



Tecla for Android

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Downloading and Installing the Tecla Access App

The latest released version is 1.0.3. There are a few different ways to install the Tecla Access App on your Android-powered device:

- 1** Visit the Google Play Store on your device and search for “Tecla Access,” then follow the app installation process.
- 2** Visit the Google Play Store on your computer and log in using the Google account registered with your device, search for “Tecla Access” and click on the “Install” button. The Tecla App will be downloaded automatically to your device.

Activating and Selecting the Tecla Access Keyboard

In order to start using the Tecla Access App for Android, activate, select and configure the app using the app settings.

- To activate the Tecla Access App:
 - For Android 3.x and earlier versions, go to: Settings > Language & keyboard
 - For Android 4.x and newer versions, go to: Settings > Language & input

Check the box beside the “Tecla Access” entry.

- A pop-up window will appear warning you about the sensitive nature of an input method and prompt you to confirm whether you still want to activate it. Read and accept the prompt.

- Once the Tecla keyboard is active, the next step is to select it as your default input method.

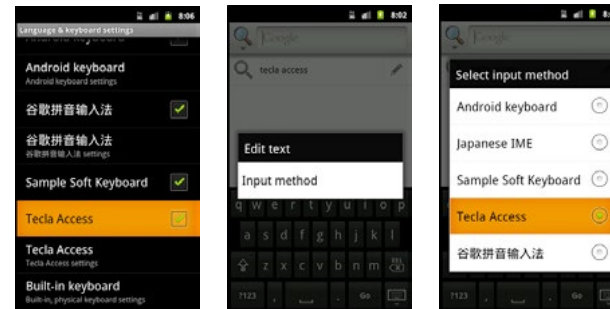
This step is different for various versions of Android. Before you continue, make sure that you know which version of Android is running on your device.

You can do this by going to:
Settings > About phone > Android version.

! The method for selecting the Tecla Access keyboard varies depending on the version of Android that is running on your device.

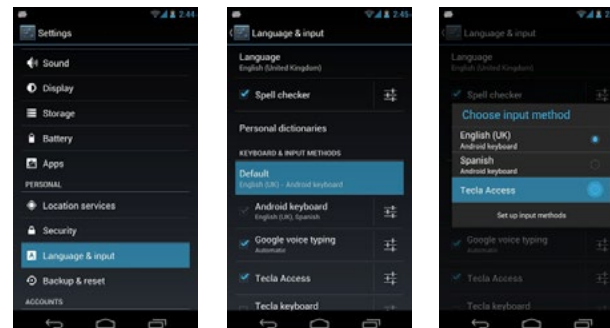
For Android 3.x and earlier versions:

- Go to any text input box (hint: finding a search box is probably the easiest) and long-press (press & hold) on it. Then select the “Input method” entry in the pop-up window that appears. Finally select “Tecla Access” from the list on the second pop-up window. The following images summarize the process:



For Android 4.x and newer versions:

- Go to Settings > Language & input and press “Default,” then select “Tecla Access” from the list in the pop-up window.



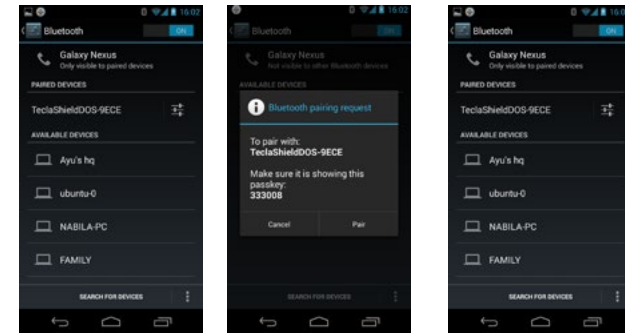
Connecting the App to the Tecla Shield

Connecting the Tecla Access Shield to the Android App may be a bit tricky the first time.

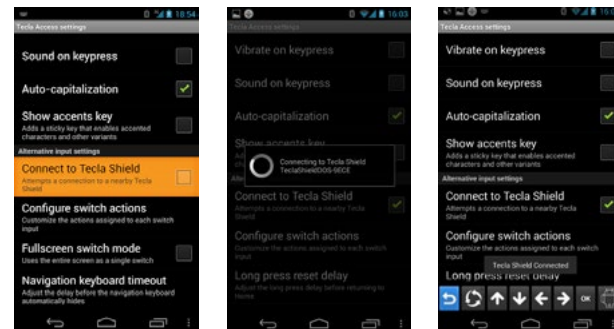
The first thing you need to do is to pair the Shield with the handset. This has to be done only **once** on each device that you wish to connect the Tecla Shield to. With the Tecla Shield ready for connection with an Android device, status indicator light should be blinking green (If not, refer to “Connecting the Tecla Shield DOS” in the “Getting Started” section).

