Operator's Manual for

∆ DeltaTalker[™]

PRENTKE ROMICH COMPANY

Corporate Headquarters

1022 Heyl Rd. Wooster, Ohio 44691 Sales: 1-800-262-1933 Service: 1-800-262-1990 Fax: 330-263-4829 E-Mail Address: info@prentrom.com Web Site Address: www.prentrom.com

Worldwide Headquarters

Prentke Romich International, Ltd. Whitegates • Swinstead • Grantham • Lincs. • NG33 4PA • UK Fax: 44 1476 550872 E-Mail Address: info@prentromint.com

CE

DeltaTalker, DeltaTalker IR, Liberator, T-TAM, Director, Scanning Director, Memory Transfer Interface and MTI, MAP, MAPmate, Words Strategy, Direct Action, MIKE, EZ Phone, PRC Infrared Receiver, IRR, Director, Director II, Scanning Director and Scanning Director II are trademarks of Prentke Romich Company; use of the name "Liberator" with permission from Liberator, Ltd.

Minspeak is a registered trademark of Semantic Compaction Systems. Minspeak uses the methodology derived from the concepts covered by U.S Patent Numbers 4,661,916; 5,097,425; 5,210,689 and subsequent patents and applications of Bruce Baker.

Unity is a registered trademark in the USA of Semantic Compaction Systems.

DEC talk speech is a trademark of Digital Equipment Corporation .

Infovox speech is a trademark of Infovox AB.

Access Windows is a registered trademark of Microsoft, Inc.

Access DOS is a registered trademark of IBM

Apple, Macintosh and AppleTalk are registered trademarks of Apple Computer, Inc.

IBM is a registered trademark of International Business Machines.

DECtalk song programming instructions, charts and speech tips are used with permission of Digital Equipment Corporation.

©Prentke Romich Company 1996. Revised 1998

All rights reserved. Under copyright laws this manual may not be copied, in whole or in part, without the written consent of the Prentke Romich Company.

ELECTRONIC INTERFERENCE INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning! Changes or modifications to this product which are not authorized by Prentke Romich Company could exceed FCC limits and negate your authority to use this product.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio comunications. However, there is no guarantee that interference will not occur in a particular installation. You can determine whether this product is causing interference in your radio or television by turning this product off. If the interference stops, it was probably caused by this product or one of its accessories. You can attempt to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move this product to one side or the other of the television or radio.
- Move this product farther away form the television or radio.
- Plug this product into an outlet that is on a different circuit from the television or radio; that is, this product should be controlled by different circuit breakers/fuses from the television or radio.
- If necessary, contact a Prentke Romich Company service technician for assistance.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.Cet appareil numérique de la classe B respect toutes les exigences du Règlement sur le matériel brouiller du Canada.

CE ENVIRONMENTAL INFORMATION: Use: 0° - 45° C; Storage: (-20°) - 50° C; 95% maximum relative humidity @ ambient temperatures less than 40° C.



Attention! Consult accompanying documents.

Not intended to be an emergency call device or a sole communication device. When operated in a medical environment, do not use with any product that is not medically approved.

Prentke Romich Company • 1022 Heyl Rd. • Wooster, Ohio 44691 •(800)-262-1984 •#10590L4.04 DeltaTalker Manual

U Before You Continue:

Turn the DeltaTalker ON

To conserve the DeltaTalker's batteries, the entire unit was turned OFF at the factory before shipping. To use it, you must turn the DeltaTalker ON.

To Turn the DeltaTalker ON:

- 1. Lift the small lid on the top right corner of the DeltaTalker to open the Control Panel.
- 2. Press *once* on the button labeled **ON/OFF**. You will hear a rising two-toned beep.
- 3. The DeltaTalker is now ON.
- 4. Close the lid.

CAUTION STOP STOP AND READ

We recommend that you turn the DeltaTalker OFF *before* you plug anything into or unplug anything from the back panel this includes switches, headpointers, and *especially* the battery charger.

Do not insert or remove a memory card until *after* you have turned the DeltaTalker OFF.

Following this recommendation helps to prevent static discharge and to preserve the DeltaTalker's memory by safeguarding its electronic circuits.

Table of Contents

GETTING ACQUAINTED

Welcome to the DeltaTalker	13
What's on the Front of the DeltaTalker?	15
What's on the Back of the DeltaTalker?	17
What's On the Inside of the DeltaTalker?	19
Charge the Batteries	21
Calibrate the Batteries	23
Turning the DeltaTalker Off and Saving Your Work	25
Auto Power Down	27
About Minspeak	29
An Example of Icon Associations	31
About Selecting Your Own Minspeak Icons to Represent Messages	33
Creating an Overlay and Using Key Co-Ordinates	35
About the Control Panel	
About the Toolbox	
Using Menus to Change a Number of DeltaTalker Options	41
Change SPEAKER VOLUME and VIEW ANGLE	43
How to Use call	45

SETTING UP

The CHOOSE OVERLAY Menu	49
The 128 Location Keyboard	51
The 32 Location Keyboard	53
The 8 Location Keyboard	55
Changing a 128 Location Overlay	57
Changing to a 32 or 8 Location Overlay	59
What are Selection Techniques?	61
Choose a Selection Technique from the SELECTION TECHNIQUE Menu	63
The Keyboard as a Selection Technique	65
Headpointing as a Selection Technique	67
Single Switch—Scan Mode 1	69
Single Switch—Scan Mode 2	71
Single Switch—Scan Mode 1 with 8 or 32 Locations	73
Dual or 2-Switch—Scan Mode 1	75
Dual or 2-Switch—Scan Mode 2	77
Joystick	79
Options in the SELCT TECH Menu	81
Scan Speed	83

Acceptance Time	
Activation Delay	
Icon Prediction	
Predictive Selection	
Save Your Set-Up Settings	

STORING MESSAGES

Digitized and Synthesized Speech	97
The Spell/Minspeak Tool	
Before You Begin to Store, Know What You Want to Say	
Digitized (Recorded) Speech	
Store Recorded Messages	
Erase Recorded Messages	
Synthesized Speech	
Store Synthesized Messages	
Edit Synthesized Messages	
Erase Synthesized messages	111
General Storing Information	
Some Helpful Storing Hints	
When One Sequence Hides Another	
Storing and Retrieving Messages in 8/32 Location	
About 1 and 2 Icon Themes	119
Using INSERT TOOL When You Store Tools	
Storing Theme Tools With and Without a Theme Icon	
Store the Theme Tool Under and Icon Sequence	
Using 1 or 2 Icon Theme	
Exit a Theme	
Review the Vocabulary of the DeltaTalker	
ZORRO (Erase) the Entire Contents of the DeltaTalker	

PERSONALIZE YOUR OVERLAY

Personalize Your Overlay	137
Different Ways to Personalize Each Key	139
Assign Spelling Characters to Keys	141
Use INSERT TOOL to Assign a Tool to a Key or Icon Sequence	
Assign a Tool in MINSPEAK Mode or SPELL Mode	145
Assign Tools and Text to the Same Key	147
Assign Tools and Text to an Icon Sequence	149
Copy "Settings" Keys to Your Unity overlay	151
Swap Key	153
Rename Icon	155
Disable Key	157
Feedback Menu	159
Auto Spell	161

Icon Tutor	
Auditory Prompts	
Store Auditory Prompts	
Erase Auditory Prompts	

MORE TOOLS FOR COMMUNICATION

About the SPEECH Menu	173
Selecting a Voice	175
Selecting a Speech Rate	177
Select an Average Pitch	179
Select a Pitch Range	181
Change Voices Within a Message	183
Speaking Tools	185
Speak Word	185
Speak Last Selection	185
Speak All	185
Speak Sentence	185
Speak Display	185
Speech On/Off	185
Wait Any Key	187
Dictionary	189
Add a Word	189
Delete a Word	191
Review Words	193
Editing Tools	195
Shift, Caps Lock, Arrows	197
Character/Word Tool	199
Plurals	201
Text Marker, Speech Marker, Text & Speech Marker	203
Clear Display	205
Delete Character	207
Delete Word	207
Delete Last Selection	207
Delete Icon	207
Arrow Keys	207

CONNECTING TO AND USING OTHER DEVICES

Connect to Other Devices by Using the Infrared Option or	
by Using a Cable	
Using the OUTPUT Menu	
Using SERIAL MARKER, SPEECH MARKER OF IRR ON	
and IRR OFF When You Store Commands	
Use the DeltaTalker with IR to Remotely Control	
Your EZ Phone and X-10 Modules	

About Storing Infrared Commands for EZ Phone,	
X-10 and Remote Control Devices	
Store DIAL and a Phone Number	
Store the EZ Phone Functions	
Storing X-10 Commands	
About Adding Remote Control Devices and Functions	
Before You Begin Adding a Device and its Functions to the	
IR SET-UP Menu	
Add a Device and One of its Functions to the IR SET-UP Menu	
When a Signal is Not Learned, Re-teach it Using the	
RECORD Button in the Control Panel	
Add Other Functions	
Store the Devices and Functions Under Icon Sequences	237
Re-Learn a Signal that You Have Already Stored	
Rename a Device	
Delete a Device	
About Computer Emulation With Infrared and	
Without Infrared	
Using an Infrared Receiver (IRR)	
Setting Up the DeltaTalker to Work With an IRR	
Storing the IRR ON and IRR OFF Commands	251
Storing More IRR Commands	252
Read These Notes Before You Begin Computer Emulation	
Getting Ready to Set Up Your Overlay	
Computer Keys and Mouse Commands	257
First Organize Your Overlay	259
Assign BACKSPACE/DELETE, RETURN and the ARROWS	
to DeltaTalker Keys	
Storing Only a Few Computer Keys Under Icon Sequences	
Organizing Your Theme	
Selecting 1 ICON THEME and Storing it On Your Overlay	
Store Computer Keys and Mouse Commands Under a	
1 ICON THEME	
Infrared Troubleshooting:	
When Multiple Devices are in Use in the Same Room	
The IR ADDRESS Menu	
About the Protocol Options	
When You Get an Error Message with IRR Use	

APPENDIXES

Adding a Memory Card	
The MAINTENANCE Menu	
About Passwords	
Storing at a Glance	
Troubleshooting	
Songs Already Stored in the DeltaTalker	
Storing Pre-Stored Songs on your Overlay	
Program and Store Your Own Songs	
Helpful DECtalk Speech Tips	
External Earphone and Speaker Information	

Х

Getting Acquainted with the DeltaTalker

Welcome to the DeltaTalker	13
What's on the Front of the DeltaTalker?	15
What's on the Back of the DeltaTalker?	17
What's Inside the DeltaTalker?	19
Charge the Batteries Regularly	
Calibrate the Batteries	
Turning the DeltaTalker Off and Saving Your Work	
Auto Power Down	27
Some Notes about Minspeak	
An Example of Icon Associations	
About Selecting Your Own Minspeak Icons to Represent a Message	
About Creating an Overlay and Using Key Co-Ordinates	35
About the Control Panel	
About the Toolbox	
Using Menus to Change DeltaTalker Options	41
Change the Speaker Volume, Earphone Volume and the View Angle	43
How to Use the CALL Tool in the Toolbox	45



The DeltaTalker

Welcome to the DeltaTalker[™]

Summary:

The DeltaTalker is a communication aid that uses the Minspeak language system for storage and retrieval of messages. It is designed to be used by anyone who has difficulty speaking and could benefit from an AAC system.

The DeltaTalker is an augmentative/alternative communication (AAC) device which uses the Minspeak communication system for the storage and retrieval of messages. It was developed to be used by anyone who has difficulty speaking and who wants to use an AAC system for easy interactive communication.

Among the DeltaTalker's powerful and user-friendly features are Icon Prediction, Auditory Prompts, Computer Emulation and the ability to store messages in both digitized (recorded) and synthesized (text-to-speech) speech. The DeltaTalker was shipped to you with the Unity 128 vocabulary loaded and the matching Unity overlay already in place.

The Minspeak language system allows people with limited language abilities to develop language skills at their own pace. People with well-developed language skills will find that the Minspeak language system allows them to communicate more rapidly and completely than with other systems. The DeltaTalker is designed to aid in and keep pace with the growing communicating ability of the person using it.

This manual should be used to set up your DeltaTalker. You will find explanations for all the functions that the DeltaTalker can perform and instructions about how to use these functions. The Table of Contents and the Index can help you find the information you want in the manual. Once you have your DeltaTalker set up and ready to go, keep this manual handy to use as a reference.



Front of the DeltaTalker

What's on the Front of DeltaTalker?

Control Panel—this area is under the small door in the upper right corner. Here you turn the DeltaTalker on/off, turn the Toolbox on/off, change volume, etc. The area on the left is the Status Panel. Lights in the Status Panel indicate when you are using the functions listed there. You can store, record, erase and edit messages from the Control Panel.

Display Screen—this shows up to 40 characters in two lines of text. You can choose to see two lines of text or one line of text and one line of icon names (when icons are selected).

Microphone—the recording microphone is under the small round grill near the center of the Control Panel.

Keyboard and LEDs (Light Emitting Diodes)—the DeltaTalker comes with a 128 location keyboard. Activate the keys by pressing on them, by using a single or dual switch or by using a headpointer. When a key is activated its LED lights and you hear a beep.

Keyguard—the keyguard fits over the keyboard and outlines the keys on the keyboard. It is made of durable plastic. Remove the keyguard by lifting up on the bottom edge and pulling it toward you.

Overlay Protector—this is the thin piece of vinyl that fits on top of the overlay. It helps to protect from spills, crumbs, drooling, etc. Place the keyguard on top of the overlay protector. *Always* use the overlay protector underneath your keyguard and on top of the overlay.

Unity overlay—this overlay is underneath the overlay protector, on top of the keyboard. *This is the overlay you will use most of the time*. You also have some blank overlays that you can use to create any kind of overlay you may need.

Toolbox—Remove the keyguard, overlay protector and overlay to see the Toolbox. The Toolbox contains 'tools' that you can use to increase the DeltaTalker's usefulness. The names of the Toolbox tools are printed on the keys. You also received 2 paper Toolbox overlays for easy reference. These have larger printing on them.



OWarning!

Do not plug the earphone into the EXTERNAL SPEAKER jack. This could cause damage to your hearing.

Connectors On the Back of the DeltaTalker

What's on the Back of DeltaTalker?

Battery Charging Jack and LED—plug the battery charger that came with the DeltaTalker in here. When it is plugged in, the LED (Light Emitting Diode) lights. (See pages 21-23 for an explanation of the battery lights and batteries.) When the batteries get low the DeltaTalker beeps a specific beep so you will know to plug in the charger.

Dual (or stereo) Jack—plug a dual switch or a headpointer in here. If you are using two single switches, plug one single switch in here and the other one in the MONO jack.

External Microphone Jack—plug an external microphone in here.

Speaker Grill—the speaker is behind this grill. Keep this area open so that your voice can be easily heard.

Multi-Switch (DB-9)—plug a Joystick into this connector.

Mono Jack—plug a single switch in here or, if you are using two single switches, plug one switch in here and the other switch into the DUAL jack.

External Speaker Jack—plug an external speaker in here.

External Earphone Jack—plug an external earphone in here.

Infrared Window—This window is used with the Infrared Option. If you purchased this option with your DeltaTalker, see the **CONNECTING TO AND USING OTHER DEVICES** chapter in this manual for a complete description of the IR window. For information about ordering this option contact the PRC Sales Department at 1-800-262-1933.

RS-232—plug in any RS-232 (serial) cable here. The cable used for memory transfer and computer emulation plugs in here.



What's Inside the DeltaTalker?

What's Inside the DeltaTalker?

There are two doors on the back of the DeltaTalker. Squeeze the two small hinges on each door and lift the door off.

Under Both Doors:

Battery Pack—inside each door compartment you can see the plastic-wrapped battery packs. Each pack can be lifted out of the case so you can get to the area beneath it. **Do not unplug** the battery pack. If you unplug the battery pack, it must be recalibrated. This process takes 24 hours.

Under the Right-Hand Door Only:

Reset Button—below the battery pack in the *right hand* compartment there is a small button. This is the reset button. Should you lock up the DeltaTalker so that you cannot press any of the keys, push this button once. The DeltaTalker should reset automatically and you can start over.

Memory Card Slot—If you order a memory card, you will place it in the memory card slot which is partially hidden underneath the battery pack in the *right hand* compartment. You remove the battery pack to insert or remove the memory card. See page 279 for more about memory cards and how to insert and remove them.

Replace the doors by fitting them in place and pressing down until the hinges click shut.

BAT = batteries are low.
beep beep beep
BATT STATUS EMPTY FULL REMAINING CAPACITY E FOR F TRKL-CHARGE
If the charger is plugged in you will see either FAST-CHARGE or TRKL CHARGE on the display.
REMAINING CAPACITY E MEM. PROTECT
If you see this, plug in the charger
Memory Protect = no storing or erasing
THE BATTERY CHARGING LED INDICATES:
QUICK FLASHINGfast-chargingSLOW FLASHINGtrickle-charging
"Trickle Charge" means that the batteries are full but the charger may remain plugged in.
If the batteries go dead, the DeltaTalker will not lose its memory
B*T = Calibrate batteries
BATT STATUS REMAINING CAPACITY E ???????? F TRKL-CHARGE RECALIBRATE
The calibration cycle must start with a full battery charge . (Full battery = trickle charge)

Charging the Batteries

Charge the Batteries Regularly

Summary:

Charge the DeltaTalker's batteries each night if the device is used every day.

The DeltaTalker will run for about 10 hours of normal use before you need to recharge it. You will hear a warning beep when the batteries are low. You will see BAT in the lower right corner of the display. You will not be able to store or erase until you plug in the battery charger. **The DeltaTalker will not lose its memory, even if the batteries go dead**.

When the battery charger is plugged in, the battery charging LED flashes to indicate one of two battery states: when the LED is flashing rapidly, the batteries are fast-charging; when the LED is flashing slowly, the batteries are trickle-charging. This means the batteries are full but they can continue to be charged. If the batteries go completely dead, charge them until the trickle-charge light flashes. This way you know you have a full charge. (You can use the DeltaTalker after about 15 minutes of charging.)

To find out how much capacity the batteries have left activate the **BATT. STATUS** tool in the Toolbox. You will see a battery gauge that goes from EMPTY to FULL (like a gas gauge). If a charger is plugged in, you will see either FAST-CHARGE or TRKL CHARGE. If the batteries are low and a charger is *not* plugged in you will see MEM. PROTECT. This means you cannot store or erase. When you see this warning, plug in a charger.

You may hear a strange beep and see **B*****T** on the display instead of BAT. If you activate BATT. STATUS, the battery gauge is full of question marks and dashes. This means the DeltaTalker can no longer accurately gauge the battery capacity. RE-CALIBRATE appears in the lower right corner of the display. When this happens, you must put your batteries through a *full charge* and *full discharge* cycle. This can take awhile, but you should plan to calibrate the batteries soon after you get the B*T warning. The next page explains how to calibrate the batteries.

ALWAYS BEGIN A CALIBRATION CYCLE WITH FULL BATTERIES!



Calibrate the Batteries

When you see B*T on the display, plan to calibrate your batteries. The calibration cycle takes quite awhile. You can continue to use the DeltaTalker through most of it, but you might want to plan to have part of it happen while you are sleeping.

To begin the calibration cycle, you **must** have a *full battery charge*. If you normally charge your batteries at night, check in the morning to see if you have a trickle charge. If not, keep the charger plugged in until the battery charging LED flashes *slowly*, indicating that it is trickle charging. This tells you have a **full charge**. You can continue to use the DeltaTalker while it is charging. It will just take longer to get a full charge. When you see the slow-flashing LED, **unplug** the battery charger and use the DeltaTalker just as you always do.

Two things can happen now. One is that you use the DeltaTalker until the batteries go dead. This is OK. Just plug the charger back in and charge the batteries again to a full trickle-charge. After about fifteen minutes of re-charging, you can even use the DeltaTalker again. The batteries will be calibrated and BATT STATUS readings will be accurate.

The other possibility is that the DeltaTalker batteries *won't* be dead by the time you want to go to bed. That's OK. Just plug the charger back in. The DeltaTalker will beep and you will see "Calibrating may add 4 hours to charging. Press STORE to calibrate or OFF to skip." When you press STORE, all the LEDs will light and the display will read, "Battery Calibration. Discharging to find end of battery." The DeltaTalker will finish discharging the batteries and then it will re-charge them while you sleep. In the morning, your batteries will be calibrated but check the BATT STATUS menu to see how much charge you have. If the batteries are not fully charged, you might want to leave the charger plugged in until trickle charging begins. You can use the DeltaTalker while it is charging. If, at some point, you see the message, "Batteries are not fully charged. Cannot calibrate without a full charge" you must continue charging the batteries until they are trickle charging before calibration can take place.

With regular DeltaTalker use, you will probably be warned to calibrate the batteries around every 64 days.

Turning the DeltaTalker Off and Saving Your Work

Summary:

Use Auto Power Down, POWER OFF or the ON/OFF button in the Control Panel to turn the DeltaTalker Off. If you turn the device Off with the ON/OFF button you must turn it back On with this button.

The DeltaTalker Turns Off 3 Different Ways:

- 1. Auto Power Down = On: the DeltaTalker powers down automatically after 7 minutes if no activations are made. (See the next page for more information on Auto Power Down.)
- 2. POWER OFF (key O8) in the Toolbox: the device powers down (see page 39 for information about the Toolbox). You can copy this key to your Unity overlay (see pages 143-145).
- 3. Press the ON/OFF button in the Control Panel: you hear a descending two-toned beep when the DeltaTalker goes Off and a rising two-toned beep when it comes On. *If you turn the DeltaTalker Off with the ON/OFF button, you must turn it back On with the ON/OFF button.*

In all of these examples, when the DeltaTalker turns off it will save any storing and/or programming that you have done up to the turnoff point. If you are doing a lot of storing or programming *make sure the DeltaTalker turns Off periodically so that your work is saved!*

In examples 1 and 2 above, the DeltaTalker powers down or 'goes to sleep'. Activate any key or switch to 'wake up' the DeltaTalker. In example 3 above, using the ON/OFF button in the **Control Panel** turns the DeltaTalker *completely* Off. This means you cannot use a key or switch to wake it up. If you are not going to use the DeltaTalker for an extended period of time, turn it Off using the ON/OFF button. This will save the batteries. *If you turn the DeltaTalker Off with the ON/OFF button you must turn it back On with the ON/OFF button*.



Auto Power Down

Auto Power Down

Summary:

Auto Power Down **>ON**< is the default setting. If seven minutes pass and you make no activations on the keyboard, the DeltaTalker automatically powers down (or 'goes to sleep'). Activate a key or switch to wake it back up. Turn this tool On or Off in the FEEDBACK menu in the Toolbox.

The DeltaTalker is pre-set to turn off automatically after seven (7) minutes if you don't make any key activations. This is called powering down. There is a tool in the FEEDBACK menu in the Toolbox labeled Auto Power Down, which is pre-set to ON. (See pages 39-41 for information about the Toolbox and menus.) Powering down helps to save the DeltaTalker's batteries. When it is powered down, the DeltaTalker goes into a "sleep" state. All you have to do to wake it back up is to activate a key or a switch.

When the DeltaTalker powers down it automatically saves any storing and/or programming you have done.

If you change Auto Power Down to Off, then the DeltaTalker will never turn Off unless you physically turn it off using the ON/OFF button in the Control Panel or the POWER OFF key in the Toolbox. If you forget that you turned Auto Power Down to Off and the device never goes Off, the batteries will eventually go dead. We recommend that you leave Auto Power Down set to On.

Use the ON/OFF button in the Control Panel to turn the device Off if you are not going to use it for a long time. (See page 27 for information about the ON/OFF button.)

ONote:

If you are using a headpointer and the DeltaTalker turns **Off**, you must activate your switch to turn it back on.



Minspeak Icon Sequences

About Minspeak

The Vanguard uses a patented vocabulary-coding method called Minspeak to help you communicate.

Minspeak is a means of coding vocabulary to a small set of icons that are rich in meaning. Minspeak's use of icons taps into a person's natural tendency to associate multiple meanings to pictures. By coding a large vocabulary of words, phrases and whole messages using this small set of icons, Minspeak offers many advantages:

- it is logical in how it represents a person's language;
- it is easy to learn because it fits into a person's natural ability to associate many meanings to one picture;
- it promotes language development by providing a rich vocabulary of words that you can combine into sentences;
- because the small set of icons remains the same on a single overlay, you can, with practice, learn to recall your vocabulary automatically;
- it promotes further language development by offering many opportunities for language-learning experiences.

These advantages lead to the ultimate benefit of using Minspeak: it allows for and promotes independent, effective communication.



Icon Associations

An Example of Icon Associations

Minspeak uses **icon combinations** to represent a vocabulary. For example, suppose you want to store the word, "Where." Minspeak allows you to choose several icons to represent the word. If you choose a two-icon sequence, you will find that you can speak the word with only two key activations. This results in a 60% savings in key activations over spelling out the word.

Minspeak also makes it easy for the user to remember which locations he/she must activate to speak a message. Here is where the power of the icons becomes apparent. When storing a message you pick icons that will remind you of its contents. With the word "who", you might choose the sequence, WORD plus . In this

case the icons were chosen because WORD represents a question

and represents a person who you may or may not know.

You will notice that in the future when you want to speak the word "who" you can simply activate the icons that you chose while storing the message. Not only will this require fewer activations, but with practice it will become automatic to recall. If the association of "where" with the map of an island is not understood to start with, there is a good teaching activity built into this kind of Minspeak sequence to help a person understand and to create a rewarding language experience.

It is important to realize that the Minspeak icons are rich in meaning. The meanings associated with the icons can be the meanings you learn from your vocabulary program and they can also have very individual meanings. For instance, the icon,

might be used in different sequences to mean 'umbrella', 'weather', 'under', 'rain', 'whether', or any number of other things that the icon makes you think of.



When selecting icons for your own messages, think about:

The "rules" your vocabulary program uses;

Possible associations for each icon;

Potential categories;

Combining icons for a wide range of messages.



Choosing Your Own Icons

About Selecting Your Own Minspeak Icons to Represent a Message

Summary:

When choosing your own icons consider the following: the "rules" for your vocabulary program; all the associations an icon may have; the category your message may belong in; how easy the association between icon and word will be to learn, to remember and to teach; what icons might be combined to represent a wide range of messages.

The Unity for AlphaTalker overlay is already on your device. This is the Unity 2-hit overlay. Each sequence can be retrieved with two activations. We suggest you use this overlay for practice. The *First Steps* workbook you received will refer to this sample overlay. It is very important, however, that you learn how to choose your own icons.

A big consideration in choosing icon sequences is that they are logical, easy to learn and easy to remember.

If you are using a vocabulary program you will want your own sequences to work the same way as the sequences work in your program. To achieve this you will need to understand the "rules" of your vocabulary program. Spend a little time thinking about multiple associations for icons. This will help you to understand how various icons can be combined to represent a word. Also spend some time thinking about what kind of a 'category' your message might fit into. Organizing a vocabulary into categories is something human beings do naturally so having a vocabulary program that is stored in the same way can help you learn and remember your sequences more easily. You may also want to consider how "teachable" an icon or an icon sequence is.

If you are not using a vocabulary program, you will want to achieve the same goals, i.e., logical sequences that are easy to learn and remember. To achieve this you will want to devise a good system for storing vocabulary. Picking icons is part of this system.



Using Key Coordinates

About Creating Your Own Overlay; About Using Key Coordinates to Locate Keys

There may come a time when you want to create a special overlay—perhaps a 'scanning only'. When you create a special overlay, spend some time thinking about the user's daily communication needs and choose icons the user can associate with these needs. For example, if talking about family is important to the user, you might want to use the FAMILY (**) icon from your sticker sheet. If music is important to the user, perhaps the MUSICAL NOTE () sticker or a picture of a radio or CD would help recall music oriented messages. When selecting icons, *involve the user*. The more input the user has, the more meaning the icons will have and the better he/she will be to recall messages.

You may want Toolbox tools on your overlay. There are a number of ways to move keys from the toolbox to your Unity overlay. We say a tool is "moved", but it is really only *copied*. All original **Toolbox tools always stay in the toolbox; only the** *copy* **is moved to the Unity overlay.**

You can develop a special overlay from any of the overlays that are included with the DeltaTalker. If you ordered an 8 or 32 location kit your overlays will have 8 or 32 squares instead of 128.

Finding Keys On an Overlay

There are 16 columns of keys going across the overlay and 8 rows going down the overlay. The columns are labeled from A (far left column) to P (far right column). The rows are numbered from 1 (the top row) to 8 (the bottom row of keys). Using these guides as key coordinates you can find any key on the overlay. For example, key A1 is the top key in the far left column. Key P8 is the last key in the far right column. Key H4 is in the middle of the keyboard. Key coordinates are used throughout this manual to help you locate any keys that are mentioned.



The Control Panel
About the Control Panel

Summary:

You use the right side of the Control Panel to store, record, erase and edit messages. The left side is a status panel where you can check, among other things, to see whether you are in Minspeak[™] or spelling or what overlay you are using.

Lift the small door in the upper right corner of the DeltaTalker. You se the Control Panel. The left side serves as a "status panel". There are small lights, called 'Light Emitting Diodes', or LEDs, next to several different functions. When an LED is lit, you are using that function. If the LED is unlit, the function is not in use. For example, if the LED for MINSPK is lit, you are in Minspeak mode. If the light is out, you are in Spelling mode. If the light next to 32 location is lit you are using a 32 location overlay. If the 32 location light is out and the 8 location light is also out, you are using the 128 location overlay.

You can turn the Toolbox On and Off from the Control Panel. Press the button labeled TOOLS to turn the Toolbox On. The small LED next to TOOLS lights. Press the button again to turn it off. The LED goes out. (The Toolbox itself also contains a TOOLS key.)

You can turn the speaker volume up or down by pressing on the right (up) or left (down) side of the SPK VOL button. (The Toolbox also contains speaker and earphone volume keys.) You can change the view angle (contrast) on the display also by pressing on the VIEW ANGLE button. Press on the left side of the button to darken the display and the right side to lighten it.

When the digitized (recorded) or synthesized memory is full, its LED light.

The buttons on the right side of the Control Panel allow you to store, record, edit and erase messages. The ESCAPE button allows you to exit any storage activity if you have made an error or changed your mind. (The Toolbox also contains ESCAPE, STORE, ERASE and EDIT keys.)



UNote

All tools and menus are *always* available in the Toolbox.

When you "move" a tool from the Toolbox to your Custom Overlay the DeltaTalker only **copies** the tool and moves the **copy** to the Custom Overlay. The original tool remains in the Toolbox.

(See STORING MESSAGES and PERSONALIZE YOUR OVERLAY)

The Toolbox

GETTING ACQUAINTED

About the Toolbox

Summary:

Remove the keyguard and overlay to see the Toolbox. To turn the Toolbox On, press the TOOLS key in the Control Panel until the TOOLS LED lights.

Remove the keyguard and overlay. What you see is the Toolbox. The Toolbox has the tools (keys) that you can use to make the DeltaTalker more useful to you. Some tools allow you to do something specific —like erase the display or turn the speech on or off. Other tools are multi-purpose—like the menu tools that give you a number of options to choose from.

To use any of the keys in the Toolbox, *you must turn the Toolbox On.* Press the TOOLS button in the Control Panel. The TOOLS LED lights. (If you move the TOOLBOX ON/OFF key to your overlay you can activate it to turn the Toolbox On.)

