



**A Word-Based Communication Program**

## *Acknowledgments*

In the development of WordCore, a number of people offered support. Thanks to Rena Carney for being the first to ask me the question “Do you think there’s any way to provide a word-based vocabulary set using spelling on a 45-location device?”; to Joan Sharp for being the first to provide feedback and encouragement to dig deeper; to Betsy Walker for being the first to work with the program and offer many suggestions; to Dave Moffatt who said “go for it”; to all my friends on the PRC Consultant Network who offered ‘fine-tuning’ advice; beta-testers in a variety of locations; and to Bruce Baker for being a linguistic mentor since 1989 and the author of the “AQLS” program from which WordCore is derived.

Most of the work on this project took place late at night and early into the morning, and I should thank the many fine musical artists who provided a soundtrack. These include Steely Dan, Amanda Ghost, George Michael, Prince, Caleb, Vangelis, Nine Inch Nails, Tears for Fears, Spock’s Beard, Seal, Diane Krall, and Castle of Astolat.

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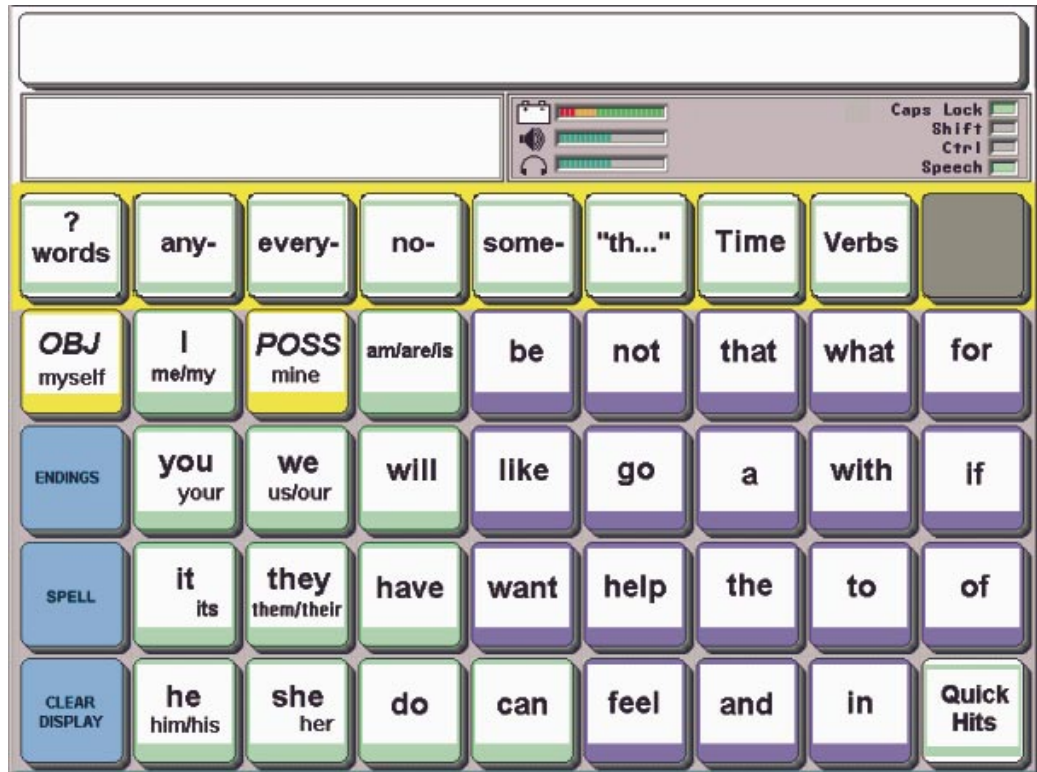
T-TAM (Trace Transparent Access Module) was developed by the Trace Research and Development Center, University of Wisconsin-Madison.

The Vantage computer access overlays are based on the work Chris Beatty did for the MIKE product. PRC gratefully acknowledges his contribution.

## WordCore: An Introduction.

### The WordCore Core.

WordCore is a word-based program designed to work with only 45 keys. It is faster than regular spelling and cuts down on the number of keystrokes needed to type messages. Anyone who can spell should be able to use the program very quickly, and with continued use become adept at communicating.



