



An AAC language program designed for switch scanning



Copyright and Trademark Information

© 2014-2019 PRC-Salttillo. Non-commercial reprint rights for clinical or personal use granted with inclusion of copyright notice. Commercial use prohibited; may not be used for resale. Contact PRC-Salttillo for questions regarding permissible uses.

CoreScanner and LAMP Words for Life are trademarks of PRC-Salttillo.

The MINSPEAK®, SEMANTIC COMPACTION®, UNITY®, and UNIDAD® trademarks are under license from Semantic Compaction Systems, Inc. in the United States and other countries.

Contact Information

PRC-Salttillo
1022 Heyl Rd
Wooster, OH 44691
www.prentrom.com

Document Version

17331v2.2 · 07/18/2019

Acknowledgements

To all of our new CoreScanners who beta tested for months and months and who persevered through the changes and taught us so much. To Brad Whitmoyer for sharing your insights, and for your example. And to Lucy, who started it all.

Table of Contents

What is CoreScanner?	5
Choosing a Switch Configuration	6
Scanning Methods	6
Accessing CoreScanner Vocabularies in PRC Devices	7
A Quick Summary of the CoreScanner Levels	8
Choosing a Level	9
In and around the Intro Screen	9
The CoreScanner Levels	11
The Early Levels	11
The Arrows	13
Using the 'My Categories' Link Page	14
The CoreScanner levels (cont.)	14
JAM!	14
A Closer Look at Blast	15
Arrangement of Word Families in Blast	16
Secondary Word Groups in Blast	17
Category Pages in Blast	18
Using Word Finder	19
Adding and Customizing Vocabulary in CoreScanner	20
Managing Auditory Prompts	26
Switch and Scan Settings	27
PRC Scan Setting Terminology	27
Suggested Scan Settings	28
CoreScanner Auto Levels	28
CoreScanner Step Levels	29
Other Common Adjustments	30
Choosing Prompt and Speech Voices	30
Adjusting Pronunciation of a Word	30
Visual Feedback Settings for Scanning	30

Scan Beeps	31
Activation Beeps	31
Backing up the Vocabulary	31
Setting the Home Level.....	31
FAQ	32

What is CoreScanner?

CoreScanner is a progressive vocabulary program specifically designed for individuals with physical disabilities, who best access augmentative communication technology through the use of a switch.

The CoreScanner concept in a nutshell:

Each word is spoken through a unique sequence of switch activations. At the beginning this is a simple, single switch activation. Additional switch activations allow vocabulary to grow, but the words always occur in the same order. In time this consistency leads to automaticity - the switch activations occur without thought. And it is this automaticity that leads to spontaneous, novel communication.

CoreScanner is based upon the foundations of Minspeak®, Unity®, and LAMP™ that have proven effective for so many people, and on the following principles:

Motor Planning

CoreScanner is a “Motor First, Vocabulary Second” language program. CoreScanner seeks to build language through the activation of the switch itself by providing a consistent, progressive scan pattern into which the vocabulary is made to fit. Whether beginning with a single word, or with hundreds of words, motor actions learned for words never require relearning in the CoreScanner progression.

Single Words

While some phrases are available at the higher levels of CoreScanner, it is essentially a word-based language program, and early levels are made up exclusively of single words. Single words are the foundation of our language, and are essential for the expression of novel thought.

Core Vocabulary and Frequency of Use

Some words are used more often than others when we speak. CoreScanner focuses on the words we all use most, our core vocabulary. Early levels of CoreScanner focus on core words found early in typical language development. As vocabulary grows, CoreScanner prioritizes words in the scan pattern based on the frequency with which they occur in language.

Robust Vocabulary Needs

CoreScanner assumes that each new learner has something unique to say, and will require a robust vocabulary to do so. CoreScanner can begin with just one core word, but builds forward to hundreds, and then thousands of words.

Early Access

It is never too late for anyone to begin to use CoreScanner. However, it is also true that language development begins in infancy, and progresses in a relatively predictable way. It is therefore never too early to begin to learn to communicate. CoreScanner seeks to provide access to a progressive and fundamentally sound language application for the earliest language learners.

Choosing a Switch Configuration

Note: CoreScanner is a prescriptive program as related to the scan pattern and scan settings. Suggested settings can be loaded from the settings screen for each level. In most cases only minor adjustments should be needed beyond the suggested scan settings for each level.

Auto Scan or Step Scan, 1 Switch or 2?

CoreScanner vocabularies are designed for either *automatic scanning* (with **1 switch**), or *step/hold scanning* (with **1 or 2 switches**). **It is important to choose the vocabulary MAP that correlates with the type of scanning being used.**

See also "Should I use 1 switch or 2" in the FAQ section at the end of this manual.

Scanning Methods

CoreScanner Auto

1 Switch Auto Scan A single switch starts the scan. The scan progresses automatically. Activation of a single switch makes a selection of the highlighted word or block.

CoreScanner Step

2 Switch Step Scan
(*most common*) Each activation of one switch manually progresses through each location in the scan. Activation of the second switch selects the highlighted word or block.

2 Switch Hold Scan Same as above except the first switch is held down to progress through the scan.

1 Switch Step Scan Each activation of the single switch manually progresses through each location in the scan. Selection of the highlighted word or block occurs automatically when the single switch is not activated for a specified length of time (scan speed setting).

1 Switch Hold Scan Same as above except that the single switch is held down to progress through the scan.

Individual consultation is always available for assistance with selecting the most appropriate setup and starting point for a new learner.

Accessing CoreScanner Vocabularies in PRC Devices

Vocabularies include

<i>CoreScanner Auto</i>	Designed to be used with a single switch for automatic scanning
<i>CoreScanner Auto Blast</i>	Advanced level of CoreScanner Auto
<i>CoreScanner Step</i>	Designed to be used with step or “hold” scanning or with 2 switches
<i>CoreScanner Step Blast</i>	Advanced level of CoreScanner Step
<i>CoreScanner Wizard</i>	Provides initial direction toward the desired vocabulary (see below)

Loading the CoreScanner configuration (preferred)

Please note that when you load in the CoreScanner configuration it replaces all current user areas. Any customizations to current areas will be lost, if not backed up.

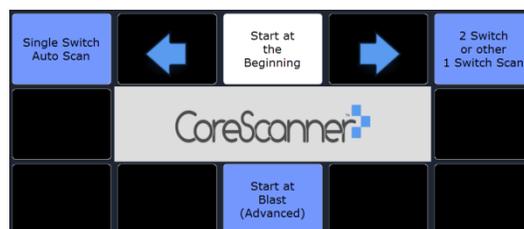
1. Enter the toolbox and then the Maintenance Menu. Select **Change Product Configuration**, and then select **CoreScanner**.
2. You may be prompted to enter a *feature code* before CoreScanner becomes visible. If so, note the serial number on the back of your device and call PRC at 800-262-1984 to activate the configuration.

Loading individual vocabularies (user areas)

1. Enter the toolbox and then the User Area Menu. Select **Replace User Area**.
2. Select the user area you wish to replace with a CoreScanner vocabulary.
3. Select the CoreScanner vocabulary you wish to load.

Note: You may need to enter a feature code before the vocabularies are visible (see above).

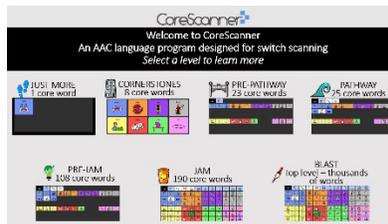
Upon loading the CoreScanner configuration, an initial **welcome screen** (shown below) will guide you toward whether you want to start at the beginning of CoreScanner (where the first progressive levels are found) or at the most advanced level (“Blast”).



The wizard will also guide you to the level that matches your switch configuration.

See the “Switch and Scan Settings” and “FAQ” sections of this manual for more on choosing a switch configuration and the difference between using 1 or 2 switches.

A Quick Summary of the CoreScanner Levels



Just More

A single word “More”. Designed for the new scanner who is just learning to access his or her switch. Use this level with just 1 switch regardless of whether the intention is for 1 or 2 switches.



Cornerstones

A group of 8 core words that occur in early language development. Accessed in a *linear scan* (i.e. left to right, top to bottom one after the other) with large keys that fill the screen.



PrePathway

23 high frequency core words are accessed with the unique CoreScanner *block linear scan* pattern. The 8 words from the previous level, CORNERSTONES, serve as the first word in each block. The 84 location grid is introduced.



Pathway

25 high frequency core words with block linear scanning. The *word families* are introduced – whereby core words lead to other core words. There is an option to customize vocabulary under *my categories*.



PreJAM

The Core words and scan pattern are identical to Pathway, however all words in the word families are now available – moving the core word count up to 108 from 25.



JAM!

Full 84 location grid with block linear scanning, word families – core words lead to other core words and option to customize vocabulary under the my categories. Word count approaches 200 core words.