The Toolbox has the names of all of the tools printed on it. You received 2 paper Toolbox overlays in your DeltaTalker package. With a paper Toolbox overlay near you to look at, you can turn the Toolbox on in the Control Panel and activate the correct Toolbox keys without having to remove your keyguard and overlay.

Look at one of the paper Toolbox overlays. The green keys are used in storing and retrieving messages. The yellow keys contain menus. There are three keys above the menu keys that are outlined in yellow. These three keys are used whenever you are selecting options in a menu.

Five of the menu keys have a small diamond in the lower right corner of the key. These five keys are used with the SAVE SETTINGS tool which also has a small diamond on it. When you save any DeltaTalker settings you are saving settings you made in the menus with the diamond on them. (See pages 93 and 151 for more information about settings.) Use CHANGE >ITEM< for any item enclosed in > < angle brackets. Use NEXT MENU ITEM for any item **not** enclosed in angle brackets.

Example # 1

Activate SELECT TECH Menu Activate NEXT MENU ITEM

Selection Technique = >KEYBOARD< Use NEXT MENU ITEM, CHANGE ITEM or EXIT

Select **CHANGE >ITEM<** to step through > < options. Return to **>KEYBOARD<**.

Select **NEXT MENU ITEM** to step through main options. Return to Selection Technique.

Acceptance Time = >.01<

Use NEXT MENU ITEM, CHANGE ITEM, OR EXIT

Select EXIT when all items are set the way you want them

Example # 2 (YES to perform task; NO to stop) TRANSFER MEMORY Menu

LOAD FROM DISK = >NO<

Use NEXT MENU ITEM, CHANGE ITEM, OR EXIT

If you want to perform the action inside the angle brackets >LOAD FROM DISK< press **CHANGE >ITEM<** to see **YES**. If you try this, press **ESCAPE** to return to first option, then **EXIT**.

If you want to see another option, select **NEXT MENU ITEM**

SAVE TO DISK = >NO<

Use NEXT MENU ITEM, CHANGE ITEM, OR EXIT

Using Menus in the Toolbox

Using the Menus in the Toolbox

All of the keys in Row 2 in the Toolbox, *except P2*, contain menus. Menus allow you to make a number of changes to the DeltaTalker at one time.

Look at your paper Toolbox overlay. The menu keys are yellow. Three keys in Row 1 are also outlined in yellow. These three keys are used once a menu is opened.

Remove the keyguard and overlay. Turn the DeltaTalker On by pressing the ON/OFF button in the Control Panel or selecting a key. Press the TOOLS button in the Control Panel. Make sure the light next to TOOLS is lit in the status panel. Now, select FEEDBACK menu (H2). On the display screen you see the menu name: FEEDBACK MENU. Activate NEXT MENU ITEM to see each menu item. Activation Signal = >BEEP & LIGHT<. Use NEXT MENU ITEM to step through all options that are **not** contained in angle brackets.

Select CHANGE >ITEM< (G1) to pick or change any option that is contained inside angle brackets (> <). Angle brackets indicate that the option *performs an action* or *changes the menu item* in some way.

In this example, >BEEP & LIGHT< perform actions (turning the beep and light on). To change this option, select CHANGE >ITEM<. To change "Activation Signal" to something else, select NEXT MENU ITEM. When you have finished stepping through the menu, select EXIT (H1). The DeltaTalker will close the menu with your options in effect.

(Remember

CHANGE >ITEM< is *always* used with options that are enclosed in angle brackets.

NEXT MENU ITEM is *always* used to step through options that are *not* enclosed in angle brackets.

You can also use the Arrow keys in the Toolbox to move forward and backward through the options in some of the menus.



Change Speaker and Earphone Volume

Change the Speaker and Earphone Volume and the View Angle

Summary:

Change the speaker volume and view angle in the Control Panel. Change earphone volume (and also speaker volume) in the Toolbox. Each activation raises or lowers the setting.

You can change the speaker and earphone volume and the view angle (contrast) of the display. Speaker volume and view angle can be changed from the Control Panel. Earphone volume can be changed in the Toolbox only. (Speaker volume can also be changed in the Toolbox.)

To Change the Speaker Volume or View Angle from the Control Panel:

- 1. Press the right side of the SPK VOL key to raise the volume. Each press will raise the volume one step.
- 2. Press the left side of the SPK VOL key to lower the volume. Each press will lower the volume one step.
- 3. Press the right or left side of the VIEW ANGLE button to change the contrast on the display screen.
- 4. When you have set the contrast or volume to where you want it, press any key to exit.

To Change Speaker Volume and Earphone Volume in the Toolbox:

- 1. Remove the keyguard and overlay. Turn on the Toolbox by pressing the TOOLS button in the Control Panel. The TOOLS LED will light in the Control Panel when the Toolbox is On.
- 2. Activate SPKR VOLUME DOWN (C1) or SPKR VOLUME UP (D1) to change the volume. Activate EAR VOLUME DOWN (A1) or EAR VOLUME UP (B1) to change the earphone volume.
- 3. Each key activation raises or lowers the volume by one step.
- 4. When you have finished, press any key to exit and turn the Toolbox Off.



Activate CALL to Get Someone's Attention

How to Use the CALL Tool in the Toolbox

Summary:

CALL is designed to bring someone to the aid of the person who is using the DeltaTalker. When it is activated it emits a series of recognizable beeps that indicate a need for some kind of help.

There will probably be times when the person using the DeltaTalker will want some assistance. The Toolbox has a CALL tool [J1] for just this purpose. The CALL tool is also on the sample overlay that you received with the DeltaTalker.

When you activate the CALL tool, the DeltaTalker emits a series of beeps which are designed to get someone's attention. The beeps are not like any other beeps that the DeltaTalker makes when it is in regular use.

Because the CALL tool is designed to attract the attention of someone who can help the person using the DeltaTalker, it should be used only when real assistance is needed. Overuse or playful use of the CALL tool will lessen the importance of the beeps to those who hear them.

Setting Up the DeltaTalker

Choose a Keyboard Size and Layout		
Learn About the 128 Location Keyboard		
Learn About the 32 Location Keyboard		
Learn About the 8 Location Keyboard		
Changing a 128 Location Overlay		
Changing a 32 or 8 Location Overlay		
What is a Selection Technique	61	
Choose a Selection Technique from the SELECT TECH Menu	63	
Keyboard Only	65	
Headpointing	67	
Single Switch—Scan Mode 1	69	
Single Switch—Scan Mode 2	71	
Single Switch—Scan Mode 1 with 8/32 Locations	73	
2-Switch—Scan Mode 1	75	
2-Switch—Scan Mode 2	77	
Joystick	79	
Options in the SELECT TECHNIQUE Menu	81	
Change the Scanning Speed	83	
Change the Acceptance Time		
Change the Activation Delay	87	
Icon Prediction		
Predictive Selection	91	
Save Your Set-Up Settings	93	



The CHOOSE OVERLAY Menu

Choose a Keyboard Size and an Overlay from the CHOOSE OVERLAY Menu

Summary:

Choose a 128, 32 or 8 location keyboard and overlay before you make your selection technique settings.

The DeltaTalker comes with a 128 location keyboard. This means there are 128 small keys on the keyboard. Each key represents one location.

For people who are not able to easily access the smaller keys of the 128 location keyboard, there is an optional 32 location keyboard and 8 location keyboard. Each of these keyboards has its own keyguard and overlay. The 32 location keyboard has locations that are as big as four of the 128 location keys put together in a square. The 8 Location keyboard has keys that are as big as sixteen 128 location keys put together in a square.

Once you have decided which keyboard and overlay you want to use, you must select them from the CHOOSE OVERLAY menu. The DeltaTalker offers the following overlays:

- 1. **QWERTY overlay** has letters arranged like a typewriter/computer keyboard. This is the overlay on your keyboard. It contains the *First Steps* sample vocabulary.
- 2. Blank overlay (for 128, 32, or 8)
- 3. **Scanning overlay** with characters and tools in a frequency-of-use layout.

Using the CHOOSE OVERLAY Menu

- 1. Remove the keyguard and overlay. Open the Toolbox. Activate the CHOOSE OVERLAY menu (F2).
- 2. Activate CHANGE >ITEM< until you see the size you want.
- 3. Activate NEXT MENU ITEM to see Keyboard Layout. Select the overlay you want to use.
- 4. Activate CHANGE >ITEM< to load the overlay.
- 5. Activate EXIT.



128 Location Keyboard

The 128 Location Keyboard

Summary:

The default overlay for the DeltaTalker is the 128 Location keyboard and overlay. This means there are 128 single key locations to choose from.

Your DeltaTalker comes with a 128 location keyboard, an overlay, an overlay protector and a keyguard. The 128 location keyboard has 128 keys arranged in 8 rows and 16 columns. The top row is Row-1, the second row is Row-2, the bottom row is Row-8. The columns are labeled with letters of the alphabet, so the far left column is Column-A, the next column is Column-B and so on. The column on the far right of the keyboard is Column-P.

You can indicate the position of any key by giving its letter/number (or number/letter) combination. For instance, the key in the upper left corner of the keyboard is A-1 (column-A, row-1). The key in the bottom right corner is P-8 (column-P, row-8). A key near the middle of the keyboard is I-3.

If you turn Auditory Prompts On (G2), the DeltaTalker speaks the letter/number designation for each location. Letter/numbers are also spoken when sequences are being reviewed.

These letter/number combinations are called *Location Codes* because they tell you where specific keys are located.

When you are using the 128 location keyboard, you cannot access any vocabulary you may have stored when you used a 32 or 8 location keyboard. To use 8 or 32 location vocabulary you must change the keyboard to 8 or 32. You can change the keyboard size from the CHOOSE OVERLAY menu.

You may want to turn the Backlight on in the FEEDBACK menu.



32 Location Keyboard

The 32 Location Keyboard

Summary:

There is an optional 32 location overlay for the DeltaTalker. This means there are 32 single key locations to choose from.

You may find that the 128 location keys are too small to be activated easily or to be seen well. You can have bigger keys for easier activation and viewing by ordering the 32 Location Kit from Prentke Romich Company.

Each location on a 32 location keyboard contains 4 single keys which act as one larger key. For example, the location in the top left corner contains the keys: A-1, B-1, A-2, B-2. These four single keys make up Key A-1 on the 32 location overlay. The 32 location keys are arranged in 4 rows and 8 columns. You can press any key in the block to store or retrieve messages.

If you store messages in 32 location, you must use a 32 location keyboard to recall the messages. That is, messages stored in 32 locations cannot be recalled if you are using 128 or 8 locations.

If you turn Auditory Prompts On (see pages 165-169), the DeltaTalker speaks the letter/number designation for each location. Letter/numbers are also spoken when sequences are being reviewed.

Tell the DeltaTalker Which Keyboard You Want to Use:

You must tell the DeltaTalker that you are going to use a different overlay size. You do this by selecting 128, 32 or 8 location from the CHOOSE OVERLAY menu (F2) in the Toolbox.

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate the CHOOSE OVERLAY key. Activate CHANGE >ITEM< until you see KEYBOARD = >32<.
- 3. Activate EXIT.
- 4. Turn the Toolbox Off. Place the 32 location keyguard on the DeltaTalker.

You may want to turn the Backlight On in the FEEDBACK menu.



8 Location Keyboard

8 Location Keyboard

Summary:

An 8 Location Overlay has 8 blocks consisting of sixteen keys each. You can order the 8 Location Overlay Kits from PRC.

If the 32 Location keys are too small to be activated easily or to be seen well, you can order an 8 Location Kit from Prentke Romich Company.

With 8 locations, the block of sixteen keys in the upper right corner acts as *one key*. For example, the key in the top left corner of an 8 Location Overlay is A-1. The key in the top right corner is D-1. The key in the bottom left corner is A-2. The key in the bottom right corner is D-2. You can activate any key in the block to store and retrieve messages.

If you store messages in 8 location, you must be using an 8 location keyboard layout to recall the messages. That is, messages stored in 8 locations cannot be recalled if you are using 128 or 32 locations.

If you turn Auditory Prompts On (see pages 165-169), the DeltaTalker speaks the letter/number designation for each location. Letter/numbers are also spoken when you use REVIEW VOCAB (M2) to review all the sequences you have stored .

Tell the DeltaTalker Which Keyboard You Want to Use:

You must tell the DeltaTalker that you are going to use a different overlay. You do this by selecting 128, 32 or 8 location from the CHOOSE OVERLAY menu (F2) in the Toolbox.

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate CHOOSE OVERLAY. Activate CHANGE >ITEM< until you see KEYBOARD = >8<.
- 3. Activate EXIT.
- 4. Turn the Toolbox Off. Place the 8 location keyguard and overlay on the DeltaTalker.

You may want to turn the Backlight On in the FEEDBACK menu.



Changing a 128 Location Overlay

Changing a 128 Location Overlay

Summary:

Remove the keyguard, overlay protector and overlay. Place a new overlay on the keyboard. Replace the overlay protector and the keyguard.

How to Change an Overlay:

Lift up on the bottom of the keyguard until it pulls loose from the magnets that hold it to the DeltaTalker. Pull the keyguard toward you slightly until it comes off the case. Remove the overlay protector (clear plastic sheet), then remove the overlay. What you are looking at now is the Toolbox. You see a rubber keypad with the names of various things printed on the keys.

Place the overlay you want to use *face up* on the DeltaTalker's Toolbox keypad. Place the overlay protector on top of the overlay. Slip the two guides at the top of the keyguard into the slots in the case right above the keyboard. Lower the keyguard until the magnets connect.



Changing to a 32 or 8 Location Overlay

Change to a 32 or 8 Location Keyboard and Overlay

The 32 and 8 Location Kits include a 32 or 8 location rubber KEYPAD, some blank overlays, a clear vinyl OVERLAY PROTECTOR, a black plastic KEYGUARD and a thin transparent piece of plastic in the shape of a "t."

Remove the 128 location keyguard and overlay if they are still on your DeltaTalker. Lift up on the bottom edge of the keyguard until it pulls loose from the magnets that hold it to the case. Pull the keyguard toward you slightly to remove it. Remove the overlay and overlay protector. What you see now is the Toolbox keypad. It is gray rubber and has black text written on the keys. *Place the 32 or 8 location keypad face up on top of the Toolbox keypad*.

When you insert or remove the "t" piece (as described below), do it *gently* or you will rip your overlay. We suggest that you practice a few times **without** the overlay protector and overlay on the keyguard.

On a flat surface, place the 32 or 8 location keyguard face down in front of you. Place the overlay protector on the keyguard. Place the 32 or 8 location overlay face down on top of the overlay protector (see note above). Hold the "t" piece so that its flat side is down. Take one of the tabs on the horizontal bar and position the edges of the tab even with the edges of its slot. Tip the tab (and whole "t" piece) up so that the tab edges are at an angle to the slot. Place your thumbs on the either side of the tab and place your fingers so they can grip the case. Slide the tab into the slot. You will hear and feel a "click" when the tab snaps into the slot. Repeat this procedure for the other tab on the horizontal bar. When these two tabs are in place, the tabs on the vertical bar will automatically fit into their slots.

Turn the keyguard over. Slide the tabs on the top of the keyguard into their holes on the DeltaTalker and lower the keyguard down until the magnets snap into place.



Defore Choosing a Selection Technique:

Analysis of positioning is required to prevent repetitive stress injuries

What are the Selection Techniques?

Summary:

The Selection Techniques are: Keyboard, 1 Switch, 2 Switch, Joystick, Headpointing. There are also a number of **Scanning** Options.

Selection Technique refers to the method you use to control the DeltaTalker. You can order 8 and 32 location keyboards for all selections.

Direct Selection Techniques:

Keyboard Only: the keyboard consists of 128 keys on the front of the DeltaTalker. Press on the keys to activate them. This technique is always active.

Headpointer: the keys on the DeltaTalker are activated by the light gathering technique of PRC's Optical Headpointer (OH-DT). A headpointer plugs into the DUAL connector on the back of the DeltaTalker. You can order a blank keyguard (a keyguard with no holes) to use with a headpointer. *Use the overlay protector even with a blank keyguard*.

Scanning Techniques:

1-Switch—Use a single switch to scan to any key on the keyboard. Choose to scan by rows and columns or by columns and rows. Plug a single switch into the MONO jack on the back of the DeltaTalker. You can order a blank keyguard (a keyguard with no holes) to use with any scanning technique. *Use the overlay protector even with a blank keyguard*.

Dual or 2-Switch—use a dual switch or two single switches to scan left, right, up and down to any key on the keyboard. Plug a dual switch into the DUAL connector on the back of the DeltaTalker. Plug two single switches into the MONO and DUAL jacks.

Joystick—allows you to scan up, down, right, left and diagonally. Plug a joystick into the MULTI connector.

		Remove keyguard and overlay. Turn on Toolbox in Control Panel.	
Toolbox Key DeltaTalker Display			
Activate SELECT TECH menu (I2)	SELECT TECH	SELECTION TECHNIQUE Use NEXT MENU ITEM to see each item	
Activate NEXT MENU ITEM	SELECT TECH	Selection Tech: >Keyboard Only<	
	•	Use NEXT MENUTTEM, CHANGE ITEM or EXIT	
Activate CHANGE >ITEM< to step through the options.	CHANGE >ITEM<	Selection Tech: >1 Switch< Use NEXT MENU ITEM, CHANGE ITEM or EXIT	
OR			
Activate NEXT MENU ITEM to step through the menu items.	NEXT MENU ITEM	Scanning Speed : >Default = 1 second< Use NEXT MENU ITEM, CHANGE ITEM or EXIT	
when you see the technique you want	EXIT	Use NEXT MENU ITEM, CHANGE ITEM or EXIT	
Turn Toolbox Off			

Use the SELECT TECH Menu to Choose a Selection Technique

How to Choose and Modify a Selection Technique by Using the SELECTION TECHNIQUE Menu

Summary:

Remove the keyguard and overlay. Turn the Toolbox on from the Control Panel. Press the SELECTION TECHNIQUE key. Press the NEXT MENU ITEM key to start stepping through the menu. Press the CHANGE >ITEM< key to change the options. Press the EXIT key when you are finished.

Choose a selection technique in the SELECTION TECHNIQUE menu (I2) in the Toolbox. To *turn the Toolbox On*, remove the keyguard and overlay. Press the TOOLS button in the Control Panel. The TOOLS LED lights when the Toolbox is on.

All of the DeltaTalker's menus are in the second row of the Toolbox keyboard. Use the NEXT MENU ITEM, CHANGE >ITEM< and EXIT keys in the top row to access the SELECTION TECHNIQUE menu.

To Choose A Selection Technique

- 1. If you are going to use a switch, headpointer or joystick, plug it into the correct jack on the back of the DeltaTalker before you turn the DeltaTalker On.
- 2. Remove the keyguard and overlay, then turn on the Toolbox.
- 3. Press SELECT TECH (I2) in the Toolbox.
- 4. Activate CHANGE >ITEM< to step through the selection techniques. When you see the selection technique you want, press NEXT MENU ITEM to see if there are any options listed for the technique you want to use. Press EXIT when you are satisfied with your selection and its options.

ONote:

If you are going to use an 8 or 32 location keyboard, you must select the correct overlay in the CHOOSE OVERLAY menu **before** setting up your selection techniques. (See page 49)



Keyboard Only

Press on the keys to make a selection.

Even if you are using another selection technique, you can always press on the keyboard to make a selection or to spell.

Keyboard Only

Keyboard Only

Summary:

If you choose Keyboard Only for your selection technique, you must be able to press on the keys with your finger or some kind of "point and press" device. Choose Keyboard Only from the SELECT TECH menu.

The keyboard and the headpointer are the quickest selection techniques. With the keyboard you make direct selections by pressing on the keys you want with your finger (or with the eraser end of a pencil or some "point and press" device). You can use the keyboard with the 128, 32, or 8 location overlays. The default acceptance time is .01 second.

The keyboard is the default selection technique for the DeltaTalker. This means that when you receive your DeltaTalker you can use it right away. Just turn it On and then press the keys on the keyboard.

The only option for the KEYBOARD selection technique is Acceptance Time. Acceptance time is the amount of time it takes between the time you select a key and the time the DeltaTalker accepts that key and activates it. See page 85 for complete information about Acceptance Time. Change the acceptance time in the SELECTION TECHNIQUE menu.

ONote:

The selection technique you choose to use with your Unity overlay can also be used in the Toolbox. If you are scanning, you can scan in the Toolbox; if you are using a headpointer, you can use it in the Toolbox.

Also remember, no matter what selection technique you choose, the keyboard is always available to use.

- 1. Plug Headpointer into DUAL connector on back of DeltaTalker.
- 2. Remove the keyguard and Overlay. Turn Toolbox on in the Control Panel.
- 3. Activate SELECT TECH menu (I 2)
- 4. Activate CHANGE >ITEM< (G1) until you see:

Selection Technique: = >Headpointing< Use NEXT MENU ITEM, CHANGE ITEM, or EXIT

5. Activate EXIT (H1)

HEADPOINTING

Selection Type = >AUTO< or >MANUAL< The defaullt is >AUTO<

If you select >MANUAL< you must have a switch plugged into the DeltaTalker. Activate the switch to make a key selection.

Power Save Mode = >ON< or >OFF<

After 3 minutes, if no activations are made, headpointing powers down and the LEDs go out. The LEDs will flash every few seconds so that you can easily point to a key to re-activate headpointing.

Headpointing

Optical Headpointing

Summary:

Plug the Headpointer into the DUAL connector on the back of the DeltaTalker. Select "Headpointer" from the SELECT TECH Menu (I2). " Power Save Mode" = >OFF< is the default.

Plug the headpointer cable into the DUAL jack on the back of the DeltaTalker. You can use the Headpointer with the 128, 32, and 8 location overlays.

You must point the headpointer at the key you want. After the "acceptance time" passes (1 second default), the key is activated. You can change the acceptance time in the SELECT TECH menu (I2). Press NEXT MENU ITEM to step to "Acceptance Time." Press the CHANGE >ITEM< key until you see the acceptance time you want to use. Press EXIT.

Selection Type = >AUTO< or >MANUAL<: allows you to select a location by activating a switch or you can let the DeltaTalker automatically select a location you have pointed to. The default is AUTO.

Power Save Mode = >OFF< or >ON<: The default is Off. If you turn this On, the DeltaTalker turns Headpointing Off after 3 minutes if no activations are made. The LEDs on the keyboard will go off to conserve energy. However, the LEDs will flash every few seconds so that you can easily point to a key to reactivate Head-pointing.

Using the Stickers That Came With Your DeltaTalker:

If you are headpointing and want to add the *blue* and *green* stickers to your overlay, cut out the area on each sticker that goes over the keyboard LED. Unless this area is cut out, the LED will not shine through the sticker and the key cannot be activated.



Single Switch—Scan Mode 1

SETTING UP 68

1 Switch—Scan Mode 1

Summary:

Plug a single switch or a dual switch (use only the SELECT side) into the jack labeled MONO on the back of the DeltaTalker. The default scan is 'automatic' and the default scanning rate is '1 second'.

You can scan with a single switch or by using only the SELECT side of a dual switch. Plug the switch into the connector labeled MONO on the back of the DeltaTalker. Remove the keyguard and overlay. Turn the Toolbox On. Activate SELECT. TECH. menu. You should see "Technique = keyboard." Activate CHANGE >ITEM< until you see 'I SWITCH'. Activate NEXT MENU ITEM to step through the scanning menus (scanning speed, acceptance time, scan mode, scan type, scan auto restart, activation delay, row/column scan method, quarter row/column, number of rescans, scan beep). When you see items that you would like to change, activate CHANGE >ITEM< until you step to the item you want to use. Pages 81-87 describe most of these options.

Activate your switch to start the scan. If you are using Row/Column scan, the top row of LEDs on the keyboard lights, then the second row lights, etc. Each time a row of LEDs lights, you hear a beep. When the LEDs in the row you want are lit, activate your switch to select the row. The LEDs in the row you have selected move from left to right through the columns in the row. When the LED for the key you want is lit, activate your switch to select that key. If a message has been stored in the location you have selected, the DeltaTalker speaks the message and then returns to scanning down the rows.

If you do not make any switch activations after starting a scan, the DeltaTalker automatically scans the rows or the columns three times and then stops scanning altogether. To begin another scan you must activate your switch. (See page 69 for a discussion of **Single Switch—Scan Mode 1** using an 8 location overlay.)



Single Switch—Scan Mode 2

1 Switch—Scan Mode 2

Summary:

Scan Mode 2 is a slightly different single switch scanning style that involves 4 switch activations rather than 3. You can select this style in the Toolbox. Use this technique with the 128 and 32 location overlays only.

Scan Mode 2 is another single switch scanning technique. This technique involves four switch activations instead of three as in Scan Mode 1. Select 1-SWITCH and Scan Mode 2 in the SELECT TECH menu.

The first switch activation causes the top row to light. The scan continues automatically down the rows. When it reaches the row you want, activate and release your switch. The scan stops at the row you have chosen and the light at Column A lights. Press the switch again and the scan proceeds across the row. When the scan reaches the key you want, press the switch to activate the location.

Scan Mode 2 has the same options as Scan Mode 1, i.e., hold or auto and column/row instead of row/column, etc.

You cannot use this selection technique with an 8 location overlay. You must select Single Switch with Circular/Linear Step or Circular/Linear Scan with an 8 location overlay. See the next page for more information.



8 and 32 Locations
1 Switch—Scan Mode 1 with 8 or 32 Location Overlay

Summary:

You must select 8 or 32 location keyboard from the CHOOSE OVERLAY menu before you can actually use the keyboard.

To use a 32 or 8 location overlay you must open the CHOOSE OVERLAY menu and select the keyboard from the menu. If you have never used an 8 or 32 keyboard before, the display will be dark. Activate VIEW ANGLE until you can see the display. Continue to set up the location. *You may also want to turn BACKLIGHT ON in the FEEDBACK menu*

Scan (32): Activate your switch. The DeltaTalker beeps and the top left block of keys lights. The scan moves at the *scanning speed* you selected. When the scan reaches the key you want, activate your switch. If no key is selected, the DeltaTalker scans three times, then stops. (You can change the *number of rescans* to a different number.) Activate your switch to start a new scan.

Scan (8): If you selected Scan Direction = *circular*, the scan moves automatically from left to right across the top row and from right to left across the bottom row. If you selected *linear*, the scan moves automatically from left to right on both the top and bottom rows. If no key is selected, the scan circles the overlay three times, then stops. (You can change the *number of rescans* to a different number.) Activate your switch to start a new scan.

Step (8): Activate your switch each time you want to move to a new key. The DeltaTalker automatically selects a location when the activation delay has passed.

Hold: Press and hold your switch until you get to the location you want. Then release the switch.

Scan Auto Restart: The DeltaTalker automatically begins to scan the rows or columns after you select a location.

Scan Beep: Turns the scanning beep ON or OFF.





2 Switch—Scan Mode 1

SETTING UP

2-Switch—Scan Mode 1

Summary:

Use two single switches or one dual switch. Plug one single switch into the MONO connector and the other one into the DUAL connector. Plug the dual switch into the DUAL connector. After each activation, the scan returns to the center of the keyboard.

2-Switch—Scan Mode 1 with 128 and 32 Locations:

With 2-Switch you can use either two single switches or one dual switch. If you have two single switches, plug one switch into the connector marked MONO on the back of the DeltaTalker. Plug the other switch into the connector marked DUAL. If you have a dual switch, plug it into the connector marked DUAL. Select 2 SWITCH in the SELECT. TECH menu. Scan Mode 1 is the default.

2 Single Switches (Auto)—"Auto" is the default. Each switch alternates the direction of the scan between up/down and left/right. The first activation of switch #1 starts the scan of the *middle column*. Press the switch again and the scan reverses. The first activation of switch #2 starts the scan across the rows. Push the switch again and the scan reverses. Press and *hold* the switch to start scan; *tap* the switch with a short hit to activate a location that is lit.

Dual Switch—The principle is the same as above. The SELECT side of your switch scans left/right and the ON/OFF side scans up/down.

You can choose AUTO or HOLD with 2-switch scanning. COLUMN/ROW is not available with 2-Switch Scan Mode 1. *STEP is not available with a 128 location overlay*.

2 Switch—Scan Mode 1 with 8 Locations

You can choose "Step" or "Hold" ("Auto" is the default) and you can choose "Circular" or "Linear" scan. (See page 73 for a description of Circular and Linear scans.) With 2 switches in 8 locations, one switch scans forward and one switch scans backward.



2-Switch—Scan Mode 2

2-Switch—Scan Mode 2

Summary:

Switch 1 starts scan. Switch 2 selects row or column. Switch 1 scans row or column. Switch 2 selects location.

Plug two single switches into the MONO and DUAL jacks. Switch 1 is in the MONO jack. Switch 2 is in the DUAL jack. If you have a dual switch, plug it into the DUAL jack. With a PRC dual switch, the SELECT side of the switch is Switch 1 and the ON/OFF side of the switch is Switch 2.

Use 2-Switch Scan Mode 2 with the 32 or 128 location overlays. 8 *Location is not an option with 2-switch, scan mode 2*. Select 2 SWITCH and MODE 2 in the SELECT TECH menu.

Press Switch 1 to start the scan. The lights in the top row or first column light up. To move the scan to the next row or column, hold Switch 1 down until the row or column you want is lit. You can also press and release the switch each time you want to move to a new row or column.

When you reach the row or column you want, press switch 2. Then press and hold Switch 1 to scan across or down, or press and release the switch until you reach the key you want.

When you reach the location you want, press switch 2.

With this technique, Switch 1 always moves you somewhere and Switch 2 always chooses your selections.

You can set scanning speed and activation delay in the Toolbox.

Stepping or pressing and holding the switch are the only scanning choices with Scan Mode 2. *Automatic scan is not a choice*.

Joystick

If you want to select a key manually you will need a fifth switch to act as the "select" switch.

Otherwise, the DeltaTalker will automatically select the location after the acceptance time has passed.





SETTING UP 78

Joystick as a Selection Technique

Summary:

Plug the joystick into the MULTI jack on the back of the DeltaTalker. A joystick allows you to scan up, down, left, right and diagonally.

A Joystick is the most versatile scanning device. A Joystick can be pushed in any direction to scan up, down, left, right or diagonally. You can also use an Arm Slot Control instead of a Joystick. The Arm Slot Control allows Joystick-type scanning for people who do not have enough fine motor skills to use a Joystick.

Plug the Joystick into the "Multi" jack on the back of the DeltaTalker.

If you choose "Manual" selection type from the menu, you must plug a separate switch into the "Mono" connector on the back of the DeltaTalker. You use the joystick to scan to the location you want. The DeltaTalker will automatically select the location after the acceptance time has passed or you can activate the separate switch to select the location.



If you would like a custom cable to allow you to use the same joystick that drives your wheelchair, you can call the PRC Service Department at 1-800-262-1990 and ask for the Rehab Engineer.



Another Selection Technique: Quarter Row/Column Scan

Options in the SELECT TECH Menu

Below are short explanations of some of the options in the SELECTION TECHNIQUE menu.

Scan Mode: Select either Mode 1 or Mode 2.

Scan Type: Auto or Hold, Step: Auto means the DeltaTalker automatically scans the keyboard. Hold means you must press and hold your switch to scan the keyboard. Step (used with an 8 location overlay) means you must press your switch each time you want to step to a new position.