*The WordCore Core screen is the default setting for the program. From here, you can build sentences using words, phrases and spelling.*

## WordCore: How Does It Work?

The Core screen of the WordCore program shows an overlay that contains only four types of key;

- ✓ Single-Hit words
- ✓ Two-Hit words or phrases
- ✓ Shortcuts
- ✓ Tools

### Single-Hit words.

Single-Hit words are color-coded in light purple. When you select one of these, the word is spoken and appears on the top of the display.



### Two-Hit words.

Select a green key and before anything appears on the display, you will see a number of possible keys from which to choose.



You will be able to generate words such as “I,” “you,” “myself,” “themselves,” or phrases such as “you will,” “will they,” “does he” and so on.

### Shortcuts.

Some keys with green stripes are shortcuts to special groups of words, such as “Question words” or “th-words.”



### Tools.

The blue keys tell the device to do something rather than just speak words. Hitting the SPELL key brings up a QWERTY keyboard; pressing ENDINGS brings up a special row of word endings, as seen below on the top row.



The CLEAR DISPLAY does just that – clears all the text from the Text Area.



The BACK key will take you back to the Core vocabulary.

## Spelling

In general, if you want to spell a word out, you simply hit the key marked SPELL.



This will take you to a spelling page like the picture below:



Now select the first letter of the word you're looking for and you will see a list of words appear in your Word Prediction area AND two rows of common words, called the "Word Rows," above the letters on the Spelling page:



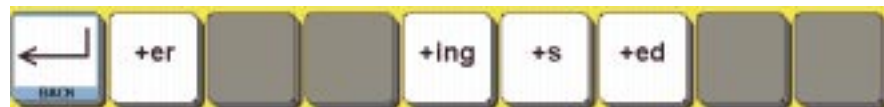
## Choose from the Word Row

Take a look to see if it in the Word Row to see if the word you want is there. For example, if you wanted “doubt,” you could choose it from the Top Row as shown here;



When you make a selection, WordCore instantly flips you back to the Core screen. Some words will not only flip you back to the Core but also give you other possible endings. For example, if you were to choose the word “decide” from the D-words Row, you would see a “Smart Row” appear;

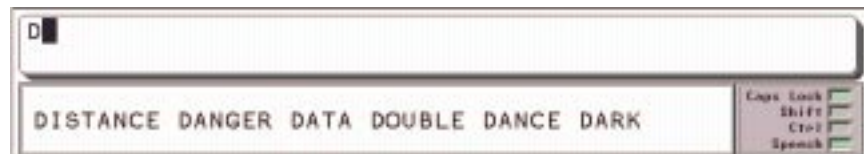
## Smart Row



Choosing an ending will change your “decide” to “decider,” “deciding,” “decides” or “decided.”

## ...or choose from the Word Prediction window...

If your word isn't in the Word Row, look above at the Word Prediction window. If it's there, select it, even if it is only the root of the word. For example, suppose you were looking for “dangerously.” In the example above, you'll see the following Word Prediction window:



The word “dangerously” isn't there, but the word “danger” is. So select it and the window will change to show;



Now you can choose “dangerously” and as it appears in the Text Area, the Word Prediction becomes empty



**...or just keep spelling.**

If the word isn't in the Word Row or the Word Prediction window, just spell the next letter and keep watching the Word Prediction window until it appears.

On rare occasions, a word won't appear in the Word Prediction window. At that point you have to decide whether or not to add it to the Word Prediction dictionary of your communication aid. If it's a word like "sesquipedalian" and you intend to use it regularly, then go ahead, but if it's a "one-off," you may decide not to bother. The choice is yours.

## Practice Words

Exploring the two-hit words is a quick and easy way of becoming familiar with how to access many words with only two keystrokes.

There is a special group of words called **Pronouns** that change depending on where you use them. WordCore has two special keys, outlined in YELLOW, which can be used to produce some of these words.

