



Access Features Guide
A Manual for People with Disabilities



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I. IntelliKeys and People With Disabilities

IntelliKeys has many built-in features for people with disabilities. With IntelliKeys, you can adjust the responsiveness of the keyboard, the way the SHIFT and other modifier keys work, the repeat settings, the speed of the mouse, the function of the indicator lights and more. You can further enhance the accessibility of IntelliKeys by using it with adaptive equipment like switches and keyguards.

Read the *IntelliKeys Owner's Guide* to learn how to install and use IntelliKeys. The *Owner's Guide* also includes important information on how IntelliKeys, in its conventional usage, benefits people with disabilities.

The purpose of this *Access Features Guide* is to describe specific IntelliKeys features that are designed solely to benefit people with disabilities. This guide also discusses adaptive equipment that you can use with IntelliKeys. It fully outlines each IntelliKeys feature in the following manner:

Challenge: A description of the challenge that a person with disabilities might encounter when using a computer keyboard.

Solution: An overview of how IntelliKeys helps to meet the challenge.

Specifics: An in-depth look at the IntelliKeys feature.

Default: The standard feature setting before it is adjusted.

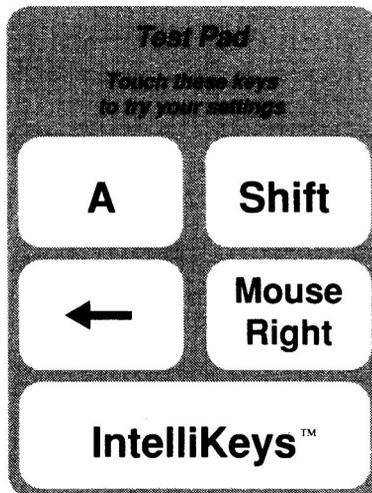
Feature Chart

In the center of this guide on pages 14-15 you will find an Access Features Chart. Use this chart for quick reference to the many features that are built into IntelliKeys.

II. Feature Settings and the Setup Overlay

Feature settings are changed with the Setup Overlay. To make an adjustment using the Setup Overlay, begin by sliding the Setup Overlay into place. Touch the key to turn on the feature you wish to set. Several features, like Response Rate and IBM Repeat Rate, require a value from 1 to 15. For instance, to set the Response Rate to 10, press the key labelled RESPONSE RATE followed by the key labelled 10.

When using the Setup Overlay, you can check the effect of your selections using the Test Pad. This Test Pad has a carefully selected set of keys to allow you to see the results of your choices before you switch back to one of the other overlays.

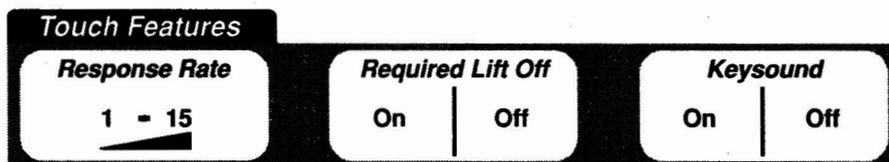


After you are done adjusting the feature settings, remove the Setup Overlay and replace it with the overlay you wish to use. Your settings will remain in effect and will be remembered by IntelliKeys even after you turn off your computer.

To Remove All Changes in Feature Settings. If you wish to return all features to their default settings, press the FEATURE RESET key twice in succession.

The Default Setting. Throughout this guide you will see references to the default setting. This term refers to the state of a specific feature when IntelliKeys is used for the first time or when you reset the keyboard. These default settings should be suitable for most users and should only be changed for a reason.

III. Touch Features



Response Rate

Challenge: Some individuals press extra, unwanted keys while reaching for a specific key. This can be a frustrating experience.

Solution: *Response Rate* slows down the response time of the keyboard, allowing the individual to get to the target key without pressing accidental keys.

Specifics: *Response Rate* adjusts the amount of time you must press on a key before IntelliKeys responds to your keypress. It has 15 settings. 15 provides no delay in the touch, so if you press a key it responds immediately. 1 is the longest delay, so you have to press for roughly 2 seconds on a key before it is typed. The numbers in between correspond to values ranging from 0 to 2 seconds.

Default: 15—No key delay.

Required Lift-Off

Challenge: This feature addresses the same challenge as *Response Rate* above.

Solution: If *Required Lift-Off* is on, after typing a key the user must lift their finger off of the keyboard before they can press any other key. For example, if they type the letter A and then slide over

to the letter B, the B will not be typed. They have to lift their finger off the A and then press the B in order to type the B.