Selection Type: Auto or Manual: Auto means the DeltaTalker will automatically select a location after the acceptance time has passed. Manual means that you must activate your switch to select a location.

Scan Auto Restart: If this is Off, once you have selected a message you must activate your switch to start a new scan. If this is On, once you have selected a message the DeltaTalker automatically starts a new scan.

Number of Rescans: This allows you to select the number of times you want the DeltaTalker to automatically re-scan the keyboard. You can select a number from 0 through 10. The default is 3 times.

Scanning Beep This allows you to turn the scanning beep >OFF< or >ON<.

Quarter Row/Column or Column/Row Scanning: The keyboard is divided into 4 equal squares (quarters). Activate your switch to choose the quarter that contains the key you want. The DeltaTalker scans each row in the quarter you choose. Activate your switch to select the row you want. Activate your switch again to select the key you want. If you select column/row, the DeltaTalker will scan the columns first, then the rows.



Scanning Speed

SETTING UP 82

Change the Scanning Speed in the SELECT TECH Menu

Summary:

Scanning speed is the amount of time it takes the DeltaTalker to move from one key to the next in a scan. As the DeltaTalker scans, it beeps and lights the LED at each key.

Scanning Speed refers to the time it takes for the DeltaTalker to move from one key to the next key in a scan. As each key is scanned its LED lights up and the DeltaTalker beeps. The default scanning speed is 1 second. You may want to use a slower scanning speed to start with, perhaps 5 seconds (5.0) between beeps. This means it will take five seconds from the time one LED lights and the DeltaTalker beeps to the time the next LED in the scan lights and the device beeps again. Or you can choose a very fast speed such as one tenth (.1) of a second between beeps.

Change the scanning speed by opening the SELECT TECH menu in the Toolbox. *Lift the keyguard and overlay off the DeltaTalker*. Turn the Toolbox On by activating the TOOLS button in the Control Panel.

Activate the SELECT TECH menu. Activate NEXT MENU ITEM to step to "Scanning Speed'. Activate CHANGE >ITEM< to scan through the different scanning speeds. When you come to the one you want to use, activate EXIT. This sets the scanning speed and closes the menu. (If you want to see the different Selection Technique options, press the NEXT MENU ITEM key after you open the menu.)

Hint:

The arrow keys in the Toolbox allow you to move backward and forward through the options in this menu correspond to NEXT MENU ITEM. Correspond to CHANGE >ITEM<



Change Acceptance Time in the SELECTION TECHNIQUE Menu

Summary:

Scanning: how long you must maintain contact with a switch before the DeltaTalker accepts a location and makes a key activation. **Headpointing**: the amount of time it takes between the time the LED lights up to the time the DeltaTalker accepts the location and activates the key.

Acceptance Time is the amount of time it takes for the DeltaTalker to accept a location and activate the key. If you are scanning, the acceptance time is the amount of time you must **maintain contact** with your switch before the key you have scanned to is accepted. If you are using the headpointer, acceptance time is the amount of time it takes between when the LED for the key you pointed to lights up and when the DeltaTalker beeps that the location has been activated. The default acceptance time is .01 second for scanning and 1.0 second for headpointing.

If the default time is too fast or slow for you, you can change the delay in the Toolbox.

To Change the Acceptance Time:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate the SELECT TECH menu (I2).
- 3. Activate NEXT MENU ITEM until you see 'Acceptance Time'.
- 4. Activate CHANGE >ITEM< to see the different acceptance times. When you come to the one you want to use, activate EXIT. This sets the acceptance time and closes the menu. (If you select a high acceptance time, e.g., 5 seconds, you **must** maintain contact with key or switch until the key activates.)

Remember that the arrow keys in the Toolbox allow you to move backward and forward through the options in this menu.

←→correspond to NEXT MENU ITEM. ψ ↑ correspond to CHANGE >ITEM<.



Activation Delay Lets You Change Your Mind

Activation Delay Gives You a Chance to Change Your Mind Before a Key is Activated

Summary:

With Activation Delay turned On, you can scan to a key, select it and then change your mind and begin to scan again before the key is activated. Activation delay is automatically set to your scanning speed.

Activation Delay gives you a few seconds to change your mind when you are scanning and have selected a key. When Activation Delay is turned On you can scan to a key, select it, and then if you change your mind, you can hit your switch again to keep the key from being activated.

The default for Activation Delay is Off. When on, the amount of delay is automatically set at whatever your scanning speed is. If your scanning speed is set to 1 second (1.0), then once you select a key you have 1 second in which to change your mind and "de-select" the key by hitting your switch again. If you open the SELECT. TECH. menu and turn Activation Delay Off, any key you select will be activated with no delay. The tool can only be turned On or Off.

To Toggle ACTIVATION DELAY From Off to On:

- 1. Remove the keyguard and overlay. Turn on the Toolbox.
- 2. Activate SELECT TECH menu (I2). Press NEXT MENU ITEM until you see ACTIVATION DELAY = OFF.
- 3. Activate CHANGE >ITEM < key (G1).
- 4. When you see ACTIVATION DELAY = ON, activate EXIT (H1).



SETTING UP 88

More Set-Up Options:

Icon Prediction Shows Where You Have Messages Stored

Summary:

When Icon Prediction is ON, LEDs light for the first icon in every sequence you have stored.

If you have stored a message or two, you have probably noticed that some LEDs on the keyboard remain lit even if you aren't scanning or pressing them. These lights are telling you that their particular keys are possible selections for messages. In this way Icon Prediction helps you to remember where you have messages stored. Icon Prediction ON is the default.

For example, let's say you have the message, "Leave me alone!" stored under the icons, (SENTENCE) \bigvee_{VOU} (YOU). The LED for the icon is lit. If you activate this icon, the LED for \bigvee_{VOU} lights. Activate \bigvee_{VOU} and the message is spoken.

Before you select any keys, all the icons that begin icon sequences where messages are stored are lit. Once you activate a key, only those icons which are possible selections for the next icon in a sequence are lit. When you select one of these keys, only the icons which are possible selections for the third icon in a sequence are lit (this is usually only *one* icon). Once the last icon in a sequence is selected, the message is spoken and Icon Prediction lights all the icons that begin icon sequences where messages are stored.

To turn Icon Prediction Off: Remove the keyguard and overlay. Turn the Toolbox On in the Control Panel. Activate the FEEDBACK menu key (H2). Activate NEXT MENU ITEM until you see 'Icon Prediction'. The default is ON. Activate CHANGE >ITEM< to toggle to OFF. Activate the EXIT key to exit the menu.



If you select this key—_____ it will not work and nothing will happen. Only lighted keys will work.

With Predictive Selection On, when you select a key that is **not** lit, the key will not work.

Predictive Selection helps you to make correct selections.

Predictive Selection works for all selection techniques.

Predictive Selection

Predictive Selection Lets You Scan Only to Where Messages Are Stored or Lets You Select Only Where LEDs are Lit

Summary:

When this is turned On, only those keys where messages are stored are active.

When Predictive Selection is turned On, only keys where messages are stored are active. This means that if you are scanning and you activate a key where no message has been stored, the key will not do anything—it won't even beep or light. Predictive Selection will not scan locations that are not predicted (lit).

If you turn 'Icon Prediction' On along with 'Predictive Selection', the DeltaTalker lights only those icons where messages are stored. These lighted icons are the only keys on the keyboard that can produce a response. This means that if you are scanning, the DeltaTalker scans only the lighted keys. If you are using direct selection (headpointing or the keyboard) you will only be able to activate lighted keys. Unlighted keys will not work.

To Turn Predictive Selection On:

- 1. Remove the keyguard and overlay from the DeltaTalker.
- 2. Go to the Control Panel and activate SELECT. Step to TOOLS. Activate the ON/OFF side to turn the Toolbox On.
- 3. Activate PREDICTIVE SELECTION (D-3).
- 4. Return to the Control Panel and turn the Toolbox Off (press SELECT, then the ON/OFF side).
- 5. Replace the overlay and keyguard.



Save Settings

Save Your Set-Up Settings

Summary:

The SAVE SETTINGS key (H3) allows you to set up from 1 to 3 different Selection Techniques and then save the settings for each under an icon sequence or a single key.

You may want to set up more than one Selection Technique and its options. Perhaps you use a headpointer in the morning when you are fresh, but like to use a switch in the afternoon or evening when you begin to tire. You can save the settings for up to three different Selection Technique set-ups.

The keys associated with saving settings keys are at locations H3, I3, J3 and K3. The SAVE SETTINGS key has a small diamond in the lower right corner of the key. The AUDIT PROMPT, FEEDBACK, SELECT TECH, SPEECH, and OUTPUT menus also have small diamonds in their lower right corners. *Any options you choose from these 5 menus are saved when you activate the SAVE SETTINGS key and then activate one of the 3 settings location keys.*

To Save Settings:

- 1. Activate SAVE SETTINGS (H3). You see, "Select the #1, #2 or #3 SETTINGS key to save or select ESCAPE to cancel."
- 2. Select the settings key you want to use, e.g., #1.
- 3. You see: "Select STORE to save settings under #1 or select ESCAPE to cancel."
- 4. Select STORE. You see a blank screen. The settings are saved.

ONote:

If you want to change from one setting to another during the day, you should store both settings on your overlay. See page 151 to find out how to do this.

UNote:

For Information about Storing

Infrared (IR) Commands,

see the Chapter:

Connecting to and Using Other Devices

beginning on page 211

Storing Messages

What is the Difference Between Digitized Speech and Synthesized Speech?	97
About the SPELL/MINSPEAK Tool	
Before You Begin to Store	
Store Messages in Digitized (Recorded) Speech	
Erase the Recorded Message	
Store a Synthesized (Text-to-Speech) Message	
Edit a Synthesized Message	
Erase a Synthesized Message	
Some Helpful Storing Hints	
When One Sequence Hides Another Sequence	
Storing and Retrieving Messages in 8 and 32 Locations	117
About 1 and 2 Icon Themes	
Using INSERT TOOL to Store Tools	
Storing THEME Tools With or Without Theme Icons	
Storing the 1 ICON THEME Tool Under an Icon Sequence	
Using the 1 ICON THEME Tool	
Exiting a Theme	
Review Your Messages	
Erase the Contents of the DeltaTalker	
1	



Digitized or Synthesized Speech

Store Digitized (Recorded) or Synthesized (Text-to-Speech) Messages

Summary:

Digitized = messages that someone has stored by speaking into the DeltaTalker's microphone.

Synthesized = messages that are typed into the DeltaTalker which the DeltaTalker then translates into its own speech.

The DeltaTalker allows you to store messages in two different kinds of speech—digitized or synthesized. **Digitized speech** is speech that someone else has recorded into the DeltaTalker, just like recording something into a tape recorder. **Synthesized speech** is speech that the DeltaTalker itself produces from words that are typed into it. Each time you store a message you can select which kind of speech you want to use.

Synthesized speech for a DeltaTalker that has been manufactured for English-speaking countries offers ten different DECtalk[™] voices. Synthesized speech for a DeltaTalker that is manufactured for non-English-speaking countries, offers four different Infovox[™] voices.

If you record messages, make sure the person doing the recording is a good representative of the person who is using the DeltaTalker. If the DeltaTalker user is an 8 year old boy, have an 8 year old boy (preferably one who is not a close friend or family member) do the recording. Remember the DeltaTalker is the *voice* of the person using it.

You will probably store most messages in **synthesized speech**. This is the best way to become familiar with Minspeak and to increase language abilities. But it is fun to use recorded speech for things like clapping, laughter, singing and various human sound effects that don't sound natural when they are reproduced in synthesized speech. There is enough digitized memory in the DeltaTalker to record approximately 2.5 minutes of digitized messages.



The SPELL/MINSPEAK Tool

About the SPELL/MINSPEAK Tool

Summary:

MINSPEAK allows you to retrieve messages by activating icons. SPELL allows you to type messages into the DeltaTalker.

In the Toolbox there is a key labeled SPELL/MINSPK (L1). If you are using the QWERTY overlay, SPELL/MNSPK is also on it. When you are selecting icons to store messages or to speak the messages you have stored, you are in MINSPEAK. When you are putting text on the display, either by typing or scanning, you are SPELLING.

In the Control Panel you can see an LED with MINSPK printed beside it. When you are using Minspeak, the LED on the Control Panel is lit. When you are Spelling, the light on the Control Panel goes *out*.

Minspeak is the quickest way to communicate—you just activate the icons you want and the DeltaTalker speaks your messages. Spelling takes longer, but is sometimes necessary. When you are in Minspeak and want to start to spell, activate the SPELL/MINSPK key until the LED goes out. Activate it again to return to Minspeak. The light comes on to remind you that you are in Minspeak. (When 'Auto Spell' is On the DeltaTalker automatically switches you from Minspeak to Spelling and then back to Minspeak. See page 161 for information about "Auto Spell.")

Before you begin to store messages: PLAN		
MESSAGES	ICON SEQUENCES	
Plan	Select	
messages which are	icon sequences for	
necessary	each message which	
useful	help you to remember	
fun	the message.	
Write them	Write them	
Examples:	Examples:	
Help!.	MEDICAL VERB	
What?.	? WORD ? WORD	
Surprise!	INTERJ RAINBOW	
Select STANDARD or EXTENDED SPEECH		

Plan Before You Begin to Store

Before You Begin to Store, Know What You Want to Say

You can store words, phrases and sentences into the DeltaTalker's memory. You can store messages under an icon sequence of up to 8 icons or under a single key.

Before you store, plan out the message *and* the icon sequence or key you want to use. This helps you to store messages faster and, if you are recording, keeps you from holding the RECORD button down while you think about what you want to say. The longer you hold the RECORD button down without recording anything, the more memory space you waste.

When you *record* a message direct your voice toward the microphone in the Control Panel. When you record you will notice that some of the LEDs in the Status Panel light up. These lights act as an **audio level** for your recording. When you begin recording, two LEDs at the bottom of the column light. If you are recording well, LEDs light up in the middle of the column. If you are speaking too loudly, two LEDs at the top of the column light. If only the two LEDs at the bottom of the column are visible, you are speaking too softly. The best recording will have the two bottom LEDs and some of the middle LEDs lit at the same time. If no LEDs in the middle of the column light during recording, you may want to re-record the message.

You can connect an external microphone to the MIC connector on the back of the DeltaTalker. PRC makes a remote microphone that fits the DeltaTalker's connector. You can also go to an electronic equipment store and ask for a remote microphone that will fit a 3.5 millimeter mono jack.



Store Recorded (Digitized) Speech

Store Your Message in Digitized (Recorded) Speech

Summary:

Select RECORD in the Control Panel. Select STORE. Activate the icon sequence to store message under. Select STORE. Press and hold the RECORD key while you speak the message. Release the RECORD key when you end the message.

To Store a Digitized Message:

- 1. Open the Control Panel and select the RECORD key (the LED will light).
- 2. Spell any text you want to show on the display. When you have finished entering the text, select STORE. If you don't want any text on the display, just select STORE without typing anything.
- 3. Select the icon sequence you want to store the message under.
- 3a. If the sequence you have chosen is already used, you will see, "Sequence used! Select ERASE to replace [the old message with the new one], STORE to choose new icons [for the new message], or ESCAPE [to escape from storage so you can start over].
- 4. Select STORE again.
- 5. Press and *hold down* the RECORD button and speak the message into the microphone. Release the RECORD button as soon as you have finished speaking.

When recording messages, speak directly into the microphone in the Control Panel. You may want to bring the DeltaTalker up near your mouth before you begin to record (hold the DeltaTalker in one hand and press RECORD with the other). Speak louder than you would normally. Speak clearly. Watch the AUDIO LEVEL LEDs. Remember that you want to see some LEDs in the middle of the column lighting while you are recording. If only the bottom two LEDs light, you are speaking too softly.

We suggest you practice a few times until you find a comfortable voice level that sounds clear when it is replayed.



Erase Recorded (Digitized) Speech

STORING MESSAGES

Erase Recorded Messages

Summary:

Select ERASE. Select the icon sequence. Select ERASE. Select ERASE again.

At some point you will want to erase some messages. The DeltaTalker's memory may become full (the LED in the Control Panel next to DIGIT. MEM. FULL will light) and you will have to erase some messages before you can record any new ones. Or perhaps some messages simply become out-of-date and you want to replace them.

To erase a message, choose ERASE from the Control Panel or the ERASE key (P3) from the Toolbox.

To Erase a Message from the DeltaTalker:

- 1. Select ERASE from the Control Panel or turn the Toolbox On and select the ERASE key (P3).
- 2. Select the icon sequence you want to erase.
- 3. Select ERASE.
- 4. The icons you chose are displayed. Select ERASE to erase the message. If you stored text with the recorded message, it will also be erased.
- 4a. If you change your mind and decide not to erase the message, select ESCAPE in the Control Panel or ESCAPE in the Toolbox to exit without changing anything.

UNote:

You cannot edit a recorded message.

If you want to change a recorded message, erase it first and then re-record it.

To learn how to erase the entire contents of the DeltaTalker, see page 133, "Zorro the DeltaTalker".



The **ESCAPE** key in the Control Panel or Toolbox can be used at any time *stop* the storing process.

A GOOD HABIT

When you type in a message to store, end it with punctuation mark and two spaces; then

Store a Synthesized Message

Store a Synthesized Message

Summary:

Select STORE in the Control Panel or the Toolbox. Spell in any message you want to be spoken. Select STORE. Activate the icon sequence you want to use to store the message. Select STORE.

A synthesized message is one you type into the DeltaTalker and store under an icon sequence. When you activate the icons the DeltaTalker speaks your message in whatever voice you have chosen to use. The message is also shown on the display screen.

To Store a Synthesized Message:

- 1. Select STORE.
- 2. Type in (spell) the message you want to store.
- 3. Select STORE.
- 4. Select the icons you want to use for the sequence.
- 4a. If the sequence you choose is already used, the display shows:

Sequence used! Select ERASE to replace, STORE to choose new icons, or ESCAPE.

You can replace the old message with your new one, choose new icons for the new message by activating STORE, or activate ESCAPE to start over.

5. Activate STORE.

To speak your message, just activate the icons you chose in step 4.

A Good Habit

When you type in messages to store, get in the habit of ending each message with a punctuation mark and then a space (or two spaces if you follow typing rules). Individual words should also be followed by a space.

If you want to store a tool with your text, you must use INSERT TOOL in the Toolbox. See page 121 and 143 for information about using INSERT TOOL and combining tools and text.



Edit a Synthesized Message
Edit a Synthesized Message

Summary:

Activate the EDIT key in the Control Panel or Toolbox. Select the icon sequence for the message you want to change, then select STORE. Edit the message, select STORE.

You can edit any message you have stored into the DeltaTalker.

To Edit a Synthesized Message:

- 1. Activate EDIT in the Control Panel or the Toolbox.
- 2. Select the icon sequence that you want to edit.
- 3. Activate STORE.
- 4. Edit the text on the display screen. You can use the arrows, DELETE WORD and DELETE CHAR. to help you change the message.
- 5. When you are finished editing, select STORE.

Also see the explanation for the CHARACTER/WORD tool on page 199.

UNote:

The EDIT tool can also be used to erase a message. Activate EDIT, clear the display and then select STORE.



Erase a Synthesized Message

Erase a Synthesized Message

Summary:

Activate ERASE in the Control Panel or on your Toolbox overlay. Choose the icon sequence you want to erase and select ERASE again. Select ESCAPE (or ESCAPE) to exit before anything is erased.

At some point you will want to erase some messages. The DeltaTalker's memory may become full (the LED in the Control Panel next to SYNTH. MEM. FULL will light) and you will have to erase some messages before you can store any new ones. Or perhaps some messages simply become out-of-date and you want to replace them.

To erase a message you can press the ERASE button in the control Panel or the ERASE key (P3) in the Toolbox.

To Erase a Synthesized Message:

- 1. Select ERASE from the Control Panel, or turn the Toolbox On and select ERASE from the Toolbox.
- 2. Select the icon sequence you want to erase.
- 3. Select ERASE again to tell the DeltaTalker you have finished selecting icons.
- 4. The DeltaTalker displays the icon names and asks if you want to erase that message. To complete erasing, activate ERASE again. If you change your mind, activate ESCAPE in the Control Panel or ESCAPE in the Toolbox.

UNote:

The EDIT tool can also be used to erase a message. Activate EDIT, clear the display and then select STORE.

To learn how to erase the entire contents of the DeltaTalker, see page 133 (**ZORRO the DeltaTalker**).



Helpful Hints



Fast, Easy Recording

- 1. Open the Control Panel.
- 2. Press RECORD.
- 3. Press STORE.
- 4. Select an icon sequence.
- 5. Press STORE.
- 6. Press and hold RECORD while speaking your message. Release RECORD when you have finished message.

Storing this way means that there is no text on the display. Also you are recording, not using one of the DeltaTalker's voices.

When you are storing, editing or erasing you can activate ESCAPE in the Control Panel or ESCAPE in the Toolbox at any time to exit any procedure.

If you want to keep a location free on your overlay, use EDIT for both editing and erasing messages with synthesized speech.

When you store individual words, always store them with a space after the word. Always store messages with punctuation and two spaces at the end of the message.

Using commas in messages adds a pause when the message is spoken and helps to make the message easy to understand.

When you are storing a message, activate SPEAK DISPLAY to hear how the message sounds. This keeps you from having to make corrections later.

When you are storing, editing or erasing, the DeltaTalker automatically switches to the Unity overlay to allow you to activate the icons you want, then returns to the Toolbox.



When a Message is 'Hidden,' Tell the DeltaTalker which Message to Speak

STORING MESSAGES

When a Longer Icon Sequence Hides a Shorter Sequence, Select the Last Icon in the Shorter Sequence Twice to Hear the Message

Summary:

If an icon sequence for one message is also the beginning of a sequence for another stored message, select the last icon in the shorter sequence twice.

Once a message is stored into the DeltaTalker, you can speak it at any time by selecting the icon sequence (or single icon) that it was stored under. However, if an icon sequence for one stored message also happens to be the **beginning** of a sequence for a different stored message, the AlphaTalker II cannot be sure which message you want to speak. For example, suppose you have the message "Not!" stored under the \checkmark (KNOT) icon. And suppose you stored the message, "I don't like that." under \checkmark \bigcirc (KNOT APPLE). When you activate \checkmark , the AlphaTalker II does not know whether you want to speak the message stored under KNOT or whether you want to add APPLE and speak the message, "I don't like that."

In cases like this when you want to speak the *shorter* sequence, activate the last icon *twice*—in this case \checkmark . If you use Icon Prediction (see page 89-91) the \checkmark icon is lit. If you activate \checkmark once, the light stays lit and the \bigcirc icon lights. You can then select either message by activating \checkmark again or by activating \bigcirc .

DImportant Note: We recommend that you try **not** to mask messages!



Storing and Recalling Messages in 8 or 32 Locations

STORING MESSAGES

Store and Retrieve Messages in 32 or 8 Locations

Summary:

Turn the Toolbox On. Open the CHOOSE OVERLAY menu (F2). Activate CHANGE MENU ITEM until the keyboard size you want is on the display. Activate EXIT.

To store in 8 or 32 locations, you must select the correct keyboard from the CHOOSE OVERLAY menu. When you are in 32 location you cannot speak messages stored in 8 or 128 locations and viceversa. Once you select 8 or 32 locations from the CHOOSE OVERLAY menu, storing and retrieving messages is the same as in 128 locations. (For more information about the 8 and 32 location keyboards, see pages 53-55.)

When you are in 8 or 32 locations you can press *any* of the keys in each of the blocks that make up the larger single key. In order to store or speak in 32 or 8 locations you must be in the 32 or 8 location keyboard layout.

To Change to Keyborad Layout:

- 1. Turn on the Toolbox and activate CHOOSE OVERLAY (F2). Activate NEXT MENU ITEM.
- 2. Activate CHANGE >ITEM< until you see the keyboard you want to use on the display.

When you activate CHANGE >ITEM< you will see PLEASE WAIT...

Then you should see the next keyboard size.

3. Activate EXIT when you see the keyboard size you want.

If you have never used the keyboard you just selected, the display screen may be dark. Turn the Backlight On in the FEEDBACK menu. (See **SAVE SETTINGS**, page 93, 151.)

If you ordered the 8 or 32 Location kit, you should put the correct keypad, overlay and keyguard on the keyboard. When you are in 8 or 32 LOC the LED for that location lights in the Control Panel.



1 and 2 Icon Themes

About Themes

Summary:

"Theme" tells the DeltaTalker to automatically "hold down" the same first icon or first two icons for any sequences you enter into the theme.

With Minspeak you can organize vocabulary (words, phrases and sentences) by category, topic or situation. This helps you remember where messages are stored. You are also building strong language skills because you are learning to categorize, store and recall vocabulary.

For example, the icon [INTERJ] represents the category, "interjection". Short, fun words and phrases can be stored using

INTERJ plus one other icon. and and can represent the word "Ouch." The graphic on the facing page shows you an "Interjection" category. To add new words to this category, you would store them using the INTERJ icon for your *first* icon. This helps you remember that each message is an interjection word. The second icon you use can help you remember the specific word or phrase.

A **1 ICON THEME** makes this kind of storing easy. In the Control Panel press the 1 ICON side of the 1 ICON/2 ICON key. Activate the icon on your overlay that you want to use for the theme. In our example, the theme, or *first* icon, is INTERJ. Once you select INTERJ as your theme icon, you don't have to select it again. As long as you remain in your theme, you only have to activate the *second* icon to store or retrieve messages.

A **2 ICON THEME** works the same way. Any messages you store in a 2 ICON THEME will all have the same first two icons. You select the third icon in the sequence.



• Note:

All tools and menus are *always* available in the Toolbox.

When you "move" a tool from the Toolbox to your Custom Overlay the DeltaTalker only **copies** the tool and moves the **copy** to the Custom Overlay. The original tool remains in the Toolbox.

Use INSERT TOOL to Store Tools

About Using INSERT TOOL When You Store Tools on Your Unity overlay

Summary:

Add 1 ICON THEME, 2 ICON THEME and EXIT THEME to your Unity overlay. Use STORE and INSERT TOOL to store the tools.

The easiest way to use themes is to move the different THEME tools (1 ICON THEME, 2 ICON THEME and EXIT THEME) from the Toolbox and to store them on your Unity overlay. When you 'move' a tool from the Toolbox to your Unity overlay you are really *copying* the tool and storing it on your Unity overlay. You can add tools to keys on your Unity overlay or you can store them under icon sequences. We will discuss storing a tool under an icon sequence.

Tools actually tell the DeltaTalker to *do* something. If you go to the Toolbox and activate SPEAK DISPLAY, the DeltaTalker will speak whatever is on the display. If you activate 1 ICON THEME, the DeltaTalker will ask you to select an icon for the theme.

Before you move a tool from the Toolbox to your Unity overlay, you must tell the DeltaTalker that you don't want it to **do** what the tool says, you just want to **move** the tool. If you activate a tool in the Toolbox without telling the DeltaTalker that you want to move the tool to your Unity overlay, the DeltaTalker will assume you want it to do whatever the tool calls for. To tell the DeltaTalker that you want to *move* the tool to your Unity overlay, **you must first activate STORE, then activate INSERT TOOL (O1) and then activate the tool you want to move.** You only use INSERT TOOL when you are storing a tool to a key or an icon sequence. Once a tool is stored on your Unity overlay it will perform its assignment just like it does in the Toolbox. (Page 143 also talks about using INSERT TOOL.)

ONote:

There are a number of ways to move tools from the Toolbox to your Unity overlay. Pages 137-151 in the *Personalize Your Overlay* chapter describe other ways to move tools.



Storing THEME Tools With or Without a Theme Icon

STORING MESSAGES

Storing a THEME Tool With or Without a Theme Icon

Summary:

When you store the 1 or 2 ICON THEME tool on your Unity overlay you can choose to store it with a theme icon or without a theme icon.

When you move a THEME tool to your Unity overlay you can choose to store the tool by itself. This means that you do not select a theme icon to go with the tool. Or you can choose to store the THEME tool with a theme icon.

If you choose to store the 1 ICON THEME or 2 ICON THEME tools *by themselves*, then whenever you select them from your overlay, the DeltaTalker will ask you to select the icon (s) that you want to use for the Theme. This means that any time you select the 1 or 2 ICON THEME tool you can pick whatever icon you want for your theme.

If you decide *to choose a theme icon* to store with the 1 ICON THEME or 2 ICON THEME tools, then whenever you select them, the DeltaTalker will automatically put you in the theme that you stored with the THEME tool. This means that any time you select the 1 or 2 ICON THEME tool you will always be in the theme that you selected when you stored the tool.

Remember, you can assign a THEME tool (with an icon or without one) to a key or you can store the tool under an icon sequence. If you decide to store the THEME tool under an icon sequence, you end the storage process by selecting an icon sequence to store the THEME under.

The next page gives you an example of storing the 1 ICON THEME tool with a theme icon and without a theme icon. You will store the tool under an icon sequence.



Store the THEME Tool Under an Icon Sequence

STORING MESSAGES

Storing the 1 ICON THEME Tool Under an Icon Sequence On Your Overlay

Summary:

An example of storing 1 ICON THEME with a theme icon and without a theme icon.

Storing 1 ICON THEME Under an Icon Sequence on your Overlay:

First, think of an icon sequence to store 1 ICON THEME under. HAMMER (tools) and BOOK (story) might be a good sequence.

- 1. Remove the keyguard and overlay. Turn the Toolbox On in the Control Panel. The TOOLS light will light.
- 2. Activate STORE either in the Control Panel or the Toolbox.
- 3. Activate INSERT TOOL (O1) in the Toolbox.
- 4. Activate 1 ICON THEME.

Dimportant: At this point the DeltaTalker switches you from the **Toolbox** to your **overlay**. If you want to select a theme icon to go with the 1 ICON THEME, you must select it from the Unity overlay now. If you do not want to use a theme icon, select STORE now. *If STORE is not on your Unity overlay, you must go to the Control Panel and select the STORE key.*

- 5. *If you want to select a theme icon to store with 1 ICON THEME* select the icon that you want to use for the theme from your overlay (see note above) If you select the icon, INTERJ, you see: <I-ICON THEME (INTERJ)> .
- 5a. *If you do not want to store a theme icon with the key*, select STORE (see note above.) You see <1-ICON-THEME>.
- 6. Select STORE.
- 7. Select an icon sequence to store 1 ICON THEME under.
- 8. Select STORE.

1 ICON THEME is now stored under a sequence. When you activate this sequence, you will be in a 1 Icon Theme or you will be prompted to choose the icon you want to use to set the theme.

OPTION # 1 When THEME key has been 1			
stored with a theme			
Activate sequence you stored THEME key under			
See on the display:			
INTERJ:			
The colon (:) after the icon name means are in your theme. You can now store messages in the theme or retrieve messages in the theme if they are already stored.			
OPTION # 2 When THEME key has been 1 ICON stored alone THEME			
Activate sequence you stored THEME key under			
See on the display:			
Select icon for 1-icon			
Activate the icon you want to for the theme			
INTERJ			
The colon (:) after the icon name means are in your theme. You can now store messages in the theme or retrieve messages in the theme if they are already stored.			

Using 1 or 2 ICON THEME

Using the 1 ICON THEME Tool

Summary:

Activate the sequence you stored the tool under. Either pick an icon to use for the theme or begin storing/retrieving using the theme icon you stored with the tool.

