

Digitized Speech Communication Systems Input-Processing- Output Features

**Pennsylvania Training and Technical Assistance Network
(PaTTAN)**

Pennsylvania Department of Education

Pennsylvania Department of Public Welfare

**Digitized Speech
Communication
Systems**
Input-Processing-
Output
Features

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Digitized Speech Communication Systems

Input-Processing-Output Features

This booklet is a sampling of digitized speech output communication systems. It is an attempt to identify the input, processing and output features associated with available systems. This booklet is not meant to be a complete listing of available products nor is it an endorsement of any of the listed augmentative communication systems.

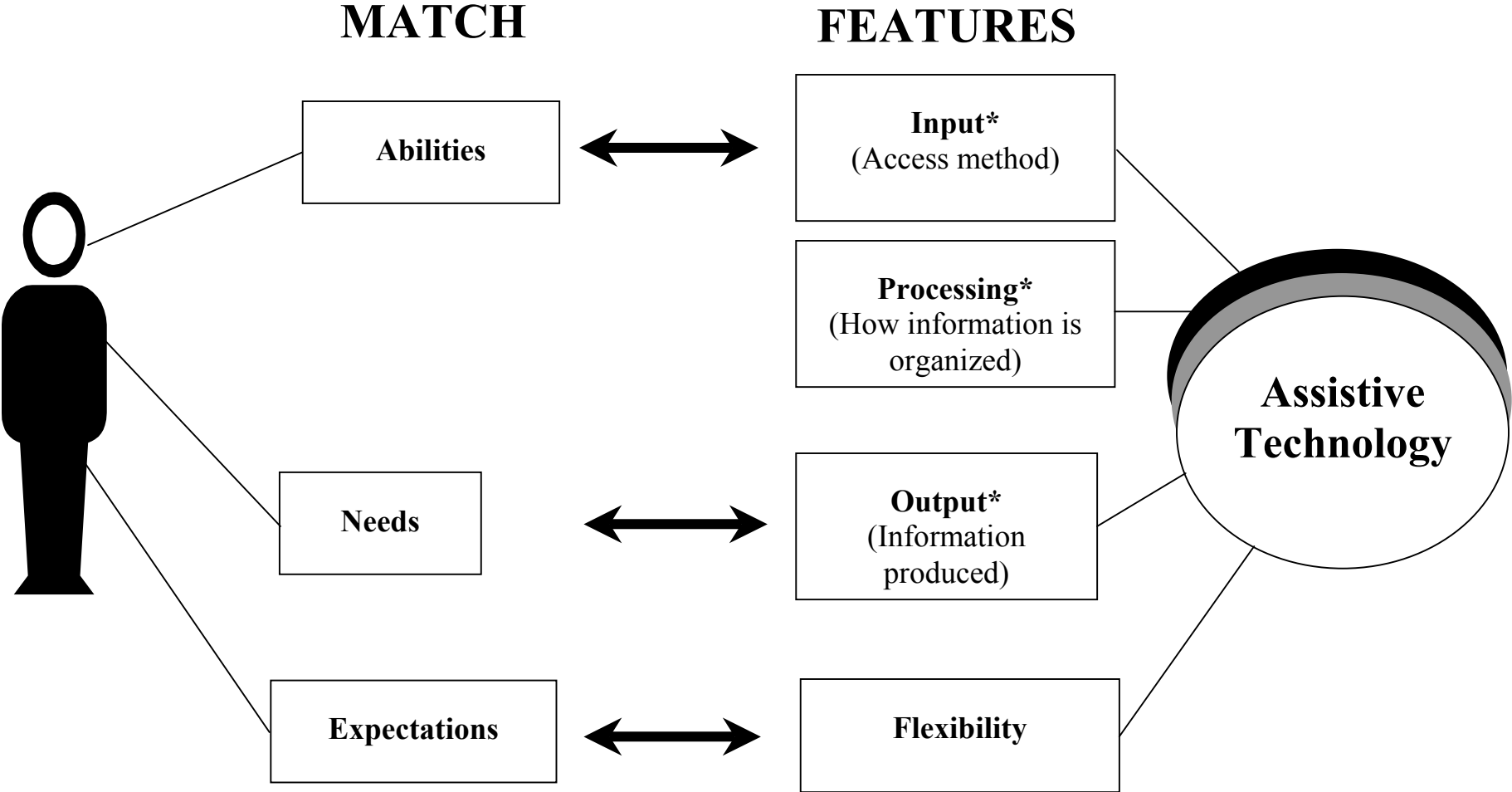
Trying out augmentative communication options is only one part of the assessment process. Most teams jump right to this step without really evaluating the needs, abilities and future expectations of the individual who needs augmentative communication.