Specifics: This feature may allow you to set a faster *Response Rate* than you would need to if *Required Lift-Off* was off. This can allow the disabled user to become a more efficient typist. If *Keysound* is on, *Required Lift-Off* will cause a beep when a key is released.

Default: Off—No lift-off is required.

Keysound

Challenge: 1) The user cannot tell if they have successfully pressed a key and it is difficult to look up at the screen after each keystroke. 2) The user employs the *Required Lift-Off* and *Repeat Latching* features and is confused by the key sounds generated by IntelliKeys.

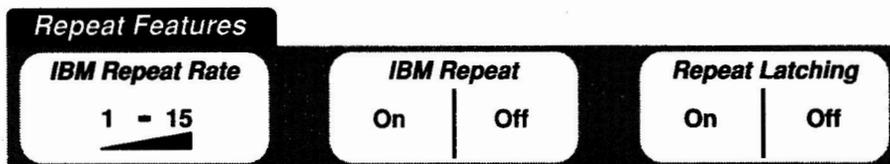
Solution: *Keysound* turns the audio feedback for each key press on and off.

Specifics: The default setting is on—there is a sound for each key stroke. If the *Response Rate* is slow (less than 10), IntelliKeys will produce a faint beep when you first touch a key followed by a full beep when the key is activated. You will hear additional key sounds when *Required Lift-Off* and *Repeat Latching* are being used.

If the *Keysound* is off, there is no sound when you press any key on the keyboard.

Default Setting: On.

IV. Repeat Features



IBM Repeat Rate

Challenge: The user finds that they are getting unwanted repeated characters on their screen while using IntelliKeys with an IBM or compatible computer.

Solution: Use the *IBM Repeat Rate* function to control the rate at which keys repeat.

Specifics: This feature sets the speed at which characters repeat on an IBM or compatible computer. It also sets the delay before a character begins to repeat. The range is 1 to 15, with 15 being the fastest repeat rate.

One thing to note is that certain programs change the repeat functions internally. These programs will not pay attention to the IntelliKeys *IBM Repeat Rate* setting. Examples of these are some of the most common word processors, such as *Microsoft Word* and *WordPerfect*. However, both of these programs do have settings that let you change the repeat speed of that program to the normal IBM computer speed, rather than the settings in that program. Refer to your word processing manual to see how to make this change. If you make the change, these programs will respond to the IntelliKeys *IBM Repeat* settings.

Default: 15—the fastest *IBM Repeat Rate*.

IBM Repeat On/Off

Challenge: The user finds that they are getting unwanted repeated characters on the screen while using IntelliKeys with an IBM or compatible computer.

Solution: Use *IBM Repeat Off* to prevent keys from repeating.

Specifics: Use this setting to turn on and off the repeat function for an IBM or compatible computer. With *IBM Repeat On*, keys repeat when you hold down a key. With *IBM Repeat Off*, you only get one character when you hold down a key. Again, certain programs may not respond to this *IBM Repeat On/Off*. See the above section (*IBM Repeat Rate*) for details.

Default: *IBM Repeat On*.

Adjusting Repeat on an Apple Computer

Challenge: The user finds that they are getting unwanted repeated characters on the screen while using IntelliKeys with an Apple IIGS or Macintosh computer.

Solution: You do not use the IntelliKeys Setup Overlay to adjust these settings for Apple IIGS and Macintosh. Instead, you use the Apple Control Panel to turn repeat off or to adjust the repeat rate.

Specifics: IntelliKeys is designed to use the Apple's built-in Control Panel to adjust these settings. On the Apple IIGS you enter the Control Panel by typing OPEN-APPLE/CONTROL/ESCAPE. Repeat is turned off by setting Repeat Delay to its highest setting. On the Macintosh, the Control Panel is available under the Apple menu. You adjust the repeat functions under the keyboard section of the Control Panel. See your Apple IIGS or Macintosh manual for details.

Default: Does not apply. IntelliKeys repeat settings do not affect Apple repeat functions.

Repeat Latching

Challenge: The user has difficulty holding down a key to make it repeat. When the user does hold a key down for repeating, they cannot easily watch the computer screen at the same time. (This can be especially troublesome when the user is pressing the arrows to move the cursor around on the screen.)