If You Did Not Store a Theme Icon with the Tool

Activate the icon sequence you stored the 1 ICON THEME tool under. The display asks you to pick an icon for your theme. Select the icon you want to use. On the bottom line of the display you see the name of the icon you just selected to use as your theme. You may now begin to store or retrieve messages under this theme.

If You Stored a Theme Icon with the THEME Tool

Activate the icon sequence you stored the theme under. On the bottom line of the display you see the name of the theme icon you stored with the theme tool. You may now begin to store or retrieve messages under this theme.

Storing and Retrieving Messages in a Theme

When you are in a theme, the DeltaTalker automatically selects the theme icon as the *first* icon in every sequence you select. You simply select the second, etc., icons that you want in your sequence. Once you have messages stored under your theme, retrieve them by activating the 1 ICON THEME sequence and then selecting any keys that have LEDs that are lit (Icon Prediction). These lighted keys are part of the sequences that are stored under your theme icon. (See pages 89-91 for information about Icon Prediction and Predictive Selection.)

OWhen you are storing or retrieving messages in a theme, the LED next to 1 or 2 ICON THEME in the Control Panel lights to remind you that you are in a theme.



Exit Theme

STORING MESSAGES

Activate EXIT THEME *Once* to Exit a Theme Temporarily; Activate EXIT THEME *Twice* to Exit a Theme Permanently

Summary:

Activate EXIT THEME once to leave a theme so that you can activate a sequence outside your theme and then return to the theme. Activate EXIT THEME twice to remove yourself completely from the theme.

Maybe you are in your FAMILY theme, talking to your friends. Someone asks you where you want to eat lunch. You want to respond "at the corner deli" but that response isn't part of your 'family' theme. Luckily, the DeltaTalker allows you to move outside your theme for a *single message* and then it automatically returns you to your theme.

Press EXIT THEME *once* to temporarily exit the current theme for one sequence activation. When the message is completed, the DeltaTalker automatically returns to the theme you were using.

If you want to go on and have a discussion about restaurants and not return to the FAMILY theme at all, you can press EXIT THEME *twice*. This cancels your theme and you are free to talk about anything you want to.

Remember:

To **Temporarily** Exit a theme for a single message press EXIT THEME **once**.

To **Permanently** Exit a theme press EXIT THEME *twice*.

If you are in a theme, the LEDs in the Status Panel next to 1 ICON THEME or 2 ICON THEME will be lit. (Always check here first if you have trouble storing or retrieving messages. You may have forgotten you were in a theme and need to exit it before you can use the DeltaTalker the way you want to.)

Remove keyguard and overlay.			
2 REVIEW VOCAB in the Too	olbox.		
CHANGE View = >ALL MESSAGES<			
>ITEM< Choose specific Icon			
NEXT Review to = >DISPLAY <			
ITEM USe NEXT MENU ITEM , CHANGE ITEM	/l or EXIT		
NEXT Review Method = >AUTOMATIC SC	AN<		
ITEM USE NEXT MENU ITEM ,CHANGE ITE	V or EXIT		
NEXT REVIEW MEMORY NOW = >NO<			
ITEM USe NEXT MENU ITEM ,CHANGE ITEN	/l or EXIT		
To start review activate CHANGE> ITEM<			
CHANGE SEQUENCE: APPLE NOUN			
>ITEM< CONTAINS: fruit			
Activate ESCAPE to quit reviewing at any time.			

Review Your Messages

Review Your Messages

Summary:

Select REVIEW VOCABULARY in the Toolbox. Select to review messages stored under a specific icon or all the messages you have stored. Choose to see the review on the display screen, to have it printed out or to see it on the display and hear it through the speaker at the same time.

You may want to review the messages that you stored in your DeltaTalker to find out if there are any messages that are no longer used with any frequency so you can erase them and store new ones. Or you might like to have a print-out of all the vocabulary in the DeltaTalker.

To Review the Messages You Have Stored in the DeltaTalker:

- 1. Remove the keyguard and overlay, turn the Toolbox On and then press REVIEW VOCAB (M2) in the Toolbox.
- 2. Activate NEXT MENU ITEM. The first option is to view all the messages you have stored under a specific icon. If you select this option, you must activate the specific icon whose messages you want to see.

If you do not want this option, press CHANGE >ITEM<. This option allows you to view all the messages you have stored.

- 3. When you have made a selection in step #2 above, you must choose whether you want the messages to go to the display screen, the display screen and speaker or to a printer or computer.
- 4. When you have made a selection in #3 above, you must choose whether you want the DeltaTalker to scan the messages automatically or whether you want to activate your switch or a key after each message. This allows you to read (or listen) at your own speed before moving to the next message.
- 5. Display shows, Review memory now = >NO<. To start the review, press CHANGE >ITEM< to change >NO< to >YES<.
- 6. If you need to interrupt the review, select ESCAPE from the Control Panel at any time or select EXIT.



"Zorro" the DeltaTalker (Erase its entire contents)

STORING MESSAGES

Erase the Entire Contents of the DeltaTalker by "Zorroing" the Device

Summary:

Use the 'Zorro' pattern to erase all the DeltaTalker's memory at one time. Activate A-1, P-1, A-8, P-8, A-8, P-1, A-1. Select **ERASE**.

You have learned how to erase stored messages one by one from the DeltaTalker (see pages 105 and 111). If you want to erase all the messages in the device and you don't have a lot of time (or patience) for erasing them one by one, you can erase everything in the DeltaTalker's memory at once by "Zorroing" the device.

When you start the procedure to erase all the memory, you are asked to enter the "ZORRO" pattern. This is a special key sequence. The key sequence is (*in the exact order as shown*): A-1, P-1, A-8, P-8, P-8, A-8, P-1, A-1

When you activate these keys in this particular sequence it resembles a forward and reverse letter 'Z' so we call it the 'Zorro' pattern.

To Zorro the DeltaTalker:

- 1. Remove the keyguard and overlay.
- 2. Open the MAINTENANCE menu (L2).
- 3. Press NEXT MENU ITEM to see >Erase all vocabulary and reset system<.
- 4. Activate CHANGE >ITEM<.
- 5. Activate the following keys in the order shown: A-1 P-1 A-8 P-8 P-8- A-8 P-1 A-1.
- 6. Select ERASE to confirm.
- 5. The DeltaTalker will erase all its memory and reset its system to all the defaults.

A complete system reset erases all the memory in the Delta-Talker and returns the system to the original defaults and reloads the demo vocabulary. To remove the Demo vocabulary, use the CHOOSE OVERLAY menu in the Toolbox and load a blank overlay.

Personalize Your Overlay

Personalize Your Overlay	137
Different Ways to Personalize the Overlay	139
Assign Spelling Characters to Keys	141
Use INSERT TOOL to Assign a Tool to a Key	143
Assign Tools in Minspeak or Spell Mode	145
Assign Tools and Text to the Same Key	147
Assign Tools and Text to an Icon Sequence	149
Copy the "Settings" Keys to Your Overlay	151
Swap Key	153
Rename Icon	155
Disable Key	157
The FEEDBACK Menu	159
Auto Spell	161
Icon Tutor	163
Auditory Prompts	165
Store Key and Category Prompts	167
Erase Prompts	169



Use These Tools to Personalize Your Overlay

Personalize Your Overlay

Summary:

Use INSERT TOOL, ASSIGN MINSPEAK, ASSIGN SPELL, to copy keys from your Toolbox to your overlay. Use SWAP KEY to move keys around on your Unity overlay.

Your Unity overlay is the overlay that you use the most. It might be the 128 location QWERTY overlay that came with your DeltaTalker, or it might be a blank overlay that you have created yourself. The most important thing about your overlay is that it is set up to help you to communicate easily, rapidly and independently.

There are many things you can do to customize, or personalize, your overlay. If there are icons on your overlay that have no meaning for you, you can change them or rename them to something more familiar. If you are using a pre-programmed overlay (like the QWERTY overlay) you can delete tools or spelling characters that you never use and add tools and spelling characters from the Toolbox that are more useful to you. You can even swap the position of one key with another. You can also assign tools, spelling characters and instructions for their use under icon sequences or to specific keys.

ONote:

Before you begin to personalize your overlay, make sure you have chosen the keyboard size and the overlay you want from the CHOOSE OVERLAY menu

The next few pages explain how to personalize your overlay.





Different Ways to Personalize Each Key

PERSONALIZE YOUR OVERLAY 138

Different Ways to Personalize Keys

If you want to assign something to a key that you can access while you are in SPELL mode:

To assign **spelling characters** to a key in SPELL mode

Use ASSIGN SPELL plus the spelling character(s) that you want to assign to the key.

To assign **tools** to a key in SPELL mode:

Use ASSIGN SPELL plus INSERT TOOL plus the tool you want to assign to the key.

To assign **tools and text** to a key in SPELL mode:

Use ASSIGN SPELL plus any spelling characters or instructions and remember to use INSERT TOOL before any tool. You can assign text and tools in any order.

If you want to assign something to a key that you can access while you are in MINSPEAK mode:

To assign **spelling characters** to a key in MINSPEAK mode:

Use ASSIGN MINSPEAK plus the spelling character(s).

To assign **tools** to a key in MINSPEAK mode:

Use ASSIGN MINSPEAK plus INSERT TOOL plus the tool you want to assign.

To assign **tools and text** to a key in MINSPEAK mode:

Use ASSIGN MINSPEAK plus the text (spelling character and or instructions) and remember to use INSERT TOOL before any tool. You can assign text and tools in any order.

If you want to assign spelling characters, tools or tools and text to an icon sequence:

Use STORE plus the spelling characters/instructions and remember to use INSERT TOOL before any tool. You can assign text and tools in any order.

To change the name an icon that is assigned to a key:

Use RENAME ICON.

To move a key from one location to another location: Use SWAP KEY.



Assign Spelling Characters In SPELL Mode or MINSPEAK Mode

Assign Spelling Characters to Keys

Summary:

Activate ASSIGN SPELL or ASSIGN MINSPEAK. Activate the key you want to assign a spelling character to. Activate the spelling character in the Toolbox.. Activate STORE.

You can assign spelling characters (e.g., a, b, th, ch, etc.) in either SPELL or MINSPEAK, or both. If you want to assign characters in SPELL, activate ASSIGN SPELL in the Toolbox. If you want to assign characters in MINSPEAK, activate ASSIGN MINSPK in the Toolbox.

Decide what spelling characters you want to assign. Decide what *keys* you are going to assign the characters to. *Mark each key on your overlay with the spelling character that you are assigning to it.*

To Assign a Spelling Character to a Key:

- 1. Remove the keyguard and overlay. Turn the Toolbox On in the Control Panel.
- 2. Activate ASSIGN SPELL (C2) or ASSIGN MINSPK (B2).
- 3. Activate the key you want to assign a spelling character to.
- 4. The DeltaTalker displays the key. If a spelling character or icon is already assigned to the key, it is named on the display. Activate CHANGE >ITEM< to continue, or EXIT to quit.
- 5. If you activate CHANGE >ITEM, activate the spelling character in the Toolbox that you want to assign to the key.
- 6. Activate STORE.
- 6a. If you change your mind and decide not to make an assignment, activate ESCAPE STORAGE in the Toolbox *before* you activate STORE.
- 7. The new spelling character is assigned to the key. It replaces any other spelling character or icon that might have been assigned to the key.

To erase a spelling character, activate ASSIGN SPELL, activate the key you want and then activate DELETE CHARACTER or DELETE WORD to erase the character.



ONote:

All tools and menus are *always* available in the Toolbox.

When you "move" a tool from the Toolbox to your Overlay the DeltaTalker **copies** the tool and moves **copy** to the Custom Overlay. The original tool the Toolbox.

Use INSERT TOOL When You Assign a Tool from the Toolbox to Your Unity overlay

Use INSERT TOOL to Assign a Tool to a Key

Summary:

You must activate INSERT TOOL *before* you activate the tool in the Toolbox that you want to move to your Unity overlay. See also page 121 for more information about INSERT TOOL.

You can assign tools from the Toolbox to your overlay. You can even assign a combination of tools and text to the same key or you can store tools or tools and text under an icon sequence. To assign a tool to a key or to store it in a sequence you must use the INSERT TOOL key in the Toolbox.

INSERT TOOL (O1) is a helper tool that you *must* use any time you want to move a tool from the Toolbox. When you use INSERT TOOL you are telling the DeltaTalker to *copy* a tool in the Toolbox and assign the copy to the key you have chosen on your Unity overlay.

Tools tell the DeltaTalker to *do* something—like DELETE a CHARACTER or turn the SPEAKER VOLUME UP. Even the menu tools tell the DeltaTalker to do something each time you select an option. When you activate a tool, something happens. Before you can move a tool from the Toolbox to your overlay, you must tell the DeltaTalker that you don't want it to do what the tool says, you just want it to assign the tool to a key or a sequence. INSERT TOOL tells the DeltaTalker that you want it to assign a specific tool somewhere, not perform the tool's function.

When you assign a tool from the Toolbox to your overlay, you can assign it using ASSIGN SPELL, ASSIGN MINSPEAK or you can store it under an icon sequence. You must always activate INSERT TOOL *before* you activate the tool you want to move.

See page 121-127 for information about INSERT TOOL and THEMES.



Assign a Tool in MINSPEAK or SPELL Mode
Assign Tools in SPELL Mode and/or MINSPEAK Mode

Summary:

Activate ASSIGN MINSPEAK or ASSIGN SPELL. Activate the key you want to assign the tool to. Activate INSERT TOOL. Activate the tool in the Toolbox that you want to assign to the key. Activate STORE. A tool always replaces the icon or spelling character that was assigned to that key.

When you assign a tool to a key, the tool in the Toolbox is *duplicated* on your Unity overlay, not removed from the Toolbox. All of the tools are always available in your Toolbox.

To Assign a Tool to a Key:

- 1. Remove the keyguard and overlay. Turn the Toolbox ON.
- 2. Activate ASSIGN MINSPEAK or ASSIGN SPELL.
- 3. Activate the key where you want to add the tool.
- 4. You see the key's current assignment if there is one.
- 5. Activate CHANGE >ITEM<. Activate INSERT TOOL. Activate the tool from the Toolbox that you want to assign to the key.
- 6. Activate STORE. The key you selected now contains the tool you assigned to it. This means that whenever you are in the correct mode, and you activate this key, it will perform the duties of the tool assigned to it.
- 7. Activate EXIT

●If you assign a tool to a key in MINSPEAK, it replaces the icon for that key. The explanation below tells you how to restore the icon if you want to.

To Erase a Tool and Restore the Icon:

- 1. Activate ASSIGN MINSPEAK in the Toolbox.
- 2. Activate the key whose icon you want to restore.
- 3. Activate CHANGE >ITEM<. Activate ERASE to remove the tool and restore the icon.
- 4. Activate EXIT.



Assign Both Tools and Text to a Key

Assign Tools and Text to the Same Key

You can assign tools and text to a key in SPELL mode and/or MINSPEAK mode.

You might like to assign some instructions to a key or an icon sequence. For example, you can assign the CALL tool to a key on your overlay and tell the DeltaTalker to say "CHARGE" any time you activate the key.

To Assign Directions (tools and text) to a Key:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate ASSIGN MINSPEAK.
- 3. Activate the key you want to assign the directions to.
- 4. Activate CHANGE >ITEM<.
- 5. Activate INSERT TOOL. Activate CALL.
- 6. Spell: CHARGE!
- 7. Activate INSERT TOOL. Activate SPEAK WORD.
- 8. Activate STORE.
- 9. Activate EXIT.

Now, whenever you activate this key in MINSPEAK mode, it will make the CALL key you will hear the CALL signal and the DeltaTalker will speak "CHARGE!"



Assign Tools and Text to an Icon Sequence

Assign Tools and Text to an Icon Sequence

You may not have any keys that are free to assign tools and text to, but you still have some instructions that you want to be able to use on your overlay. You can assign these instructions to an icon sequence. Then, instead of activating a key to tell the DeltaTalker to perform your instructions, you just activate the icon sequence you stored them under instead.

To Assign Tools and Text to an Icon Sequence:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate STORE.
- 3. Activate INSERT TOOL. Activate CALL.
- 4. Spell: CHARGE!
- 5. Activate a space.
- 6. Activate INSERT TOOL. Activate SPEAK WORD.
- 7. Activate STORE.
- 8. Select an icon sequence to store the directions under
- 9. Activate STORE.



When you store tools under an icon sequence, **try each icon sequence after you have finished storing**. Make sure the tool is doing what you want it to do. Make sure the person using the DeltaTalker is not left in the toolbox by mistake.

Remove the keyguard and overlay. Turn the toolbox On.					
STORE Activate STORE					
Spell message then select STORE					
Type in text first: e.g.: Taylor's afternoon settings.					
THEN activate:					
Now activate STORE STORE					
Select icon sequence, then select STORE					
Select the sequence you want and activate STORE.					
ANY					
ICON ICON STORE					
Turn theToolbox Off. Go to your Custom overlay. Make sure you are in Minspeak. Activate the icon sequence you stored the SETTINGS key under.					
You see: Select STORE to replace current settings. Any other key to cancel					
Activate: STORE					
DeltaTalker speaks					
and displays: Taylor's afternoon settings					
Using #1 settings					

Copy the SAVE SETTINGS Keys to Your Unity overlay

Copy the ''Settings'' Keys to Your Unity overlay

Summary:

When you move any SAVE SETTINGS keys from the Toolbox to your overlay, **any text must be entered before you use INSERT TOOL.**

When you select the #1, 2 or 3 SAVE SETTINGS key, the DeltaTalker asks you to confirm your selection by activating STORE. Because of this, you cannot copy it to your overlay by activating INSERT TOOL first. You must type in any text **before** you activate INSERT TOOL. This allows the DeltaTalker to prompt you to activate STORE to confirm your use of the new settings.

Before you move a settings key to your overlay, save the settings you want to use to that key using the procedure that is described on page 93. Assign your settings to a specific key on your overlay or to an icon sequence.

Save the #1, 2 or 3 SAVE SETTINGS Key to Your Overlay and Store it Under an Icon Sequence:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate STORE.
- 3. Type in any text you want to use to describe the settings, e.g "afternoon settings." When you activate your sequence you will see this text on the display.
- 4. Activate INSERT TOOL.
- 5. Select the correct #1, 2 or 3 SAVE SETTINGS key from the Toolbox.
- 6. Activate STORE.
- 7. Activate the icon sequence you want to use. Activate STORE.
- Activate the icon sequence you selected. You should see: "Select STORE to replace current settings. Any other key to cancel." If you want to use the settings, activate STORE. The #1, 2 or 3 settings will take the place of any settings you *were* using. If you don't want to use the new settings, just activate any key (except STORE) to cancel the operation.



Use SWAP KEY in the Toolbox to Move Keys on your Unity overlay

Swap Key

Summary:

Activate SWAP KEY. Activate one of the keys you want to swap. Activate the key you want to swap with the first key. Select ESCAPE in the Control Panel to exit.

After using your overlay for awhile, you may find that the position of some keys is awkward for you. By using the SWAP KEY tool you can swap the positions of any two keys at a time.

To Swap Keys:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate SWAP KEY (D2) in the Toolbox.
- 3. The DeltaTalker asks you to select one of the keys you want to swap. Select one of the keys on your overlay that you want to swap. (The DeltaTalker automatically switches you from the Toolbox to your overlay.)
- 4. The DeltaTalker asks you to select the key you want to swap with the key you just selected. Select the key on your overlay that you want to swap with the first key.
- 5. The DeltaTalker display tells you the names of the keys you have swapped. Activate NEXT MENU ITEM to continue swapping keys or activate EXIT to quit.

You can select any key *twice in a row* to exit from SWAP KEY; or you can select ESCAPE in the *Control Panel*.

When you swap keys, you swap everything associated with each key—this includes the spelling assignment, the Minspeak assignment (icon or tool), and any messages that may be stored under the key.



Use RENAME ICON to Give an Icon a Different Name

Rename Icon

Summary:

If you don't like the name of an icon you can give it a different name by using the RENAME ICON menu.

The icons on your overlay were assigned names at Prentke Romich Company. Some icons have names like HOUSE and SUN. Some have names that are location codes like B1 or K7. You can change B1 to an easier-to-remember icon name or you can change an icon name like HOUSE to another name that might be more descriptive for you, such as HOME or LARGE or BUILDING.

To Rename an Icon:

- 1. Remove the keyguard and overlay. Turn the toolbox on.
- 2. Activate RENAME ICON (A2) in the Toolbox.
- 3. Activate the icon on your *Unity overlay* that you want to rename.
- 4. The DeltaTalker asks you to spell the new name you want to use for the icon. Spell the new name.
- 5. Select STORE.
- 6. The DeltaTalker tells you that the old icon has been renamed to the new name you have chosen.
- 7. You can select another icon to be renamed or you can select the EXIT key to quit renaming icons.

UNote:

In step #3, if you accidentally activate an icon you don't want to change, just activate STORE *instead of spelling a new name*.

If you spell in a new name and then decide you don't want it, use the arrows and DELETE keys to erase the new name. Then activate STORE. The original name will be kept.



If you decide to EXIT now and not do anything: activate EXIT (H1).

If you decide to disable some keys:

Activate DISABLE KEY *again*: All keys that are currently useable (enabled) light up.



- 1. Activate any key you want to disable.
- 2. The LED goes out and the key is disabled.
- 2a. Activate the key again. The LED goes on and the key is enabled.

												:	:-	- 5	3
Г	•	•	Γ	Г	•		•	P	•	•	۰	•	•	۴	٩
-					•		•	•		•	•		•		┢
Г	•	٠			•			•	•	•		Þ	•		┝
	•	•			•		t	•	•		•	•	•		Þ
Г	•	•	Γ		•			•		۰	•	٠	•	•	Þ
	•				•	•			•			•	1		•
	•	٠	•		•	۰	٠	•	•	٠	•	•		•	Þ
t				Þ	•	Ð	t	•	-		•	+		+	╈

All the keys that have lighted LEDs may be used.



Disable Key

PERSONALIZE YOUR OVERLAY 156

Disable Key

Summary:

Activate this key and then activate the key you want to disable.

The DISABLE KEY tool disables a key so that it won't work at all. It is rather like turning the key off. Press it and nothing happens. This is handy if you want to learn just a few keys and sequences at a time.

To Disable Keys:

1. Remove the keyguard and overlay. Turn the Toolbox On.

2. Activate DISABLE KEY (O5). At this point, the display tells you: This function disables or enables keys. Re-select DISABLE KEY to proceed, or EXIT.

If you select DISABLE KEY again, all the keys that are currently enabled (useable) light up. *From now on, you must activate ESCAPE in the Control Panel to exit the "Disable" process.*

- 3. Activate the first key you want to disable. Its LED goes out. This indicates that the key is now disabled.
- 4. If you change your mind, just activate the key again. When the LED comes back on, the key is ready to use.
- 5. Continue to activate all of the keys you want to be disabled—that is, turn *out* their LED's.
- 6. To *stop* disabling keys, got to the *Control Panel* and activate the ESCAPE button. This is the only way you can exit from disabling keys once you have begun the "disable" process.
- 7. Turn the Toolbox Off and replace the keyguard and overlay.

To Re-enable a Key:

Go to the Toolbox and activate DISABLE KEY **twice**. Activate any key that does not have a lighted LED. When the LED lights, the key is enabled. Follow step #6 above to exit from disabling/enabling keys in the Toolbox.



FEEDBACK Menu

PERSONALIZE YOUR OVERLAY 158

Feedback Menu

The FEEDBACK menu (H2) contains options that give you information about what the DeltaTalker is doing. **Icon Prediction** and **Predictive Selection** are feedback choices.

Activation Signal = >BEEP< or >LIGHT<

Auto Power Down = >ON< or >OFF< When this is On, the DeltaTalker powers down after 7 minutes if no key or switch activations are made. When it is Off, you must turn the DeltaTalker Off in the Control Panel. See page 27 for more information.

Feedback is also what you see on the display screen. If you select **View Selected Icons =** >**ON**<, you will see icon names on the second line of display screen when you activate icons. If it is >OFF<, you won't see icon names and you may use the second line for text.

Auto Repeat Rate allows you to choose how fast a key will repeat itself when you continue to hold it (or your switch) down. If you select "1.0" for example, a key that you hold down will repeat itself once every second.

Backlighting = >OFF< or >ON< When this is On the display screen is backlit so that you can see it better. The default is Off.

Backlight Shut-Off = >OFF < or >ON < When this is ON, the backlight turns off automatically after 3 minutes if no activations are made. Activate a key or switch to turn the backlight back ON. The default is Off.

The FEEDBACK menu also contains two very special feedback choices: **Auto Spell** and **Icon Tutor**. Please read the next two pages to learn about these options.



Auto Spell Changes Icons to Spelling Characters

Auto Spell

Summary:

Auto Spell >On< allows you to go automatically from Minspeak to Spelling, spell one word, and then automatically return to Minspeak. The default is Off.

When Auto Spell is On:

If you select an empty sequence (a sequence that has not been used to store a message) while you are in Minspeak, the DeltaTalker usually displays [EMPTY] after the icon name(s). If you have turned Auto Spell >On< and you select an empty sequence, the DeltaTalker checks to see if the keys you activated contain any spelling characters. If they do, the DeltaTalker automatically transfers you from Minspeak to Spelling and displays the spelling characters associated with your icons on the screen. Now you can spell a word using the characters on the display. When you finish the word, activate a space. The DeltaTalker automatically switches you back to Minspeak.

Predictive Selection with Auto Spell On:

If you are using Predictive Selection in Minspeak, activate SPELL/MINSPK once. This switches you from Minspeak to Spelling. Spell the word you want, then activate a space. The DeltaTalker returns you automatically to Minspeak.

Spelling more than one Word:

If you decide you need to spell more than one word, you can activate SPELL/MINSPK *twice*. This allows you to spell all the words you want. When you are ready to return to Minspeak, just activate SPELL/MINSPK again.

	_
Remove keyguard and Turn the Toolbox On. Activate FEEDBACK MENU (H2) Select NEXT MENU ITEM and step to Tutor". Select CHANGE >ITEM< to turn Icon Tutor>ON<. Select EXIT.	
On Your Custom	
Select SPELL	
Spell "Please".	
Please	
Activate the "space"	
Please	
If "please" is stored in your vocabulary, Icon Tutor shows you where.	
Please	
Stored at: INTERJ WANTED	
On the display you see the names of the icons	
HINT:	
Icon Tutor can only find individual	

that have been stored with **space** at the end of the

Icon Tutor Helps You Remember Where Vocabulary is Stored

Icon Tutor

Summary:

The Icon Tutor helps you to learn the sequences where you have stored specific words.

The Icon Tutor is another aid that you can use to help you learn where words are stored.

Turn the Icon Tutor On:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Open the FEEDBACK menu. Activate NEXT MENU ITEM until you see Icon Tutor = >Off<.
- 3. Activate CHANGE >ITEM< once. You see, Icon Tutor = >On<.
- 4. Turn the Toolbox Off and replace the overlay and keyguard.

Now make sure you are in SPELLING. (Look at the status panel. If the MINSPK LED is not lit, you are in SPELLING. If it is lit, you are in MINSPEAK, so activate MINSPK/SPELL once to switch to SPELLING.)

Perhaps you want to say, "Please" and you can't remember if it is in your vocabulary or not.

Spell "please" on your keyboard and activate the space key after you have spelled the word. If "please" is stored in your vocabulary, as soon as you activate the "space" key, the icon (or icon sequence) that "please" is stored under will be displayed on the screen.

UNote:

When you store individual words, add a space at the end of the word. Icon tutor can only find individual words, not words in a message.

When Icon Tutor is turned On, you can find out if any word is in your vocabulary and where it is stored by simply spelling the word and then activating a space. If the word is in your vocabulary, the DeltaTalker beeps and displays the icon name or sequence on the display screen.



Auditory Prompts

Summary:

Assign a spoken prompt to any key by using the AUD PROMPT menu. Auditory prompts can be used with an earphone.

Assign spoken prompts to individual keys or to a row or column of keys. Spoken prompts help you to learn locations on the keyboard. You can hear prompts through a regular speaker or you can plug an earphone into the jack labeled EAR on the back of the DeltaTalker.

Key prompts might be icon names or the name of an alphabet letter or perhaps the name of a color. *Category* prompts should help identify what a kind of messages a specific row or column of keys contains, such as "school" or "family."

The AUDITORY PROMPT Menu:

Prompts = >Off< or >On<: to hear any prompts, **turn PROMPTS** = >ON<.

Prompt by = >**Key**<: Key prompt is the default. The DeltaTalker speaks the pre-assigned location code or icon name of each key (A-1, P-4, SUN). Change pre-assigned names if you wish by storing new key prompts. Once a prompt is spoken, activate the key *again* to tell the DeltaTalker to select it.

Prompt by = >Content<: the DeltaTalker speaks the stored message when the last icon of a sequence is activated. *You do not store content prompts*. The prompt is the already stored message. If no message is stored, the pre-assigned *key prompt* is spoken. **>Store a Key Prompt**<: Use this to store your own prompt for a key.

>Store a Category Prompt<: (scanning) use this to store a
category name for a row or column of keys where most messages
are about something similar (e.g., ROW-1, SCHOOL)</pre>

>Erase a Key/Category Prompt<: use this to erase prompts.

All prompts must be stored in synthesized speech. You might want to choose a voice that is different from your main voice to speak the prompts. You can select a prompt voice from the SPEECH menu.

Activate three times	Remove keyguard and overlay. Turn the Toolbox On. Activate the AUD PROMPT menu.			
NEXT MENU	STORE A KEY PROMPT = >NO<			
ITEM	Use NEXT MENU ITEM, CHANGE ITEM or EXIT			
CHANGE	J5			
>ITEM<	Select key where prompt is to be stored			
	WORK			
J5	Spell prompt for [J5], then select STORE			
STORE	>STORE A KEY PROMPT<			
	Use NEXT MENU ITEM, CHANGE ITEM or EXIT			
NEXT MENU	STORE A CATEGORY PROMPT = >NO<			
TIEM	Use NEXT MENU ITEM, CHANGE ITEM or EXIT			
CHANGE	J5			
>ITEM<	Select key where prompt is to be stored			
	ROW 5 WORK			
A5 STORE	Spell prompt for [A5], then select STORE			
	STORE A CATEGORY PROMPT = >NO<			
	Use NEXT MENU ITEM, CHANGE ITEM or EXIT			
Continue storing prompts or activate EXIT				

Storing Prompts

Store Key and Category Prompts

To Store a Key Prompt:

- 1. Remove Keyguard and overlay. Turn Toolbox On.
- 2. Open the AUD PROMPT menu. Activate NEXT MENU ITEM until you see: STORE A KEY PROMPT = >NO<
- 3. Activate CHANGE >ITEM<. You see: "Select key where prompt is to be stored."
- 4. Select the key on your Unity overlay where you want to store the prompt: e.g. J5
- 5. Spell the prompt you want to use: e.g., WORK
- 6. Activate STORE. You see: STORE A KEY PROMPT = >NO<

To Store a Category Prompt (scanning only):

Store category prompts only in Column A (for column/row scan) or Row 1 (for row/column scan).

- 1. Same as Step #1 above.
- 2. Same as Step #2 above.
- 3. Activate CHANGE >ITEM< to see: STORE A CATEGORY PROMPT = >NO<
- 4. Activate CHANGE >ITEM<. Select the key on your overlay where you want to store the prompt. ⇒This key represents a row or a column: e.g., A5
- 5. Spell the prompt: e.g., Row 5 WORK.
- 6. Activate STORE.