Blast

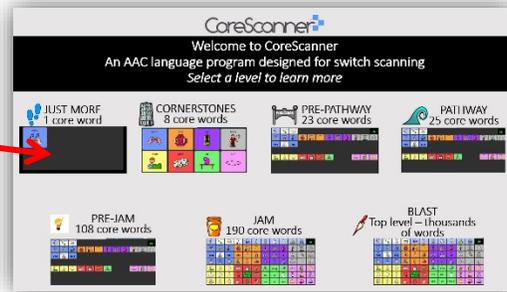
Full 84 location grid with block linear scanning. Word count is in the thousands with grammatical endings, all parts of speech and phrase handling. All word families are present with additional space designated for customized vocabulary.

Choosing a Level

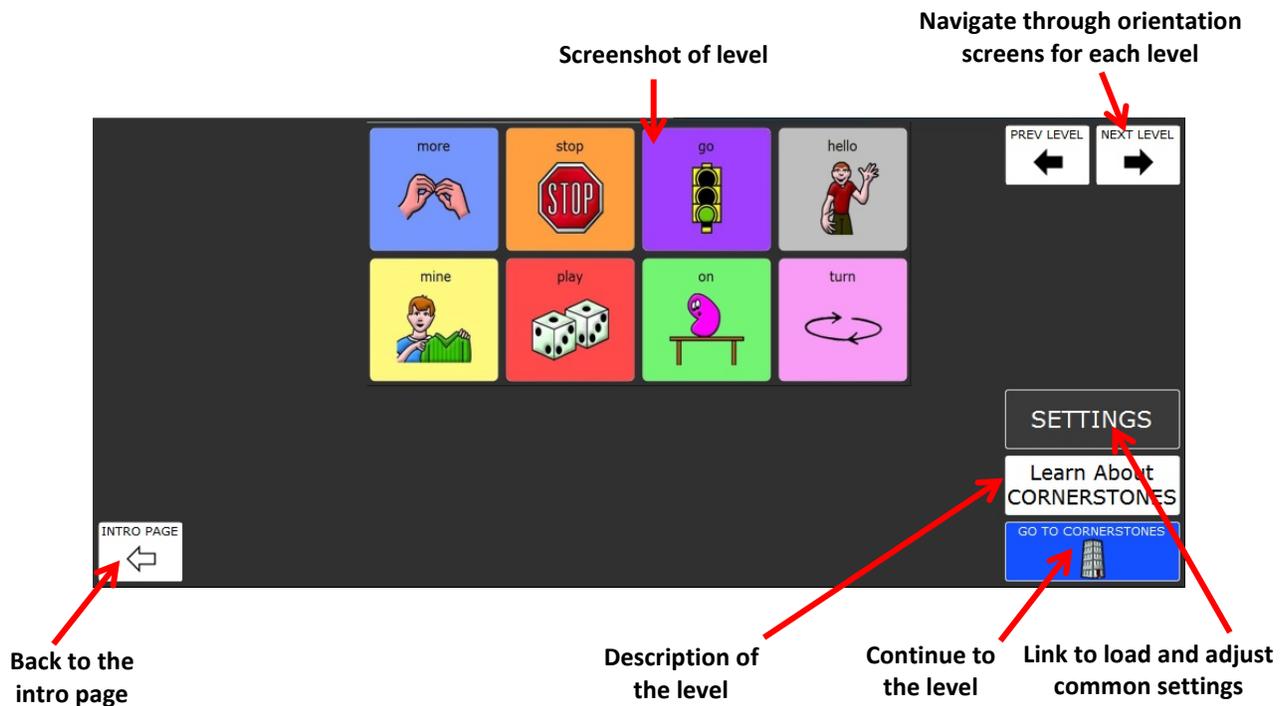
It is important to note that while CoreScanner was designed with a “beginning to end” progression in mind, many learners will benefit from starting at one of the higher levels, and many more will skip levels along the way. The levels are designed so that any new learner, regardless of his or her physical ability or language level, can begin engaging in language learning and then make progress no matter where he or she started.

In and around the Intro Screen

Touch the screenshot of the level that you wish to explore.



Each level includes an orientation screen. From this screen you can learn about the level and about common settings, load suggested settings, and make common adjustments.



Sample Settings Screen

The screenshot shows a settings menu with the following options and their corresponding descriptions:

- Fine tune scan settings:** Manually adjust scan settings, Change Voice, Set home level, Turn prompts on, Turn prompts off.
- Change Speaking and/or Prompting voice:** Change Voice.
- Learn about the alternative version of CoreScanner:** Learn About Auto Version, Switch to Auto Version.
- Learn about different scanning options:** Learn About 1 Switch Step, Learn About 1 Switch Hold, Learn About 2 Switch Step.
- Load desired scan method for the level:** Load 1 switch step settings, Load 1 switch hold settings, Load 2 switch step settings.
- Toggle auditory prompts on/off:** Turn prompts on, Turn prompts off.
- Option to set desired "home" level (see "Setting the Home Level" on page 31):** Set home level.
- GO BACK:** A button with a left-pointing arrow.

In and around the Intro Screen (cont.)



In order to return to the intro screen from any level touch the blue gear icon to access the user keys.

Then touch **Intro Page**.

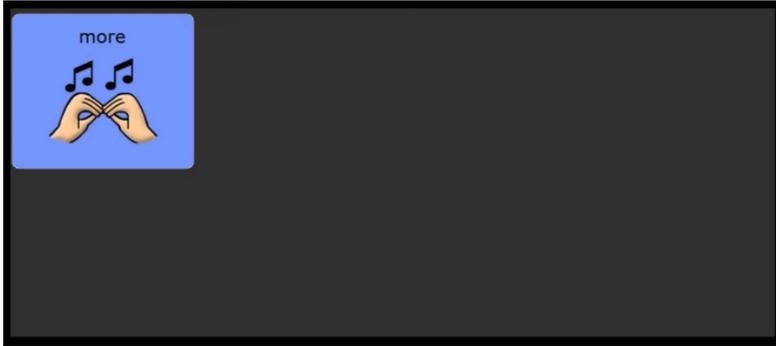


Also included in the user keys is a link to the toolbox, shutdown, the "setup key" for editing, clear display, access to the Windows® operating system (if applicable), and navigation to the Categories Page (see "Using the 'My Categories' Link Page" on page 14).

The CoreScanner Levels

The Early Levels

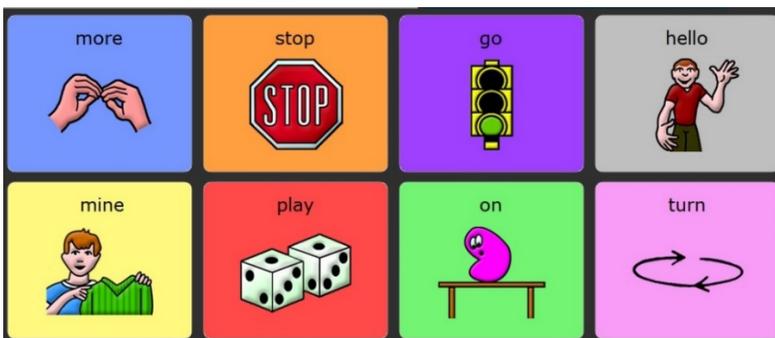
Just More



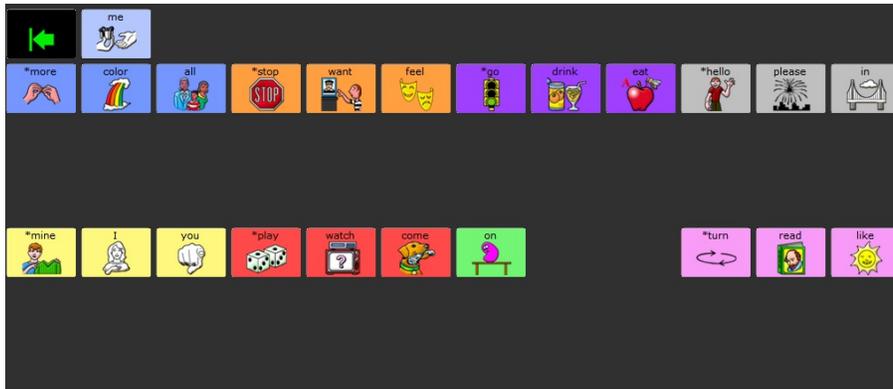
A single word “More”. Designed for the new scanner who is just learning to access his or her switch. A single activation of the switch results in the word. “More” was chosen as the starter word because it is one of the earliest words learned in typical language development, because it is one of the most commonly used words in language and because it can be used by an early learner to direct an endless number of activities. This word will become the first word at the next scanning level and beyond, so that from day 1 “more” will forever be the first word in the scanning pattern.

Use this level with just 1 switch regardless of whether the intention is for 1 or 2 switches.

Cornerstones



A group of 8 core words that occur in early language development. Accessed in a simple *linear scan* - i.e. left to right, top to bottom, one after the other with large keys that fill the screen. Like “more”, the additional Cornerstone words are among the most commonly used words in language, and are flexible enough to be used to direct any number of fun activities for the early learner.



Touch navigation in PrePathway and beyond:

The Cornerstone words are marked with an * and when touched will mimic the scan (i.e. open the corresponding block of words—touch again to say the word).