Solution: *Latch* the key that you wish to repeat. When *Repeat Latching* is on, the user holds down the key for a certain length of time and the key begins repeating. The user can then release the key, watch the screen and watch the character repeat. When the character has repeated the desired number of times, the user can press any key on IntelliKeys (or just touch its surface) and the repeating will stop.

Specifics: On IBM and compatible computers, the rate at which characters repeat and the time before *Repeat Latching* starts are both controlled by the *IBM Repeat Rate*. On Apple computers, the rate at which characters repeat is determined by the rate set in the Control Panel. However, the delay before *Repeat Latching* takes effect is not governed by the Apple Control Panel. Instead, it is governed by the IntelliKeys *IBM Repeat Rate*. This is one instance where the *IBM Repeat Rate* affects an Apple computer. Set the *IBM Repeat Rate* to 15 and *Repeat Latching* happens very quickly after touching a key. Set the *IBM Repeat Rate* to 1 and you must hold down a key for 2 to 3 seconds before *Repeat Latching* takes effect.

Default: Off—no *Repeat Latching*.

Repeat Key

Challenge: The user has difficulty watching the screen while a key is repeating.

Solution: While using the QWERTY overlay, plug a single switch into SWITCH JACK #2. This switch functions as a REPEAT KEY, a special key that causes the previously pressed key to be repeated. To see it operate, press any key on IntelliKeys, then press the switch to repeat that key.

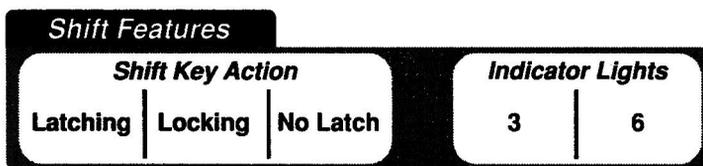
Specifics: The REPEAT KEY is a special key that repeats the last character sent to the computer by IntelliKeys. You can use this key when you make your own overlays, and it is active in SWITCH #2 when you use the QWERTY Overlays.

IBM Repeat Off does not affect the separate REPEAT KEY. It only affects the other keys. Therefore, when you use the REPEAT KEY, you may wish to turn the *IBM Repeat* off. You will be able to use the REPEAT KEY. At the same time, you will not run the risk of unwanted repetitions on the other keys.

Using a switch as a repeat key can be very useful, even for people with disabilities who do not typically use switches.

Default: Does not apply. You may always use the REPEAT KEY when you are using the QWERTY Overlays.

V. Shift Features



Shift Key Action

Challenge: The user is not able to press two keys simultaneously in order to create a capital letter, execute a control function or use other modifier keys.

Solution: IntelliKeys uses sequential keystrokes to solve this challenge. The user never has to press two or more keys at the same time. There are some options in the way that these sequential keystrokes can operate. Use *Shift Key Action* to set these options.

Specifics: The CONTROL and SHIFT keys are called modifiers. All modifiers on IntelliKeys operate in a sequential manner. Here is a complete listing of the latching modifiers on IntelliKeys:

Apple Modifiers	IBM Modifiers
Shift	Shift
Control	Control
Open-Apple/Command	Alt
Closed-Apple/Option	

Shift Key Action has three settings: *Latching*, *Locking* and *No Latch*. The default setting is *Latching*.

Latching. *Latching* means you press SHIFT or any other modifier and that key is held down for the following keystroke. For

example, if you want an exclamation point, you press the SHIFT, lift your finger off of the SHIFT key, and then press the number 1. This will generate an exclamation point. If you type another 1, it will not be shifted. Notice that if you press the SHIFT key several times in succession, it first turns the SHIFT key on and then off, then on, then off, etc.

Locking. *Locking* means the SHIFT key goes through three states when you press it in succession. The first time you press the SHIFT key, it is in a latched state, identical to the *Latching Shift* state. The second time you press the SHIFT key (twice in a row), the SHIFT key becomes locked down. This enables you to type several shifted characters in a row. If you press the CONTROL key twice in a row, you can then type several control characters in a row. The third time you press the SHIFT (or CONTROL) key, you turn off the locked modifier. This same *Locking* feature works on all modifiers.

No Latch. *No Latch* is for those rare software programs that use a modifier key (SHIFT, CONTROL, ALT, etc.) as a regular key. For example, there are some game programs that use the SHIFT keys to flip the paddles on a pinball machine. In this case, *No Latch* is the appropriate setting. *No Latch* is a seldom-used mode of IntelliKeys.

Default: *Latching*.