To Use Prompts:

In the AUD PROMPT menu select "Prompts On" and "Key" or "Content". "Category" prompts are heard automatically when you are scanning as long as prompts are turned ON.

If you are using the keyboard, **press and hold** a key (or wait until the activation delay has passed) until you hear the prompt. Press or point to the key *again* to select it and hear the message (if any) for that key.

For scanning, scan to the key you want. The prompt is spoken automatically. Then press your switch to select the key.



Erase Auditory Prompts

Erase Auditory Prompts

To Erase Prompts:

- 1. Turn the Toolbox On and open the AUDIT PROMPT menu.
- 2. Activate NEXT MENU ITEM until you see ERASE A KEY PROMPT = >NO<
 - (If you do not want >key<, activate NEXT MENU ITEM to see ERASE CATEGORY PROMPT = >NO<)
- 3. Activate CHANGE >ITEM< to see Select prompt to be erased.
- 4. Select key

J5

5. You see on the display

Select ERASE to erase prompt at [J5]

6. You see

ERASE A KEY PROMPT = >NO< Use NEXT MENU ITEM, CHANGE >ITEM< or EXIT

Remember:

To hear your prompts, turn them ON in the AUD PROMPT menu. The default is OFF.

More Tools for Communication

Choosing a Voice

Select a Voice	75
Select a Speech Rate	77
Select an Average Pitch	79
Select a Pitch Range 18	81
Changing Voices in a Message	83
Speaking Tools	
Speak Word	85
Speak Last Selection	85
Speak All	85
Speak Sentence	85
Speak Display	85
Speech On/Off	85
Wait Any Key	87
Dictionary	
Dictionary—Add a Word18	89
Dictionary—Delete a Word	91
Dictionary—Review Words	93
Editing Tools	95
Shift/Caps Lock	97
Character/Word19	99
Plurals	01
Text Marker/Speech Marker/Text & Speech Marker	03
Clear Display	05
Delete Character	07
Delete Word	07
Delete Last Selection	07
Delete Icon	07
Arrow Keys	07



Speech Menu

About the Speech Menu

Summary:

The SPEECH MENU is available for synthesized speech. From it you can choose the voice that you want the DeltaTalker to use to speak your messages. The DeltaTalker uses DECtalk[™] speech for English speaking countries.

Remember that synthesized speech is speech that the DeltaTalker produces from text that you have typed into the device. DeltaTalker's that are produced for English speaking countries use DECtalk speech. DECtalk speech offers you ten different voices to choose from. You can select a voice like *Perfect Paul* (adult male), *Beautiful Betty* (female) or *Kit the Kid* (small child). There are also variations on these three voices that include a deep voiced male (*Huge Harry*), a whispery female voice (*Whispering Wendy*), and a whispery male voice (*Frail Frank*). *Rough Rita*, *Doctor Dennis* and *Uppity Ursula* are other male and female voices. *Variable Val* is a voice you can change to suit yourself.

DECtalk speech allows you to change some of the parameters of the voice you choose. You can change the pitch, pitch range and speech rate of the voice. Each of these parameters is explained in the next few pages.

You can choose one voice to speak all the messages that you store and anything you put on the display. You can choose another voice to speak any auditory prompts you might use. (See pages 165-167 for more about Auditory Prompts.)

To select a voice and/or change voice parameters, you must open the SPEECH MENU (J2) in the Toolbox.

9	SELECT A VOICE							
Re	move keyguard and overlay. Turn Toolbox On. ctivate the SPEECH MENU							
SPEECH MENU ♦	Voice Selection = >Main Voice< Use NEXT MENU ITEM, CHANGE ITEM or EXIT							
NEXT MENU ITEM	Voice Selection = >Perfect Paul< Use NEXT MENU ITEM, CHANGE ITEM or EXIT							
CHANGE >ITEM<	Use CHANGE >ITEM< to find the voice you want to use.							
EXIT	Use NEXT MENU ITEM or EXIT							

Select a Voice (DECtalk speech)

Selecting a Voice

Summary:

Select your main voice from ten DECtalk speech voices.

Select a Speech Voice:

- 1. Remove the keyguard and overlay from the DeltaTalker. Turn the Toolbox On.
- Activate the SPEECH MENU (J2). Activate NEXT MENU ITEM to see the first menu item. You see: Voice to Modify = >Main Voice<.
- 3. Activate NEXT MENU ITEM. You see:

Voice = >Perfect Paul<

Activate CHANGE >ITEM< until you see the voice you want to use. Then activate NEXT MENU ITEM to move on to the next menu item (Speech Rate) or activate EXIT to close the SPEECH MENU. The voice you selected will now speak all your messages.

Select an Auditory Prompt Voice:

When you see Voice to Modify = >Main Voice< activate CHANGE >ITEM<. You see: Voice to Modify = >Auditory Prompt Voice<

Select the voice you want to use for the prompts.

(For more about Auditory Prompts and how to use them see pages 165-167).

Helpful Hint:

While you are still in a menu, you can activate SPEAK ALL, SPEAK LAST SELECTION, SPEAK SENTENCE or SPEAK DISPLAY to hear a sample of the voice.



Selecting a Speech Rate

Selecting a Speech Rate

Summary:

Speech rate is how fast or slowly words are spoken.

Sometimes synthesized speech is difficult at first for listeners to understand. Slowing down the speech rate so that words are spoken more slowly often helps until listeners become used to your voice. On the other hand, you may find that people who listen to you talk all the time understand you easily and want you to speak faster. Raising the speech rate would be helpful here.

The speech rate is from 0-9. 0 is very slow and 9 is very fast.

To Change the Speech Rate for DECtalk and Infovox:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate SPEECH MENU (J2).
- 3. Activate NEXT MENU ITEM to see the first menu item. Select a voice.
- 4. Activate NEXT MENU ITEM to see the voices. Select a voice.
- 5. Activate NEXT MENU ITEM until you see: Speech Rate = >6<.
- 6. Activate CHANGE >ITEM< (or the arrow keys) until you see the speech rate number that you want displayed on the screen.
- 7. You can activate any of the 'speak' tools to hear how the speech sounds before you select a setting.
- 8. Either activate EXIT if you are finished or activate NEXT MENU ITEM to continue viewing speech menu options.



When you are giving a speech or talking on the telephone, people will understand your speech better if you set the speech rate to one of the *lower* levels. Ask someone to listen to you on the phone while you try out some of the lower speech rates to see which one is easiest to understand.



Selecting an Average Pitch

Selecting Average Pitch

Summary:

Pitch is how high or low a voice sounds.

All speech has variations in pitch within a sentence. The beginning of a sentence might be pitched higher or lower than the end of a sentence. The overall pitch of a voice, though, refers to whether the voice sounds high or low to someone who is listening to it. If you change the pitch of the voice you have chosen, you can make it sound higher over-all or lower over-all.

Each voice defaults to different pitch level. The range is 0-9. The nearer to nine, the higher the pitch; the nearer to zero, the lower the voice.

To Change the Pitch of the Voice You Selected:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate SPEECH MENU (J2). Activate NEXT MENU ITEM to select a Main or Auditory Prompt voice and then activate NEXT MENU ITEM again to select the voice you want to use.
- 3. Select NEXT MENU ITEM until you see: Pitch = >2<.
- 4. Activate CHANGE >ITEM< until you see the pitch number that you want displayed on the screen.
- 5. You can test the pitch by selecting SPEAK DISPLAY or any of the 'speak' tools.
- 6. Either activate EXIT if you are finished or activate NEXT MENU ITEM to continue.

SEI	LECT A PITCH RANGE Remove keyguard and overlay. Turn Toolbox On. Activate the SPEECH MENU
SPEECH MENU	Voice to Modify = >Main Voice< Use NEXT MENU ITEM, CHANGE ITEM or EXIT
NEXT MENU ITEM	Voice Selection = >Perfect Paul< Use NEXT MENU ITEM, CHANGE ITEM or EXIT
NEXT MENU ITEM	Average Pitch = >4< Use NEXT MENU ITEM, CHANGE ITEM or EXIT
CHANGE >ITEM<	Average Pitch = >5< Use NEXT MENU ITEM, CHANGE ITEM or EXIT
	DOWN = towards monotone UP = towards too much inflection
EXIT	Use NEXT MENU ITEM or EXIT
Э You backwa	can use the Arrow keys to go forwards and ards through the numbers.

Selecting a Pitch Range
Selecting a Pitch Range

Summary:

Pitch Range is the amount of variation (or inflection) there is in the voice's pitch during speech. A pitch range of 0 produces a monotone; a pitch of 9 produces wildly inflected speech.

A voice can have an over-all high or low sound. We say that someone has a high-pitched voice, or a low-pitched voice. But what is actually being said by a person can also have a degree of pitch itself. When someone speaks in a monotone, every word sounds the same and it is boring to listen to. On the other hand, if someone is really excited, or very afraid, they may pitch their words so wildly that they can barely be understood. A good pitch range is one where words can be easily understood but are also interesting to listen to.

The pitch range is from 0-9. 0 is a monotone and 9 is extremely inflected. The default is different for each voice.

To Change the Pitch Range:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate SPEECH MENU (J2). Activate NEXT MENU ITEM to see the first menu item. Activate NEXT MENU ITEM again and then select a voice.
- 3. Activate NEXT MENU ITEM until you see: Pitch Range = >6<.
- 4. Activate CHANGE >ITEM< (or the arrow keys) until you see the pitch number that you want displayed on the screen.
- 5. You can activate any of the 'speak' tools to listen to the speech before you select the range you want.
- 6. Either activate EXIT if you are finished or activate NEXT MENU ITEM to continue viewing menu options.



Change Voices Within a Message (Synthesized speech only)

Changing Voices Within a Message (DECtalk speech)

Summary:

DECtalk speech allows you to store messages that contain two or more voices. Use the synthesized speech storing method.

You might want to store a message that uses more than one voice. Perhaps you are asked to read something to a group, or you want to tell a joke that has different characters speaking in it.

To use two or more voices you must type in a special code for each voice that you use. The voice code must be entered right before the words that are to be spoken in that particular voice. For example, you could store the following message using a number of different voices:

[:np] Papa Bear said [:nh] Who's been sitting in my chair?[:np] Mama Bear said [:nb] Who's been sitting in my chair?[:np] Baby Bear said [:nk] Who's been sitting in my chair?

You can see that it is quite easy to change voices in a message. Just remember that you must copy the code for each voice exactly as you see it here—use small letters, the square brackets and no spaces:

- [:np] Perfect Paul
- [:nb] Beautiful Betty
- [:nh] Huge Harry
- [:nf] Frail Frank
- [:nk] Kit the Kid
- [:nr] Rough Rita
- [:nu] Uppity Ursula
- [:nd] Doctor Dennis
- [:nw] Whispering Wendy
- [:nv] Variable Val

Use the synthesized speech storing process that you learned on page 107.



The SPEAKING Tools

Speaking Tools

Summary:

These tools help you to communicate easily and promptly. All of these tools work whether you have the speech On or Off.

SPEAK WORD: the DeltaTalker speaks the last word you typed in Spell mode, or the last word you brought up in Minspeak mode. If you are typing in Spell mode, you can turn speech OFF (so you don't have to listen to the DeltaTalker speak each letter) and type the word. Then you can activate this key and the word you typed will be spoken.

SPEAK LAST SELECTION: the DeltaTalker speaks the last stored message you activated or the last spelling characters you put on the display. This is helpful if you have to repeat yourself so that someone listening can understand you better, or to get someone's attention.

SPEAK ALL: the DeltaTalker speaks all of the text on the display and in the buffer. (When you type, letters and words that move off the screen in order to make room for new letters and words go into the "buffer." You can't see them, but they are there. You can use the arrow keys to bring them back onto the display screen.) Use CLEAR DISPLAY tool or turn the DeltaTalker OFF to clear the buffer.

SPEAK SENTENCE: the DeltaTalker speaks the message that contains the cursor. This is helpful if you want to hear how something you are working on sounds before you store it. It is also useful if you are going to give a speech or presentation. People seem to understand synthesized speech better when they hear it one sentence at a time until they get used to listening to it.

SPEAK DISPLAY: the DeltaTalker speaks everything that is visible on the display screen.

SPEECH ON/OFF: the default is ON. Anything you select or type is spoken. When this is turned Off, nothing is spoken unless you activate one of the tools listed above.



MORE TOOLS FOR COMMUNICATION 186

Wait Any Key

Summary:

This tool tells the DeltaTalker to wait until you press any key before it begins to speak.

When you add WAIT ANY KEY to a synthesized message, you can pause *within* the message, wait for any amount of time, then activate any key or switch to continue speaking. For example, suppose you were going to store a joke under an icon sequence. The joke is: Why is 6 afraid of 7?

```
(audience response)
Because 7 8 9!
```

You might store "Why is 6 afraid of 7?" under one sequence and "Because 7 8 9!" under another sequence. To tell the joke you would have to activate the first sequence, wait for a response and then activate the second sequence to tell the rest of the joke. If you store the whole joke and use WAIT ANY KEY, you only have to activate one sequence plus one extra key or switch activation.

To Use the WAIT ANY KEY Tool:

- 1. Activate STORE.
- 2. Spell in the message. Remember to use INSERT TOOL and then WAIT ANY KEY to allow for any pauses you want in the message. For example, in the example above you would type in "Why is 6 afraid of 7?" Then activate INSERT TOOL. Then activate WAIT ANY KEY. Then type "Because 7 8 9!"
- 3. Activate STORE.
- 4. Select an icon sequence.
- 5. Activate STORE.

Now when you activate the icon sequence to retrieve this message, the DeltaTalker speaks, "Why is 6 afraid of 7?" and pauses. The audience can ask, "I don't know—why is 6 afraid of 7?" And then you can activate any key on your keyboard or a switch and finish the joke. WAIT ANY KEY allows you to participate easily and naturally in conversations.

	E	Remove keyguard and overlay. Turn the Toolbox On. Activate DICTIONARY menu (E2).	
2	DICT IONARY	ADD A WORD $= > NO <$ Use NEXT MENU ITEM CHANGE ITEM or EXIT	
	CHANGE >ITEM<	Enter proper spelling, then select STORE	
Uuanita ■ Enter proper spelling, then select S		Juanita Enter proper spelling, then select STORE	
	STORE	ORE Wahnee tuh Enter pronunciation, then select STORE	
	STORE	ADD A WORD = >NO< Use NEXT MENU ITEM CHANGE ITEM or EXIT	

Adding Words to the Dictionary

Adding Words to the Dictionary

Summary:

Add words to the Dictionary to teach the DeltaTalker how to pronounce things correctly.

The DeltaTalker correctly pronounces most words that you use, but it has trouble with proper nouns like the names of cities and people's names. When you put words in the dictionary you are teaching the DeltaTalker to pronounce them correctly. Dictionary options are in the DICTIONARY menu (E2).

When you add words to the dictionary, first you spell them correctly, then you spell them the way you want the DeltaTalker to say them. For example, the name, "Juanita" is usually mispronounced so it's a good practice word.

When you open the DICTIONARY menu, the display asks you to spell the word you want to add. So you correctly spell in "Juanita" and then activate STORE. Now spell it the way it sounds. Select SPEAK DISPLAY or SPEAK SENTENCE while you are trying out different spellings until the DeltaTalker pronounces your word correctly. You will probably end up with a word that looks something like, "Wahnee tuh". Activate STORE when you are ready.

To Add a Word to the Dictionary:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate the DICTIONARY menu (E2). Activate NEXT MENU ITEM to see the first menu item, which is Dictionary Options = ADD A WORD = >NO<
- 3. Activate CHANGE>ITEM< to add a word.
- 4. Enter the correct spelling for the word you want to add.
- 5. Activate STORE.
- 6. Now type in the pronunciation (that is, spell the word the way you want it to be pronounced) and activate STORE.
- 7. You can either continue to add words or activate EXIT to close the menu.

	E	Remove keyguard and overlay. Turn the Toolbox On. Activate DICTIONARY menu (E2).		
2	DICT IONARY	ADD A WORD = >NO< Use NEXT MENU ITEM CHANGE ITEM or EXIT		
	CHANGE >ITEM<	GE /< Enter proper spelling, then select STORE		
		Juanita Enter proper spelling, then select STORE		
	STORE	Wahnee tuh		
	STORE	ADD A WORD = >NO< Use NEXT MENU ITEM CHANGE ITEM or EXIT		

Deleting Words from the Dictionary

Delete Words from the Dictionary

Summary:

Delete words from the Dictionary that you no longer need.

To Delete a Word from the Dictionary:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate the DICTIONARY menu. Activate NEXT MENU ITEM to see the first menu item. Activate NEXT MENU ITEM until you see

Dictionary Item = DELETE A WORD = >NO<

- $3. \quad Activate \ CHANGE > ITEM < to \ delete \ a \ word.$
- 4. Spell the word you want to delete.
- 5. Activate STORE.
- 6. The display automatically deletes the word, or it gives you an error beep. If you get an error beep, try spelling the word differently (perhaps you misspelled it).
- 7. Continue to spell words to be deleted or activate EXIT to close the menu.

	Remove keyguard and overlay. Turn the Toolbox On. Activate DICTIONARY (E2).		
NEXT MENU ITEM	Activate NEXT MENU ITEM until you see:		
	Review to = >DISPLAY<		
	Use NEXT MENU ITEM , CHANGE ITEM or EXIT		
CHANGE	Review to = >DISPLAY & SPEAKER<		
>ITEM<	Use NEXT MENU ITEM , CHANGE ITEM or EXIT		
	Review to = >COMPUTER or PRINTER<		
	Use NEXT MENU ITEM , CHANGE ITEM or EXIT		
NEXT	Review Method = >AUTO<		
ITEM	Use NEXT MENU ITEM , CHANGE ITEM or EXIT		
	Review Method = >STEP<		
	Use NEXT MENU ITEM ,CHANGE ITEM or EXIT		
NEXT MENU	REVIEW DICTIONARY WORDS = >NO<		
ITEM	Use NEXT MENU ITEM ,CHANGE ITEM or EXIT		
	To start review activate CHANGE> ITEM<		
CHANGE >ITEM<	Akron		
Activate ESCAPE to quit reviewing at any time.			

Review the Words in the Dictionary

Review Words in the Dictionary

Summary:

You can review all the words in your dictionary. You can see them on the DeltaTalker display, or see them and hear them spoken, or send them to a printer to be printed out.

If you use your dictionary a lot, you may want to review the entries every now and then. You can find out what words you use and want to keep, or you can note which words you don't use any more and then delete them.

To Review the Words in Your Dictionary:

- 1. Remove the keyguard and overlay. Turn the Toolbox On. Activate DICTIONARY (E2).
- 2. Activate NEXT MENU ITEM to step to

```
"Review to = >DISPLAY<
```

You can use CHANGE >ITEM< to review to >DISPLAY & SPEAKER< or >PRINTER OR COMPUTER<.

- 3. Select whether you want the DeltaTalker to review the messages automatically or whether you want to activate a key to step through them at your own pace.
- 4. When you have finished making selections in the above steps, you will see:

WORDS = >NO<.

Activate CHANGE >ITEM< to begin the review or activate EXIT to close the menu.

You can activate ESCAPE at any time to stop the review.



The Editing Tools

About the Editing Tools in the Toolbox

Summary:

Editing tools can help your conversation sound better when you are using synthesized speech.

When you store messages to be spoken in synthesized speech, you want the messages to be as clear and easy to understand as possible. Your messages will also be displayed on the DeltaTalker's display screen as well as spoken, so you want them to be easy to read, too.

You can correct any mistakes you make when you are storing messages by using the editing tools in the Toolbox. The next few pages describe the various editing tools and how to use them.

UNotes:

If you are editing at the end of the display screen, the DeltaTalker does not show partial words. The text jumps to the end of the next word, instead.

Use the UP and DOWN arrows to go line by line through the buffer. See page 207 for more about the arrows.



SHIFT, CAPS/LOCK and Arrows

SHIFT, CAPS LOCK and Arrow Keys

Summary:

These Tools also help make communicating easier for the person using the DeltaTalker and for the person listening.

SHIFT: When you activate this tool, the next letter that you select will be a capital letter. When you activate SHIFT, the CAP/SHIFT LED in the Control Panel *flashes* until you select the next letter.

CAPS LOCK: When you activate this tool, all the letters that you select afterwards will be capital letters. The CAPS/SHIFT LED in the Control Panel *stays lit* until you release the CAPS LOCK tool by activating it again.

UP, DOWN, LEFT and RIGHT ARROWS (N3, O4, N5, M4) When you activate an arrow key, you move the cursor through text on the display screen. The cursor moves in the same direction as the arrow you are using. You can move the arrow keys through text letter-by-letter or word by word by activating the CHAR/WORD tool. You can also use the arrow keys to move backward and forward through the options in some of the menus in the Toolbox.

Tacos are my favorite foof. Activate once Tacos are my favorite foof
Activate once Tacos are my favorite foof
Tacos are my favorite foof
Activate DELETE CHAR.
Tacos are my favorite foo
Activate "d"
Tacos are my favorite food
CHAR/ WORD Activate once for WORD ON
Tacos are my gavorite food.
Activate donce
Tacos are my gavorite
Activate DELETE WORD.
Tacos are my food.
Spell "favorite"
Activate to return to the end of the sentence
Tacos are my favorite food.

Character/Word

MORE TOOLS FOR COMMUNICATION 198

Character/Word

Summary:

Activate the left or right arrows to move the cursor through a word character by character. Switch to WORD and move the cursor through a message word by word.

When you have typed something on the display screen and you see that you have made a mistake, you can edit the message by using your arrow keys and the CHAR/WORD key (N4).

The default for this tool is CHARACTER. This means that each time you activate the left or right arrow, the cursor will move through a word character by character, to the left or to the right. Press the DELETE CHAR key (P7) to delete the character **to the left** of the cursor.

If your cursor is at the end of a long sentence or paragraph and you want to correct a mistake at the beginning, you can activate the CHAR/WORD tool to switch from CHARACTER to WORD. Now when you activate the left or right arrows the cursor moves from word to word instead of letter to letter. Actually, the cursor moves from *space to space* You can activate DELETE WORD to delete the word **to the left** of the cursor. Or you can activate CHAR/WORD again to switch back to CHARACTER so you can move through the word letter by letter and change whatever letters you want to.

WORD allows you to move the cursor more quickly with less activations than CHARACTER does.



Remove keyguard and overlay. Turn Toolbox On.			
HOUSE			
Spell a word on the display (or retrieve a stored message)			
Make sure the word you want to make plural is <i>to the left</i> of the cursor.			
PLURAL Activate the PLURAL key			
HOUSES			

Making Words Plural with the PLURAL Tool

Plurals

Summary:

Activate this key if you want to make the word to the left of the cursor plural.

The DeltaTalker has a tool in the Toolbox that will allow you to make many words plural without having to spell. You can move it to your Unity overlay if you find that you like to use it.

The PLURAL tool will add the plural for the word *to the left of the cursor* on the display. This is true whether you have spelled a word onto the display or whether you have placed the cursor next to a word in a message that you have retrieved from storage.

To pluralize a word, position the cursor so that the word you want to make plural is to the left of the cursor. Then activate the PLURAL key. If the word "house" is to the left of the cursor and you activate PLURAL, "house" will become "houses". If the verb "go" is to the left of the cursor and you activate PLURAL, "go" will become "goes".

The PLURAL tool does not do too well with words like "woman" or "foot"—that is, words which are exceptions to the standard pluralization rules. "Woman" becomes "womans" and "foot" becomes "footses". However, for plurals that follow regular spelling rules, you will have no trouble.

1				Π
	H			Ξ
	Ħ			
	H		H	Ξ
	ç	 		

Remove the keyguard and overlay. Turn the Toolbox On.

Activate |STORE

Activate INSERT TOOL Activate TEXT MARKER

Type the words you want to see on the display. "The Pledge of Allegiance"

Activate INSERT TOOL Activate SPEECH MARKER

Type the words you want to speak: "I pledge allegiance to the flag "

When you reach the end of text that you want to speak:

Activate INSERT TOOL Activate TEXT & SPEECH MARKER

Your display should look like this:

<TEXT MARKER>The Pledge of Allegiance<SPEECH MARKER> I pledge allegiance...with liberty and justice for all.<TEXT & SPEECH MARKER>

STORE Activate

Select an icon sequence to store the message under.



Activate STORE again.

Using Text Marker, Speech Marker, Text & Speech Marker

Text Marker, Speech Marker, Text & Speech Marker

Summary:

These tools mark text that is to be seen on the display but is *not* to be spoken or that is to be spoken but not seen. The Text & Speech Marker tool closes the operation.

The TEXT MARKER tool allows text from a stored message to be seen on the display, but not spoken. TEXT MARKER goes in front of the text that is to be shown.

The SPEECH MARKER tool allows text from a stored message to be spoken but not to be seen on the display. SPEECH MARKER goes in front of the text that is to be spoken.

Use the TEXT & SPEECH MARKER tool to complete the operation where individual speech and text markers are used in a message.

Using Text and Speech Markers:

When you retrieve a message, it is automatically spoken and displayed, but messages don't really need to be displayed. You might want to store the "Pledge of Allegiance" but you don't necessarily want to see it every time you have to say it.

- 1. Activate STORE.
- 2. Activate INSERT TOOL.
- 3. Activate TEXT MARKER.
- 4. Type "The Pledge Of Allegiance"
- 5. Activate INSERT TOOL.
- 6. Activate SPEECH MARKER.
- 7. Type in the complete Pledge of Allegiance.
- 8. Activate INSERT TOOL at the end of the pledge.
- 9. Activate TEXT AND SPEECH MARKER.
- 10. Finish the regular storing process.

When you activate the icons for the Pledge, you will see only the title on your display while the DeltaTalker speaks the pledge.



Clear Display

MORE TOOLS FOR COMMUNICATION 204

Clear Display

Summary:

This tool removes all text and prompts from the display screen and the buffer.

When you activate this tool, it clears all the text and icon names or prompts that are on the display screen. It also clears any text that has scrolled off screen into the buffer.

When you type, letters and words eventually move off the display screen in order to make room for new letters and words. When they move off the display they go into the "buffer." The DeltaTalker holds them in the buffer until you print the message or use the arrow keys to bring them back onto the display screen. The buffer will hold 2K or about 2,048 characters.



The DELETE Tools

Delete Character, Delete Word, Delete Last Selection, Arrow Keys

Summary:

The DELETE tools are all used to erase text and or icons on the display screen.

DELETE CHAR (P7): DELETE CHARACTER removes the character to the *left* of the cursor.

DELETE WORD (P6): This tool removes the word or group of letters to the *left* of the cursor up to the next space or punctuation mark. If the character to the left of the cursor is a space, DELETE WORD removes the space.

DEL LAST SELECT (P5): DELETE LAST SELECTION removes any text that you brought up on the display when you activated your last (previous) selection. If the previous selection was a tool, DELETE LAST SELECTION does nothing.

DELETE ICON (P4): This tool deletes the last icon that you selected. You can select a new icon or re-select the deleted one if you want to.

UP, DOWN, LEFT and RIGHT ARROWS (N3, O4, N5, M4) When you activate an arrow key, you move the cursor through text on the display screen. The cursor moves in the same direction as the arrow you are using. You can move the arrow keys through text letter-by-letter or word by word by activating the CHAR/WORD tool. You can also use the arrow keys to move backward and forward through the options in some of the menus in the Toolbox. When you have positioned the cursor where you want it, you can activate other editing keys to edit your word or sentence.

Connecting to and Using Other Devices

Connect to Other Devices by Using Infrared or	
by Using a Cable	211
Use the OUTPUT Menu to Make Your Computer or Printer and DeltaTalker Compatible	.213
Using SERIAL MARKER, SPEECH MARKER or IRR ON and IRR OFF When You Store Commands	215
Use the DeltaTalker with IR to Remotely Control Your EZ Phone and X-10 Modules	.217
About Storing Infrared Commands for EZ Phone, X-10 and Remote Control Devices	.219
Store DIAL and a Phone Number	221
Store the EZ Phone Functions	223
Storing X-10 Commands	.225
About Adding Remote Control Devices and Functions to the IR SET-UP Menu	.227
Before You Begin Adding a Device and its Functions to the IR SET-UP Menu	.229
Add a Device and One of its Functions to the IR SET-UP Menu	231
When a Signal is Not Learned, Re-teach it Using the RECORD Button in the Control Panel	.233
Add Other Functions	235
Store the Devices and Functions Under Icon Sequences	237
Re-Learn a Signal that You Have Already Stored	239
Rename a Device	241
Delete a Device	243
Computer Emulation With and Without Infrared Using an Infrared Receiver (IRR)	245 247

Setting Up the DeltaTalker to Work With an IRR	
Storing the IRR ON and IRR OFF Commands	
Storing More IRR Commands	
Read These Notes Before You Begin Computer Emulation	n254
Getting Ready to Set Up Your Overlay	
Computer Keys and Mouse Commands	
First Organize Your Overlay	
Assign BACKSPACE/DELETE, RETURN and the ARROWS	261
Storing Only a Faw Computer Kaya Under Icon Sequence	
Storing Only a Few Computer Keys Onder Icon Sequence	265
Organizing four meme	
Selecting 1 ICON THEME and Storing it On Your Overlay.	
Store Computer Keys and Mouse Commands Under a 1 ICON THEME	
Infrared Troubleshooting:	
When Multiple Devices are in Use in the Same Room	
The IR ADDRESS Menu	
About the Protocol Options	
When You Get an Error Message on your DeltaTalker while you are Using the IRR	

Connect to Other Devices by Using the DeltaTalker Infrared Option (IR) or by Using a Cable

With infrared (IR) the DeltaTalker can operate remote controlled appliances such as the PRC EZ Phone (see note below), a TV, VCR, etc.

The DeltaTalker with the IR can learn infrared signals for any appliance you own that has a remote control. You teach the remote control signals to the DeltaTalker and then store the commands for the signals under icon sequences. The DeltaTalker already knows the signals for the EZ Phone and X-10 modules. All you have to do is store the commands for these signals.

With a PRC **Infrared Receiver** (IRR), you can also use the DeltaTalker IR as a wireless link to a device that does not have built-in IR receiving capabilities, such as a computer or printer.

All infrared signals are sent from the IR window on the back of the DeltaTalker. When you want to send IR signals, this window must be pointing in the general direction of the appliance that you are sending the signal to. If you are using an IRR, the IR window on the DeltaTalker must be facing in the general direction of the IRR window.

If you do not want to use the IR option, you can also use computer emulation or printer with your DeltaTalker. You must be connected (wired) to the printer or to a computer with the appropriate cable.

Note: EZ Phone is a speaker phone designed to work with telephone systems in the United States or compatible analog systems.

Options in the OUTPUT Menu

Serial Output = >OFF< or >ON<

Serial Output Mode = >IMMEDIATE< or >DELAYED< (Use DELAYED with a printer; IMMEDIATE with a computer)

Send Output From = >RS232 port< or >IR Window<

Character Pacing = >OFF< or >ON<

Baud Rate = >1200< or >2400, 4800, 19200, 38400, 57600, 110, 300<

The baud rate of the DeltaTalker and the device you are sending signals to must match!

Note:

Change the baud rate for **MEMORY TRANSFER** in the TRANSFER MEMORY menu, **not** the OUTPUT menu.