The 8 Cornerstone words are shrunk to their final size and serve as the first word in a block. We now have 23 high frequency core words that are accessed with the unique CoreScanner *block linear* scan pattern. This means that the scan will begin scanning the cornerstone words, and upon each selection, the scan will move inside the block (the “more” block or the “stop” block for example) and then begin a linear scan. For “more” and the other cornerstone words this will simply mean one additional switch activation to speak them, and if the learner chooses not to make that additional switch activation then he or she gets exposure to new words. In this way words are added progressively in each CoreScanner level without requiring the learner to “unlearn” and “relearn” as he or she moves along.

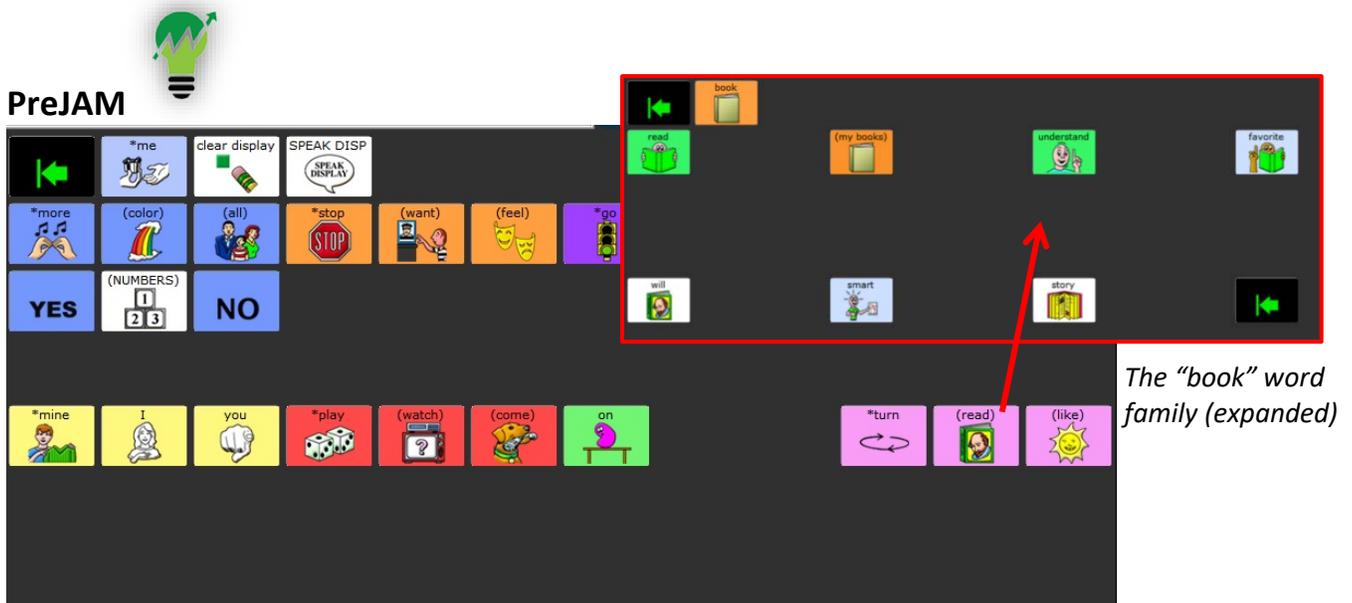
Pathway



The “book” word family

Note, “on” does not have a word family, but “(read)” does.

Block/linear scanning continues. While some words remain spoken exactly as they were in PrePathway, 15 of the 25 core words now lead to a “my category” where personalized vocabulary can be added. For example, along with the word “read” is a category entitled “my books.” This is the introduction of the CoreScanner *word families*. The words with word families are indicated with labels in (parenthesis). A numbers page is now accessible as well.



A similar level to Pathway, however now each word family has a full screen of related core words. This brings the core word count up to 108. For example the “read” word family now includes words such as “understand” and “smart”.

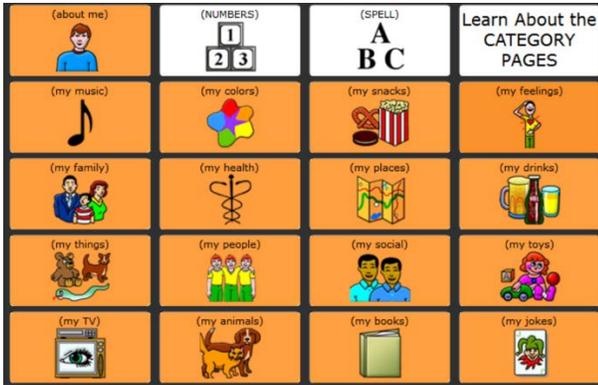
The Arrows



The arrows serve two functions:

1. **They provide an “escape route”** within each block in case the block was selected by accident. The location of the arrow within the block depends upon which version of CoreScanner you are using.
 - In *CoreScanner Auto*, the arrow is scanned first upon selection of a block to serve as a momentary “pause”. This gives the learner time to anticipate the next switch activation.
 - In *CoreScanner Step* the arrows are scanned last in each block. This allows the first key in the selected block to be a simple “double tap” for the step scanner.
2. **Indication of where custom vocabulary can be added.** Both arrows are green, but the green arrow with the **WHITE background** is used to indicate a block that can be programmed with customized vocabulary. A green arrow with a **BLACK background** indicates a block that should not be customized. See “Adding and Customizing Vocabulary in CoreScanner” on page 20.

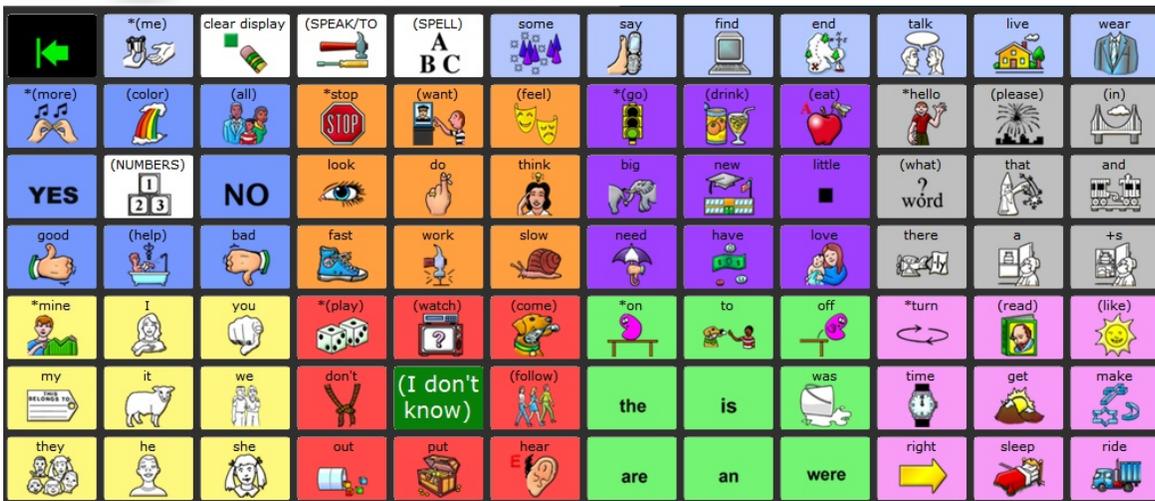
Using the 'My Categories' Link Page



Accessed through the orange key in the user keys (press blue gear first). Be sure to follow the correct prompts to return to your CoreScanner level.

This page provides direct links to the “my categories” vocabulary found in the CoreScanner word families (ex. “my books”). It can be used in conjunction with one of the early CoreScanner levels such as Cornerstones or PrePathway in which the word families, and therefore personalized vocabulary, is not available. While not a level by itself, this quick link allows a teacher to provide access to personalized vocabulary for the learner who is not yet scanning there on his own. See “Adding and Customizing Vocabulary in CoreScanner” on page 20 for steps to add personalized vocabulary.

The CoreScanner levels (cont.)

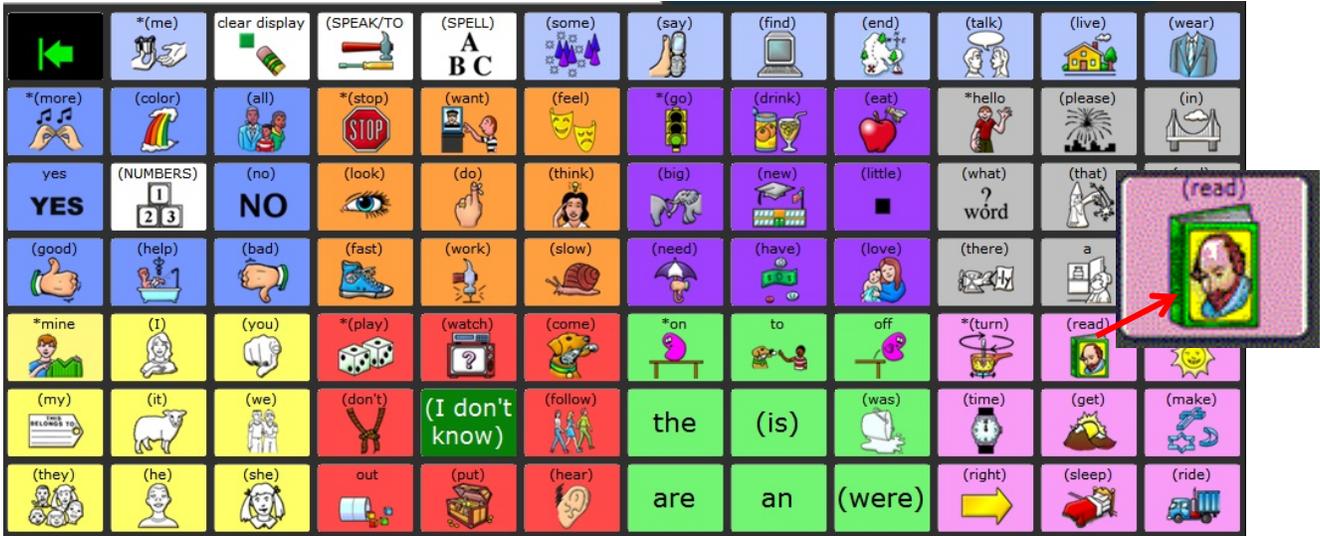


The scan pattern remains consistent with previous levels, block/linear scanning, and the full 84 location grid is now available. The core word count has grown to 190, and word families have been expanded from those available in PreJAM. A quick phrases page is introduced, activated through the phrase “I don’t know”. Also available are a spelling page and a device tools page.