### The OBJ key



Hit the OBJ key and you will see the following words:

"myself"	"yourself"	"ourselves"	
"itself"	"yourselves"	"himself"	"herself"

### The POSS key



Hit the POSS key and you get a different set of words:

"mine"	"yours"	"ours"	
"its"	"theirs"	"his"	"hers"

Now hit the "I," "you," "it," "he," "she," "we" and "they" keys. Where the OBJ and POSS keys are, you'll see new words:

"me"	"I"	"my"
"you"	"you"	"your"
"it"	"it"	"its"
"him"	"he"	"his"
"her"	"she"	"her"
"us"	"we"	"our"
"them"	"they"	"their"

### So what ARE these words?

Grammatically, these words are all Pronouns, but more specifically Subject, Object, Possessive and Reflexive Pronouns. It doesn't matter whether you understand this; all you need to know is where they are! They are grouped together grammatically, such as all the "-self" words are OBJ + something.

Just use them as they are and don't spend too much time worrying about what they are called. Once you start creating sentences, you'll find them easily. And remember, some of the keys actually have the word you want printed on them to make it easier!

## Practice Shortcuts

Hit a Shortcut key and choose a word from that group.



## Practice Phrases

There are many short phrases in WordCore that you can produce using only two keys, which is effectively one key per word. These phrases are either “Statements” or “Questions” depending on the order in which you press the keys.

### Simple statement phrases

Hit a Pronoun (I/you/he/she/it/we/they) and choose a second key:

“I like...”  
“He wants...”  
“She goes...”  
“We should...”

### Simple question phrases

Now hit a green Verb (will/have/do/can...) and choose a second key:

“will you...”  
“has he...”  
“can they...”

Notice how WordCore even handles the way that verbs change. Selecting HAVE followed by HE produces “has he...” whereas HAVE and YOU gives “have you...” This means you don’t need to have keys for both “have” and “has” – thus making the system as a whole more efficient.

### Simple negative phrases

You can follow any phrase with NOT to make a negative:

“I will not...”  
“He does not...”  
“They can not...”

However, you can also insert the “not” in the middle of a two-hit phrase to get the more informal form:

I + NOT + WILL = “I won’t”  
THEY + NOT + CAN = “They can’t”  
HE + NOT + WANT = “He doesn’t want”

When you hit the “not” in these sequences, you’ll see the next word appear on the key you need to select. Again, this is another example of how WordCore makes most use out of a small number of keys.

### Simple negative questions

Just as above, hit a green Verb but this time have the “not” in the middle:

“Haven’t they...”  
“Can’t he...”  
“Doesn’t she...”

## Practice Sentences

The best way to learn about the WordCore program is to start using it. The following sentences have been chosen to demonstrate the different ways in which you can generate words.

*Core-Only:* These sentences can be constructed without needing to use the SPELL key.

*Core and Word Row:* These require you to use the SPELL key then select a word from the top Word Rows on a page.

*Core, Word Row and Word Prediction:* You will find some of the words you need by using the Word Prediction window.

### Core-only Sentences

1. I think I know what you want.
2. I can do that for myself.
3. What do you want me to do?
4. I will go with you.
5. He might not want to go with us.
6. Didn't you want me for something?
7. Where are we going tomorrow?
8. Have you done what you were going to do?
9. I know you can help me.

### Core and Word Row Sentences

1. I can talk about anything I like.
2. What did you think of my new idea?
3. I think it is a difficult problem.
4. Somebody should have told me what you said.
5. Do you have anything to drink?

### Core, Word Row and Word Prediction Sentences

1. I need help with my wheelchair because I think it is broken.
2. I can talk with this special program.
3. Can I have a drink of coffee please?