The OUTPUT Menu

Use the OUTPUT Menu to Make Your Computer or Printer and DeltaTalker Compatible

Summary:

Select a baud rate and send output to a computer or printer .

Whether you are connected by a cable or using the IR window, the DeltaTalker and a computer or printer send information to each other through their serial ports or the IR Window. You set up how you want the information to be sent in the OUTPUT menu (K2). The OUTPUT menu options are explained below.

Serial Output = >OFF< or >ON<: In order to send any information from the DeltaTalker to a computer or printer you must turn this option >ON<. When this is >OFF< no information can be sent.

Serial Output Mode = >IMMEDIATE< or >DELAYED<

>IMMEDIATE< sends information to the computer as soon as you enter it into the DeltaTalker. >DELAYED< information is not sent until it scrolls off the DeltaTalker's display into the buffer. *Use* >DELAYED< only with a printer, not a computer.

Send Output From = >RS 232 PORT< or >IR WINDOW<: If you are connected to a computer or printer with a cable, select >RS 232 PORT<. If you are using the IR option, select >IR WINDOW<.

Character Pacing = >OFF< or >ON<: If you turn this >ON< the rate at which each individual character is sent from the DeltaTalker to the computer *emulator* is slowed down. You may need to turn this on if you are using the T-TAM and sending large groups of text to the computer.

Baud Rate = >1200< or >2400, 4800, 9600, 19200, 38400, 57600, 300, 110< : How fast information travels from one serial port or IR Window to another is called the baud rate. It can be slow (110) or very fast (57600). The baud rate for your computer emulator or printer and the baud rate for the DeltaTalker must be the same. The recommended default for IR is 1200. It is 300 or 1200 if you are connected by cable.

When You Store Infrared Commands Use One of the Following Options:

SERIAL MARKER

You can use a <SERIAL MARKER >before and after the command. The DeltaTalker sends the command out the serial port without speaking or displaying it.

SPEECH MARKER

You can use a <SPEECH MARKER> before you type in a prompt that the DeltaTalker will speak but not display. The prompt can tell you what the command is supposed to do, e.g., "CHANNEL UP".

IRR ON and IRR OFF

You can store the commands <IRR ON > and <IRR OFF> under icon sequences on your overlay.

Using <SERIAL MARKER>, <SPEECH MARKER> or <IRR ON> and <IRR OFF>

Using SERIAL MARKER, SPEECH MARKER or IRR ON and IRR OFF When You Store Infrared Commands

Summary:

Use SERIAL MARKER to mark the part of the text that you want to send out the serial port but do not want to have spoken or displayed; use SPEECH MARKER to mark the prompt that you want to have spoken. With an IRR, you can store IRR ON and IRR OFF under icon sequences.

SERIAL MARKER is used when you want the DeltaTalker to send information out the serial port without having it speak or display the information in the command. SPEECH MARKER is used when you want to hear a prompt that tells you what the command is that you are sending but not have the prompt displayed. Use these tools when you store commands for computer emulation and ECU use.

If you use INSERT TOOL and SERIAL MARKER before you begin entering a command, and another one at the end of the command, the command will be sent to the computer without being spoken.

If you want the DeltaTalker to indicate that you sent the correct command, store a prompt, e.g., "CHANNEL UP", that the DeltaTalker speaks. Every time you activate the <CHANNEL UP> sequence the DeltaTalker will speak, "CHANNEL UP" and the command will be sent to the computer. Use a SPEECH MARKER in front of the prompt to make this happen.

Another option for controlling where text is sent when you are using a computer and ECU commands at the same time is to store the commands <IRR ON> and <IR OFF> under sequences on your overlay. These two commands turn the infrared receiver (IRR) for the computer OFF when you send ECU commands and then to turn it back ON when you return to using the computer. See page 251 for more information about the <IRR ON> and <IRR OFF> commands.



Using the DeltaTalker with Infrared
Use the DeltaTalker with IR to Remotely Control Your EZ Phone and X-10 Modules

With the DeltaTalker's infrared, you can store all the EZ Phone and X-10 functions that you want to use in your DeltaTalker under icon sequences. Then when the phone rings, for example, all you have to do is to activate the sequence where you stored the function, ANSWER/HANGUP. Or, if you want to turn on a light, just activate the sequence where you stored the X-10 control unit command that controls your light.

The infrared window on the DeltaTalker and the infrared area of the EZ Phone or Command Center must be able to "see" each other when you send signals. If something blocks their line-of-sight the signals cannot get through and the command cannot be performed.

The following pages explain how to store EZ Phone and X-10 commands into your DeltaTalker.



About Infrared Commands

About Storing Infrared Commands for EZ Phone, X-10 and Remote Control Devices

In the Toolbox there are two keys that are used specifically with IR commands: the IR SET-UP Menu [02] and the IR COMMAND [03] tool.

You use the **IR SET-UP** Menu to select pre-stored devices and functions, add new devices and functions, re-name devices, delete devices and re-teach stored signals.

You use the **IR COMMAND** tool to **store** the transmit commands for the devices and functions that are in the IR SET-UP Menu. You store the commands under icon sequences on your overlay.

About Selecting Icon Sequences:

Before you begin to store any IR commands, take some time to think of the icon sequences you want to use. The first icon in the sequence could represent the *device*—perhaps you might choose the PHONE icon for the first icon of all the phone commands. The second icon could represent the function, ANSWER/HANGUP, DIAL or REDIAL, for example. You may need a third icon for some commands—this icon might represent UP or DOWN or some specific part of a command that you want to remember.

You might want to make a list of the devices that you want to control. Then add the functions for each device. Finally, add the sequence you want to use for each entry to your list. This may help you to see the relationship between the icons you choose for the devices and the icons you choose for the functions.



Store DIAL and a Phone Number

Store DIAL and a Phone Number

Store the DIAL function and a specific phone number under an icon sequence.

Store the DIAL Function and a Number Together:

- 1. Activate STORE.
- 2. Activate IR COMMAND (O3).
- 3. You see EZ PHONE on the display. Activate STORE.
- 4. You see DIAL on the display. Activate STORE.
- 5. Type in the number you want to dial.
- 6. Activate STORE.
- 7. Select the icons to store the number under.
- 8. Activate Store.

When you select the icon sequence where you stored the DIAL command with a phone number, EZ Phone will automatically take the phone off the hook and dial the number.



Store an EZ Phone Function

Store the EZ Phone Functions

To Store EZ Phone Functions Under Icon Sequences:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate STORE.
- 4. Activate IR COMMAND (03).
- 5. Activate the arrow keys until you see the *device* you want to store, >EZ PHONE<.
- 6. Activate STORE.
- 7. Activate the arrow keys until you see the *function* you want to store, e.g., >ANSWER/HANGUP<.
- 8. Activate STORE.
- 9. Type in any text that you want to appear as a prompt on your display (e.g., ANSWER). It will also be spoken.
- **9a**. If you are going to use the DTIR with a computer, printer and an Infrared Receiver, or as an ECU, store text for a prompt with a SPEECH MARKER so that the DeltaTalker speaks the prompt but does not display it on a monitor or send it out the serial port.

To Store a Prompt with a Speech Marker:

Activate SPEECH MARKER [D3]. Type in the prompt you want to hear (e.g., ANSWER/HANGUP).

10. Activate STORE.

11.Select an icon sequence to store EZ PHONE ANSWER under, e.g.,

E (T

12. Activate STORE.

UNote:

If you are using the DeltaTalker as an ECU and *also* with a computer, you can store the commands, <IRR ON> and <IRR OFF>, under icon sequences instead of using a SPEECH MARKER in front of a prompt in the EZ Phone commands. See page 215.

Store an X-10 IR Command	
Remove keyguard and overlay. Turn the Toolbox On.	
STORE Activate STORE	
IR COM- MAND Activate IR COMMAND	
$ \begin{array}{c} & & \\ \leftarrow & \\ \downarrow \end{array} \end{array} \ \ \begin{array}{c} \text{Activate arrow keys until you} \\ \text{see the } \textbf{device} \text{ you want to store,} \\ \text{e.g., } >X-10 < \end{array} $	
STORE Activate STORE	
$ \begin{array}{c} & & \\ \leftarrow \\ \downarrow \end{array} \end{array} \xrightarrow{\uparrow} \mbox{Activate arrow keys until you} \\ see the function you want to store, \\ e.g., >UC-1 OFF< \end{array} $	
STORE Activate STORE	
Type in any text that you want the DeltaTalker to speak and display: e.g., LAMP OFF	
STORE Activate STORE	
Select an icon sequence for X-10 UC-1 OFF For example:	
STORE Activate STORE	

Store an X-10 Command

Storing X-10 Commands

First, read about setting up X-10 modules in your EZ Phone manual. When you have set up your modules and are ready to store the commands, follow the steps below.

- 1. Remove the keyguard and overlay from the DeltaTalker. Turn the Toolbox On.
- 2. Activate STORE.
- 3. Activate IR COMMAND (03)
- 4. Activate the arrow keys until you see >X-10<.
- 5. Activate STORE.
- 6. Activate the arrow keys until you see the command you want to store, e.g., >UC-1 OFF<.
- 7. Activate STORE.
- 8. Type in any text that you want to see on the display and hear spoken (e.g., LAMP OFF).
- **8a**. If you are going to use the DTIR with a computer, printer and an Infrared Receiver, or as an ECU, store text for a prompt with a SPEECH MARKER so that the DeltaTalker speaks the prompt but does not display it on a monitor or send it out the serial port.

To Store a Prompt with a Speech Marker:

Activate INSERT TOOL. Activate SPEECH MARKER [D3]. Type in the prompt you want to hear (e.g., LAMP OFF).

- 9. Activate STORE.
- 10. Select an icon sequence to store X-10 UC-1 OFF under,

e.g.

11. Activate STORE.

UNote:

If you are using the DeltaTalker as an ECU and *also* with a computer, you can store the commands, <IRR ON> and <IRR OFF>, under icon sequences instead of using a SPEECH MARKER in front of a prompt in the EZ Phone commands. See page 215.



Add Remote Control Devices to the IR Menu

About Adding Remote Control Devices and Functions to the IR SET-UP Menu

If you have a remote control for your TV, VCR, CD, Tape Deck, etc., you can teach the DeltaTalker the remote control signals for functions such as ON, VOLUME UP, FAST FORWARD, etc., for each device. In order to do this, you add the *device* (TV, VCR, etc.) you want to send signals to and then add each of the *functions* that you want to use for the device. You add devices and functions to the IR SET-UP Menu in the DeltaTalker Toolbox.

When you add a new device to the IR SET-UP Menu, you add the name of the device (e.g., TV), a function for the device (e.g., POWER) and then you teach the DeltaTalker the signal for that function. You must add at least one function for each device and you must teach the signal for that function to the DeltaTalker. You teach the signal at the same time that you add the function. This means that when you are ready to store commands and teach signals, you must be near the appliance you want to control and have its remote control handy. You use the remote control to teach the DeltaTalker the correct remote control signals. In order to test the signal to see if the DeltaTalker learned it, you must have the appliance where the DeltaTalker can "see" it.

Once you have added the new devices and functions to the IR SET-UP MENU, you will store each new device and its functions under icon sequences. The DeltaTalker automatically places the device and function names in the IR COMMAND tool.



Teach and Test the Remote Control Signal

Before You Begin Adding A Device and its Functions to the IR SET-UP MENU

The example on the next page explains how to add the device, TV, and the function, POWER, to the IR SET-UP MENU. At a certain point in the directions, the display tells you to point the TV remote control at the DeltaTalker's IR window and tap the remote control button for the signal you want to teach. For every signal you want to teach the DeltaTalker, *you must point the remote control at the IR window and tap the proper remote control button*.

When you tap the remote control button the display shows, "DeltaTalker will now test the signal. Watch the remote controlled device". You will also see numbers count down from 5 to 1 in the lower right corner of the display. This means that you have **5** seconds to make sure the DeltaTalker is pointing at the device you want it to control (e.g., the TV).

For example, if you are teaching the TV POWER signal, once you have tapped the remote control POWER button, you have 5 seconds to make sure the DeltaTalker's IR window is facing the TV. Then the DeltaTalker sends the POWER signal to the TV. If the DeltaTalker learned the signal, the TV will go On (or Off). If nothing happens, press the RECORD button in the DeltaTalker's Control Panel and try to teach the signal again.

The next page explains how to add a device and function and teach the function's IR signal to the DeltaTalker.



Add a Device and Function

Add A Device and One of its Functions to the IR SET-UP MENU

UNote

All device and function names must be limited to 13 characters. If you use abbreviations, use ones that you can easily remember.

Remember that the DeltaTalker should be facing the device you want to control.

- 1. Remove the keyguard and overlay from the DeltaTalker. Turn the Toolbox On.
- 2. Activate IR SET-UP MENU (O2).
- 3. Activate NEXT MENU ITEM until you see: ADD A NEW DEVICE.
- 4. Activate CHANGE >ITEM<. The display shows: Spell Device name, then select STORE.
- 5. Spell the name of the device, in this case, TV.
- 6. Activate STORE.
- 7. The display shows: Spell function name, then select STORE.
- 8. Spell the function name, in this case, POWER.
- 9. Activate STORE.
- 10. The display shows: To teach signal: aim remote control at IR window, then select STORE.
- 11. Aim the infrared area of the remote control for the TV at the IR window on the DeltaTalker. Activate STORE in the DeltaTalker.
- 12. The display shows: Tap the remote control button for TV POWER.
- 13. Tap the POWER (or On/Off) button on your remote control.
- 14. Now make sure DeltaTalker is facing device you want it to control. The display shows: 5,4,3,2,1 Did it learn it correctly?
- 15. If the TV went On (or Off), select STORE to save the signal, OR If nothing happened on the TV, select RECORD to re-learn the signal, OR
 Select ESCARE to exit

Select ESCAPE to exit.



Re-teach the Signal Using RECORD

When a Signal is not Learned, Re-teach it Using the RECORD Button

If the DeltaTalker did not learn the signal you sent it, you will be able to tell. The DeltaTalker tests the new signal by sending it out right after it has been learned. If the device you want to control does not work, you know that the DeltaTalker did not learn the signal. If this happens you can re-teach the signal using the RECORD button.

To Re-teach a Signal:

- 1. Store a device and function following the steps on the previous page.
- 2. When you see "Did it learn it correctly?" on the display, select RECORD.
- 3. Aim the remote control at the IR window and select STORE on the DeltaTalker.
- 4. Tap the remote control button for the function you want (in this example you would press the POWER button).
- 5. Now the DeltaTalker should be facing the device you want to control (e.g., the TV). You see "5,4,3,2,1" on the display
- 6. If the TV goes on (or Off), the signal was learned. Select STORE to save the signal.

To learn how to add more functions, turn the page.



Add Other Functions to a Device

Add Other Functions for the Device You Want the DeltaTalker to Control

When you want to add a device (such as a TV or VCR) to your DeltaTalker, you have to add at least one function at the same time you add the device. However, there are probably more functions for that device that you will want to add, too. It's easy to do this once you have the device and first function added.

To Add More Functions to the IR SET-UP MENU:

- 1. Remove the keyguard and overlay from the DeltaTalker. Turn the Toolbox On.
- 2. Activate the IR SET-UP MENU.
- 3. Activate NEXT MENU ITEM until you see TV.
- 4. Activate CHANGE >ITEM<. The device name will be visible on the right side of the display, e.g., >TV<.
- 5. See >Add a Function< on the display. Select CHANGE >ITEM< again.
- 6. Spell the name of the function you want to add, e.g., CHANNEL UP.
- 7. Activate STORE.
- 8. Aim the remote control at the IR window on the DeltaTalker.
- 9. Activate STORE.
- 10. Tap the remote control button (e.g., tap the button for CHANNEL UP).
- 11. Now make sure the DeltaTalker's IR window is facing the device you want to control (e.g., the TV). You see the countdown from 5 to 1 and then, "Did it learn it correctly?" If the device does what you want (e.g., the channel changes to the next higher one), the signal is working. Activate STORE.
- 12. If nothing happens, activate RECORD. Re-teach the signal to the DeltaTalker. (See the previous page for information about re-teaching a signal.)









Store the Device and Function Under an Icon Sequence

Store Devices and Functions Under Icon Sequences on Your Overlay

When you have added all the devices and functions that you want to the IR SET-UP MENU, store them under icon sequences. Use the IR COMMAND tool.

To Store a Device and Function You Have Added to the DeltaTalker:

- 1. Remove the keyguard and overlay. Turn the toolbox On.
- 2. Activate STORE.
- 3. Activate IR COMMAND.
- 4. Activate arrow keys to step to the device you want (e.g., >TV<).
- 4. Activate STORE.
- 5. Activate arrow keys to step to the function you want (e.g., >TV POWER<).
- 6. Activate STORE.
- 7. Spell any text that you want to appear on the display (e.g., TV ON). **●**If you are using your DeltaTalker as an ECU or with a computer or printer, use a SPEECH MARKER before you type in a prompt. See the note on page 215.
- 8. Activate STORE.
- 9. Activate an icon sequence for TV POWER (e.g., TV VOLT).
- 10. Activate STORE.

Test the Signals:

Turn the Toolbox Off and replace the overlay and keyguard. Point the DeltaTalker's IR window toward the device that you want to control. Make sure you are in Minspeak mode.

Activate the sequences for the device you want to control. For example, activate all your TV commands. If the TV goes On, the channels change, the volume goes up or down, you know that the DeltaTalker is working correctly. Test all the sequences for each device in this manner. If you find a sequence where nothing happens, you may have to re-teach the signal to the DeltaTalker.



Re-learn a Signal that is Already Stored

Re-learn a Signal that you Have Already Stored

If you trade in an old TV for a new TV, you can teach the new TV's signals by using the old TV and its functions in the IR SET-UP Menu.

To Re-Learn an Already Stored Signal:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Activate the IR SET-UP MENU.
- 3. Activate NEXT MENU ITEM until you see the device you want (e.g., TV).
- 4. When you see the device you want, activate CHANGE >ITEM<.
- 5. The display shows >ADD A FUNCTION<.
- 6. Activate NEXT MENU ITEM until you see >RE-LEARN A SIGNAL<, then activate CHANGE >ITEM<.
- 7. Activate NEXT MENU ITEM until you see the function that you want the DeltaTalker to re-learn then activate CHANGE >ITEM<.
- 8. Point the remote control at the IR window and tap the remote control button for the function you have selected.
- 9. Make sure DeltaTalker's IR window is aimed at the device you want to control. You see the countdown on the display and then, "Did it learn it correctly?"
- 10. If the command works, activate STORE. If not, activate RECORD and start over.

UNote:

When a signal that has already been stored under an icon sequence is re-learned, it does not have to re-stored under the icon sequence.



Rename a Device

Rename a Device

Let's say you have a TV in the family room and you stored its signals using the label, TV. Now let's say you buy a TV for your bedroom. You store those TV signals using the name, BEDROOM TV. You don't want to confuse the family room TV with the bedroom TV. You can change the TV label to FAMILY TV.

To Rename a Device:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Open the IR SET-UP MENU.
- 3. Activate NEXT MENU ITEM until you see the name you want (e.g., >TV<).
- 4. Activate CHANGE >ITEM<
- 5. Activate NEXT MENU ITEM until you see: >RENAME DEVICE<.
- 6. Activate CHANGE >ITEM<.
- 7. Spell the new name (e.g., FAMILY TV [you can use up to 13 characters for the name]).
- 8. Activate STORE.
- 9. The display will tell you that the new name has replaced the old name. Activate EXIT.

If you want to change the name of more than one device, you must activate NEXT MENU ITEM and then re-name each device.

ONote:

When you re-name a device that has already been stored under an icon sequence, the name is automatically changed in the command that is stored under the sequence.



• Note:

When you delete a device, the *function commands* for that device are *still stored* under icon sequences. Use the regular DeltaTalker erasing procedure to erase the function commands.

Delete a Device

Delete a Device

There may be a time when you no longer use a device that you have stored in your DeltaTalker. You can delete the device from the DeltaTalker.

To Delete a Device:

- 1. Remove the keyguard and overlay. Turn the Toolbox On.
- 2. Open the IR SET-UP MENU.
- 3. Activate NEXT MENU ITEM until you see the name of the device that you want to delete.
- 4. Activate CHANGE >ITEM<.
- 5. Activate NEXT MENU ITEM until you see >DELETE DEVICE<. The name of the device you want to delete should be visible on the right hand side of the display, e.g., >TV<.
- 6. Activate CHANGE >ITEM<.
- 7. The display shows: >DELETE TV?<
- 8. If you want to delete that device, activate ERASE in the Control Panel. (If you change your mind, activate EXIT here.)
- 9. The display will show: TV HAS BEEN DELETED.
- 10. Activate NEXT MENU ITEM or EXIT.

ONote:

When you have deleted a device, the function commands that you stored under icon sequences for that device *will still be there*. However, if you activate them, the display will show: INVALID COMMAND. IR DEVICE HAS BEEN DELETED.

If you want to erase the function commands to free up those icon sequences, use the regular DeltaTalker erasing procedure (see **Erase Synthesized Speech** in the DeltaTalker manual)



Different Computer Emulation Methods

About Computer Emulation with Infrared and Without Infrared

To use the DeltaTalker with a computer you must have a computer emulation device like the T-TAM, or computer emulation software like Access DOS or Access Windows. If you are not using infrared to access your computer, you will connect your T-TAM directly to your DeltaTalker and your computer. If you are using infrared, you will connect the T-TAM to your computer and the Infrared Receiver (IRR). The IRR will receive the infrared signals from the DeltaTalker and send them to the T-TAM.

If You Are Not Using Infrared:

You can go to page 254-269 to learn how to store your computer commands. Remember to set the OUTPUT menu when you are ready to send commands.

If You Are Using Infrared:

If you are using an **IRR**, the computer commands are not stored the same way you stored remote control commands. You *do not* use the IR SET-UP Menu or the IR COMMAND tool. You simply store all the computer commands under icon sequences.

Remember to set the OUTPUT menu when you are ready to send commands.

Read the next few pages before you begin storing.



Using the DeltaTalker with an Infrared Receiver

Using an Infrared Receiver (IRR)

To send infrared commands from the DeltaTalker to a device that does not have a built in infrared receiver, such as a computer or printer, you must connect an Infrared Receiver (IRR) to the device that is going to be receiving the signals.

The IRR is an infrared accessory that accepts infrared signals from the DeltaTalker. The IRR plugs into whatever device you are using it with. For example, to use an IRR with a printer, plug the IRR into the serial or parallel port on the printer. To use the IRR with a T-TAM and computer, plug the IRR into the front of the T-TAM. If you are using a computer software such as Access DOS or Access Windows, plug the IRR into the serial port on your computer. In all cases, the IRR replaces the cable you might have used to connect your communication device to a printer or computer.

The infrared window on the IRR must be able to see the infrared window on the DeltaTalker, otherwise the IRR will not receive the signals the DeltaTalker sends. If the IRR and DeltaTalker windows are *closer* than 18 inches and directly facing each other, the infrared signal from the DeltaTalker could be too strong for the IRR to read. Either move the devices farther apart, or place the DeltaTalker so that its IR window is at an angle to the IRR window.

OImportant Notes:

When you are using an IRR, always have the IRR battery charger plugged in!

Read the *Infrared Receiver Instructions* that came with your IRR for IRR cable and settings information. There is also a list of IRR commands that can be stored in your DeltaTalker.

The recommended baud rate for the DeltaTalker with an IRR is 1200. If you use a T-TAM that operates at 300 baud, contact the PRC Service Department to have the T-TAM upgraded to support 1200 baud.



Set the OUTPUT MENU for IRR Use

Setting Up the DeltaTalker to Work with the IRR

When you have connected your IRR to a computer or printer, you need to make the correct button settings on the IRR. See the instruction sheet that came with your IRR for instructions on setting the buttons.

You must also set the OUTPUT MENU options in the DeltaTalker.

- 1. Remove the keyguard and overlay from the DeltaTalker.
- 2. Turn the Toolbox On.
- 3. Open the OUTPUT MENU [K2].
- 4. Activate NEXT MENU ITEM.
- 5. Set the Following Options:

Serial Output = >ON<

Serial Output Mode = >IMMEDIATE< If you are using the IRR with a printer, you can set this to >DELAYED< if you prefer.

Send Output From = >IR WINDOW<

Character Pacing = >ON < or >OFF <

If you are using a T-TAM this setting should be **ON**. If it isn't, you could lose characters from longer strings of text on their way to the computer. If you are using a computer emulator and you are losing characters, turn this option ON. Otherwise, leave it OFF. See the *IRR Instruction Sheet* for more information on Character Pacing.

Baud Rate = >1200<

Remember that the baud rate for the DeltaTalker, the IRR and any emulator you are using *must be the same*.

If you are using a T-TAM that does **not** have a 300/1200 baud switch on it, you must upgrade the T-Tam or use the 300 Pipeline protocol. See *IR Troubleshooting: About Protocol*

Options (pg. 288) for more information.

Note: Make sure the IRR Battery Charger is plugged in!



Store the IRR ON and OFF Commands

Storing IRR ON and IRR OFF

When you use the Deltatalker for both ECU commands *and* computer emulation, any ECU prompts that are stored *without* speech markers will be displayed on your computer monitor as well as sent out the DeltaTalker serial port. There are a couple of ways to handle this.

Without an IRR

If you are not using the IRR for computer emulation, you can store the ECU prompts with a SPEECH MARKER (see page 215). If you do not use a SPEECH MARKER, you can go to the OUTPUT MENU and turn Serial Output OFF *before* you activate the sequence where you stored an ECU command.

With an IRR

If you are using an IRR for computer emulation, you can store the ECU prompts with a SPEECH MARKER (see page 215). If you do not want to use a SPEECH MARKER, you can store <IRR ON> and <IRR OFF> under separate icon sequences on your overlay. When you want to send an ECU command (e.g., "answer the phone") activate the sequence where you stored IRR OFF, send the ECU command and talk on the phone. Activate IRR ON when you are ready to go back to computer emulation.

To Store the IRR ON and IRR OFF Commands:

- 1. Remove the keyguard and overlay from the DeltaTalker.
- 2. Turn the Toolbox ON.
- 3. Activate STORE.
- 4. Activate <SHIFT><ESC>IRR,ON.

In case you have forgotten, this means you activate the SHIFT key [B8], the ESC key [B5], Spell IRR, activate the comma key [K7], spell ON and activate the period key [L7].

- 5. Activate STORE.
- 6. Select the icon sequence you want to use.
- 7. Activate STORE.

Repeat these steps to store IRR OFF. In step #4 activate <SHIFT><ESC>IRR,OFF. instead of IRR,ON.

Storing More IRR Commands

On the previous page you learned about storing IRR ON and IRR OFF to keep ECU commands from being displayed on your monitor.

Using the same model, you can store other IRR Relay commands under icon sequences. All the IRR commands that can be stored in the DeltaTalker are listed on the instruction sheet that came with your IRR.

Below are a few other tools that are helpful to have when using IRR with a computer. If you are using a T-TAM you may have Character Pacing turned On in the OUTPUT menu. When Character Pacing is On, the IRR commands won't work. To send these commands you need to turn Character Pacing Off.

Note: <INSERT TOOL> must be used in the Character Pacing macro shown below.

Character Pacing Toggle (On/Off):

<INSERT TOOL><SPEECH MARKER>TOGGLE CHARACTER PACING<INSERT TOOL><OUTPUT><INSERT TOOL><NEXT MENU ITEM><INSERT TOOL><NEXT MENU ITEM><INSERT TOOL><NEXT MENU ITEM><INSERT TOOL><NEXT MENU ITEM><INSERT TOOL><CHANGE ITEM><INSERT TOOL><EXIT>.

Relay Toggle (On/Off)

If your IRR has the switch option, you can store RELAY commands to turn a switch on momentarily then turn off automatically, or turn on (latch) until you activate another key to turn it off.
Note: It is not necessary to use <INSERT TOOL> in the macros shown below.

RELAY ON/OFF: 1 Second Relay Pulse

<SPEECH MARKER>ACTIVATE RELAY 1 <SERIAL MARKER><SHIFT><esc>IRR,RELAY1,ON.<SERIAL MARKER><SERIAL MARKER><SHIFT> <esc>IRR,RELAY1,OFF.

RELAY ON/OFF using WAIT ANY KEY: Relay On until another key is selected.

<SPEECH MARKER>ACTIVATE RELAY 1<SERIAL MARKER><SHIFT> <esc>IRR,RELAY1,ON.<WAIT ANY KEY><SERIAL MARKER> <SHIFT><esc>IRR,RELAY1,OFF.

Read These Notes Before Beginning Computer Emulation

OImportant Note:

To use the DeltaTalker with a computer you must have a computer emulation device like the T-TAM, or computer emulation software like Access DOS or Access Windows. The manual that came with your emulation device or software will have a list of code names for the different computer keys, functions and mouse commands. When you are ready to store computer commands into your DeltaTalker, you will need to use the names from these lists.

UImportant Note:

When you are using the DeltaTalker with a computer all of the letters, numbers and punctuation marks that are already stored in your device in SPELL mode, and any synthesized messages you have stored in MINSPEAK will work with the computer. Open a word processing file on your computer. Turn SERIAL OUTPUT >On< and begin activating letters or sequences on your DeltaTalker. Words and messages will appear on your computer. *Digitized messages will not appear on the computer screen*.

OImportant Note:

In order for your DeltaTalker and your computer to work together, you must set SERIAL OUTPUT to >ON< in the OUTPUT menu. Make sure the baud rates for the computer and the DeltaTalker are the same. This manual has information about setting the OUTPUT MENU

for use with infrared and without infrared. Also look in your emulator manual for serial output information.

Getting Ready to Set Up Your Overlay

If you are using the DeltaTalker with IR you may be storing a lot commands under icon sequences on your overlay. You might have EZ Phone commands, IRR commands and computer commands to be stored. Even if you aren't using IR, your computer and mouse commands will all have to be stored under icon sequences.

Plan your overlay before you begin storing so that finding and activating the various sequences will be natural and easy. You might want to use a different theme to store each set of commands. No matter how you decide to set up your overlay, you should take the time to write out the sequence you are going to use for each command. This will help you to select consistent sequences for each set of commands.

The next few pages explain about setting up your overlay for computer emulation and how to store the computer commands. If you are going to store a lot of IR commands, you might want to go through this section to get a feel for setting up your overlay before you begin to store.



Computer Keys and Mouse Command Categories

Computer Keys and Mouse Command Categories

There are 3 computer key and mouse command categories that can be stored in your DeltaTalker for computer use. Almost all computer keyboards and mice have the following keys/commands. You may want to store some, or all, of them:

1. Regular Computer Keyboard Keys:

Function Keys The F1 - F12 keys

Modifying Keys CTRL, SHIFT, OPTION, ALT

Keyboard Keys These include the letter keys (a,b,c), number keys (1,2,3), punctuation keys (!,.?), ENTER, ESC, etc.

2. The 6 Basic Word Processing Keys:

The 4 ARROW Keys $\leftarrow \rightarrow \uparrow \downarrow$

DELETE or backspace erases characters.

RETURN This key **does not** need to be stored if you are using the DeltaTalker with a **Macintosh** computer. It works as both a DeltaTalker RETURN key and a Macinstosh RETURN key just as it is. If you are using an IBM computer, you must store the RETURN key as a computer key

3. Mouse Movements

Mouse Cursor Movements: move right, move up, move down

Mouse Button Actions: click, double-click, click right, etc. Mouse Reset: calibrates the mouse to the screen GOTO Commands: moves the mouse to specific locations Move Mouse Commands: moves mouse in increments (+5, -5, etc.)