A Closer Look at Blast

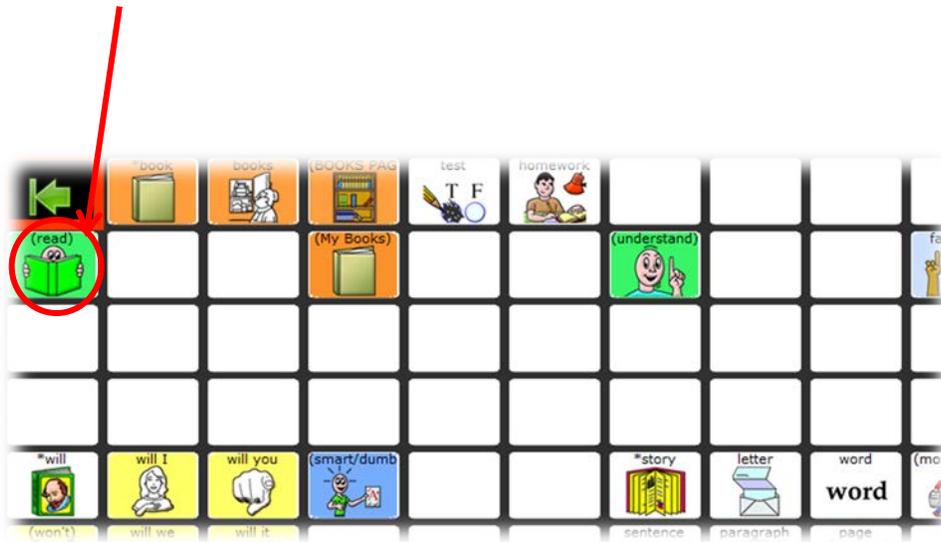


All word families are present, with the majority of the core words leading to a family of related words. The word count is in the thousands with all parts of speech and grammatical endings. Two additional places for personalized vocabulary are available within each word family.



As is true in JAM!, in Blast when a word family is selected from the Blast screen, the word that represents the word family is located in the first location.

(ex. "read")



Arrangement of Word Families in Blast

- The first word in the first scan block on the word family page is always the word that was selected from the Blast screen (i.e. it is one additional switch activation).
- If there is a category for customization (ex. “My Books” from the “read” example) it is located in block 2 for quick access to customized vocabulary.
- All other words are presented based on their known frequency of use.

“My Books” – links to a top block that is designed to be customized. See “Adding and Customizing Vocabulary in CoreScanner”.

“Read” in the first location of the word family page. Coded green (verb).

Verb (“understand” – coded green) links to additional forms of the word, scanned in a top block just like the “my books” link introduced in JAM!. Any word in (parenthesis) scans this way from a word family.

“Book” – category noun, coded orange. Singular and plural. Always in the top block when present.

As in Pathway and JAM!, corner words that mimic the scan when touched are marked with an *asterisk.

“smart/dumb” in dark blue to indicate *adjective opposites*. The word “smart” here in block 6 occurs less frequently than the word “favorite” back in block 4.

Pronouns are coded yellow and always located in block 5 when present in a word family.

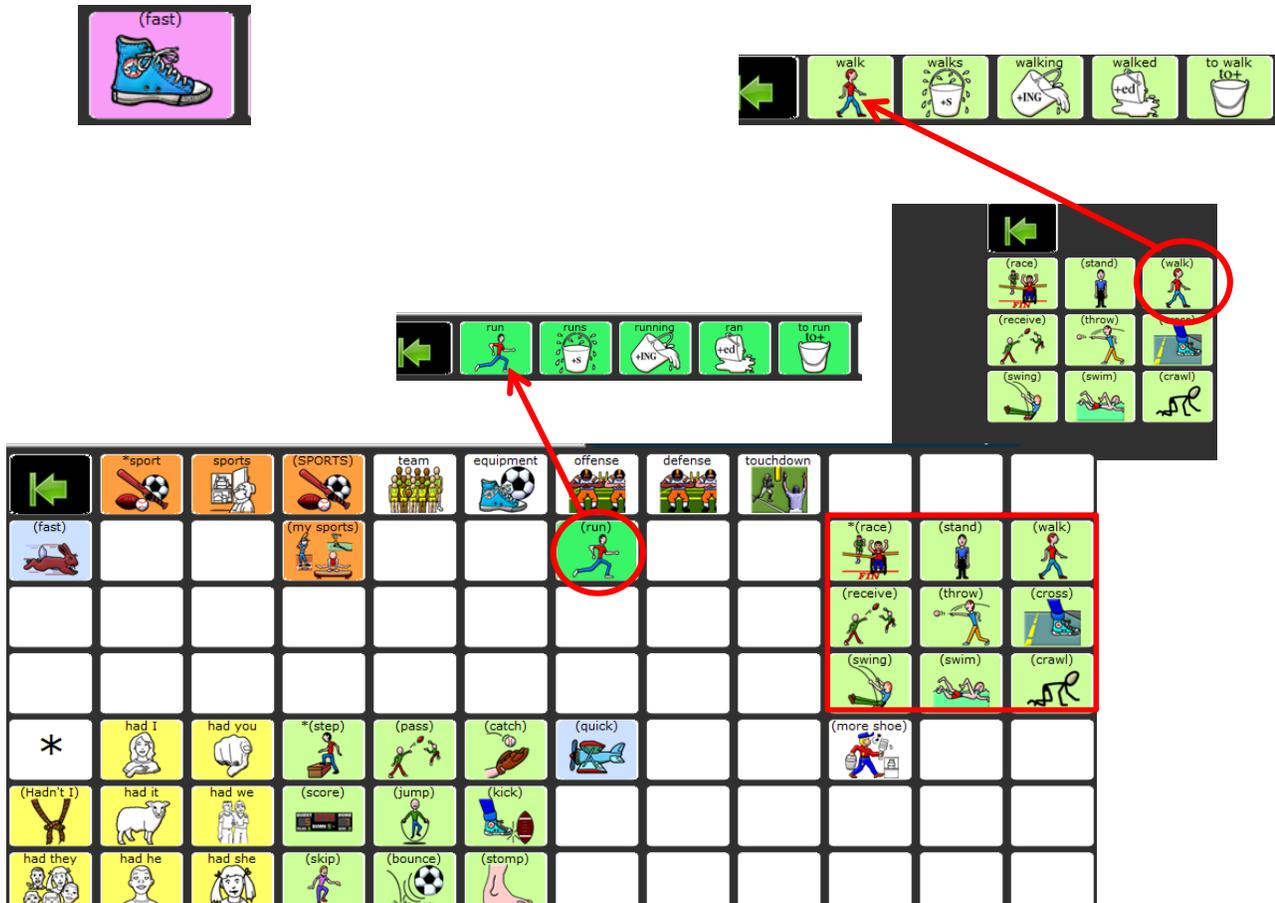
“favorite” coded blue (adjective) in block 4 occurs less frequently in language than “understand” in block 3.

←	*book	books	(BOOKS PA	test	homework						
(read)			(My Books)			(understand)			favorite		
*will	will I	will you	(smart/dum			*story	letter	word			
(won't)	will we	will it				sentence	paragraph	page			
will they	will he	will she				chapter					

Secondary Word Groups in Blast

In larger word families, CoreScanner uses secondary scan blocks to allow access to the less frequently used words in the word family.

Note that “walk” occurs less frequently in language than “run” and thus is further along in the scan. While “run” links directly to its top block, “walk” requires an additional switch activation.