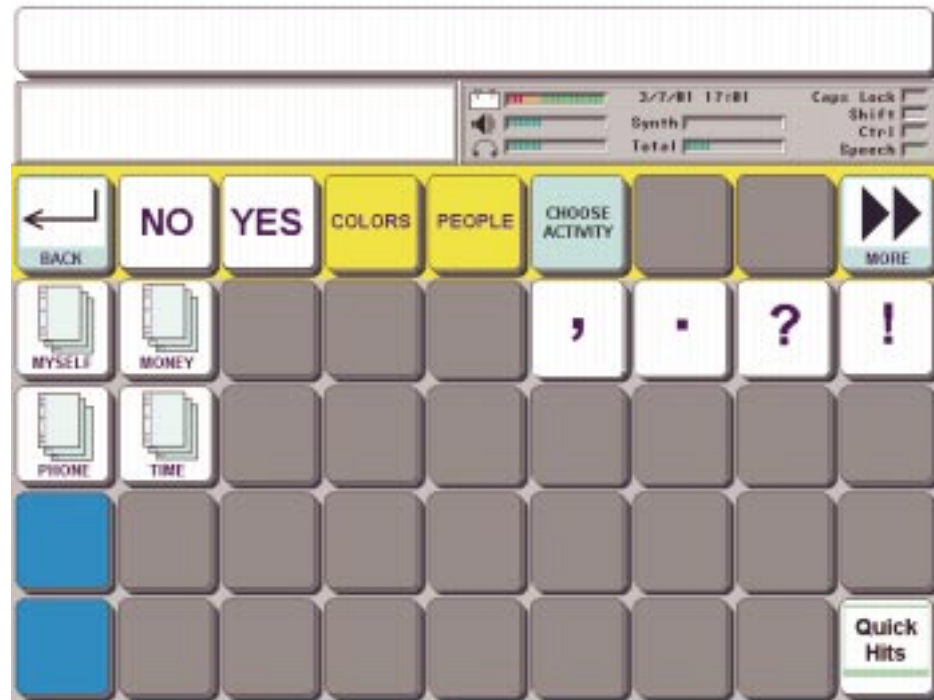
## Punctuation and Functions

For most of the time, you will be able to simply build sentences and speak by touching the text bar. However, on some occasions, you may want to do something more. For example, what if you have a really long sentence that runs off the screen altogether; how would you say it all?

This is where you can use special Punctuation and Function keys. These are available in a number of locations.

### Quick Hits

Try hitting the QUICK HITS key  and see what happens.



### Smart Comma

Press the COMMA inserts a comma after the last word, then puts a space in before the next.

### Smart Period

The PERIOD adds a period after the last word, speaks the whole sentence, adds a space before the next word, and automatically makes the next word start with an uppercase letter – that's why it's called a "smart" period!

### Smart Question

Similar to the smart period, the QUESTION adds the punctuation, speaks the sentence with a questioning intonation and makes the next word start with an uppercase letter.

### Smart Exclamation

Just like the period and question.


**Choose Activity** When you first get the WordCore program, you will not need this key. However, if you start adding new Activities to your Activity Row, you will need to be able to scroll through them. At that stage, this is the key to use.

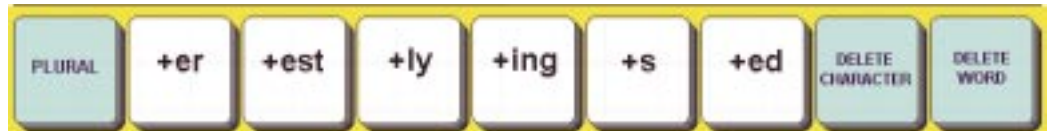
**MORE key** This takes you to a new Activity Row that contains two special keys: Computer ON and Computer OFF. If you are connected to a computer and your computer is ready to receive information from your device, these keys can be used to turn on the link. Once you have selected Computer ON, all the text you generate will be sent to your computer. That means if you have a Word Processor open, you can write to the screen!

If you select Computer OFF, your communication aid will no longer send information to the computer.

There is a way to do very sophisticated computer emulation and that is covered in the next section of this manual.

### Endings Key

Try hitting the ENDINGS key  and you will find three special functions available.



**Plural** This will change a noun into its plural form. This is unlikely to be used frequently as the Word Prediction system will normally provide the plurals.

**Delete Character** This deletes the last character selected.

**Delete Word** This deletes the last word selected.

## **More Shortcuts**

There are some special little features included in the WordCore program that can help keep keystrokes down to a minimum. Here are some details of these shortcuts.

### ***Negative Phrases***

- To get the negative form of a phrase, put the NOT key into the middle. So, YOU + HAVE gives "you have," but YOU + NOT + HAVE gives "you haven't."

### ***The "a" words***

- When you select the A key, the Spelling page appears, but there are also some short words that start with "a" on the page, namely "an," "as," and "at." Select one of these and it will replace the "a."