Organize Your Overlay

First Organize Your Overlay

Before you use a computer with your DeltaTalker, answer these questions for yourself: What applications are you going to use? What keys do you need to operate these applications? Will you be using a mouse? The answers will help you organize your Unity overlay and select the keys you will really need.

The following DeltaTalker Toolbox tools will be helpful to have on your Unity overlay: SPEECH OFF/ON, OUTPUT menu (or the setting to turn the Serial Port On and Off), and EXIT THEME. You can assign these tools to keys on your overlay.

If you are only going to use the 6 basic word processing keys, follow the steps on page 107 to store them. Remember, the Arrow keys and DELETE CHARACTER key can be assigned to the DeltaTalker Arrow keys and DELETE CHARACTER key (page 207). The RETURN key can be assigned to an available key on your DeltaTalker in SPELL or in an icon sequence in MINSPEAK.

If you want a lot of computer keys you can store them under individual icon sequences (following the directions on page 107), but you will probably find them easier to access if you store them under a **1 Icon Theme**. Mouse movements should be stored under a separate 1 Icon Theme. Pages 119-127 describe how to create and store a theme.

Before you begin to store, write down each computer key and mouse command/movement that you want to store. Then, go to your *emulator* manual and find the lists with the *computer code name* for each key and mouse movement. Copy the *exact code name* for each key you are going to store, including any commas or periods.

◆Note: Regular computer keyboard keys (alphabet, numbers and punctuation) do not have special computer code names. See the note on page 256.



Assign the DELETE Key

Assign BACKSPACE/DELETE, RETURN and the ARROWS to DeltaTalker Keys

Assign the BACKSPACE/DELETE, RETURN and the 4 ARROW keys to DeltaTalker keys using ASSIGN MINSPEAK and/or ASSIGN SPELL. Then you can use the keys as regular DeltaTalker keys or as computer keys. If you are using the QWERTY overlay you can assign the keys where the DELETE CHARACTER, ARROW and RETURN keys are.

To Assign the BACKSPACE/DELETE Computer Key:

- 1. Remove the keyguard and overlay. Turn the Toolbox ON.
- 2. Activate ASSIGN MINSPEAK. (You can also assign each of the above keys to SPELL mode if you want to.)
- 3. Activate DELETE CHARACTER on your Unity overlay.
- 4. Activate CHANGE >ITEM<.
- 5. Activate STORE.
- 6 You should see, <DELETE CHARACTER> on the display. Make sure the cursor is flashing at the end of the word. **Do not** erase <DELETE CHARACTER>.
- 7. Activate INSERT TOOL.
- 8. Activate SERIAL MARKER.
- 9. Activate SHIFT.
- 10. Activate <ESC> (above the = sign.)
- 11. Type in the code name for your computer's DELETE key *exactly as it is written* in your emulation manual. Make sure you end it with a period.
- 12. Activate INSERT TOOL.
- 13. Activate SERIAL MARKER.
- 14. Activate STORE.

The BACKSPACE/DELETE key is now assigned to MINSPEAK on your DeltaTalker. When you use a computer and activate this key it will delete a character on your computer screen and your DeltaTalker. You can assign the arrows and RETURN in exactly the same way by activating NEXT MENU ITEM or you can EXIT.



Store A Small Number of Keys and Commands Under Icon Sequences

Storing Only a Few Computer Keys Under Icon Sequences

If you want to store only a few computer keys, you may find it easier to store them as icon sequences rather than storing them in a theme. Just follow the regular storing procedure but add two steps as described below.

When you store a computer key under an icon sequence, you have to tell the DeltaTalker that you are storing a *computer* key, not a regular message. To do this, you must activate the SHIFT key (B8) and then the <ESC> key (B5) on the DeltaTalker keyboard before you enter the code name for the computer key. When you activate the SHIFT and <ESC> keys, you will see a small left arrow on the DeltaTalker display. This indicates that you are storing a computer key or mouse command.

Store Computer Keys and Mouse Commands Under an Icon Sequence:

- 1. Remove the keyguard and overlay. Turn the Toolbox ON.
- 2. Activate STORE.
- 3. Activate SHIFT.
- 4. Activate <ESC>.
- 5. Type in the computer key code name or the mouse command *exactly as it is given* in your emulation manual. End with a period.
- 6. Activate STORE.
- 7. Activate the icons you want to use for your sequence.
- 8. Activate STORE.

Your computer key or mouse command is now stored under an icon sequence.

⇒You do not have to store the RETURN key if you have a Macintosh computer. It is already set up to work with both the DeltaTalker and the computer.



Organizing Your Theme

Organizing Your Theme

When you use a theme, you must decide on an icon to represent the theme. For example, to represent all your computer keys you

might select for your theme icon. All your keys will be stored under COMPUTER plus another icon to represent each individual key. In the same manner, select an icon to represent a MOUSE theme, and then select a sequence for each mouse command or movement you want to store.

Write down each key you are going to use, its computer code name and the sequence you are going to use to store it. For example, = <ESC>tab. = tab. COMPUTER is the theme, FROG ("jump") represents the computer key "tab" and <ESC>tab. is the computer code name for the tab key. At the FROG location on your overlay, write "TAB" or some indication of the computer key you are storing there.

When you have finished organizing a theme, select an icon or icon sequence to store the entire theme under. This icon (or sequence) will let you *enter* your theme. For example, you could store your

COMPUTER theme under again or you could store it under a sequence such as (COMPUTER HAMMER which might signify "work" to you).

Select an icon or sequence to represent each theme ("Computer" and "Mouse"). Think of this as your "Enter Theme" icon or sequence.

You also need a way to *exit* your theme. You can either assign the EXIT THEME tool (in the Toolbox) to a key on your overlay (using ASSIGN KEY), or you can store it under an icon sequence in *each* of your themes. For instance, you might store the EXIT key under

 \square EXIT : This way it is part of your COMPUTER theme. Store it again under your MOUSE theme.



Store 1 ICON THEME Under a Sequence

Selecting a 1 ICON THEME and Storing it On Your Overlay

It's easy to access a lot of computer keys and mouse commands if you store them under separate "Computer" and "Mouse" 1 ICON THEMES.

First you store your theme, then you store the "Enter Theme" key.

Select a 1 ICON THEME and Store it on your Overlay:

- 1. Remove the keyguard and overlay. Turn the Toolbox ON.
- 2. Activate STORE.
- 3. Activate INSERT TOOL.
- 4. Activate 1 ICON THEME.
- 5. Activate the icon you have decided on for your theme (e.g., COMPUTER).
- 6. Activate STORE.
- 7. Activate the icon or icon sequence you want to use for storing the theme (this is your "enter theme key").

➡ If you store the "Computer" theme under the COMPUTER icon only, you will have to activate COMPUTER ENTER in order to access your theme.

8. Activate STORE.

Follow this same procedure to store a "Mouse" theme.

Test the Theme:

Activate the icon or sequence you stored your 'Computer' or 'Mouse' 1 ICON THEME under. The bottom line of your display should show: ICON NAME:

The ICON NAME is the name of the icon you selected for your 1 ICON THEME. The colon (:) tells you that you are now in your 1 ICON THEME. If you do not see a colon, activate ENTER, just in case you masked the theme when you stored it. If you still do not see a colon, store the 1 ICON THEME again.

Repeat these instructions to store your MOUSE theme and "Enter Theme" key.



Store Computer Keys/Mouse Commands Under the 1 ICON THEME

Store Computer Keys or Mouse Commands Under a 1 ICON THEME

Once you have stored your "Enter Theme " key, you can:

Store Using the 1 ICON THEME:

- 1. Activate the icon or sequence you stored your 'Computer' or 'Mouse' 1 ICON THEME under (your "Enter Theme" icon or sequence).
- 2. Notice that your display shows: ICON NAME: The ICON NAME (e.g., COMPUTER) is the icon you selected for your 1 ICON THEME. The colon (:) tells you that you are now in the 1 ICON THEME. (If you don't see this, activate ENTER.)
- 3. Activate STORE.
- 4. Activate SHIFT.
- 5. Activate <ESC>.
- 6. Type in the computer key **code name** or the mouse command **code** *exactly as it is given* in your emulation manual. End with a period.
- 7. Activate STORE.
- 8. Select an icon to represent this key or command.
- 9. Activate STORE.
- 10. Continue to store all your COMPUTER theme keys following steps 3-9. Repeat the instructions to store your MOUSE theme commands.

OUSING SERIAL MARKER: When you activate the keys you just stored, the DeltaTalker will speak the key or command and you will see what you stored printed on the display. If you do not want this to happen, use the SERIAL MARKER tool. See page 215 for more information.

CRegular Keyboard Keys: All regular computer keyboard keys such as the alphabet, number and punctuation keys, can be stored under your 1 ICON THEME using the **regular** DeltaTalker storing process. Just **omit** activating the SHIFT and ESCAPE keys (steps #4 and #5).



About One Person Using a DeltaTalker, an EZ Phone and an IRR, or Two or More People Each Using a DeltaTalker, an EZ Phone and an IRR at the Same Time

The chances are that you will be the only person using your DeltaTalker IR with an EZ Phone or a computer and the IRR. However, there may be situations, such as a lab or therapy facility, where there may be two or more DeltaTalkers, EZ Phones, IRRs and computers all in the same room, receiving the same signals at the same time.

If you are in a situation where multiple devices are in use, you have to tell your DeltaTalker which devices it is going to talk to. You do this by assigning the *same unit number* to your DeltaTalker, EZ Phone and IRR.

The IR ADDRESS MENU allows you to set unit codes for your DeltaTalker and its devices. If you are the only person using your DeltaTalker with other IR devices, everything in this menu defaults to "1" which is just fine for you. If you are in a multiple device situation, you and the other people using DeltaTalkers must decide which DeltaTalkers will talk to which devices and assign the correct Unit Number to each device. For example, you might assign Unit Number 1 to your DeltaTalker, EZ Phone and IRR, while your neighbor gets to use Unit Number 2 for her DeltaTalker, EZ Phone and IRR.

Turn the page to learn how to use the IR ADDRESS MENU.



The IR ADDRESS MENU

The IR ADDRESS MENU

To open the IR ADDRESS MENU:

In the Control Panel

- 1. Turn the DeltaTalker Off.
- 2. Press the EDIT key and the ON/OFF key at the same time.
- 3. Release the two keys.
- 4. IR ADDRESS MENU should appear on the display.

Activate NEXT MENU ITEM to see the options.

This DeltaTalker Unit Number = >1<

The default is Number 1. In multiple device situations, you can choose to be Unit 1, 2, 3 or 4.

EZ Phone Unit Number = >1<

The default is Number 1. In multiple device situations, you can choose to be Unit 1, 2, 3 or 4.

EZ Phone Baud = >1200<

The default is 1200. You can change to 300 if necessary.

IR Receiver Unit Number = >1<

The default is Number 1. In multiple device situations, you can choose to be Unit 1 or 2.

IR Receiver Protocol = >PACKET<

The default is PACKET protocol. You can choose PIPELINE protocol, if necessary. See the next page for protocol information.

Remember: When you assign a Unit Number, your DeltaTalker and all the devices that your DeltaTalker will be sending signals to **must have the same Unit Number**.

About the Protocol Options

There is an option in the IR ADDRESS MENU that allows you to choose the kind of protocol you want an Infrared Receiver (IRR) to use to receive signals from the DeltaTalker. The protocol choices are PACKET or PIPELINE.

PACKET PROTOCOL allows you to have more than one DeltaTalker and IRR in the room, with all of them receiving the same signals at the same time. Packet protocol allows you to assign a Unit Number to each device. Packet protocol also checks for errors in the infrared communication and screens out infrared information from outside sources. This provides for more accurate infrared communication. **1200 baud must be used with this protocol.**

PIPELINE PROTOCOL does not check for errors in the infrared information it receives. It does not allow you to assign Unit Numbers for more than one infrared device. It does not screen out infrared information from outside sources. This means that accurate infrared information may be difficult to achieve in some situations. You can use either 1200 or 300 baud with this protocol. **Character Pacing must be used with this protocol.**

ONote:

If you are using the DeltaTalker IR with an older T-TAM, a computer and an IRR, set the Protocol option to PIPELINE and use 300 baud. You must use Character Pacing with this protocol. If you have a T-TAM with a 300/1200 baud switch on it you can use 1200 baud and PACKET protocol. (If you want to update your T-TAM to support 1200 baud, call the PRC Service Department.)

If You are Using an IRR and You Get an Error Message on the DeltaTalker

If the IRR doesn't receive the infrared signals you send from the DeltaTalker, the DeltaTalker display will show the message, "Remote IR device is not responding. Please wait or hit A1 to cancel."

Make sure the DeltaTalker's IR window is *facing* the infrared window on the IRR. Check to make sure nothing is blocking this line-of-sight between the DeltaTalker and the IRR. If something is in the way, remove it and the signal should go through.

The infrared signal that the DeltaTalker sends is very strong. If the DeltaTalker and IRR windows are *closer than* 18 inches to each other and are *directly facing* each other, the IRR may not be able to read the DeltaTalker's signal. Either move the DeltaTalker farther away from the IRR or set the DeltaTalker so that its IR window is at an angle to the IRR. The signal will go through but it will not overpower the IRR.

When you use the DeltaTalker with a computer and an IRR, you set (among other things) the "Serial Output" option to On and the "Send Output" option to IR WINDOW in the DeltaTalker's OUTPUT MENU.

If you use your DeltaTalker with these settings when the IRR is not available (in another room or blocked in some way), you will get an error message that says the DeltaTalker is busy sending IR data. Either go where the IRR is or check to make sure the IRR is not blocked. If you don't want to send signals at all, go to the OUTPUT MENU and turn the Serial Output to OFF.

Appendixes

Add Digitized Memory to the DeltaTalker	
with a Memory Card	279
The MAINTENANCE MENU	280
About Passwords	281
Storing at a Glance	282
Troubleshooting	283
Songs Already Stored in the DeltaTalker	285
Storing a Pre-stored Song on your Overlay	286
Program and Store Your Own Songs	287
Helpful DECtalk Speech Tips	309
	017
External Microphone, Earphone and Speaker Specifications	317





APPENDIXES 278

Add Digitized Memory to the DeltaTalker with a Memory Card

Add 14.5 minutes more memory for *digitized* speech by inserting a memory card into the DeltaTalker.

Warning!

—Before you add a Memory Card, *you must—* UNPLUG THE BATTERY CHARGER if it is plugged in and TURN THE DeltaTalker OFF using the ON/OFF button in the Control Panel.

Turn the DeltaTalker face down on a flat surface. Look at the door on the **right**. Place a finger against each of the two hinges on the left-hand side of this door. Pinch the hinges and pull up on the door. You can now see the battery case. Remove the battery case from the unit by sliding the case slightly toward the left until the right end is free. Gently lift the battery case out and place it on the table. Do not unplug the batteries.

Hold the memory card so that the end that has the little holes on it is pointing toward the inside of the DeltaTalker case. The card plugs into a connector that is hidden under the black plastic housing. Place the back end of the card into the case first. Keep the card flat and push it toward the front of the case until you feel the card snap into place. The lower left corner of the card will fit into a small L-shaped guide when the card is in place.

To remove the card, pull the guide away from the lower left corner of the card. With your fingers pull the card out. This may take a little practice.

If you remove the card from the DeltaTalker after you have stored new vocabulary, some of that vocabulary will stay in the DeltaTalker and some will go with the memory card. You can't be certain what vocabulary will remain and what vocabulary will leave.

The MAINTENANCE Menu Gives You Information about the DeltaTalker

The MAINTENANCE menu contains options that you will not use frequently. The options are described below.

System Lock = >ON< or >OFF<

When this is On, the Control Panel and all of the keys in the Toolbox *except* the MAINTENANCE menu and the TOOLBOX ON/OFF key are locked. You can use the keyboard for speaking, but you cannot store, etc. The default is Off.

ERASE ALL VOCABULARY AND RESET SYSTEM = >NO<

When you activate this by activating CHANGE >ITEM<, the system erases all its memory and resets itself to its original defaults. You must enter the ZORRO pattern before the system can be reset. See page 61 for ZORRO information

Available STORE Memory = xx Bytes

This tells you how much synthesized memory is left.

Available RECORD Memory = x minutes, xx seconds

This tells you how much memory is left in digitized speech.

Software Version:

This tells you the version of software that is installed on your DeltaTalker.

Boot Block Version:

This tells you the version number of the permanent, unerasable software that remains in your DeltaTalker.

Load New System Software = >NO<

Use CHANGE >ITEM< to load new system software that you may receive from PRC.

Electronic ID or Serial Number = xxxx

If you order software from PRC you must repeat this number to a sales representative when you order. See facing page for more information.

About Passwords

If you have software version 1.04 or higher you do not need passwords.

When you load software disks that you received from PRC, the DeltaTalker may ask you for a password before you can complete the loading process. Passwords are generally written on the update instruction sheets that come with the software. If they are not, you must phone the PRC Sales Department at 1-800-262-1990 between 8:00 am and 4:00 pm, M-F, to ask for a password.

When you phone PRC to order software, you will be asked for the unit ID or Serial Number of your DeltaTalker. You can find this number in the MAINTENANCE Menu (see facing page). Give this number to the salesperson. PRC will assign you a password at the factory and it will be sent to you along with your software. Simply enter this password when the DeltaTalker prompts you for it during a download.

If you do not have the unit ID number available when you order software, you will have to look it up in the MAINTENANCE Menu and call PRC Technical Services a 1-800-262-1990 between 8:00 -5:00. Give the Technical Services person the electronic ID and ask for a password. You must do this before you can download your new software.

During the download, the DeltaTalker will prompt you to "Enter the password for XXXX and press STORE. (On your device XXXX will be replaced with a product code number.) You enter the password you received from PRC and press STORE.

If you enter the wrong password DeltaTalker tells you that you have entered an invalid password and it beeps at you. Double check your password. If it doesn't work a second time, look up the Unit ID or Serial Number in the MAINTENANCE menu again and call the PRC Service Department.

Storing at a Glance

Synthesized Speech (text-to-speech)

STORE

- 1. Activate STORE.
- 2. Type message.
- 3. Activate STORE.`
- 4. Select icon sequence.
- 5. Activate STORE.

EDIT

- 1. Activate EDIT.
- 2. Select icon sequence.
- 3. Activate STORE.
- 4. Edit message.
- 5. Activate STORE.

ERASE

- 1. Activate ERASE.
- 2. Select icon sequence.
- 3. Activate ERASE.
- 4. Activate ERASE again.

Select ESCAPE in the Control Panel or the Toolbox any time you want to exit one of these procedures.

Digitized Speech (recorded speech)

- 1. Activate RECORD.
- 2. Spell Text (if any).
- 3. Activate STORE.
- 4. Select icons.
- 5. Activate STORE.
- 6. Hold down RECORD and speak message.

Troubleshooting

Warning! You **must** use the correct battery charger with the DeltaTalker. Using an unauthorized battery charger may damage the batteries. In North America use only the battery charger with the part number, BCPS-1. In CE Standard countries use only the battery charger with part number, BCPS-UK-2.

Replacing the Batteries

You can replace the DeltaTalker's batteries yourself, but you must order replacement battery packs from PRC.

➡ If you replace the batteries, you must dispose of the old batteries properly. Follow the battery disposal regulations of you city, state or country.

The DeltaTalker has two battery packs, one under each door on the back of the device. Remove the doors. Unplug each battery pack by grasping the battery wires down near the connector, then pull up on the wires. You may have to use steady pressure to unplug the connector. Remove the battery pack by pushing one end towards the inside of the case and lifting the other end out until the whole pack comes out of the case.

Insert the new battery pack. Place the end that has the wires coming from it into the case first. Insert this end so that it is moving toward the center of the case. Drop the other end in. Plug the batteries into the connector. Push down on the connectors so that they fit tightly together. If they are not tight you won't be able to fit the door back on. Push the wires snugly up against the battery pack. Replace the doors. **You must calibrate the batteries after you replace them.** Please read pages 21-23 for information about calibration.

Memory Transfer (see the MTI Manual for more information)

The default baud rate for a DeltaTalker memory transfer is 57600. If you try a Memory Transfer and it doesn't work, first look for the baud rate in the menu bar of the MTI program. The MTI baud rate and the DeltaTalker's Memory Transfer baud rate must be the same for the transfer to work. The DeltaTalker's baud rate can be changed in the TRANSF. MEMORY menu.

The Transfer Memory baud rate and the Serial Output baud rate are **not** the same things. Change the serial output baud rate in the OUTPUT menu. It defaults to 300.

Cleaning the DeltaTalker Regular Cleaning:

To keep the DeltaTalker clean, wipe the device with a *damp* (not wet) cloth. Do not get water or soap into the speaker or microphone. The overlay protector can also be cleaned with a damp sponge or a window cleanser such as Windex[®]. Wash the keyguard in hot, soapy water.

Disinfecting:

To disinfect your equipment, mix $\frac{1}{4}$ cup vinegar with 1 cup water. Wipe all equipment with a cloth dampened in this mixture. Allow the equipment to air dry.

The Pre-Stored Songs in the DeltaTalker

Amazing Grace Joy to the World O Come Little Children Silent Night Away in a Manger Row Row Row Your Boat My Country 'Tis of Thee Old MacDonald Mary Had A Little Lamb Humpty Dumpty Twinkle Twinkle Little Star London Bridge I'm a Little Teapot Hickory Dickory Dock Jack and Jill

Storing a Pre-Stored Song on your Overlay

There are a number of different songs already stored in the DeltaTalker. In the Toolbox there is a key labeled SING at B3. All of the songs are stored under the SING key (B3) in the Toolbox. To sing the songs, you must move them to your overlay. Store each song under an icon sequence or an individual key. You cannot sing from the Toolbox.

To Store a Song Under an Icon Sequence:

- 1. Remove the keyguard and overlay. Turn the DeltaTalker On. Press TOOLS in the Control Panel.
- 2. Select STORE.
- 3. Select INSERT TOOL.
- 4. Select the SING key.
- 5. You see a song title on the display. Use the UP and DOWN arrows to step through the different song titles. When you see a song you would like to have on your overlay, select STORE.
- 5. You see the word SING with the title of a song in brackets on the display screen. If you want the song title to appear on the display when you sing the song, type the title in now. In this example you would type "Amazing Grace" (add the TEXT MARKER tool *before* you spell the title if you don't want the title to be spoken).
- 6. When you have finished with Step #5, select STORE.
- 7. Select the icon sequence on your overlay that you want to use for storing your song.
- 8. Select STORE.
- 9. Turn the Toolbox Off. Replace the overlay and keyguard. Make sure you are in MINSPEAK. Select the icon sequence you chose for your song. The DeltaTalker should sing the song.
- 10. If the DeltaTalker does not sing, open the Toolbox and re-store your song following the steps above. Don't forget to use INSERT TOOL.

You can store as many songs as you want under individual icon sequences.

Program and Store Your Own Songs in the DeltaTalker

Programming a song is different from programming regular text because you must tell the DeltaTalker to *sing* the song, not speak it.

To do this you must type each letter of text phonetically and add time and pitch values that correspond to musical notes. At the end of this appendix you will find a list of PITCH and TIME values, a chart of musical notes and a list of vowel and consonant phonemes to use.

Programming songs is not difficult but it *is* time consuming, so plan accordingly.

OHighly Recommended

Write down the programming of your song *before* you begin to program it into the DeltaTalker.

Write down the words to the song in phonemes and add the time and pitch values exactly the way you want to program them. This will save you a great deal of time when you are ready to enter the song into the DeltaTalker.

🔅 Tip

We encourage you to use the sheet music for any song you want to program. This way you can match the notes on the sheet music with the notes in the Pitch and Time tables. You don't have to be able to read music.

If you want to program from your Unity overlay you must have the complete alphabet, the left and right square brackets [], the left and right angle brackets < >, a comma , and the CTRL key on your overlay. You may also want to have the TEXT, SPEECH and TEXT AND SPEECH MARKER tools on the overlay. If these are not on your Unity overlay, store from the Toolbox.

Programming a Song

When programming a song you must change the letters in your song to phonemes (the written form of sounds). Find the sound in the Vowel and Consonant Phoneme List for each letter in your song and write down the phoneme.

Once you have entered the correct phoneme for a letter, you must tell the DeltaTalker how *long* (time) to hold which *note* (pitch). The TIME and PITCH values are *always* enclosed in angle brackets < > immediately following the phoneme they represent. The TIME value *always* comes before the PITCH value inside the brackets. The two values are *always* separated by a comma, i.e., <300,24>.

You always start to program a song by activating the left square bracket [. This tells the DeltaTalker that you are programming a song.

Program all songs in STORE mode for synthesized speech.

Break the Song into Phrases or Lines

Most songs, unless they are very, very short (one line) must be broken down into separate phrases or single lines to be stored. After each phrase (or line) you must activate the *right* square bracket,] and then the **CTRL** key and the "**k**" key on your keyboard. You will see the tight bracket and two small characters beside it on your display.

The right square bracket] usually tells the DeltaTalker that it has come to the end of the song. But when it is combined with the **CTRLk** activation, it tells the DeltaTalker to keep on singing the song until it comes to a right square bracket that is **not** followed by a CTRLk character. The] *without* a CTRL k following it signifies the end of the song.
Programming a Song

OBefore you Begin to Store:

Write down the song you want to store *exactly* the way you will enter it into the DeltaTalker.

- 1. Start with the left angle bracket [.
- 2. Use the **phoneme lists** to change each letter of the song into the correct phoneme.
- 3. Use the **TIME and PITCH tables** to match the note values in your song.
- 4. Write down the TIME and PITCH values after each phoneme. **Enclose the TIME and PITCH values in angle brackets** < > and separate the two values with a comma.
- 5. Break the song into phrases or lines by adding a **right square bracket**] **at the end of the line or phrase** and a reminder of some kind to tell you to activate the **CTRL and** "k" **keys** when you are actually programming.
- 6. Start the next phrase or line with the left square bracket [.
- 7. Continue until you have completed the song.

About TIME Values

The TIME value refers to the *amount of time in milliseconds* that a note is to be held.

1,000 milliseconds = 1 second;

500 milliseconds = 1/2 second.

Use the above numbers as a reference point.

Choose the amount of time you want a note to be held according to the tempo of the song. For example, a *quarter note* is held half as long as a *half note*, so you would adjust the time value for a phoneme accordingly. Use the **Note Time Value Chart** at the end of the appendix.

After you have entered a phoneme, type the left angle bracket < and then enter the TIME value (how long you want that phoneme to be held).

Programming a Song

About PITCH Values

PITCH values correspond to notes as you see them on sheet music or hear them on a piano. The PITCH value of notes for the DeltaTalker range from 1-37 with 1 corresponding to C2 (or the second C below middle C on a piano); 25 corresponds to the note C4 (middle C on a piano); and 37 corresponds to C5 (the first C above middle C on a piano). The two tables, **PITCH NOTES AND VALUES** and **PITCH VALUE CODE**, at the end of the appendix will help you to figure out PITCH values.

Enter the **PITCH** value that corresponds to the note you want after you have entered the TIME value and a comma. Then type a right angle bracket >. Do not put a space before or after the comma.

An Example of Programming a Song

Mary Had a Little Lamb



#1 Change the words of the song into phonemes. Use the Vowel and Consonant Phoneme Tables to find the correct phonemes.

Mar y ha d a li t tlela mbMER IY HXAE D AX LIH T TUHL LEYAE Mli t tlela mbli t tlela mbLIH T TUHL LEYAE M LIH T TUHL LEYAE Mmar y ha d a li t tlela mbMER IY HXAE D AX LIH T TUHL LEYAE MI t s flee cewa s whi te a s snowIH T S FLIY S WAX Z WAY T AE Z SNOW.

If you are new to using phonemes, it will take a little practice to become familiar with the different sounds. Sometimes a beginning consonant will blend into a vowel, but other times it may have to

Programming a Song

stand alone. Most ending consonants will stand alone but will be held for a very short time. Use the phoneme tables at the end of the appendix.

Practice by spelling words into the DeltaTalker using the phonemes you think might work. Then listen to them. Soon you will develop an idea about which phonemes are going to correspond to which sounds.

#2 Find the correct **PITCH** value in the **PITCH Values** charts.

Below is the regular notation for Mary Had a Little Lamb.





Sound Better:

Most songs that have notes above "37" (see the PITCH Value Code Chart) are scored too high for any DeltaTalker voice to sing well. These higher songs will sound much better if you give the notes their value in an octave lower. For example, the first note in *Mary Had a Little Lamb* is B above middle C. This B has a PITCH value of 36. To assign the correct value in an octave lower, go to the PITCH Value Chart and find the first B *below* middle C. Notice that its value is 24. Assign 24 to your B.

Also, some songs sung in a male DeltaTalker voice may sound better if you program them in an octave lower than they are written.

Below, the PITCH values for *Mary Had a Little Lamb* are shown an octave lower than written in the music.



Programming a Song

- **#3** Find the correct **TIME** value for each note and write it down.
- 1. Using the secondhand on a watch, time the amount of time it takes you to sing your song.
- 2. On the sheet music, look at the tempo of the song. In our example it is 4/4 time.
- 3. The top "4" means that there are four beats to a measure. There are four measures in our song. The vertical lines between groups of notes define a measure.
- 4. The bottom "4" means that each 1/4 note gets one beat.
- 5. Suppose it takes 10 seconds to sing *Mary Had a Little Lamb*. To find out how many seconds each measure gets, divide 4 into 10. In this case each measure gets 2.5 seconds.
- To find out how many milliseconds each 1/4 note (one beat) gets, divide 4 into 2.5. In this case each 1/4 note gets 625 milliseconds per beat. (You can round these numbers up or down so that they are easier to work with; e.g., 600.)
- An 1/8 note is held for one-half the time of a 1/4 quarter note, or 312 milliseconds (624 divided by 2). A 1/16 note is held for one-half as long as an 1/8 note, or 156 milliseconds (312 divided by 2).
- 8. a 1/2 note is held one-half the time longer than a 1/4 note, or 1250 milliseconds (625 times 2).
- 9. A whole note (4/4) is held twice as long as a 1/2 note, or 2500 milliseconds (1250 times 2).

⇒Remember that each note contains "x" number of phonemes to be sung. In our example, "Mary" (two 1/8 notes in the music) makes up one beat and a beat is one 1/4 note. But "Mary" is broken down into three phonemes: m er iy (the "a" and "r" in Mary is one vowel sound). The "m and ea" phonemes are equivalent to one 1/8 note. So is the "r and iy". According to our calculations above, an 1/8 note gets 312 milliseconds.



If you are not concerned with achieving the exact tempo of a song, there is a quicker way to figure out the TIME values.

Hum a song. Look at a watch or have someone count to calculate the rough timing of the song. Decide how many seconds you want a whole note to be held. Then divide the 1/2, 1/4, and 1/8 notes accordingly.

For example: If you give a whole note the time of 2 seconds (or 2000 milliseconds), then a 1/2 note gets the value of 1000 milliseconds; a 1/4 note gets the value of 500 milliseconds; an 1/8 note gets the value of 250 milliseconds.

By practicing giving whole notes different time values and listening to the results on the DeltaTalker, you can approximate the tempo of a song fairly accurately by using this method.