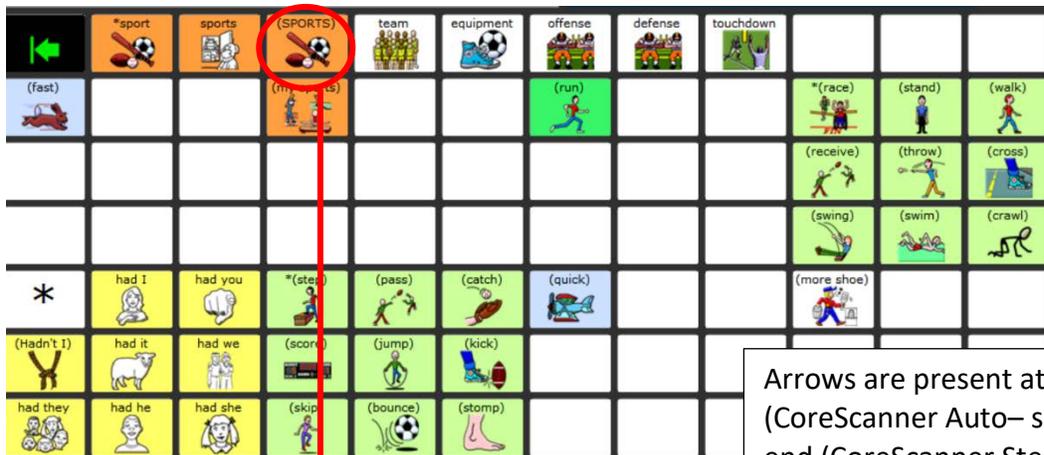


Category Pages in Blast

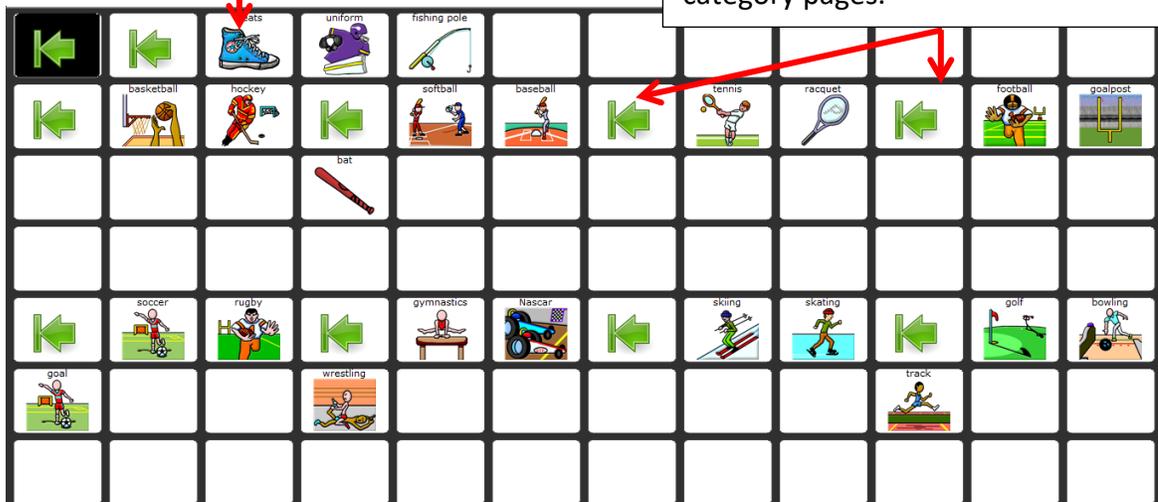
- Links to category pages are found in the **top block** on some word family pages. These keys are coded **Orange**.
- Category pages are available for customization. See “Adding and Customizing Vocabulary in CoreScanner” on page 20.



Category Page links are always in the top block and use capital letters in parentheses—in this case (SPORTS).



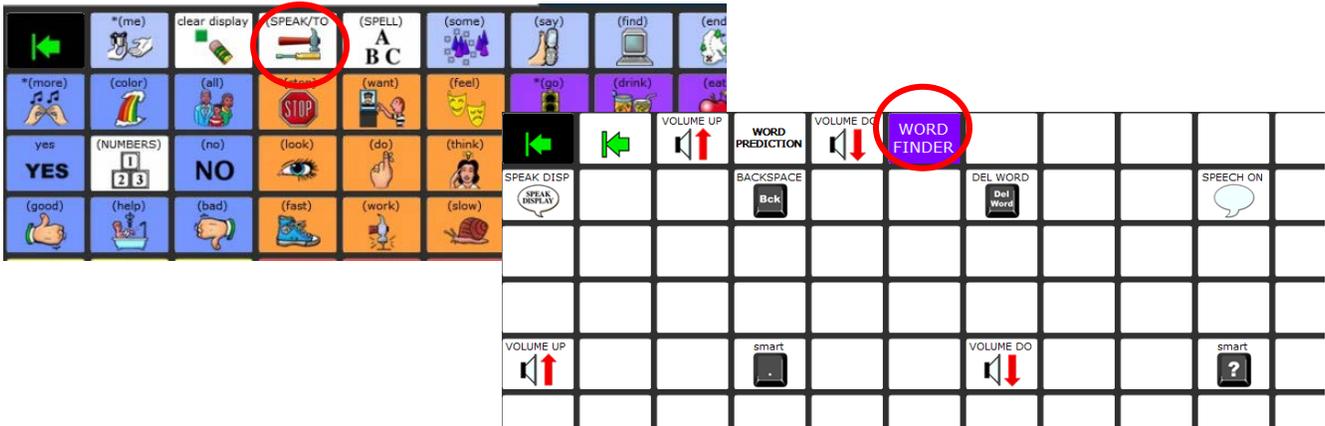
Arrows are present at the beginning (CoreScanner Auto— shown here) or end (CoreScanner Step) of each of the 8 blocks and the top block on all category pages.



Using Word Finder

Word Finder™ is a powerful tool that allows you to search for words that are preprogrammed into CoreScanner at the Blast and JAM! levels.

To access Word Finder, activate the speak/tools key in the top row of the Core Screen, and then activate the purple “Word Finder” key.



From the keyboard, type the word you are looking for and then select **OK** in the bottom right corner. The keys required to say the word are presented in sequence. Note the sequence, select **OK** again, and locate the word either with your switch (preferably) or by direct access.

In the example below we search for the word “drink”, and we are presented with two sequences of key activations. **Each word will show at least two sequences** – one that shows the switch activations required (through the organization of the blocks) and one that shows the direct path if accessed via touch.

The diagram shows a sequence of icons for the word 'drink'. A red arrow points to a path starting with a purple 'go' icon, followed by a 'juice' icon, and then three 'drink' icons. Another red arrow points to a direct path of three 'drink' icons. A text box explains that the direct path is shorter. A note states that cornerstone words like 'go' only show the switch activation path. An 'OK' button is visible in the bottom right corner.

Direct path – is always the sequence with fewer keys.

Switch Activation path – is always the sequence with more keys. Note that the word “drink” is accessed via the Juice icon, which is located in the purple block. The switch activation path includes the required initial activation of the *Cornerstone word “go” to get into this block.

*Note: The original 9 *Cornerstone words will always only show the switch activation path.*

OK

Adding and Customizing Vocabulary in CoreScanner

CoreScanner is a “motor first” language program with a specifically designed scan pattern. Therefore it is essential that new vocabulary remain consistent and predictable within the scan pattern. For this reason, **in CoreScanner it is important to make changes and customizations only in designated blocks.**

There are three specific places designated for customizations (see examples on the following pages):

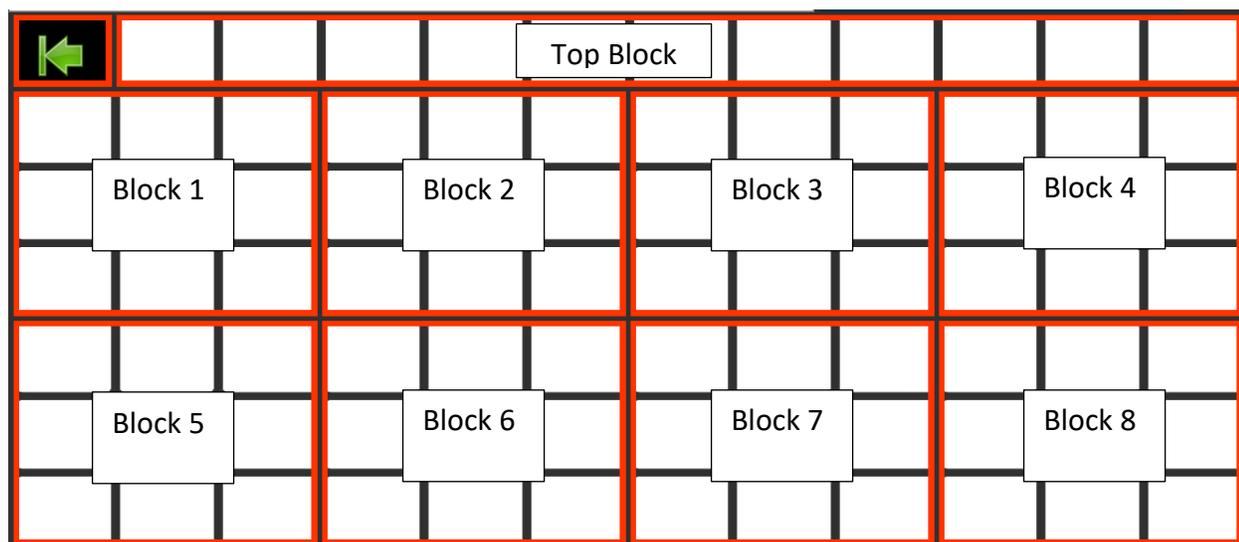
1. Within a “My Categories” top block
2. On category pages (*Blast only*)
3. Adding a core word to a word family (*Blast Only*)

You will know that a block is designated for customization by the presence of the green and **white arrow. This will be highlighted in the examples to follow.