### ***The "the" word***

- When you choose the "the" key, WordCore will flip you straight to the Spelling page. This is because you will not be using any of the Core words to follow the "the," so automatically switching to Spell saves a keystroke.

### ***Green words to SPELL***

- If you select any of the words in green, you can then hit the SPELL key and the word will be produced on screen AND you will be ready to spell.

For example, if you wanted to say "Will Bob help with that?" you might think you have to hit WILL + WILL to get "will," then hit SPELL followed by "b" "o" "b" then SPACE to get "Bob." But you can save keystrokes by selecting WILL then SPELL. WordCore will automatically bring "will" up in the Text Area as well as putting you into Spelling Mode. This saves a keystroke.

### ***SPACE key back to Core***

- When spelling a word, if you hit the SPACE key at any time you will be flipped back to the Core vocabulary.

### ***Word Row back to Core***

- Selecting a word from the Word Row at any time will take you back to the Core. Notice that this changes when you start spelling.

### ***Use "be" for be-type words***

- When you select the "be" key, you will get the word "be." However, you also have the opportunity to change this to one of the following; "are," "being," "was," "were," and "been." These are forms of the "to be" verb. Selecting in this way saves keystrokes.

### ***Use "have" for variations of "have"***

- Selecting the "have" key gives you the options of "haven't," "hasn't," "hadn't," "having," "has" and "had" in the Smart Row that appears.

### ***Use "do" for variations of "do"***

- Selecting "do" key gives you more options; "don't," "doesn't," "didn't," "doing," "did" and "done" from the Smart Row.

### ***"Quick Hits"***

- The QUICK HITS key will bring up "no," "yes," COLORS and PEOPLE, special punctuation keys and pre-designed Pages.

## **Customizing WordCore**

Although WordCore has been designed to be used “as-is,” many people will want to add personal features to the program. Along with specific instructions found in your device operator’s manual, here are some suggestions of ways in which you might want to extend the functionality of WordCore.

### ***Adding more Names***

- The QUICK HITS key brings up a sub-category of PEOPLE, which contains generic people names like “mother,” “father,” “sister” and so on. You can erase these and add specific names if you want or add a new list of names.
- To modify the current set, use the MODIFY ACTIVITY menu in the device Toolbox and find the WHO? Activity. Select the key you want to change and add the new name you want to enter.
- End the name with a SPACE and the <CHOOSE-ACTIVITY> function – this is just to make sure that once you select a name, the WordCore program goes back to the Core screen.

### ***Adding more Activities***

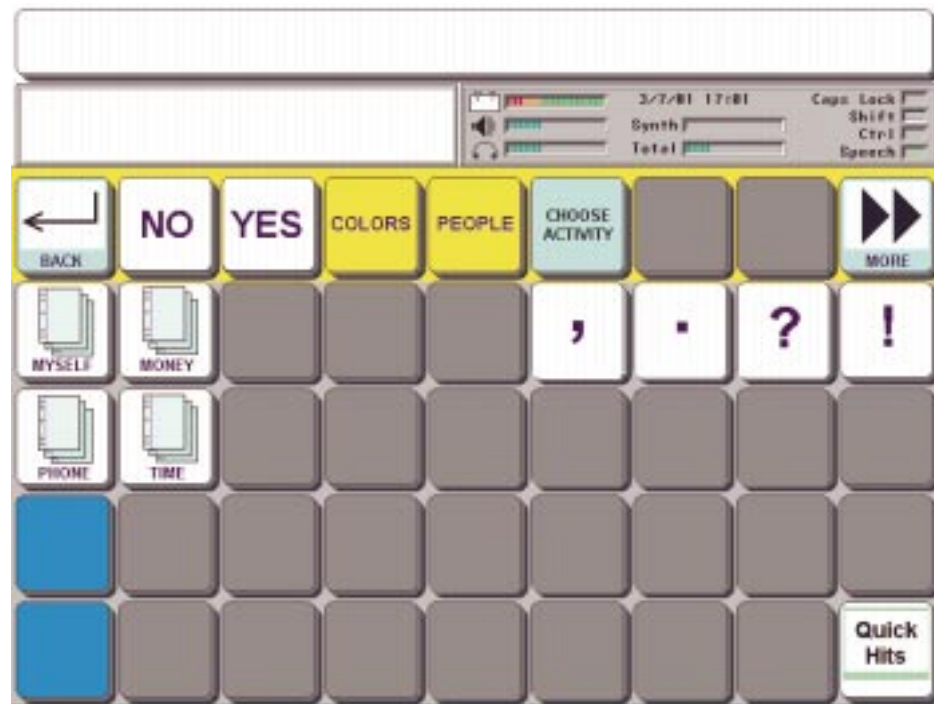
- All the Shortcuts visible in the Activity Row along the top of the WordCore program are simply Activities. To add a completely new one, go to the device Toolbox and choose the CREATE ACTIVITY menu. Follow the prompts and refer to your Operator Manual for details on how to add new items.
- End each item with a SPACE and the <CHOOSE-ACTIVITY> function.
- If you only want your Activities to appear when a particular key, or keys, is selected, use the DYNAMIC ACTIVITY menu in the Toolbox to assign the Activity to the required key(s).