#4 Assign **TIME and PITCH values** to the phonemes.

Now let's figure out how many milliseconds from among the 312 (or 625 for a 1/4 note) to give to each phoneme.

Vowels are always held for a longer amount of time than consonants.

Consonants that stand alone at the beginning and end of words are usually held for short amounts of time.

Now that we know this we can begin to put the phonemes, TIME value and PITCH value together.

The "m" and "er" of "Mary" can probably be sung together— "MER". Together, these two phonemes make up an 1/8 note. We discovered that in this song an 1/8 note uses 312 milliseconds, so let's assign a TIME value of 300 to "MER". (300 is easier to work with than 312 and there is no noticeable difference between the length of 300 and 312.)

When you compare the notes on your sheet music with the notes on the PITCH Charts, you see that the first note (MER) has a PITCH value of 24. So "MER" will be sung with a TIME value of 300 and a PITCH value of 24.

The "IY" phoneme is held for about the same amount of time as "MER" when you sing it so let's give it a TIME value of 300, too. When we look at the PITCH charts, we see that its PITCH value is 22.

The first word of our song will look like this when you enter it into the DeltaTalker:

[MER<300,24>IY<300,22>

The second word, "HAD" uses an 1/8 note and contains the phonemes "HXAE D". The "D" is an ending consonant and stands

Programming a Song

alone. We don't want it to sound too pronounced when the word is sung, so it should get a lesser TIME value than "HXAE".

Now we have:

[MER<300,24>IY<300,22>HAEX<220,20>D<80,20>

Let's give "HXAE" a TIME value of 220. Its PITCH value is 20. And let's give "D" a TIME value of 80. Its PITCH value is 20. (220 plus 80 equals 300, or an 1/8 note.)

"A" (phonemes "AX") is easy. It's a one-phoneme 1/8 note. It gets a TIME value of 300 and the assigned PITCH of 22.

"LITTLE" must be broken up into "LIH T TUHL". Because we want to hear the "T" pronounced in "little" we should give it its own TIME value. "LIH" and "T" make up the first 1/8 note, so let's give LIH the TIME value of 250 along with its PITCH value of 24. Since an 1/8 note has 300 milliseconds and we have used 250 for "LIH", that leaves us with a TIME value of 50 for "T" (300 minus 250 equals 50). Its PITCH value is 24. "TUHL" uses an 1/8 note so it gets a TIME value of 300 and its PITCH value of 24.

Now we have

[MER<300,24>IY<300,22>HAEX<220,20>D<80,20>A< 300,22>LIH<250,24>T<50,24>TUHL<300,24>

"LAMB" ("LEYAE M") uses a 1/4 note or about 600 milliseconds. It has an ending consonant, "M" (the "b" is silent) which must stand alone so we can hear it. Let's give "LEYAE" a TIME value of 500. Its PITCH is 24. ("LEYAE" sounds better when sung than "LAE".) "M" then gets a TIME value of 100. Its PITCH value is 24.

When "LAMB" is repeated in the second line of the song, it uses an 1/8 note (300 milliseconds) so give "LEYAE" the TIME value of 200 and "M" the TIME value of 100. The pitch is 24. Now we have

[MER<300,24>IY<300,22>HAEX<220,20>D<80,20>A< 300,22>LIH<250,24>T<50,24>TUHL<300,24>LEYAE< 500,24>M<100,24>

Use the] and CTRLk

We have reached the end of the first line of our song. This is a good place to insert a right square bracket] and the **CTRLk** character so that the DeltaTalker knows that it should keep on singing. Select the] key on your keyboard and then select the CTRL key and the "k" key. (You will see a symbol for CTRLk (



When you end a phrase or line of a song with a] (right square bracket) and the **CTRLk** characters, you *must* start the next phrase or line with a [(left square bracket).

If you do not do this, the DeltaTalker will not know it is supposed to continue singing the song.

At the end of the entire song you *must* enter a] (right square bracket).

MARY HAD A LITTLE LAMB

Written down the song exactly as it is to be entered into the DeltaTalker

[MER<300,22>IY<300,24>HXAE<220,20>D<80,20> AX<300,22>LIH<250,24>T<50,22>TUHL<300,24> LEYAE<500,24>M<100,24>]CTRLk[LIH<250,22>T<50,22> TUHL<300,22>LEYAE<500,22>M<100,22>]CTRLk [LIH<250,24>T<50,24>TUHL<300,27>LEYAE<500,27> M<100,27>]CTRLk[MER<300,24>IY<300,22>HXAE<220,20> D<80,20>AX<300,22>LIH<250,24>T<50,25>TUHL<300,24> LEYAE<500,24>M<100,24>]CTRLk[IH<170,24>T<50,24> S<80,24>FLIY<200,22>S<100,22>WAX<200,22>Z<100,22> WAY<220,24>T<80,24>AE<200,22>Z<100,22> SNOW<600,20>]

Chefful Hints: If you have Auto Power Down or Power Save Mode turned On, the DeltaTalker will power down if no activations are made after a pre- set number of minutes pass. If you are entering your song and the DeltaTalker powers down, you will lose your programming. Before you begin to program songs into the DeltaTalker we recommend that you **turn Auto Power Down or Power Save Mode Off**.

We also *highly recommend* that you have the song written down on a piece of paper exactly as you are going to program it before you begin to enter it. This will save you a lot of time.

Programming Your Song

Storing the Song

If you do not have all the extra song programming characters on your Unity overlay (including TEXT and SPEECH MARKERS if you plan to use them), store the song from the Toolbox.

Storing Using TEXT and SPEECH MARKERS

If you do not want the actual song programming to show on the display while you are singing, you can use TEXT and SPEECH MARKERS to display only the title of the song. See below.

- 1. Activate STORE.
- 2. Activate INSERT TOOL (O1).
- 3. Activate TEXT MARKER (C3)
- 4. Type the title of the song.
- 5. Activate INSERT TOOL.
- 6. Activate SPEECH MARKER (D3).
- 7. Activate the left square bracket [(SHIFT (N6)).
- 8. Type in the song exactly as you wrote it out for programming. You can listen to your song at any time by activating SPEAK ALL after you have entered a right square bracket] and **CTRLk**. You can use the arrow keys and DELETE keys to edit the song and correct any mistakes.
- 9. When you reach the end of the song, *before entering the right square bracket*], activate INSERT TOOL.
- 10. Activate TEXT AND SPEECH MARKER (E3).
- 11. Activate the right square bracket] .
- 12. Activate STORE.
- 13. Select the icon sequence you want to use on your Unity overlay.
- 14 Select STORE.

If you do not want to use TEXT and SPEECH MARKERS, skip steps #2-6 and #9-10.

English Vowel Phonemes

Phoneme		Phoneme	
Symbol	Example	Symbol	Example
Vowels			
aa	f a ther	ih	b i t
ae	b a t	ix	k i sses
ah	b u t	iy	b ea t
ao	b ou ght	OW	b oa t
aw	b ou t	oy	b oy
ax	a bou t	rr	b ir d
ay	b i te	uh	b oo k
eh	b e t	uw	b oo t
ey	b a ke	yu	c u te

R-Colored Diphthongs

ar	b ar
er	b ear
ir	b eer
or	b or e
ur	p oor

Syllable Consonants

el	bott le
en	butt on
rr	butt er
IT	bull er

Chart copied with permission from Digital Equipment Corporation

Phoneme		Phoneme		
Symbol	Example	Symbol	Example	
Consonants				
b	b in	р	p in	
ch	ch in	r	r ed	
d	d ebt	S	s it	
dh	th is	sh	sh in	
f	f in	t	t est	
g	g ive	th	th in	
hx	h ead	V	v est	
jh	g in	W	w est	
k	c at	Z	Z 00	
1	l et			
m	m et			
n	n et			
nx	si ng			
dx	ri d er, wri t e	r		
lx	be ll			
rx	o r ation			
tx	La t in			
q	w e			

English Consonant Phonemes

Chart copied with permission from Digital Equipment Corporation

Pitch Notes and Pitch Values

PITCH NOTES AND PITCH VALUES



PITCH NOTES AND VALUES (cont'd)



APPENDIXES 304

PITCH Value Code

PITCH NOTE	PITCH VALUE	OCTAVE RANGE
C4	25	C4 = Middle C
B	24	
A#	23	ONE
A	22	
G#	21	
G	20	OCTAVE
<u>F</u> #	19	
	18	
	1/	BELOW
	16	
	14	MIDDLE C
	15	
В	12	
Ă#	11	тwo
A	10	_
G#	9	
G	8	OCTAVES
F#	7	
F	6	
E	5	BELOW
D#	4	
	3	
	2	
02	1	

PITCH Value Code (cont'd)

PITCH NOTE	PITCH VALUE	OCTAVE RANGE
	05	
	25	C4 = Wildale C
	20	
D#	28	ONE
EG	29	
F	30	OCTAVE
F#	31	OUTATE
G G	32	
Δ	30	ABOVE
A#	35	
B	36	
C5	37	
C#	555.4*	
D	587.6	тwo
D#	622.4	
E	659.6	
F F	697.8	OCTAVES
	740.2	
G#	/ 04.4 831.0	ABOVE
	880.0	ADUVE
A#	932.4	
В	988.0	MIDDLE C
C6	1046.8	

* For two octaves **above** middle C, you must enter the PITCH value in Herz. This range is quite high for DECtalk speech voices. If you don't like the way a song sounds in this range, consider entering the same notes in the PITCH values that correspond to one octave lower.

TIME Values of Notes

NOTE TIME VALUE CHART



Use the Alternate Pronunciation of a Word

Activate the right parenthesis. Do not put punctuation or spaces after you type it.

)record

Type the word.

The DeltaTalker will now speak the alternate pronunciation.

Also in this Appendix

Abbreviations that the DeltaTalker knows

How the DeltaTalker handles numbers

The Speech Tips Appendix

Helpful DECtalk Speech Tips

Sometimes a word has two different pronunciations. For instance, the word "record" can be pronounced as it is in this sentence, "We kept a record of how many people attended the museum opening." The word can also be pronounced as it is in this sentence, "Our speech teacher let us record our voices on a tape recorder."

The way a word is most often spoken is the way the DeltaTalker will pronounce the word. In this case, if you typed "record" it would be pronounced as it is in the first example. If you want the alternate pronunciation for the word, type a closing parenthesis prior to the word i.e.)record. Do not put any spaces between the closing parenthesis and the word you type onto the display.

If you store a word using a parenthesis in a sequence, every time you retrieve that word the DeltaTalker will speak the alternate pronunciation of the word.

We recommend that you **do not** store alternate pronunciations in the Dictionary, since they are the less frequently used pronunciations of words.

The following pages contain a list of words that have alternate pronunciations which DECtalk speech already knows. There is also a list of all the abbreviations that you can use which DECtalk speech knows how to pronounce.

The last part of this appendix explains how the DeltaTalker and the DECtalk speech board handle numbers.

Words with Alternate Pronunciations

abstract	defect	perfect	segment
abuse	deliberate	permit	separate
addict	desert	pervert	subject
advocate	digest	polish	sublet
affix	discharge	predicate	
	subordinate		
alternate	dove	predominate	suspect
animate	duplicate	present	syndicate
annex	elaborate	proceed	suspect
appropriate	estimate	produce	tear
associate	excuse	progress	torment
attribute	exploit	project	transform
august	export	protest	transport
bass	extract	read	upset
close	implant	rebel	use
combat	import	recall	wind
combine	imprint	recap	wound
compact	incense	recess	
compound	incline	record	
compress	increase	recount	
conduct	insert	refill	
content	insult	refresh	
conflict	interchange	refund	
console	intimate	refuse	
construct	invalid	reject	
contest	lead	relapse	
contract	live	relay	
contrast	miscount	remake	
converse	misuse	rerun	
convert	moderate	research	
convict	object	retake	
coordinate	overrun	rewrite	

Chart copied with permission of Digital Equipment Corporation

Abbreviations Recognized by DECtalk Speech

Abbreviation	Word
all-in-1	All in one
all-in-one	All in one
Apr.	April
Assoc.	Associates
Aug.	August
Av.	Avenue
Ave.	Avenue
bldg.	Building
Blvd.	Boulevard
CH.	Chapter
Ch.	Chapter
cm.	centimeters
cms.	centimeters
Co.	Company
COD	"see-oh-dee"
cont.	continued
Corp.	corporation
Ctr.	center
CTRL	control
cu.	cubic
dec	DEC (as in Digital)
Dec.	December
Dist.	District
deg.	degrees
Dept.	Department
doz.	dozen
Dr.	Doctor (when followed by a name i.e., Doctor West)
Dr.	Drive (when preceded by a name i.e, West Drive)
ESC	escape
esp.	especially
est.	established ("e ess tee")
etc.	et cetera
ext.	extension
Feb.	February
fig.	Figure
Flt.	flight
Abbreviation	Word

APPENDIXES 311

APPENDIXES 312		
P1.	Plural	
Abbreviation	Word	
028.	ounces	
UZ.	Ounces	
001.		
INOV.	November	
MIL.	Mount	
mss.	manuscripts	
msecs.	milliseconds	
msec.	milliseconds	
msde.	merchandise	
ms.	miz	
mrs.	missus	
mr.	mister	
Mon.	Monday	
ml.	milliliters	
misc.	miscellaneous	
mgs.	milligrams	
mg.	milligrams	
Mar.	March	
Ltd.	Limited	
lbs.	pounds	
lb.	pounds	
km.	kilometers	
kgs.	kilograms	
kg.	kilograms	
Jun.	June	
Jul.	July	
Jr.	Junior	
Jan.	January	
Intl.	international	
Inc.	Incorporated	
i.e.	"eye ee" (not 'that is')	
hrs.	hours	
Gov.	Governor	
gm.	grams	
Gen.	General	
Ft.	Fort (not 'Foot')	
ft.	feet (not 'foot')	
Fri.	Friday	
Fr.	Father	
fn.	footnote	
FOB	freight on board	

pp.	pages
ppd.	post paid
Pres.	President
Rd.	Road
recd.	received
Rep.	Pepresentative
Rev.	Reverend
rsts	"ris-tis"
rsts/e	"ris-tis-ee"
Rte.	route
Sat.	Saturday
Sen.	Senator
Sep.	September
Sept.	September
sq.	square
Sr.	Senior
St.	Saint (when followed by a name)
St.	Street (when preceded by a name)
Sun.	Sunday
Thu.	Thursday
Thurs.	Thursday
Tue.	Tuesday
Tues.	Tuesday
Univ.	University
USA	"you-ess-aye"
Vol.	Volume
vs.	versus
yds.	yards

Exceptions*

nt.wt.	net weight
op.cit.	op cit
p.p.d.	post paid
pat.pend.	patent pending.
Wed.	Wednesday

* These abbreviations will **not** work at this time (12/90)

Creating a Pause in Message You can create pauses in sentences, songs, etc.

Activate [Activate the SPACE key Activate < Type: 1000 (1000 will create a I second pause; if you type 2000 you will have a 2 second pause, etc.) Activate > Activate]

Producing a Long "A" in the Middle of a Sentence:

Usually an "A" by itself in the middle of a sentence is pronounced as "uh", but there may be times when you want it to be pronounced as a long "A" ("ayee"). To acvhieve this, type in the capital letter "A" and then add a punctuation mark immediately following it:

A. A, A? A! (A A;

This will change the inflection of the sentence somewhat, but it will produce a long "A".

How DECtalk Speech Handles Numbers

1995 is a year. 1,995 is a big number. 1995 (no comma) is spoken as "nineteen-ninety-five." 1,995 (with a comma) is spoken as "one-thousand-nine-hundred-and-ninety-five." Any four-digit number is spoken as a year unless you add a comma after the first digit. Commas are not necessary if a number contains more than four digits (e.g. 10,375). Numbers containing up to 9 digits are pronounced correctly.

Examples of Entering Math Problems:

When you enter math problems, they must be spaced correctly for DECtalk speech and the DeltaTalker to pronounce them correctly.

For example: 5 - 3 = 2

Enter this problem in the following manner:

5 (space) -3(no space between "-" and "3" but add a space after "3") =(space) 2.

The problem looks like this when it is entered:

5_-3_=_2 ("_" indicates a space)

Examples of Spacing for Other Math Problems:

2*8_=_16; 1*2_=_2 ("*" indicates "times") 2_+8_=_10 1 1/12 must be entered as 1& 1/2

11/12 must be entered as $1\&_{1/2}$ (1/2 can be entered by activating "1" "slash" "2".)

At this time DECtalk speech and the DeltaTalker cannot speak division problems correctly.

How DECtalk Speech Handles Numbers

Examples of Entering Dates:

DECtalk speech does not recognize dates if you enter them the way they are normally written, e.g.:

6-8-1990 or 11/20/95

Enter dates in the following manner for them to be spoken correctly:

6-Aug-1990 or 20-Nov-1995

These dates are spoken as "August 6, 1990" and "November 20, 1995".

Example of Entering a Phone Number:

Phone numbers must be entered by placing spaces and commas as shown below:

1_1_6,_2_6_2_,1_9_8_4 or 2_6_2,_1_9_3_3

External Speaker, Earphone and Microphone

You can connect an external microphone, speaker and earphone to the DeltaTalker. (External earphones should be used if you are also using Auditory Prompts.) Their connectors must fit into the following jack sizes on the back of the DeltaTalker:

External Microphone Jack—3.5 millimeter; mono External Speaker Jack—3.5 millimeter mono; use an 8 ohm speaker Earphone Jack—2.5 millimeter; mono

Prentke Romich Company makes a remote microphone that will fit the DeltaTalker's microphone jack. You can order this from PRC. You can also ask at various electronic supply or electronic equipment stores for microphones, speakers and earphones which might be compatible with the DeltaTalker jacks.

OWarning!

Do not plug an earphone into the EXTERNAL SPEAKER jack. This could cause damage to your hearing.

Index

1-switch scan 61, 69, 71, 73
1 icon theme 121-129,
2 icon theme 121-129
2-switch scan 61, 75-77
8 location keyboard 49, 55, 117
8 location overlay 55, 59, 65-69, 71, 75-77, 81
32 location keyboard 49, 53, 61-63, 73, 117
32 location overlay 37, 53, 59, 71-73
128 location keyboard 49, 51
128 location overlay 37, 57, 75-77, 157

AAC (DeltaTalker) 13 Acceptance time 65, 67, 69, 79, 81, 85 Activation delay 69, 73, 77, 87, 167 Activation signal 41 Add memory 279 Appendixes about passwords 281 add memory card 279 DECtalk speech tips 309 external microphone, earphone, speaker specifications 317 MAINTENANCE MENU 133. 282 songs in DeltaTalker 285 storing at a glance 282 storing songs 286, 287-309 Arrow keys 41, 177, 177, 181, 185, 197-199, 207 using with a computer 61-71 using with EZ Phone 217-223

Assign Minspeak 137-147 Assign spell 137-147 Assign tools 145-149 Audio level LEDs 101, 103 Auditory prompts 15, 51, 53, 55, 165-169, 173-79 on/off 165 prompts by category 165-167 prompts by content 165 prompts by key 165-167 storing 167 erasing 169 Augmentative communication 13 Auto power down 29, 27, 159 Auto repeat rate 159 Auto scan restart 69, 73, 81, 159, see also Scan auto restart Auto spell 99, 159, 161 Automatic/manual/hold scan 69, 81 Backlighting 159 Battery charger iv, 21, 23, 283 Battery calibration , 23, 283 Battery charger 21, 23, 283 Battery disposal 283 Battery replacement 283 Batteries v, 21, 23, 25, 27, 279, 283 replacing 283 using the correct charger 283 Baud rate 213, 247, 249, 254, 273, 274, 284, see also MTI Manual OUTPUT Menu 213, 249, 254 IR ADDRES Menu 273-274 Beeps 19, 45, 73, 83, 85, 163

INDEX 319

on/off 159 scanning 73, 83 Blank overlay 31, 49, 59, 133, 137.183 Buffer 185, 195, 205 Calibration, battery 22-23 CALL 45 CAPS/LOCK 197 CE environmental information ii CHANGE > ITEM < 41 Changing overlays 8 location 59 32 location 59 128 location 57 Changing voices in a message 183 Character pacing 223, 259, 262, 284 CHARACTER/WORD 109, 199 Charger, battery, about 23, 283 Charging, batteries, 21 CHOOSE OVERLAY menu 49-55, 63, 73, 117, 133, 137 Circular/linear scan 71 Circular/linear step 71 Cleaning the DeltaTalker 294 CLEAR DISPLAY 185, 205 Column/row 71, 75, 81, 167 Computer 255-279 with IRR 255-262 without IRR 264-279 memory transfer see MTI Manual Control panel v, 15, 27, 29, 37, 39, 41, 43, 63, 101, 103, 105, 107, 109, 111, 117 Control panel door 12 CTRL 264-279

activation 159

DECtalk speech 171-183, 319 Defaults reset the system 19, 133 290

DELETE CHAR 109, 141, 147, 149, 199, 207, 267, 271 DELETE ICON 207 DELETE LAST SELECTION 207 DELETE WORD 109, 141, 191, 199, 207 DeltaTalker about 15 back 17 cleaning 294 front 15 inside 19 DICTIONARY MENU 189-193 add word 189 alternate pronunciation 188-189 delete word 191 review word 193 DIGITIZED MEMORY FULL 97 Digitized speech 97, 103-105 amount of memory 280 memory card iv, 19, 279 erase 105 store 103 Direct selection 61, 65, 91 DISABLE KEY 157 Disinfecting the DeltaTalker 284 Display screen 15 Disposal, batteries 283 Dual or stereo jack 17, 25 Dual (2) switch scanning 17, 61, 75-77 EARPHONE VOLUME DOWN 43 EARPHONE VOLUME UP 43 Earphone, external 17, 37, 43, 165, 317 Editing auditory prompts 51-55, 165, 169, 173-175 synthesized messages tools 92-98 ENTER 257 Erase

INDEX 320

entire contents 133

auditory prompts 169 recorded speech 104 spelling *see DELETE CHARACTER* synthesized speech 111 ESCAPE 37 EXIT 41 EXIT THEME 121, 129, 259, 265 External earphone 17, 37, 43, 165, 317 External microphone 17, 97, 101, 103, 288, 317 External speaker 17, 31, 43, 131, 165, 193, 317 EZ Phone 217-243

FEEDBACK menu 29, 41, 51, 89, 93, 159, 163

Headpointing	61, 67, 85, 91
Helpful hints	113, 213
Memory tran	sfer see MTI
Manual	
storing 113	

Icon

about 31-33, 101 masked 115 prediction 89-91 tutor 163 Infrared 211-275 about 213 add devices and functions 227-243 COMMAND tool 219 computer emulation 245-269 delete a device 243 EZ Phone Commands 219-243 OUTPUT Menu 213 re-learn an already stored signal 239 rename a device 241

remote control 211, 217 re-teach a signal 239 SERIAL MARKER, SPEECH MARKER 215, 253, 261, 269 SET-UP MENU 219, 227-245 Storing under icon sequences 237 EZ Phone commands 219-243 IRR commands 251 X-10 Commands 225 Troubleshooting 271-275 Infrared Receiver 211, 215, 245-252 IR COMMAND Tool 215-225 IR SETUP Menu 215, 227, 231 IRR 211-252 Insert Tool 107, 121, 137-139, 143-145, 151, 187, 219, 229, 257 IR see Infrared Joystick 79 Key assignments 139-153 Key coordinates 35 Key locations 35 Keyboard 15, 51 128 location 51 32 location 53 8 location 55 Keyboard emulation 245-265 Keyguard 15, 49 cleaning 284 Keypad 32 location 53, 59 8 location 55, 59 LED 17, 19, 23, 25, 37, 39, 43, 59, 67, 69, 83, 85, 89, 91, 97, 99, 101, 127 Lights 41, see also LED Locations, key 35

INDEX 321

Load memory (MTI) see MTI Manual Load module/merge see MTI Manual MAINTENANCE menu 133, 280 Masking icons 115 Memory adding iv, 21, 279 amount left 280 card iv, 21, 279 digitized 97 full 97 synthesized 97 transfer see MTI Manual Menus ASSIGN MINSPEAK 137-149 ASSIGN SPELL 141-149 AUDITORY PROMPTS 165-169 CHOOSE OVERLAY 49-55, 63, 73, 117, 133, 137 DICTIONARY 189-193, 313 FEEDBACK 29, 41, 51, 89, 93, 159, 163, 284 IR SET-UP 219-235 MAINTENANCE 133, 280 OUTPUT 213 RENAME ICON 139, 155 **REVIEW VOCAB** 131 SELECTION TECHNIQUE 63-65, 81, 85 SPEECH 165, 173-181 SWAP KEY 137, 139, 153 TRANSFER MEMORY see MTI Manual Menu helper keys CHANGE > ITEM < 41 EXIT 41 NEXT MENU ITEM 41 Merge/load module see MTI Manual Microphone 15, 97, 101, 103, 288, 317 external 17, 317 Minspeak 29-35 assign to a key 137-147

Mono jack 17, 77, 101 MTI-IBM see MTI Manual MTI-Macintosh see MTI Manual Multi switch 17 NEXT MENU ITEM 41 OH-DT (Optical Headpointer) 61, 67, 85, 91 ON/OFF control panel v, 15, 27, 29, 37, 41, 288, 293 character pacing 213, 249, 252, 274 relay 257 remote 235 prompts 51, 165-169 speech 185 toolbox 39, 284 Optical headpointer (OH-DT) 61, 67, 85, 91 25, 28 Overlay 8 location 49, 55, 59, 65-69, 71-73, 81 32 location 49, 53, 71, 73 128 location 49, 57, 75-77, 157 blank 19 changing 57, 59 QWERTY 49, 99, 137, 153, 265 scanning 49 Toolbox 15, 39, 41, 93, 111 Overlay protector 15, 51, 57-59 OUTPUT menu 213 Passwords 281 Pitch, average 179 Pitch range 173, 181 Plurals 201 POWER OFF 27, 29 Predictive selection 91, 127, 159, 161

INDEX 322

Prompts, auditory 15, 51, 53, 55, 165-169, 173-79 Quarter Row/Column Scan 81 QWERTY overlay 49, 99, 137, 153, 265 Rate, speech 173-177 Recorded speech 97, 103-105, 113 RENAME ICON 139, 155 Reset Defaults 284 Review Dictionary 193 **REVIEW VOCAB menu 131** Row/column scan 69, 71, 167 RS-232 19, 215 SAVE SETTINGS 39, 93, 117, 151 Save memory see MTI Manual Scan 69-81 acceptance time 65-69, 79, 81, 85 activation delay 69, 73, 77, 87, 167 auto restart 69, 73, 81, 159, automatic 67,75 speed 73, 77, 83, 87 step 75 Scan mode 1-1 switch 61, 69 Scan mode 1-2 switch 61.75 Scan mode 2-1 switch 71 Scan mode 2-2 Switch 77 Scan type auto 69 hold 69 step 69 Scanning overlay 49, 61, 65 Scanning speed 86 Selection technique menu 63, 65, 81, 85 Selection techniques 61 Selection type 81 Sequences, icon, 31, 51, 89, 101, 137

Printer 211-217

Serial marker 215, 253, 261, 269 Serial output 213, 252-253, 264, 275 Serial port 19, 215, 252, 259, 261, 269 SETTINGS #1, #2, #3 39, 93, 117, 151 Shift 197 Singing 285-307 Single switch scanning 69-73 Software Update 286 Songs, prerecorded 285 songs, entering your own 287-307 SPEAK ALL 185 SPEAK DISPLAY 185 SPEAK LAST SELECTION 185 SPEAK SENTENCE 185 SPEAK WORD 185 Speaker, external 19, 31, 43, 131, 165, 193, 317 SPEAKER VOLUME UP 36 SPEAKER VOLUME DOWN 36 Speaking tools 185 Speech digitized 97, 103-105, 113 synthesized 97, 107-111, 113 voices 81-82 SPEECH MARKER 203, 215 SPEECH menu 173-183 SPEECH ON/OFF 153, 185 SPKR VOL UP 36 SPKR VOL. DOWN 36 Speech rate 173-177 Speech Tips 134-137 SPELL/MINSPK 99 Spelling assignment 137-147 Status panel 17, 37, 39, 41, 129, 163 Step scan 35 STORE about 101 auditory prompts 167 computer commands 254-269 different voices in a message 183

digitized messages 97, 103-105, EZ Phone commands 215-243 IRR commands 215, 247-269 songs 285-307 synthesized 97, 107-111, 113 themes 119-127, 265-269 with 32 and 8 117 X-10 commands 225 Storing at a glance 282 SWAP KEYS 153 SYNTHESIZED MEMORY FULL 97 Synthesized speech 107-111

Text

assigning 139-141 2 lines on the display 15 TEXT MARKER 203 TEXT& SPEECH MARKER 203, 215 Text-to-speech 97 Themes 119-127, 255-269 1 icon 119-127, 255-269 2 icon 119-127, 255-269 EXIT 129 computer 265-269 using 127 Toolbox 39 TOOLBOX ON/OFF 39 Tools assigning 139, 145-149 insert 121, 143 #1 SETTINGS 39, 93, 151 #2 SETTINGS 39, 93, 151 #3 SETTINGS 39, 93, 151 1 ICON THEME 121-129, 255-299 2 ICON THEME 121-129 BATT. STATUS 23, 383 CALL 45 CAPS LOCK 197 CHAR/WORD 109, 199 CLEAR DISPLAY 185, 205 CONTROL 261

DELETE CHARACTER 109, 141, 147, 149, 199, 207, 263, 265 DELETE ICON 207 DELETE LAST SELECTION 207 DELETE WORD 109, 141, 191, 199, 207 DISABLE KEY 157 EAR VOL.UP 43 EAR VOLUME DOWN 43 EDIT 51-55, 165, 169, 173-175, ENTER 257 ERASE auditory prompts 169 digitized speech 104 synthesized speech 111 system 133 ESCAPE 37 EXIT THEME 121, 129, 259, 273 INFRARED SET-UP (IR Setup) 211-252 INFRARED COMMAND (IR Command) 211-252 INSERT TOOL 107, 121, 137, 139, 143, 145, 151, 187, PLURALS 201 POWER OFF 27.29 SAVE SETTINGS 39, 93, 117, 151 SERIAL MARKER 225 SHIFT 197 SPEAK ALL 185, 314 SPEAK DISPLAY 185 SPEAK LAST SELECTION 185 SPEAK SENTENCE 185 SPEAK WORD 185 SPEECH MARKER 203, 215 SPEECH ON/OFF 153, 185 SPELL/MINSPEAK 99 SPEAKER VOLUME UP 36 SPEAKER VOLUME DOWN 36

INDEX 324
STORE see p. 323	saving 211-219
WAIT ANY KEY 187	VIEW ANGLE 13, 37, 36
Tools and Text, assigning 145-	View selected icons 74
149	Voice
TRANSFER MEMORY Menu see	auditory prompt 82
MTI Manual	changing voices in a message
Transfer vocabulary see MTI	85, 183
Manual	main voice 81
Troubleshooting 283-284	pitch, average 179
IRR 271-275	pitch range 173, 181
	selecting a 81
	speech rate 173-177
Update software 280	
Using key coordinates 35	
Using icons 33	WAIT ANY KEY 187
Using Insert Tool 107, 121, 137-	
139, 143-145,	
Using menus 41	X-10 217, 225
Using themes 119-127, 255-269	
	ZORRO 133
Vocabulary	