Indicator Lights

Challenge: The user has difficulty keeping track of the states of the SHIFT and other modifier keys. Sometimes they might lose track of whether a SHIFT or CONTROL key is currently latched.

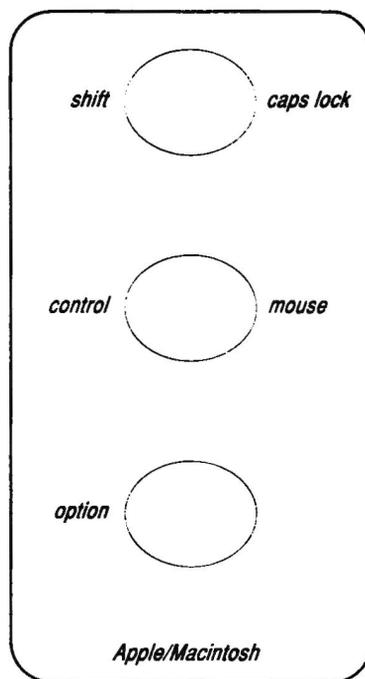
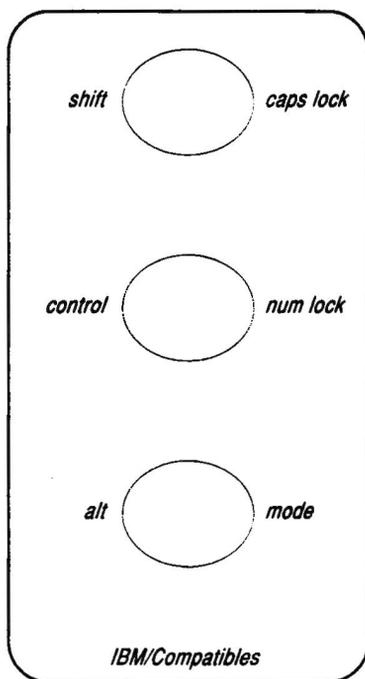
Solution: The indicator lights on the left side of IntelliKeys provide visual indication of the state of the keyboard. They have two modes of operation: three lights or six lights.

Specifics: Each of the three lights is actually made with two small bulbs. These can light up together, both with the color green. When they glow in this way, they give visual indication of three common states.

They also can light up as separate bulbs. The left-hand bulb glows green while the right-hand bulb glows red. In this way, they give visual indication of six states: the three common states along with three additional modifier states. You can choose between three and six indicator lights.

Three Lights. When the indicator lights function as three lights, they operate according to the labels on the IntelliKeys case. The top two lights indicate SHIFT and CAPS LOCK. On IBM computers the bottom light indicates the NUM LOCK, while on Apple computers it indicates that you have turned on the *Mouse Arrows* or you have pressed the MOUSE key on the QWERTY Overlay.

Six Lights. To change to six-light operation, place one of the two adhesive templates that comes with IntelliKeys over the lens area. One is for Apple/Macintosh and one is for IBM/Compatibles. The six lights will provide visual indication for the keys as shown in the following picture:



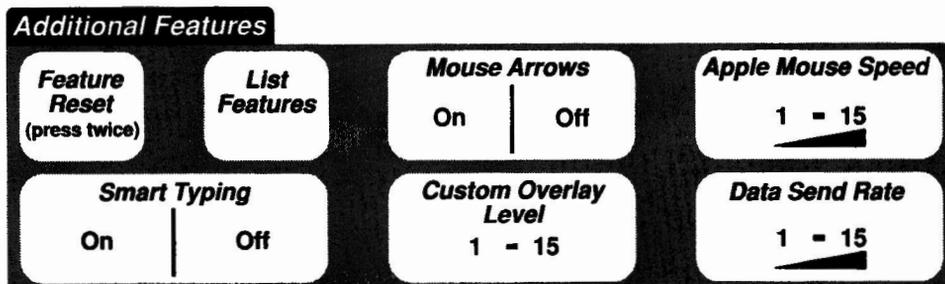
Default: 3—The indicator lights function as three lights.