The child's team should begin the assessment process by identifying the child's abilities, needs and expectations and then match these to features, functions or strategies found in augmentative communication systems. Use this booklet to see what systems have the desired features that teams want to consider during the trial periods.

Model for Assistive Technology Assessment Planning

- ◆ **Team Building**
- ◆ **Identification of Individual's Abilities, Needs and Expectations**
 - ◆ **Daily Needs**
 - ◆ **Background Information**
 - ◆ **Family and Child Information**
 - ◆ **Address Motor, Sensory, Cognitive and Language Issues**
 - ◆ **Address Life Transitions**
- ◆ **Match Individual's Abilities, Needs and Expectations to Assistive Technology Features and Strategies**
- ◆ **Assess Assistive Technology Features and Strategies Through Trial Periods and Mock-ups**
 - ◆ **Revise and Refine Feature Match Decisions**
 - ◆ **Address Environmental Issues**
 - ◆ **Reach Team Consensus**
- ◆ **Develop On-going Implementation Plan Reflecting Individual's Abilities, Needs and Expectations**

Match Individual's Abilities, Needs and Expectations to Specific Assistive Technology Features/ Functions and Strategies



* Examples of these features, as they relate to communication devices, will appear below these column headings in the booklet.

The digitized devices in this booklet have been divided into categories according to message capacity. The categories are as follows:

- Single Message
- Two to Ten Single Messages
- Ten or More Single Messages
- Beyond a Single Key

In the interest of saving space, each device has been listed only once in the booklet although it may be appropriate to have it listed in two or more of the categories since models of a device may vary in options. For example, the Cheap Talk on page 9 is listed in the *Two to Ten Single Messages* category, but there are some models of Cheap Talk that could be listed in the *Beyond a Single Key* category. This is because those models have a levels feature available.

Therefore, please read the descriptions for each device carefully so you will be able to best match the needs of the child/student to the features of each device.

Single Message




These devices will allow a child/student to say one message. They are usually quite simple to operate. They vary in size and shape; some may activate a toy for the length of the spoken message.

These devices may be used:




- As a stand-alone device to get started with communication
- In combination with other single message units
- As a component of a more complex communication system

Low Tech (Digitized Speech Output) Communication Systems Features

Single Message

Name	Manufacturer	Input	Processing	Output	Other
 <p>One step Communicator</p>	<p>Ablenet www.ablenetinc.com</p>	<ul style="list-style-type: none"> • Direct selection • 20 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Has an angled base • Smaller than a Big Mack • Mounting base and carrying strap available
 <p>Big Mack</p>	<p>Ablenet www.ablenetinc.com</p>	<ul style="list-style-type: none"> • Direct selection • 5" single message area • Can use external switch 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Can connect to external speakers • Comes in a variety of colors • Can connect to a toy or appliance • On/off switch
 <p>Chipper</p>	<p>Adaptivation www.adaptivation.com</p>	<ul style="list-style-type: none"> • Direct selection • Can use external switch 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Threaded base-easy to mount • Uses 9volt battery • Available in different colors • Relay/switch output • Adjustable volume

Single Message

Name	Manufacturer	Input	Processing	Output	Other
 <p>Keychain Talker</p>	<p>Attainment Company www.attainmentcompany.com</p>	<ul style="list-style-type: none"> • Direct selection • Single message area • 8 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Attaches to backpack or belt with removable chain • Size: 1 ½" x 2 ½" x ½"
 <p>Clip Talk</p>	<p>Enabling Devices & Toys for Special Children www.enablingdevices.com</p>	<ul style="list-style-type: none"> • Direct selection • One (20 second) or two (10 second) message areas • Some models have option for external switches 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Clips to wheelchair, bedrail, stroller etc. • Portable and lightweight
 <p>Talking Picture Card Holder</p>	<p>Enabling Devices www.enablingdevices.com</p>	<ul style="list-style-type: none"> • Direct selection • Single message area • 20 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Multiple units can be linked together • Clear durable covers for pictures • Vertical placement of pictures




Two to Ten Messages

These devices are usually simple to operate and allow a child/student to say up to ten different messages.