### ***Adding Special Pages***

- Your communication aid can store vocabulary items on special pages. You can use this feature to access specific groups of language. For example, suppose you want a page of up to 40 “Friends;”
- Go to the Toolbox and select CREATE PAGE, call it FRIENDS, select the 45-key size option and choose “Copy from an existing page.”
- Choose the page called MASTER – this contains some keys already defined, which allow you to go back to the WordCore Core, go to spell, or simply clear the display.
- Create your Page. Once it has been designed, you need to have some way to access it from your Core. Here’s a suggestion: Store each page using QUICK HITS + another key – that way you can access many pages without pressing more than 2 keys!

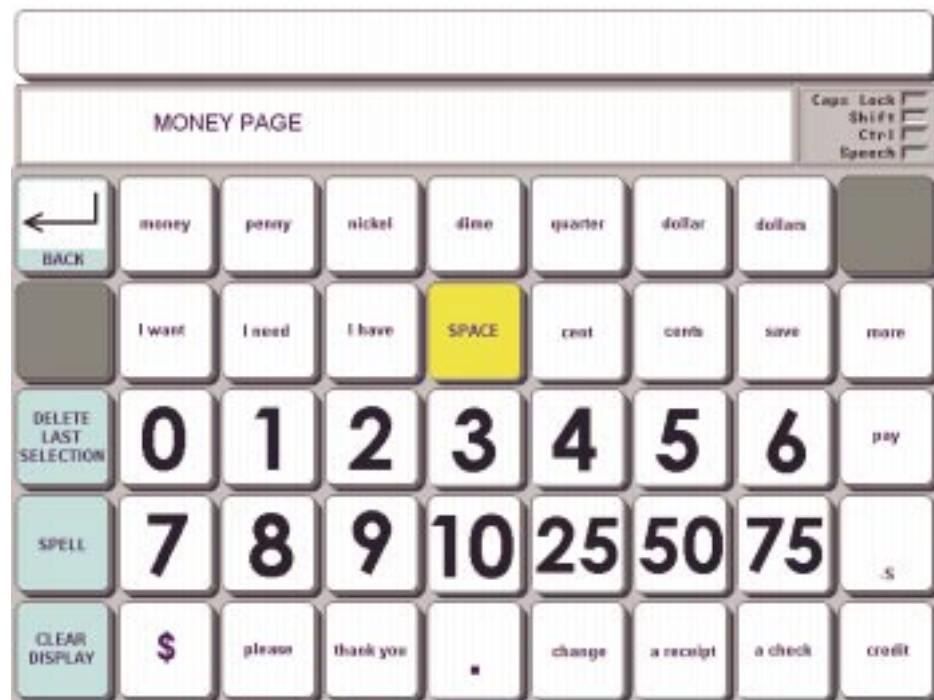
## Example Pages

Included with WordCore are some examples Pages to illustrate who you might want to use them along with the QUICK HITS key. You may have already seen them in the previous section on “Punctuation and Functions.”



Simply select keys to explore the vocabulary. Hit the GO CAK key when you have finished. Remember, you can create your own Pages either by copying one of these or using the MASTER Page template.