Name	Default	General Description
Response Rate	15	Change the speed at which IntelliKeys accepts a valid key press from the user.
Required Lift Off	Off	Requires the user to lift their finger from the keyboard between each key typed.
Keysound	On	Turn on and off the sounds caused by key presses.
IBM Repeat Rate	15	Control the rate of key repeats on an IBM or compatible.
IBM Repeat	On	Turn on or off the key repeats on an IBM or compatible.
Repeat Latching	Off	On—hold down a key until repeat starts, let go and repeat continues. Touch keyboard and repeat stops.
Shift Action	Latching	<i>Latching</i> —press shift key followed by letter for capitalization. <i>Locking</i> —latching plus press the shift key twice to lock it down until it is press again. <i>No Latch</i> —shift keys work like regular keys.
Indicator Lights	3	3— provides visual indication of SHIFT, CAPS LOCK, and NUM LOCK (IBM) or mouse (Apple). 6—adds all the modifiers governed by <i>shift action</i> (listed above).
Feature Reset	N/A	Press twice to reset all features to default settings.
List Features	N/A	Press to get a listing of the current feature settings.
Mouse Arrows	Off	Adds mouse functions to the Elementary Overlays.
Apple Mouse Speed	3	15 is the fastest mouse speed, 1 is the slowest.
Smart Typing	Off	When you type a Q, IntelliKeys automatically adds a “u.” Punctuation is followed by the proper number spaces and, where appropriate, a latching shift key.
Custom Overlay Level	1	Use for redefining the switch settings. Also for using IntelliKeys as a keyboard with two big keys.
Data Send Rate	15	Adjust the speed at which IntelliKeys sends phrases.

es Chart

Notes
Other adaptive equipment refers to this as “input rate,” “input delay” or “SlowKeys.”
Other adaptive equipment refers to this as “BounceKeys.”
For Apple IIGS or Macintosh, adjust with the Apple Control Panel.
For Apple IIGS or Macintosh, adjust with the Apple Control Panel.
The time until repeat latching takes effect is governed by the <i>IBM Repeat Rate</i> (even on Apple II and Macintosh).
Affects SHIFT, CONTROL, ALT, COMMAND/OPEN-APPLE and OPTION/CLOSED-APPLE. Note: IntelliKeys does not work if you try to hold down shift and another key at the same time.
When you use 6 indicator lights, you also use an adhesive template that fits around the lights. There are different templates for Apple/Macintosh and IBM/Compatibles.
Does not affect Custom Overlay or Troubleshooting features.
Use with word processing software.
T-TAM or AccessDOS required for IBM/compatibles.
Designed to speed up typing.
See the switch settings chart in the <i>Switches</i> chapter.
Important only when using the customization software.

VI. Additional Features



Feature Reset

Challenge: You have adjusted the features and you wish to return them to their default status.

Solution: Press FEATURE RESET twice and all the features revert to their default status.

Specifics: *Feature Reset* affects the *Touch Features*, *Repeat Features*, *Shift Features* and *Additional Features*. It does not affect the *Troubleshooting* settings.

Feature Reset does not affect the Custom Overlay. Therefore, if you are working with a Custom Overlay and you wish to reset the features settings, you can do so without erasing the Custom Overlay.

Default: Does not apply.

List Features

Challenge: After you set the IntelliKeys features to accommodate the needs of the user, you want to have a record of these feature settings.

Solution: Print or view a list of the feature settings.

Specifics: Start a word processing program on your computer and begin a new document. Press LIST FEATURES and IntelliKeys will type the settings of all the feature settings into the document. You can then save or print this document.

If the feature listing is scrambled (or only some of the features show), try adjusting the DATA SEND RATE (see page 20).

Default: Does not apply.

Mouse Arrows

Challenge: The user wants to operate a program that makes use of a mouse, but they cannot control a mouse or mouse substitute. This is especially important on Macintosh computers, since most Macintosh software requires the use of a mouse.

Solution: Use the mouse functions that are built into IntelliKeys. While the QWERTY Overlays each contain a key to operate the mouse, the mouse operation on the four Elementary Overlays must be turned on from the Setup Overlay.

Specifics: On the Setup Overlay you will find the MOUSE ARROWS key. Simply slide in the Setup Overlay and press MOUSE ARROWS ON to activate the mouse capabilities of the four Elementary Overlays. Remove the Setup Overlay and replace it with one of the four Elementary Overlays. Use the arrow keys to move the mouse pointer. Consult Chapter V of the *IntelliKeys Owner's Manual* for a complete discussion on using the IntelliKeys mouse with Apple computers.

Default: Off.

Apple Mouse Speed

Challenge: When IntelliKeys is operating as an Apple mouse, the IntelliKeys mouse moves too quickly for the user to control or too slowly for the user to get where they want.

Solution: Change the *Apple Mouse Speed* to a more appropriate setting.