This type of device may be:

- a beginning communication system
- used in combination with another system
- programmed with vocabulary for a specific activity
- useful in situations where a larger device may be too cumbersome




Two to Ten Single Messages

Name	Manufacturer	Input	Processing	Output	Other
Talktrac Communicator 	Ablenet www.ablenetinc.com	<ul style="list-style-type: none"> • Direct selection • Four 1 inch message areas • 75 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Worn on the wrist
Switchboard 	Adaptivation www.adaptivation.com	<ul style="list-style-type: none"> • Direct selection • 6 message areas • Works with switch jacks of any communication aid 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Durable high density plastic • Clear overlay pockets for symbols • Built in handle and adjustable nylon carry strap • Size: 16 x 12 x 5 inches
Voice Pal 	Adaptivation www.adaptivation.com	<ul style="list-style-type: none"> • Direct selection • Up to 5 message areas • 20 seconds recording time 	<ul style="list-style-type: none"> • Single location activation • Delayed activation • Repeat message mode 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Voicepal "on" 24 hours per day • Won't lose messages even if batteries go dead • Uses 4 AA batteries




Two to Ten Single Messages

Name	Manufacturer	Input	Processing	Output	Other
Tech/Four 	Advanced Multimedia Devices, Inc. www.amdi.net	<ul style="list-style-type: none"> • Direct selection • 4 message areas • Can use external switches • 20 seconds of recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Light touch membrane switch pad • Adjustable on/off volume control • Uses 4 AA batteries • Weight: about 1.5 lbs.
Five Talker 	Attainment Company www.attainmentcompany.com	<ul style="list-style-type: none"> • Direct selection • 5 message areas • 2 minutes total recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Uses 9 volt battery • On/off and volume control • Laminated inserts • Weight: 8 oz.
Four Frame Talker 	Attainment Company www.attainmentcompany.com	<ul style="list-style-type: none"> • Direct selection • 1, 2 or 4 message areas • 20 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Clear plastic overlays • Weight: 8 ounces

Two to Ten Single Messages


Name	Manufacturer	Input	Processing	Output	Other
4-Plate Communicator 	Enabling Devices & Toys for Special Children www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • Four message areas (3" x 5" each) • Five seconds recording time per message area 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Device can be positioned at a 30 degree or 70 degree angle • Option with "Say It-Play It" model to activate a toy or device
Voice-in-a-Box 	Enabling Devices & Toys for Special Children www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • Can use external switches • 4 or 8 message areas • 5 seconds recording time per message 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	
Cheap Talk 	Enabling Devices & Toys for Special Children www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • Can use external switches and/or scanning • 4 or 8 message areas depending on the model • Target size is 2" square • Up to 5 seconds recording time per message area 	<ul style="list-style-type: none"> • Single location activation • Some models have 6 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Option to insert overlays is available • Lightweight

Two to Ten Single Messages

Name	Manufacturer	Input	Processing	Output	Other
Twin Talk Communicator And Twin Talk and Play 	Enabling Devices www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • 2 large message areas • 10 seconds recording time for each message area 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Comes with clear plastic covers • Twin Talk and Play simultaneously speaks and activates toy
Talk Pad 	Frame Technologies www.frame-tech.com	<ul style="list-style-type: none"> • Direct selection • 4 messages • 15 seconds recording time each message 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Clear plastic moisture guard included • Available with four jacks for switch access • Portable with carrying handle
Message Box 	Saltillo Corporation www.saltillo.com	<ul style="list-style-type: none"> • Direct selection • 80 seconds of recording time—20 seconds per message 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Belt clip • Uses 9V battery • Includes 4 overlays • Weight: 7.5 oz. • Size: 2.5" x 5"

Two to Ten Single Messages

Name	Manufacturer	Input	Processing	Output	Other
Ultimate	TASH www.tashint.com	<ul style="list-style-type: none">• Direct selection• 4 or 8 message areas (depending on the model) of 4 seconds each	<ul style="list-style-type: none">• Single location activation	<ul style="list-style-type: none">• Digitized speech	<ul style="list-style-type: none">• Constructed of rugged aluminum alloy-resistant to dropping, mishandling and moisture





Ten or More Single Messages

These devices allow a child/student to say at least ten different messages. Most often there is not an option available for levels (i.e., different layers of recorded messages). A few devices in this category may have scanning options.



This type of device may be:

- a beginning communication system
- used in combination with another system
- programmed with vocabulary for a specific activity
- useful in situations where a larger device may be too cumbersome

Ten or More Single Messages

Name	Manufacturer	Input	Processing	Output	Other
Speakeasy 	Ablenet www.ablenetinc.com	<ul style="list-style-type: none"> • Direct selection • Can use membrane keyboard or switches • 1- 12 message areas • Keys may be combined to create larger message cells • 4 minutes and 20 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Can connect with one or two toys/appliances • No message overlap • Weighs one pound • Size: 7 1/2 " x 5 1/2")
Voice Pal Max or Pro 	Adaptivation www.adaptivation.com	<ul style="list-style-type: none"> • Direct selection • Visual and auditory scanning capabilities • 2, 3, 4, or 10 messages areas • Keys can be combined to create larger message areas • 60 or 90 second recording time 	<ul style="list-style-type: none"> • Single location activation • Delayed activation feature • Relay activation • Reinforcement delay • Cue word scanning (Max) • Two button scanning (Max) • Sequential messaging • Three methods of scanning activation selection (Max) 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Auto shutdown (Max)