### *“Money Page” example*



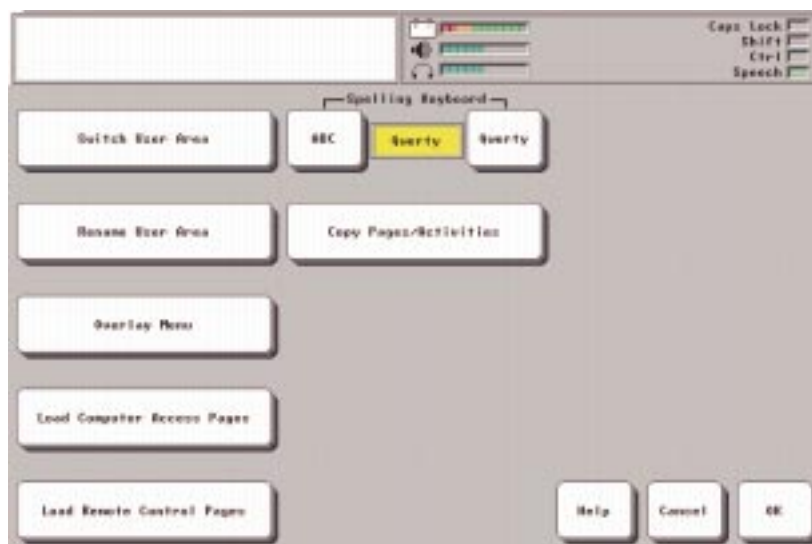
## **Computer Access: Built-in Option**

**Computer  
Access:  
Where do I  
find it?**

Go to the Toolbox of your device and find the “Choose Overlay Menu” button.



Select this and you will see a screen offering a number of options.



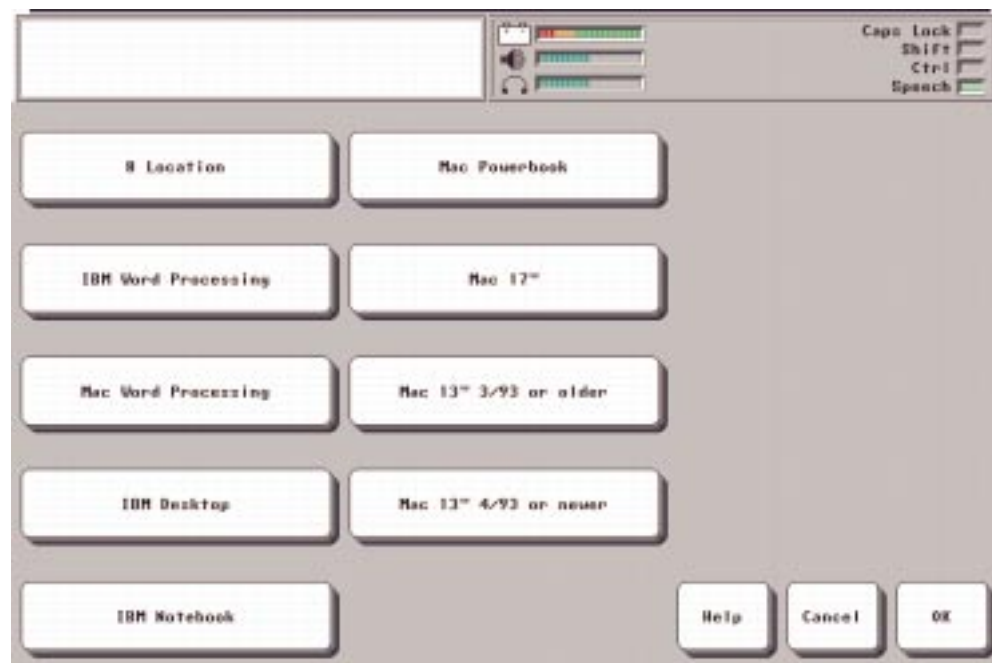
Select the “Load Computer Access Pages” button.



Choosing this allows you to load in a number of special Computer Access pages that have been designed for different computers and computer operations. These include both Mac and IBM Word Processing configurations, desktop and laptop options, even older Macs prior to 1993.

## Computer Access choices

Here are all the options available to you. The most common choice is “IBM Desktop.”