Specifics: The APPLE MOUSE SPEED key on the Setup Overlay sets the speed of the mouse for the four Elementary Overlays. Press the APPLE MOUSE SPEED key and then press a numeral from 1 to 15 on the number pad. 1 sets a slow *mouse speed*. 15 sets a fast *mouse speed*. Use the test pad to try the new speed before returning to the overlay of your choice.

On the Apple QWERTY Overlay, you can set the *mouse speed* with the NUMBER keys, the two BRACKET keys and the three punctuation keys above (-, = and \). These 15 keys take the mouse speed from a range of 1 to 15, with the numeral 1 being the slowest speed and the BACK SLASH being the fastest speed (15).

Default: The default *mouse speed* is 3.

Using IntelliKeys as a Mouse on IBM Computers

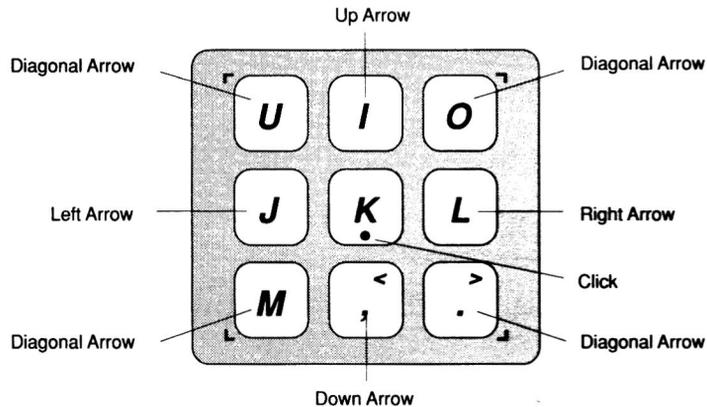
Challenge: The user needs to use IntelliKeys to control mouse functions on an IBM computer.

Solution: Use a T-TAM or AccessDOS. T-TAM is a hardware device and AccessDOS is free software available from IBM. Contact Unicorn Engineering for information on either of these products. They allow standard keyboards to control a mouse (similar to *MouseKeys* on a Macintosh). They work well with IntelliKeys and IntelliKeys actually has some special built-in features to make it work smoothly with both products.

Specifics: Turn *Mouse Arrows* on to use IntelliKeys with a T-TAM or AccessDOS. When you are using the four Elementary Overlays, you turn on *MouseKeys* from the standard keyboard

following the directions in the T-TAM or AccessDOS manual. IntelliKeys will control the mouse with the same keys it uses to control the Apple mouse. Also, you can use the small M and K on the Basic Writing Overlay to type ALT-CONTROL-NUM LOCK, the key sequence needed to turn the T-TAM and AccessDOS *MouseKeys* on and off.

If *Mouse Arrows* is on, the ACCESS MOUSE and KEYBOARD keys become active on the IBM QWERTY overlay. Press the ACCESS MOUSE key to send ALT-CONTROL-NUM LOCK to activate *MouseKeys*. Now use the ARROWS to move the mouse pointer, the RETURN to CLICK, the right SHIFT to DOUBLE CLICK and the SPACE BAR to LOCK or RELEASE the mouse button. Also, there is an eight-directional mouse pad located around the K. Finally, the numbers 1, 2 and 3 switch between the left, middle and right buttons. (See the T-TAM or AccessDOS manual for details.)



The *Apple Mouse Speed* does not affect the speed of IBM mouse movements.

Default: Does not apply.

Smart Typing

Challenge: The user types at a very slow rate.

Solution: Turn *Smart Typing* on. *Smart Typing* automatically types certain characters to make typing faster.

Specifics: With *Smart Typing* on, when you type an upper or lower case “q,” IntelliKeys automatically adds a lower case “u” following your “q.” When you type a period, exclamation point or question mark, IntelliKeys automatically adds two spaces and a SHIFT key, so that the next character typed will be a capital. When you type a comma or semicolon, IntelliKeys automatically adds one space. When you type a colon, IntelliKeys automatically adds two spaces.

Default: Off.

Custom Overlay Level

Challenge: You wish to use IntelliKeys with software designed for single switches, but the software requires keys other than the standard IntelliKeys switch settings.

Solution: Use *Custom Overlay Level* to choose a new definition for the two switches.

Specifics: See Chapter VIII for information on this topic.

This feature is also important if you are using the IntelliKeys customization software. When the IntelliKeys customization software becomes available in the fall of 1992, the documentation for that software will describe the process for changing Custom Overlay levels.