Ten or More Single Messages

Name	Manufacturer	Input	Processing	Output	Other
<p>Talk Back 24</p> 	<p>Crestwood www.communicationaids.com</p>	<ul style="list-style-type: none"> • Direct selection • 6 larger message areas or 24 smaller message areas • 4 minutes total record time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Weight 1 ½ lbs • Size 10" x 8" • Optional carrying bag • Handle and shoulder strap
<p>Hip Talk Communicator And Hip Talk Plus</p> 	<p>Enabling Devices www.enablingdevices.com</p>	<ul style="list-style-type: none"> • Direct selection • Different configurations for message areas depending on the model (1-16 messages) • 75 seconds total of recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Comes in a soft nylon zipped pack with a waist strap • Hip Talk Plus comes with 3 interchangeable templates

Ten or More Single Messages



Name	Manufacturer	Input	Processing	Output	Other
Voice in a box	Frame Technologies www.frame-tech.com	<ul style="list-style-type: none"> • Direct selection • 16 message areas • 3.75 seconds recording time each message • Total 60 seconds recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Never loses messages • Easy to record • Rugged



MicroVoice	Frame Technologies www.frame-tech.com	<ul style="list-style-type: none"> • Direct selection • 16 message areas • 3.75 seconds recording time each message 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Uses 4 AAA batteries • Clear plastic pocket for overlays • Portable • Upgradeable to levels
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Ten or More Single Messages

Name	Manufacturer	Input	Processing	Output	Other
<p>Message Mate</p> 	<p>Words Plus www.words-plus.com</p>	<ul style="list-style-type: none"> • Direct selection • Membrane keys for light touch • Keys can be combined to make larger message areas • Different models come with varying amounts of recording time from 60 seconds to 10 minutes 	<ul style="list-style-type: none"> • Single location activation • Message builder allows users to build a sentence before speaking • Option for 4 levels available with Multi-Level Message Mate 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Comprehensive user's manual • AC adapter • Long lasting internal rechargeable battery • Adjustable volume
<p>Parakeet</p>  <p>A 15-Key Digital Recording Communication System</p>	<p>Zygo Industries Inc. www.zygo-usa.com</p>	<ul style="list-style-type: none"> • Direct selection • 15 message areas • 8 seconds per message of recording time 	<ul style="list-style-type: none"> • Single location activation 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Comes with eight laminated inserts • 9 volt battery • Weight: less than one pound




Beyond a Single Key

These devices in general are more complex with additional features such as scanning, levels (i.e., different layers of messages), additional recording time and an overall greater capacity for number of messages.



Devices in this category:

- allow for growth in vocabulary, grammar and syntax use
- allow for more spontaneity in communication
- may be a bridge to a more advanced communication system



Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Action Voice and Action Voice 2A 	Ability Research www.skypoint.com/~ability/	<ul style="list-style-type: none"> • Direct selection or scanning depending on model • 10 message areas on one level or 18 messages on two levels • 2 minutes total 	<ul style="list-style-type: none"> • Single location activation • 1 or 2 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Prompted auditory scanning on 2A model only
Step by Step Communicator 75 	Ablenet www.ablenetinc.com	<ul style="list-style-type: none"> • Direct selection • Pre-record a series of message sequences • 75 seconds recording time 	<ul style="list-style-type: none"> • Single location activation • Option for model with levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Mounting base and carrying strap available • “Message lock” feature prevents user from moving to next message inadvertently
BlackHawk 	Adamlab/USA www.adamlab.com	<ul style="list-style-type: none"> • Direct selection • 16 message areas per level • 3.75 seconds of recording time per key 	<ul style="list-style-type: none"> • Single location activation • 4 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Userlock protects from accidental programming • Adjustable volume • Sensitive touchpanel • Weight: 1.5 pounds • Size: 9.5” x 6” x 1.75”



Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
<p>SuperHawk</p>  <p>The SuperHawk device is a rectangular unit with a speaker on the left, a small display in the center, and a large grid of 72 keys on the right. Each key has a unique icon representing a different message or function.</p>	<p>Adamlab/USA www.adamlab.com</p>	<ul style="list-style-type: none"> • Direct selection • Single and multiple switch auditory scanning • Can use up to 4 switches • Up to 72 keys message areas per level • 6 minutes (SuperHawk) or 72 minutes (SuperHawk Plus) of recording time 	<ul style="list-style-type: none"> • Single location activation • 72 levels • Message buffer • Programmable go-tos take you to different pages 	<ul style="list-style-type: none"> • Digitized Speech 	<ul style="list-style-type: none"> • Userlock protects from accidental programming • LCD display for level location and programming functions • Adjustable volume • Ultra sensitive touchpanel • 72 location keyguard included • Weight: 3 pounds • Size: 13 3/4" x 10 1/2" x 2"
<p>Hawk</p>  <p>The Hawk device is a smaller, more compact unit with a speaker on the left and a grid of 8 keys on the right. Each key has a unique icon representing a different message or function.</p>	<p>Adamlab/USA www.adamlab.com</p>	<ul style="list-style-type: none"> • Direct selection • Can use 8 switches • 9 message areas (Hawk), 8 message areas per level (Hawk II & III) • 6.5 to 15 seconds of recording time per key, depending on model and level 	<ul style="list-style-type: none"> • Single location activation • Up to 3 levels, depending on model 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Sensitive touchpanel on Hawk II & III • Adjustable volume



Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
LightHawk Photo not available	Adamlab/USA www.adamlab.com	<ul style="list-style-type: none"> • Direct selection • Single switch and 2 switch scanning • 8 message areas per level • 7.5 to 15 seconds of recording time per message area, depending on level • Total of 4 minutes recording time 	<ul style="list-style-type: none"> • Single location activation • 3 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • NiCad batteries with charger included • Adjustable volume
Sequencer 	Adaptivation www.adaptivation.com	<ul style="list-style-type: none"> • Direct selection • Can use an external switch • Pre-record a series of messages • 60 seconds of recording time 	<ul style="list-style-type: none"> • Single location activation • 2 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • External switch jack • Threaded base-easy to mount • Uses 9 volt battery • Available in different colors • Adjustable volume
Tech/Speak 	Advanced Multimedia Devices, Inc www.amdi.net	<ul style="list-style-type: none"> • Direct selection • Can use external switches • 32 message areas • Message length of 2 seconds or 4.5 seconds • 128, 256 or 384 seconds of recording time, depending on the model 	<ul style="list-style-type: none"> • Single location activation • 2,4,or 6 levels 	<ul style="list-style-type: none"> • Digitized Speech 	<ul style="list-style-type: none"> • Light touch membrane switch pad • Adjustable on/off volume control • Level select switch • Uses 4 AA batteries • Weight: about 2 pounds • Size: 12.5" x 6.5" x 2.5"




Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
<p>Tech/Scan Series</p>  <p>The image shows a rectangular device with a grid of 32 small, colorful buttons arranged in 4 rows and 8 columns. A yellow starburst with the word 'NEW' is in the top right corner.</p>	<p>Advanced Multimedia Devices, Inc www.amdi.net</p>	<ul style="list-style-type: none"> • Direct selection • Single switch activation • Linear, step or row/column scanning • 8 or 32 message areas • Message length of 2 seconds or 4.5 seconds per message area 	<ul style="list-style-type: none"> • Single location activation • 2, 4, 6 levels (Tech/Scan 32), or 8 levels (Tech/Scan 8) 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Light touch membrane switch pad • Auditory beep to assist with visual cues • 3 scan speeds available • Patented scanning grid allows an uninterrupted view of scanning lights without requiring a hole to be punched in the overlay • Adjustable on/off volume control • Level select switch • Uses 4 AA batteries • Weight: 2 pounds
<p>Tech/Talk</p>  <p>The image shows a rectangular device with a grid of 8 larger, colorful buttons arranged in 2 rows and 4 columns. Each button has a different icon representing a message area.</p>	<p>Advanced Multimedia Devices, Inc www.amdi.net</p>	<ul style="list-style-type: none"> • Direct selection • Can use external switches • 8 message areas • Message length of 2 or 4 seconds • 128, 256 or 384 seconds of recording time, depending on the model 	<ul style="list-style-type: none"> • Single location activation • Options for 6, 8 or 12 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Light touch membrane switch pad • Record time controlled with “Time-Lock” • Adjustable on/off volume control • Level select switch • Uses 4 AA batteries • Weight: 2 pounds




Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
<p>Go Talk</p>  <p>The Go Talk device is a dark green handheld device with a screen displaying a grid of icons including a person, a question mark, a person with a speech bubble, a person with a speech bubble and a red 'X', a person with a speech bubble and a red 'O', a person with a speech bubble and a red 'D', a person with a speech bubble and a red 'M', a person with a speech bubble and a red 'T', and a person with a speech bubble and a red 'L'. There are three navigation buttons at the bottom: a left arrow, a right arrow, and a red circular button with a white 'X'.</p>	<p>Attainment Company www.attainmentcompany.com</p>	<ul style="list-style-type: none"> • Direct selection • 9 messages areas • 8+ seconds recording time per message 	<ul style="list-style-type: none"> • Single location activation • 4 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Volume control • Level lock prevents unintentional changing of levels • Record lock eliminates accidental erasures • Weight: 12 ounces
<p>Pocket Go Talk</p>  <p>The Pocket Go Talk device is a green handheld device with a screen displaying five numbered message areas (1-5). There are several buttons on the right side, including a red circular button with a white 'X' and a red circular button with a white 'O'. There are also some smaller buttons and a speaker grille at the bottom.</p>	<p>Attainment Company www.attainmentcompany.com</p>	<ul style="list-style-type: none"> • Direct selection • Single switch scanning access • 5 message areas • message length of 14 seconds • 6 minutes total record time 	<ul style="list-style-type: none"> • Single location activation • 5 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Volume control • Level lock and record lock • Uses 2 AA batteries • Weight: 1 pound • Size: 3" x 5 5/8" x 1"

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Dynamo 	Dynavox www.dynavoxsys.com	<ul style="list-style-type: none"> • Direct selection • Single switch scanning access • 25 minutes recording time 	<ul style="list-style-type: none"> • Single location activation • Dynamic display—stored pages are instantly called up on the screen 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Display screen may be viewed in both the sun and the dark • Built in remote control to access and operate appliances • 3300 DynaSyms available within the system
6 Level Communicator 	Enabling Devices www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • Eight 2 inch message areas for each level • 240 seconds total recording time 	<ul style="list-style-type: none"> • Single location activation • 6 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Depending on the model, comes with 8 jacks for external switches
32 Message Communicator 	Enabling Devices www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • 32 message areas • 288 seconds total recording time 	<ul style="list-style-type: none"> • Single location activation • Depending on the model, 1, 2, 3 or 6 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Size 16" x 9" • Adjustable legs for tilting

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Auditory Communicator 	Enabling Devices www.enablingdevices.com	<ul style="list-style-type: none"> • Auditory scanning • Pre-record a series of messages • 300 seconds of recording time 	<ul style="list-style-type: none"> • Single location activation • 16 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Built in switch and jack for external switch
Communication Builder 	Enabling Devices www.enablingdevices.com	<ul style="list-style-type: none"> • Direct selection • 1,2,4,8,16 message areas • Smallest message area 1 ½" X 1 ½" • 300 seconds total recording time 	<ul style="list-style-type: none"> • Single location activation • 7 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Size: 8 ½" x 7" • Built in handle • 5 interchangeable overlays • Available in 2 different colors
Voice in a box 6 	Frame Technologies www.frame-tech.com	<ul style="list-style-type: none"> • Direct selection • 16 messages-9.3 seconds recording time per message • or • 36 messages per level-8.3 seconds recording time per message 	<ul style="list-style-type: none"> • Single location activation • 6 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Uses 4 AA batteries • Available in "preschool" cases • Easy to switch between levels

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Easy Talk	Great Talking Box Company www.gtb-sym.com	<ul style="list-style-type: none"> • Direct selection • Scanning option • Can use 2 switches • Number of message areas may vary from 1 to 40 • Variable length messages • 8 to 32 min. recording time for standard play • 14-56 min. recording time for extended play 	<ul style="list-style-type: none"> • Single location activation • 8 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Comes with 6 colored, 6 blank overlays • NiCad battery 7.2V • Weight: 2.1 lbs.
DigiCom 2000	Great Talking Box Company www.gtb-sym.com	<ul style="list-style-type: none"> • Direct selection • Several scanning options • Number of keys may vary from 2 to 48 • Available with 34 to 142 minutes of recording time, depending on model 	<ul style="list-style-type: none"> • Single location activation • 48 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • LCD display assists in set-up and programming • Auto power down • Rechargeable battery • Visual & auditory scanning • Earphone & external speaker jack • Includes 18 overlays • Weight: 2 lbs., 7 oz. • Size: 10.75" x 7.5" x 1.875"