Before Customizing

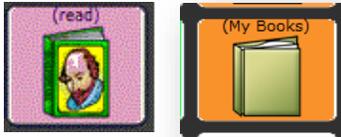
To make your customizations most effective, it is important to know which block you are customizing and how the block fits into the overall scanning pattern. Take a moment to familiarize yourself with the specified scanning pattern (shown below). Every screen in CoreScanner will have a green and black arrow at the top left (top right in step version), 8 primary blocks, and a 9th block (the top block).



Customizing “My Categories”

For quick access to common, personalized vocabulary

In the example below, when the “My Books” key is activated (from the word family associated with the “book” icon), a row of 11 keys appears at the top of the grid.



Note the green arrow with the WHITE background – This indicates that any of the keys in this particular block can be customized with vocabulary unique to the learner. Some customized rows are blank and others, like this one, have some samples already programmed.



To customize a key



1. Be sure you are looking at the key you want to edit.
2. Select the blue gear icon.



3. Select **Setup Key**.
4. Touch the key you want to edit.
5. If you wish to clear a key before customizing it, select **Clear Key Contents**. Once the key is cleared, or if it was already blank, select **Change Icon** to locate a picture. Choose a category, import an icon from USB flash drive, or select **Spell Icon to Find**. Touch the desired icon.
6. Look to see if the “text to speak” is correct. If not, select **Spell Message or Define Key Function** to type text that will appear in the display. Be sure to put a space after the last character. Select **OK**.
7. Check to see if the label (the writing above the picture) is correct. If not select **Change Label**, select **OK**, and **OK** again. Or select **Choose Next Key to Define**.

Adding Core Words to a Word Family (Blast only)

Note the CoreScanner Core Word icon in block 8 of each Word Family Page.



This icon immediately links to a blank row of 11 open keys available for adding new core words. Note once again the Green/White Arrow indicating this block is free for customization.



To customize a key



1. Be sure you are looking at the key you want to edit.
2. Select the blue gear icon.

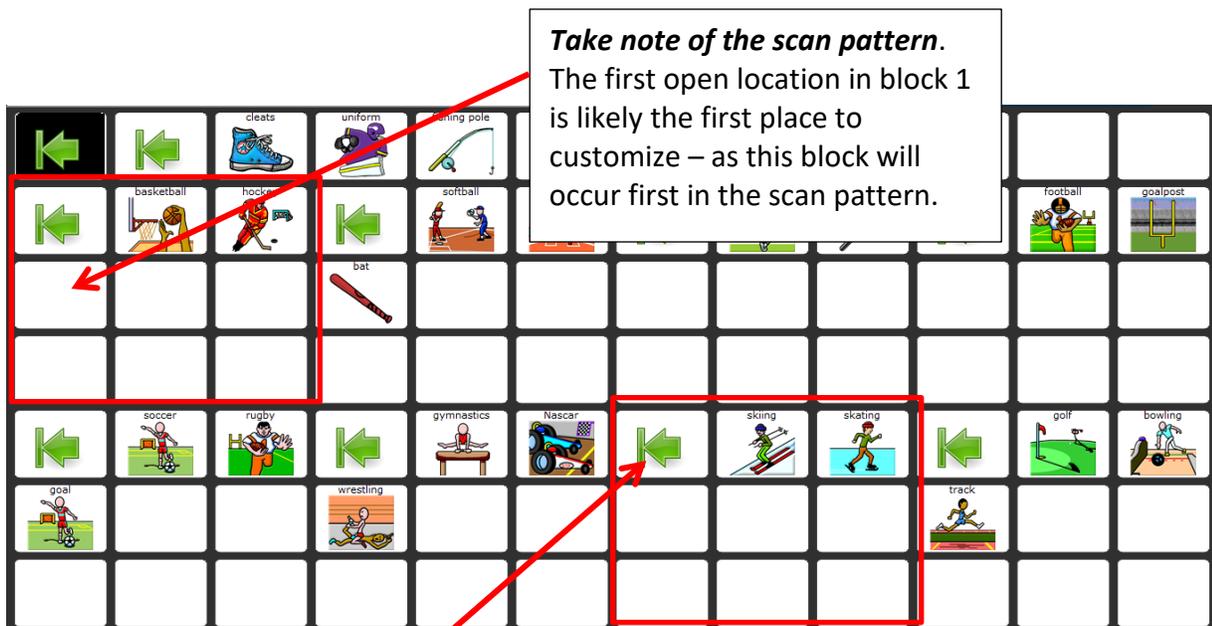


3. Select **Setup Key**.
4. Touch the key you want to edit.
5. If you wish to clear a key before customizing it, select **Clear Key Contents**. Once the key is cleared, or if it was already blank, Select **Change Icon** to locate a picture. Choose a category, import an icon from USB flash drive, or select **Spell Icon to Find**. Touch the desired icon.
6. Look to see if the “text to speak” is correct. If not, select **Spell Message or Define Key Function** to type text that will appear in the display. Be sure to put a space after the last character. Select **OK**.
7. Check to see if the label (the writing above the picture) is correct. If not select **Change Label**, select **OK**, and **OK** again. Or select **Choose Next Key to Define**.

Customizing on Category Pages (Blast only)

The CoreScanner category pages are designed to provide access to a group of words that all fall into the same category.

Ex. "SPORTS" from the Shoe word family. Note the key is in the top block, is orange, and the label is (ALL CAPS) inside parenthesis.



Note Green and White arrows in each block. These designate that the keys in the block can be customized.

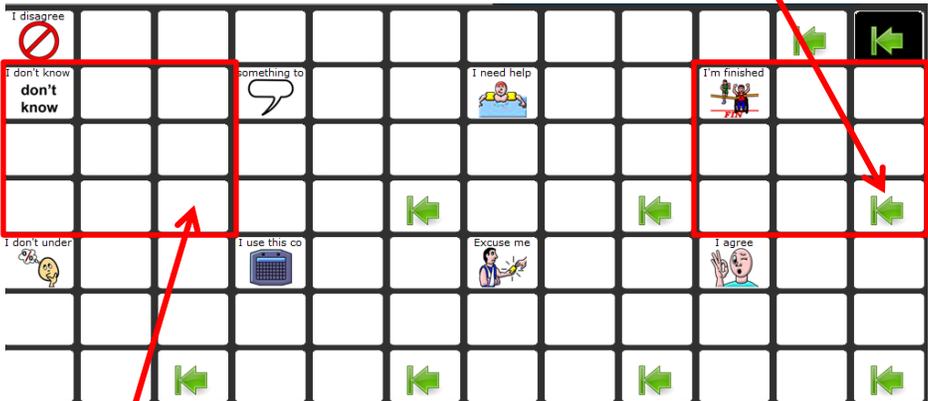
This is the **CoreScanner Auto version**. Note arrows at the *start* of each block. In the Step version arrows are at the end of each block (see the next example)

If you are using auditory prompts, it is recommended that you leave the first key in each block as it is. Otherwise the prompt for that block will need to be adjusted (see "Managing Auditory Prompts").

Customizing on Category Pages (Blast) cont.

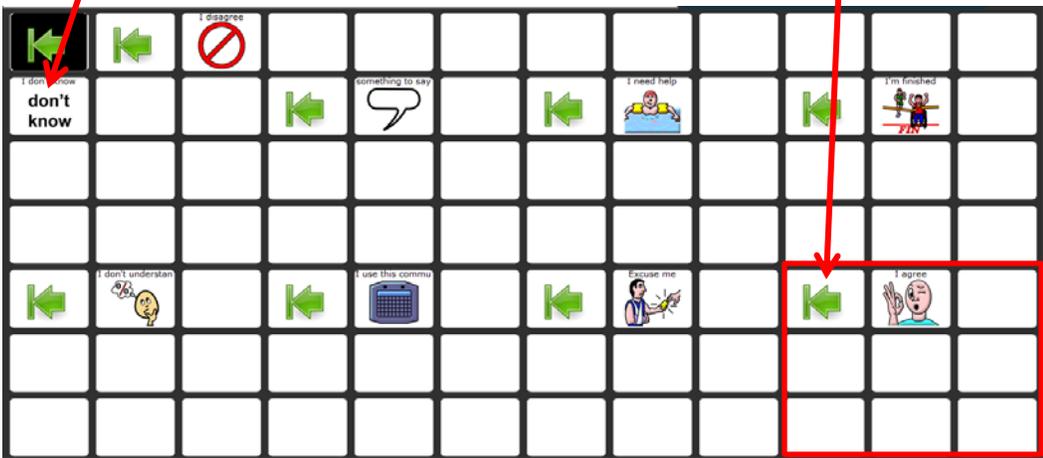


CoreScanner Step version of the “I don’t know” page in Blast for quick access phrases. Note the arrows at the *end* of each block. The white/green arrows indicate blocks available to be customized.