Default: Level one.

Data Send Rate

Challenge: The user is working with a Custom Overlay and word processing software. When they type a key that represents more than one character (like a name, phrase, or sentence), only some of the characters appear on the screen. IntelliKeys is entering them into the word processor too quickly.

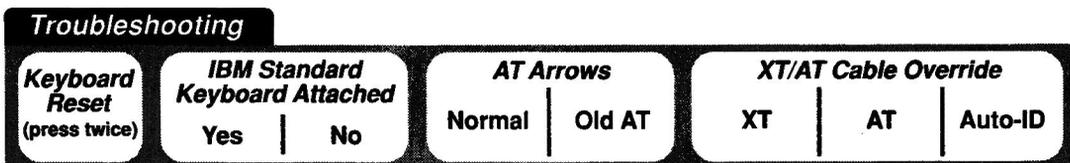
Solution: Slow the rate at which the characters are entered into the word processor by adjusting the *Data Send Rate*.

Specifics: You only need to adjust the *Data Send Rate* if you use IntelliKeys with Custom Overlays. *Data Send Rate* affects the pace at which IntelliKeys sends characters to the computer. This is only important when IntelliKeys attempts to send more than one character in a given keystroke.

You can set the *Data Send Rate* from range of 1 to 15. 1 is the slowest rate, 15 is the fastest.

Default: 15—the fastest rate.

VII. Troubleshooting



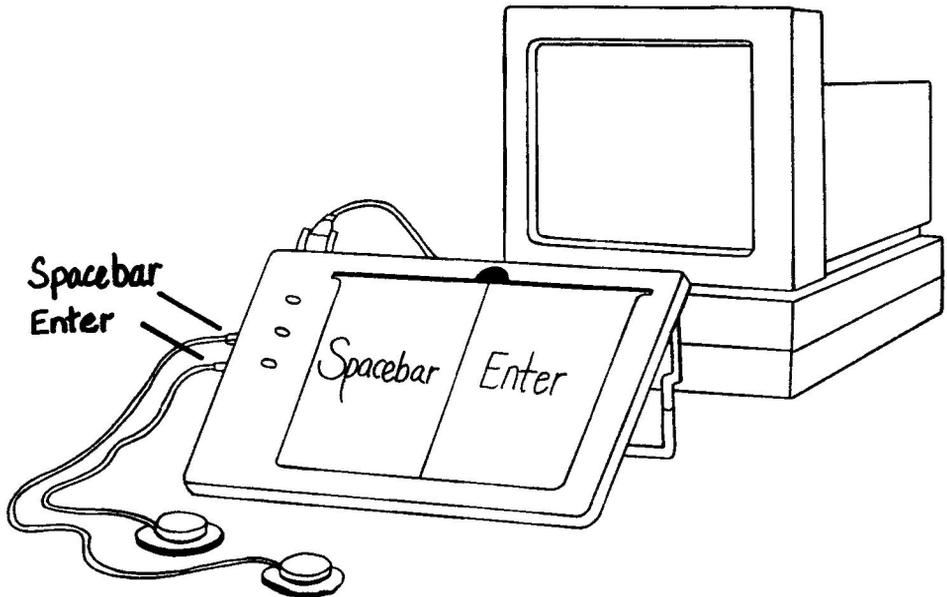
All of the troubleshooting commands on the Setup Overlay are discussed in detail in the *IntelliKeys Owner's Guide*. See Chapter VII, *Troubleshooting with the Setup Overlay*.

VIII. Switches

Switches are used by disabled individuals who have difficulty pressing computer keys. Some software is specifically designed for people who access their personal computer with switches. IntelliKeys comes with two built-in switch jacks. Most commercial and homemade single switches can be plugged directly into either of these jacks, making IntelliKeys ideal for people who wish to use switches with special switch software.

Using IntelliKeys as a Two-Key Keyboard

If you use IntelliKeys without any overlay in place, the IntelliKeys keyboard will behave as two switches or a two-key keyboard. IntelliKeys will function in this same manner if you slide in a home-made overlay with no bar code on the back. One switch (or key) occupies the entire left side of IntelliKeys while the other fills the entire right side. In addition, the settings for the two halves of the keyboard are the same as those for SWITCH #1 (left side) and SWITCH #2 (right side).