Beyond a Single Key



Name	Manufacturer	Input	Processing	Output	Other
Holly.com and Holly.com E-Lite	Holly.Com www.comdevices.com	<ul style="list-style-type: none"> • Direct selection • 8 or 32 standard message areas, depending on the model • Linear scanning • Row/column scanning (32 key model) • Adjustable scan rate • Visual scanning • 76 seconds of recording time per overlay • 4 overlays per disk • Adjustable tilt-up keyboard • Tactile key feedback 	<ul style="list-style-type: none"> • Single location activation • Can reconfigure message areas to 4 or 16 areas 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Attachment points for wheelchair mounting • PC connectable for use with Holly.com alphabet software • 1/8" jack for external switch • Auto "sleep" mode • Storage compartment for disks and overlays • Handle for easy portability • Optional carry bag • Holly.com E-Lite has two position tilting mechanism • Weight: 7.9 lbs (Holly.com) 3.9 lbs. (Holly.com E-Lite) • Size 14' x 9 1/2" x 3 3/8"
Hand Held Voice	Mayer Johnson Company www.mayer-johnson.com	<ul style="list-style-type: none"> • Direct selection • Up to 9 message areas on each screen • 8 minutes recording time, can be increased using expansion cards 	<ul style="list-style-type: none"> • Dynamic display 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Uses AA batteries • 2,400 3/4" Picture Communication Symbols available on system • Text on symbols may be edited • 16 minute expansion cards provide 96 new levels



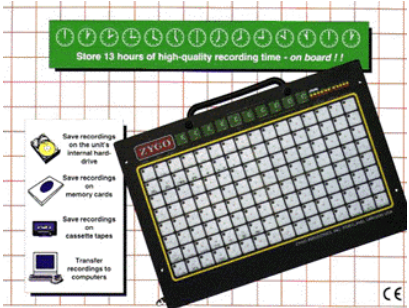

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Sidekick 	Prentke Romich Company www.prentrom.com	<ul style="list-style-type: none"> • Direct selection • Switch-activated scanning • Auditory scanning • 24 message areas • 6 ½ minutes standard or 11 ½ minutes extended recording time 	<ul style="list-style-type: none"> • Single and multiple location activation • 4 user areas available • Option for Unity (based on the Minspeak language system) to be included 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Keyguard • Weight: 13 ounces • Size: 6" x 3 ¼"
AlphaTalker II 	Prentke Romich Company www.prentrom.com	<ul style="list-style-type: none"> • Direct selection • Scanning • Includes options for auditory scanning and/or auditory prompts • Can use 8 switches if adapter is connected • 4, 8 or 32 message areas • Total recording time is 6 ½ minutes in standard mode or 11 ½ minutes in extended speech mode 	<ul style="list-style-type: none"> • Single or multiple location activation • Offers icon prediction (when icon is selected, only those icons sequenced with it light up to remind the user where the messages are stored) • Available with the AlphaTalker II version of Unity software which includes 125 core vocabulary words 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Can save messages on computer disk with memory transfer interface • Weight: 2 lbs. 14 oz. • Size: 13 ¾" x 8 ¼"

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
<p>ChatBox/ ChatBox DX</p> 	<p>Saltillo Corporation www.saltillo.com</p>	<ul style="list-style-type: none"> • Direct selection • DX model has auditory scanning capability, remote switch access and four location keyboard option • Up to 10 minutes of recording time • Utilizes Minspeak language system 	<ul style="list-style-type: none"> • Single and multiple location activation • Offers icon prediction • 4 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Light on each key indicates stored messages • Weight: 1.5 lbs. • Size: 5.75" x 7.5"
<p>VocaFlex</p> 	<p>Saltillo Corporation www.saltillo.com</p>	<ul style="list-style-type: none"> • Direct selection • 4, 8, or 16 message areas per level • Message length 10 and 20 seconds • 1 hour of recording time 	<ul style="list-style-type: none"> • Single and multiple location activation • 51 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • 3 position volume switch • Automatic on/off • 9 keyguards included - (3 each of) 4, 8 or 16 message areas • Includes 90 overlays & vocabulary tracking chart • A disk containing Boardmaker compatible files is included for printing directly on the overlays • Weight: 11 oz. • Size: 6.3" x 4" x 11"

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
<p data-bbox="121 282 533 354">Green Macaw Series</p> 	<p data-bbox="533 282 779 354">Zygo Industries Inc.</p> <p data-bbox="533 354 779 776">www.zygo-usa.com</p>	<ul data-bbox="779 282 1073 776" style="list-style-type: none"> • Direct selection • Scanning • From 2 to 128 message areas • 19 to 38 minutes of recording time, depending on model 	<ul data-bbox="1073 282 1367 776" style="list-style-type: none"> • Single location activation • Option for 8 to 63 levels, depending on the model • Any number of keys can be combined for key-linked messages (up to 80) • String Messages 	<ul data-bbox="1367 282 1570 776" style="list-style-type: none"> • Digitized speech 	<ul data-bbox="1570 282 2053 776" style="list-style-type: none"> • Some models have the option for varied personalities • Folding handle • Neck strap • No “dead spots” on keyboard • Great Green and Great Green +2 have internal 40MB hard drive • Weight: 2.3 pounds
<p data-bbox="121 776 533 815">Macaw II</p> 	<p data-bbox="533 776 779 847">Zygo Industries Inc.</p> <p data-bbox="533 847 779 1279">www.zygo-usa.com</p>	<ul data-bbox="779 776 1073 1279" style="list-style-type: none"> • Direct selection • Scanning • 2 to 32 message areas • 4.5 min high quality recording time • 8.5 min. extended play recording time 	<ul data-bbox="1073 776 1367 1279" style="list-style-type: none"> • Single location activation • Any number of keys can be combined for key-linked messages (up to 3) • String messages • 8 levels 	<ul data-bbox="1367 776 1570 1279" style="list-style-type: none"> • Digitized speech 	<ul data-bbox="1570 776 2053 1279" style="list-style-type: none"> • Folding handle and neck strap • No “dead spots” on keyboard • Size: Keyboard: 11.5 x 7 ¾ inches