Note the absence of an arrow in block 1. This previously learned, frequently used phrase “I don’t know” is a single hit from this screen. *Do not customize this block.*

CoreScanner Auto version of the “I don’t know” page in Blast. Note the arrows at the *start* of each block that can be customized. The white/green arrows indicate blocks available to be customized.



If you are using auditory prompts, it is recommended to leave the first key in each block as it is. Otherwise the prompt for that block will need to be adjusted (see “Managing Auditory Prompts”).

To customize a key



1. Be sure you are looking at the key you want to edit.
2. Select the blue gear icon.



3. Select **Setup Key**.
4. Touch the key you want to edit.
5. If you wish to clear a key before customizing it, select **Clear Key Contents**. Once the key is cleared, or if it was already blank, select **Change Icon** to locate a picture. Choose a category, import an icon from USB flash drive or select **Spell Icon to Find**. Touch the desired icon.
6. Look to see if the “text to speak” is correct. If not, select **Spell Message or Define Key Function** to type text that will appear in the display. Be sure to put a space after the last character. Select **OK**.
7. Check to see if the label (the writing above the picture) is correct. If not select **Change Label**, select **OK**, and **OK** again. Or select **Choose Next Key to Define**.

Managing Auditory Prompts

To Turn Prompts On or Off

1. Enter the toolbox.
2. Choose **Auditory Prompt Menu**.
3. Turn “Auditory Prompts” on or off.
4. CoreScanner is designed to have “Prompts by” set to “Content” by default.

Note: You can also quickly turn prompts on or off from the intro screen for all levels prior to Blast.

Adding or Customizing Auditory Prompts

The CoreScanner auditory prompts are preprogrammed. Attention to them is rarely necessary. If you are simply adding a word (ex. someone’s name), the prompt will be read automatically with no additional programming.

There are two instances in which customizing a prompt may be necessary:

1. If the prompt needs to be different from the content of the key
(*ex. Programming a macro of tool functions*).

To accomplish this:

- Select **Setup Key**, touch the key you want to edit, and proceed to step 6 above under “To Customize a Key”.
- From the keyboard activate **Insert Tool**.
- Navigate to find the tool titled “Prompt Marker” (tools are listed alphabetically)
- Type the desired prompt and select **OK**.

2. If a different prompt is desired for a block
(*ex. Some category pages may include empty blocks with a generic prompt “block 8”*).

To accomplish this:

- Select **Setup Key**.
- Select the top left, i.e. the first key in the desired block (whether it is blank or has an arrow).
- Select **Store Category Prompt**.
- Select **Block Prompt**.
- Type the desired block prompt and select **OK**.

Switch and Scan Settings

PRC Scan Setting Terminology

- **Access Method:** The method by which the user operates the device. Each level of CoreScanner has a recommended access method. If the device does not match up with the recommended setting for the level, it can be changed by selecting **Choose Different Access Method** from Access Method Menu in the toolbox.
- **Scanning Speed (1 switch only):** This is the speed at which the scan moves through the words or blocks. *This is a commonly adjusted setting.*
- **Acceptance Time:** The amount of time the switch is held before the activation is accepted by the device. This should almost always be at its lowest (shortest) setting. However raising this number can help accommodate accidental switch activations.
- **Release Time:** The amount of time that must pass after an initial switch activation before a subsequent switch activation will be accepted. Because those new to switch scanning often unintentionally hit the switch multiple times, *raising this number is a common adjustment.*
- **Set Custom Switch Times:** Allows for individual adjustments of Acceptance and Release times when using more than one switch.
- **Predictive Selection:** This allows blank keys to be skipped in scan patterns. CoreScanner is designed to work with this setting turned on.
- **Scan Auto Restart:** This setting determines whether the scan continues immediately after the selection of a key. It is essential this be set correctly to CoreScanner to scan correctly. Each level of CoreScanner has a recommendation for this setting. See below.
- **Cancel Time (2 switches only):** Allows the scan to restart if no selection is made within the given time frame. Note that this will restart the scan within the selected screen—it will not provide an escape route to restart the entire scan pattern. For additional information, see “The Arrows” on page 13.
- **Activation Delay (1 switch only):** Allows the single switch, automatic scanner to “un-select” after a switch activation if it was made in error. This requires a fairly rapid “double hit” on the switch. CoreScanner provides an alternative to this setting with the arrow keys in each block. If activation delay is desired, set it to match the scan speed. Otherwise this setting can remain turned “off”.
- **Number of Rescans (1 switch only):** Allows adjustment for the number of times the scan pattern will repeat itself if no selection is made. The default setting for CoreScanner at all levels is 1 rescan.

Suggested Scan Settings

Suggested scan settings can be loaded automatically from the intro screen for each level. The list of settings below are provided for reference.

CoreScanner Auto Levels

Just More

- Auditory Prompts: off (see “Managing Auditory Prompts” on page 26)
- Access Method: 1 Switch Step Scan Linear
- Scan speed: lowest setting (.10)
- Acceptance Time: lowest setting
- Release Time: adjust as needed (see “PRC Scan Setting Terminology” on page 27 for a description)
- Predictive Selection: On (always)
- Scan Auto Restart: off
- Number of Rescans: 1

Cornerstones, PrePathway, Pathway, PreJAM, JAM!, and Blast

- Auditory Prompts: adjust as needed (see “Managing Auditory Prompts” on page 26)
- Access Method: 1 Switch Auto Scan, Linear
- Scan Speed: adjust as needed (2.0 is an average scan speed)
- Acceptance Time: adjust as needed (see “PRC Scan Setting Terminology” on page 27 for a description)
- Release Time: adjust as needed (see “PRC Scan Setting Terminology” for a description)
- Predictive Selection: On (always)
- Activation Delay: off or adjusted to the same as the scan speed (see “PRC Scan Setting Terminology” for a description)
- Scan Auto Restart: off
- Number of Rescans: 1

CoreScanner Step Levels

Just More

- Auditory Prompts: off (see “Managing Auditory Prompts” on page 26)
- Only one switch is used. Second switch introduced at Cornerstones level
- Access Method: 1 Switch Step Scan Linear
- Scan speed: lowest setting (.10)
- Acceptance Time: lowest setting
- Release Time: adjust as needed (see “PRC Scan Setting Terminology” on page 27 for a description)
- Predictive Selection: On (always)
- Scan Auto Restart: off
- Number of Rescans: 1

Cornerstones

- Auditory Prompts: adjust as needed (see “Managing Auditory Prompts”)
- Access Method: 2 switch step scan, linear, 2 switch hold scan linear, 1 switch step scan linear, or 1 switch hold scan linear.
- Acceptance Time: adjust as needed (see “PRC Scan Setting Terminology” on page 27 for a description)
- Release Time: adjust as needed (see “PRC Scan Setting Terminology” for a description)
- Predictive Selection: On (always)
- Scan Auto Restart: off
- Cancel Time: off

PrePathway, Pathway, PreJAM, JAM!, and Blast

- Auditory Prompts: adjust as needed (see “Managing Auditory Prompts”)
- Access Method: 2 switch step scan, linear, 2 switch hold scan linear, 1 switch step scan linear, or 1 switch hold scan linear.
- Acceptance Time: adjust as needed (see “PRC Scan Setting Terminology” on page 27 for a description)
- Release Time: adjust as needed (see “PRC Scan Setting Terminology” for a description)
- Predictive Selection: On (always)
- Scan Auto Restart: on
- Cancel Time: off or adjust as needed (see “PRC Scan Setting Terminology” for a description)

Other Common Adjustments

Choosing Prompt and Speech Voices

(Can also be accessed through *Settings* within each level)

To select a speaking voice

1. Enter the **Speech Menu** within the toolbox.
2. Select **Change Voice** and choose a voice.
3. Rate and volume can be adjusted for some voices.
4. Select **Test Speech** to hear a sample of the voice. Select **OK**.
5. Select **Go to Home** when done.

To select an auditory prompt voice

1. Enter the **Speech Menu** within the toolbox.
2. Select **Auditory Prompt Voice**.
3. Follow the same steps as when selecting a speaking voice.

Adjusting Pronunciation of a Word

1. Enter the **Pronunciation Dictionary** within the toolbox.
2. Choose either **Main Voice** or **Prompt Voice**.
3. Select **Add Pronunciation**.
4. Enter the correct spelling of the word. Select **OK**.
5. Enter the “phonetic spelling” of the word. To test the pronunciation, select the message window.
6. Select **OK**, select **OK** again, and then select **Go to Home** (blue key).

Visual Feedback Settings for Scanning

Several options are available for providing visual feedback throughout the scanning pattern. To explore and adjust these settings:

1. Enter the **Access Method Menu** within the toolbox.
2. Select **Highlight Settings**.
3. Adjust “highlight style” using the arrows and options referencing the preview provided.
4. Select **OK**, select **OK** again, and then select **Go to Home** (blue key).

Scan Beeps

This setting controls whether an auditory “beep” is heard as the scan progresses.

1. Enter the **Feedback Menu** within the toolbox.
2. Turn **Scan Beeps** on or off.
3. Select **OK** and then select **Go to Home**.

Activation Beeps

This setting controls whether an auditory “beep” is heard upon key activation

1. Enter the **Feedback Menu** within the toolbox.
2. Turn **Activation Beeps** on or off.
3. Select **OK** and then select **Go to Home**.