Redefining the Switches and the Two Big Keys

IntelliKeys comes with 11 built-in settings for the switches. Initially, it defines the switches and two halves of the keyboard with default settings (see level 1 in the chart below). In order to redefine these settings, press the CUSTOM OVERLAY LEVEL key on the Setup Overlay. Choose a level on the number pad between 1 and 11. Each level corresponds to a different setting. The following chart indicates the settings for each level.

Level Number	Switch #1/ Left Side of Keyboard	Switch #2/ Right Side of Keyboard
1 - Apple (default)	Open-Apple (Command)	Closed-Apple (Option)
1 - IBM (default)	Spacebar	Enter
2	Spacebar	Return/Enter
3	Down Arrow	Return/Enter
4	Right Arrow	Return/Enter
5	Tab	Return/Enter
6	Escape	Return/Enter
7	Left Arrow	Right Arrow
8	Up Arrow	Down Arrow
9	1	2
10	Left Shift	Right Shift
11	Click	Double Click

Creating an Overlay for the Two-Key Keyboard

When you use IntelliKeys as a keyboard with two big keys, you can use a homemade overlay. Create an overlay that indicates the location of the two large keys and includes artwork that corresponds to the software program the user is running.

Start with a legal size piece of paper. Trim the length from 14 inches to 13 inches. Design the overlay as you wish. Slide the overlay into place. Then, slide the clear plastic sheet on top of your homemade overlay.

IX. Custom Overlays

Any overlay that you slide into IntelliKeys that is not one of the seven overlays included with IntelliKeys is a Custom Overlay. This can either be an overlay provided by a software company to work specifically with their software or it can be an overlay that you make yourself.

In the fall of 1992, the customization software for IntelliKeys will become available. You will be able to use that software to create your own overlays and reprogram IntelliKeys to respond to your overlays. This process will be easy and will not require any special computer knowledge.

In the summer of 1992, software publishers will begin to distribute Custom Overlays that work with their software programs. The software programs will contain information that automatically redefines IntelliKeys to work with the Custom Overlay. Contact Unicorn Engineering for more information on this software.

X. Practical Suggestions

Keyguards

Some disabled individuals press keys accidentally when reaching for the key that they want. This can be corrected in two ways. One is to use the RESPONSE RATE discussed in the features above. The other is to use a keyguard.

A keyguard is a clear plastic template that fits over IntelliKeys and has holes cut over the keys. This gives the user a place to rest their hand while they type with their index finger or other pointing device. It also prevents them from pressing keys adjacent to the desired key. Keyguards for IntelliKeys are available from Unicorn Engineering.

Slant Bar

IntelliKeys comes with a removable slant bar. When this slant bar is extended, IntelliKeys is at a 35° angle. If other angles are desired, custom slant bars can be made. If you want to make a slant bar, use the IntelliKeys slant bar as a general guide. Make the wire slightly longer or shorter in length to create the angle you desire. Keep in mind you also can create larger angles by putting something under the existing slant bar.

Mounting IntelliKeys on a Wheelchair

IntelliKeys can be mounted on a wheelchair. Use one of the many commercially-available attachment arms commonly employed with communication devices. Affix the plate that normally attaches to the communication device to the back of IntelliKeys using DualLock™ or another brand of heavy-duty Velcro™. If the slant bar is in the way, you can remove it by pressing the two sides inward. Also, notice that when the slant bar is removed, there are two holes available that you can use for a custom mounting plate.

Braille Overlays

IntelliKeys overlays are printed on Lexan™, a durable plastic. This plastic can be embossed with key shapes and Braille characters. Please contact Unicorn Engineering for further information.

Holding Overlays in Place

If an individual pulls the IntelliKeys overlay out of the keyboard while dragging their hand, try using tape to further secure the overlay. Keyguards also can be helpful in this situation.

Laptop Compatibility

IntelliKeys works with Apple PowerBooks and any IBM laptop that has a keyboard port. The standard IIGS/Mac cable works with the PowerBook. If you are using an IBM compatible laptop, use the IBM cable that matches its keyboard port.

If you need to attach IntelliKeys to an IBM compatible laptop that does not have a keyboard port, please contact Unicorn Engineering for details on possible solutions.

Using Utilities With IntelliKeys

IntelliKeys works very well with a variety of enhancements developed for disabled and non-disabled individuals, including:

- Abbreviation, macros and word prediction software
- Keyboard alternatives for the mouse
- Visual indicators of computer sounds
- Speech output software
- Large font and large print software

Contact Unicorn Engineering for a list of enhancements tested with IntelliKeys.