## Adding the IBM Desktop

Select the “IBM Desktop” button and you will see a box telling you that your access pages have been loaded into your device.



When you choose the “OK” button a couple of times to get back to the WordCore screen, you’ll see a special picture has been added to your Activity Row on the right-hand side.

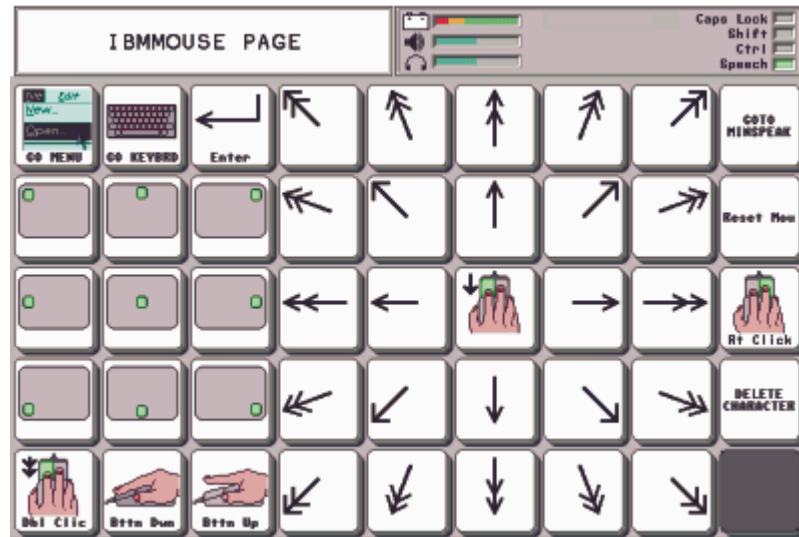


## What the Computer Access looks like

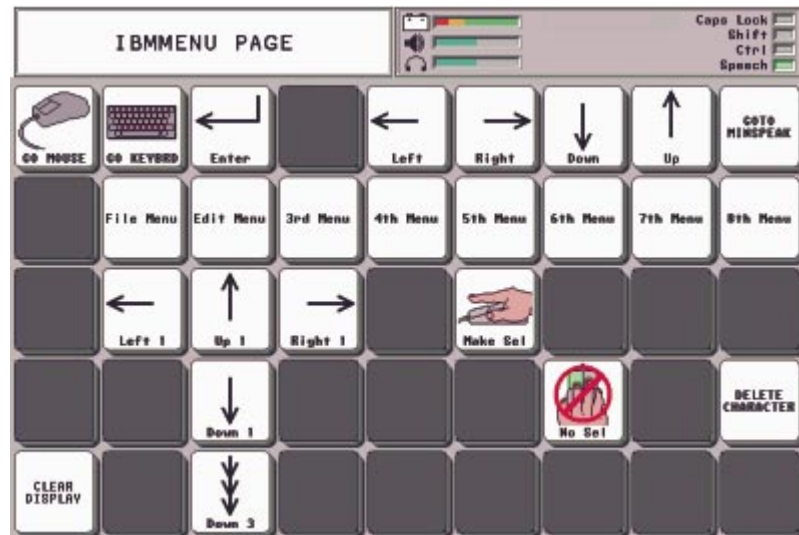
Select the new button and you'll see a special row of computer access keys.



Now press the "Go to Mouse" key and you'll see the following screen:



You can use this to navigate around the computer, just like you would do using a mouse. If you press the "Go Menu" key, you now have the chance to use regular program menus directly from your device.



Hit the "Goto Minspeak" at any time to get back to regular WordCore.

**Connecting to  
your Computer**

Your communication aid can be linked to your computer in one of a number of ways:

1. Using the Serial cable that came with the device to provide a physical link to the computer.
2. Using a hardware interface, such as a T-TAM (Trace Transparent Access Module, purchased separately).
3. Using the device's infra-red output to an infra-red receiver (IRR), purchased separately.

**Use Your  
Operator Manual**

To set-up your device to work as a keyboard input to your computer, you need to refer to the "Operator Manual" that came with your device.

Go to the section on "Connecting to and using other devices" for specific details. Connection settings vary between types of computer, so you may need to experiment a little to make sure your own communication aid works with your specific computer.