Backing up the Vocabulary

1. Insert your flash drive into the USB port on the back of the device.
2. Select **Tools**, and then select **Toolbox**.
3. Select **Transfer Memory Menu**.
4. Select **Save One User Area** and touch the user area you want to back up or select **Save Entire Device Contents**.
5. Make sure the pre-set folder is a USB drive and select **OK**.
6. Type the file name and date.
7. Select **OK** and wait for the memory transfer to take place.
8. When the transfer is complete, select **OK**, select **OK** again, and then select **Go to Home**.

Setting the Home Level

When you enter a level in CoreScanner, this level is automatically set as your *Home*. This means that any key with a “go to home” tool will take you to your level. This also applies to the “go to home” key in the toolbox and can sometimes affect the appearance of the device when it first boots up. If needed, a manual setting for the home level is provided from the settings screen for each level. See the screenshot on page 10 of this manual.

FAQ

Are there prerequisites for beginning with CoreScanner?

Yes. The production of a movement that can be intercepted with a switch, thereby producing a switch activation. That switch activation becomes the first word. The movement need not be large or even very noticeable. Technology exists that can sense even the smallest intention of a movement to produce a switch activation.

Should I use 1 switch or 2?

The number of switches, switch placement, and type of switch are areas that should be assessed by professionals who have experience helping individuals with complex physical disabilities. Help is available from those familiar with CoreScanner. However, in general terms, 2 switches will work best for individuals who have two movements, natural and frequent, that the individual can begin using to activate 2 separate switches. The primary advantage to 2 switches is that there is no timing element; the learner is in complete control. By contrast, 1 switch will work best for individuals who do not have a clear second movement, or for whom fatigue is a significant consideration, or simply for individuals who work best reproducing the same movement repeatedly with a timing element.

What is the difference between the Auto and Step versions?

The words are the same, and occur in the same order in both versions. A primary difference is where the escape arrows occur in the scanning pattern. The “motor first” approach to the language program remains; words are built through the operation of the switch(es). However, the motor actions used to build language with 1 switch automatic scanning are different from those used to build language with 2 switches or other scanning methods, so a unique version for each is required.

Can I program new vocabulary in CoreScanner?

Yes. CoreScanner is a pre-programmed language program and does not require extensive customization. However, space is provided for new vocabulary beginning at the Pathway level.

Do I have to start at the first level of CoreScanner?

No. The only way to learn a word is to say it. A new learner can only learn the words that are made available. Therefore it is recommended that new learners begin at the highest level possible.

Do I have to master a level before moving to the next?

No.

Can I change the order of my keys in the Cornerstone level?

CoreScanner is a “motor first” language program with a specifically designed scan pattern into which the vocabulary fits. It builds from one word to potentially thousands of words without ever requiring the learner to unlearn and relearn switch activation sequences. The order of the words coincides with the frequency of word use in typical language. It is therefore not recommended that the order of words be changed at any level of CoreScanner.

Can I choose another scanning pattern or create a new one?

CoreScanner is a “motor first” language program with a specifically designed scan pattern into which the vocabulary fits. CoreScanner will not work properly if the scanning pattern is changed.

What is the “double tap” in CoreScanner Step?

In traditional 2 switch step scanning, the first switch drives the scan through the scan pattern and the second switch serves to make a selection. CoreScanner uses this method, with one adaptation. Beginning at the PrePathway level, when a block of words is selected with switch #2, the first word in the block can be spoken with an immediate second hit on switch #2. This “double tap” method eliminates the need to drive the scan to the first word and shortens the sequence of switch activations to say them. Remember that CoreScanner is a language that builds words through the switches—there is no prerequisite to understand “2 switch step scanning” prior to learning the language.

How do I know when to move up a level in CoreScanner?

If you’re asking this question, it’s time to move up.

Why were these words chosen, and what determined the word arrangement in CoreScanner?

CoreScanner is based on the LAMP Words for Life® vocabulary. The words that are included in CoreScanner are, with few exceptions, the same. However, we know that the means by which someone accesses a language program is that person’s tool for learning and exploring the language. CoreScanner is designed for someone who is building language through the use of a switch. The arrangement of the words in the early levels of CoreScanner (ex. at the Cornerstones level) was determined by the need to provide early access to the same core words that occur in typical language development, and words that offer the early learner meaningful experiences with language. The simple linear scan of 8 words at this level offers the new learner a chance to receive quick responses with a simple scanning pattern while getting good practice activating his or her switch. The arrangement of the keys in the later levels follows two simple principles: 1. Build upon words learned at an earlier level through consistent switch sequences (motor patterns) so that re-learning is never required; and 2. Frequency of use in natural language.

Can I hide the number of key choices?

The Cornerstones level is the most common place to hide keys if needed - provided they are hidden and unhidden in order so as to preserve the integrity of the word order. The levels between Cornerstones and JAM! are essentially showing hidden keys along the way, and are done in such a way as to preserve the word order and motor patterns. Therefore, hiding keys is usually not necessary beyond Cornerstones.

How much should I use the My Category link page?

In the early learning stage, the focus of the CoreScanner program is to give the new learner an opportunity to explore words and engage in meaningful human interactions without any wrong answers, with an “any word works” approach. The core words that are used exclusively in the levels prior to Pathway offer a clearer path to meaningful exchanges than choice/category words. However, choice words are certainly important—in the earlier levels it is recommended that choice words be accessed through strategies outside of CoreScanner, such as low-tech choice boards, eye gaze, and even single message communicators. This strategy will come in handy even after reaching JAM! The direct link to the My Categories is a nice supplement to these low tech strategies.

Is “Hello” a core word?

The word “Hello” is included at the Cornerstones level to provide early access to a word that can be used for a simple greeting by the new learner. A new learner should not be required to greet people with this word, but for many children who may use CoreScanner, the opportunity for spontaneous social interaction with peers and adults can be of great importance, and indeed for some children may also be highly motivating. Further, the role of socialization is well established and an essential aspect in typical language development—the inclusion of “Hello” early in the CoreScanner progression seeks to address this fact. Throughout the levels of CoreScanner, “Hello” remains a single hit word, a word that can be said quickly with very few switch activations.

What is with the arrows all over the place?

Beginning at the PrePathway level, an arrow will appear upon selection of any block. The arrows serve three functions: (1.) They provide an “escape route” within each block in case the block was selected by accident. (2.) They provide an indication of whether or not the block is open for adding new vocabulary (green/white arrow = yes, green/black arrow = no). (3.) They provide efficiency within the scan pattern. For a single switch automatic scanner, the arrow is scanned first upon selection of a block to serve as a momentary “pause”, which gives the learner time to anticipate the first location in the next block of words. For the step scanner, it is scanned last to provide the new learner a chance to quickly access the first word in the block with a simple “double tap”.

I added a word but it disappeared. What happened?

The word was added into a block without a green/white arrow. CoreScanner is a “motor first” language program with a specifically designed scan pattern. Therefore it is essential that new vocabulary remain consistent and predictable within the scan pattern. In CoreScanner it is important to make changes and customizations only in designated blocks.

How come I have to press a word with an asterisk * twice?

*When activating a word with an asterisk * using your finger or a mouse, it is just as if you selected that word with a switch. The *words are found only in the upper left corner of a block of words, and they allow you to mimic the scanning pattern. For a true experience with CoreScanner and to more fully understand the experience of the learner, it is recommended that anyone exploring CoreScanner do so with a switch, at least initially.*

Should I use 1 switch or 2?

The number of switches, switch placement, and type of switch are areas that should be assessed by professionals who have experience helping individuals with complex physical disabilities. Help is available from those familiar with CoreScanner. However, in general terms, 2 switches will work best for individuals who have two movements, natural and frequent, that the individual can begin using to activate 2 separate switches. The primary advantage to 2 switches is that there is no timing element; the learner is in complete control. By contrast, 1 switch will work best for individuals who do not have a clear second movement, or for whom fatigue is a significant consideration, or simply for individuals who work best reproducing the same movement repeatedly with a timing element.

It seems like it takes a lot of steps to get to a word at the more advanced levels. Why?

The highest levels of CoreScanner offer access to a robust vocabulary. To do this efficiently, the words that are used most often require the fewest switch selections, while less frequently spoken words require more. The CoreScanner pattern for scanning is a “block/linear” approach—i.e. once a block of words is selected, the scan proceeds to the individual words in the block. As far as the number of switch activations required, this is analogous to “row/column” scan patterns found in other programs. However, CoreScanner makes use of visual enhancements to visually isolate a block once it has been selected, and some blocks do not show their content until selected (ex. the “my family” category block). For some observers this offers the illusion of an additional step or “link”. However, for the individual who is doing the scanning, he or she is simply making a selection from within the block that was chosen.

What is the color coding?

The blocks of the core screen in Pathway, JAM!, and Blast are colored to provide a visual distinction from block to block and to help define the scan pattern for those who are using their vision. Beyond the core screens, the parts of speech in CoreScanner are coded as follows:

Verbs	Green
Adjectives	Blue
Adjective opposites	Dark Blue
Pronouns and pronoun phrases	Yellow
Category nouns	Orange
Individual and customized nouns	White