Beyond a Single Key

Name	Manufacturer	Input	Processing	Output	Other
Macaw 3 Series	Zygo Industries Inc. www.zygo-usa.com	<ul style="list-style-type: none"> • Direct selection • Scanning • 2 to 32 message areas • High quality rec. time: 9 minutes to 38 minutes, depending on the model 	<ul style="list-style-type: none"> • Single location activation • Any number of keys can be combined for key-linked messages (up to 80) • String messages • 32 levels 	<ul style="list-style-type: none"> • Digitized speech 	<ul style="list-style-type: none"> • Folding handle and neck strap • No “dead spots” on keyboard • Big Blue models come with 40MB Hard Drive • Some models have option for varied personalities • Size: Keyboard 11.5 x 7 ¾ inches



Selected Assistive Technology Manufacturers and Vendors

ABILITY RESEARCH, INC.

PO Box 1721

Minnetonka, MN 55345-0721

952-939-0121

Website: <http://www.skypoint.com/~ability/>

ABLENET

1081 Tenth Avenue SE

Minneapolis, MN 55414-1312

800-322-0956

Website: <http://www.ablenetinc.com>

ADAMLAB/USA

55 East Long Lake Road

Mailstop PMB-337

Troy, MI 48098

248-594-6997

ADAPTIVATION, INC.

2225 West 50th Street. Suite 100

Sioux Falls, SD 57105

800-723-2783

Website: <http://www.adaptivation.com>

ADVANCED MULTIMEDIA DEVICES, INC.

31 Watermill Lane

Great Neck, NY 11021

888-353-2634

Website: <http://www.amdi.net>

ATTAINMENT COMPANY, INC.

504 Commerce Parkway

Box 930160

Verona, WI 53593-0160

800-327-4269

Website: <http://www.attainmentcompany.com>

COMMUNICATION DEVICES, INC. (HOLLY.COM)

4830 Industrial Way West

Coeur d'Alene, ID 83815

800-604-6559

Website: <http://www.comdevices.com>

CRESTWOOD COMMUNICATION AIDS, INC.

6625 North Sidney Place

Milwaukee, WI 53209

414-352-5678

Website: <http://www.communicationaids.com>

DYNAVOX SYSTEMS, INC.

2100 Wharton Street, Suite 400

Pittsburgh, PA 15203

800-344-1778

Website: <http://www.dynavoxsys.com>

ENABLING DEVICES & TOYS FOR SPECIAL CHILDREN

385 Warburton Avenue

Hastings-On-Hudson, NY 10706

800-832-8697

Website: <http://www.enablingdevices.com>

FRAME TECHNOLOGIES

W681 Pearl Street
Oneida, WI 54155
920-869-2979

Website: <http://www.frame-tech.com>

MAYER-JOHNSON, INC.

PO Box 1579
Solana Beach, CA 92075-7579
800-588-4548

Website: <http://www.mayer-johnson.com>

PRENTKE ROMICH COMPANY

1022 Heyl Road
Wooster, OH 44691
800-262-1984

Website: <http://www.prentrom.com>

SALTILLO CORPORATION

2143 TR112
Millersburg, OH 44654
330-674-6722

Website: <http://www.salttillo.com>

TASH INTERNATIONAL, INC.

Unit 1 – 91 Station Street
Ajax, Ontario Canada L 1S 3H2
800-463-5685

Website: <http://www.tashint.com>

THE GREAT TALKING BOX COMPANY

2211B Fortune Drive
San Jose, CA 94043
800-361-8255

Website: <http://www.gtb-sym.com>

WORDS +, INC.

1220 West Avenue
Lancaster, CA 93534
800-869-8521 or 805-266-8500

Website: <http://www.words-plus.com>

ZYGO INDUSTRIES, INC.

16260 SW Upper Boones Ferry Road
Portland, OR 97224-7220
800-234-6006 or 503-684-6006

Website: <http://www.zygo-usa.com>