2 If the Shield is on, you should see it appear in your Bluetooth Devices list

- The Shield will show up in the list of available Bluetooth devices as TeclaShieldDOS-XXXX where XXXX is a random sequence of characters. Select this item from the list. A pairing request pop-up window will appear. Select the “Pair” button. The Shield should then appear in the list of paired devices.



Once paired, go to Settings > Language & Keyboard > Tecla Access settings and select “Connect to Tecla Shield.” After a few moments, the Shield should connect automatically and the navigation keyboard should appear.



The pairing process has to be done only **once** for each Android device that you wish to connect the Tecla Shield to.

1 Pair your Tecla Shield

- For Android 3.x and earlier versions, go to: Settings > Wireless & networks > Bluetooth settings
- For Android 4.x and newer versions, go to: Settings > Bluetooth Settings

Click on “search for devices”

Press Pair when the Bluetooth pairing request window pops up.

Connecting Switches

Some of the settings mentioned in these instructions may need further explanation. All of the settings are defined at the end of this guide in the section called “Tecla Access Settings.”

Full Screen Switch Mode

The full screen switch mode can be used to evaluate the functionality of the Tecla Access App even when a Tecla Shield is not available. In this mode, the entire screen can be used as a single switch. Full screen switch mode works in combination with self-scanning and inverse scanning. When self-scanning is selected, you can long-press (press & hold) the screen to go back to the Tecla Access settings to quickly disable it.



While in full screen switch mode, you can quickly access the Tecla App Settings by long-pressing anywhere on the screen.

External Switches

The Tecla Shield has three input ports available for connecting standard adapted switches: two dual switch 1/8” or 3.5mm stereo ports named Switch Port 1 (SP-1) and Switch Port 2 (SP-2), and one Wheelchair Port providing up to four additional switch inputs through a DSub 9-pin (also known as DB9) connector, compatible with the directional controls available on standard powered wheelchair ECU modules.

In combination with the Tecla Shield, the Tecla Access keyboard can be controlled by a single switch connected to SP-1, two single switches connected to SP-1 and SP-2, a dual switch connected to SP-1 or SP-2, or up to four switches connected to the wheelchair port.



When plugging dual switch interfaces, such as sip & puff switches, into SP-1 or SP-2, the Tecla Shield will reconfigure itself automatically, making both sets of switch functions available on the switch port used.

Single-Switch Access

Tecla Access can be used with as little as one switch in self-scanning and inverse scanning modes. Connect your switch to SP-1.

Dual-Switch Access

There are several ways to configure the Tecla Shield for dual-switch operation. You can plug two single switches (with mono 1/8" plugs) into SP-1 and SP-2, or you can plug a dual switch (with a stereo 1/8" plug) into either SP-1 or SP-2. However, when using SP-1 and SP-2, the Tecla Shield recognizes a maximum of two discrete switch inputs.

By default, a two-switch configuration is designed for self-scanning or inverse scanning. The first switch will activate the highlighted item and the second switch will cancel the last selection (when the full keyboard is shown). You can also use two switches in the step-scanning mode by changing the switch action assignments through the "Configure switch actions" setting in the Tecla Access Settings app. You would typically make the first switch move the highlight and the second switch activate the selected item.

Multiple Switches (3+)

Tecla Access can be used with up to 4 switches connected to the wheelchair port. By default, switch 1 activates a selection, switch 2 cancels the last selection, switch 3 moves to the next item in the keyboard and switch 4 moves to the previous item in the keyboard. This behavior can be changed and restored at any time with the Configure switch actions setting in the Tecla Access Settings App.



When using the Multiple Switch Adapter (sold separately), you can mix and match up to six single switches for for more flexibility in positioning multiple switches

Controlling the Android User Interface

The Tecla Access App is an input method; this is a special kind of application that integrates tightly with the operating system, enabling access to most of its functions.

Navigation Keyboard

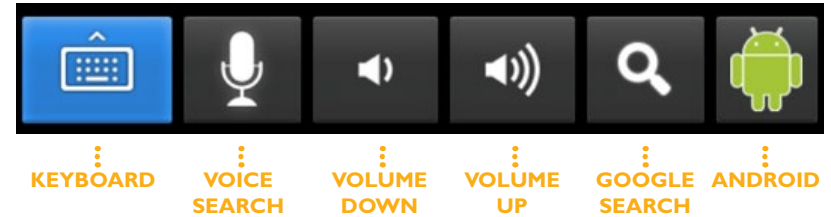
When using an alternative input method (full screen switch or switch access), the navigation keyboard allows you to navigate the Android user interface. The navigation keyboard sits at the bottom of the screen.



The keys in the navigation keyboard have the following functions:

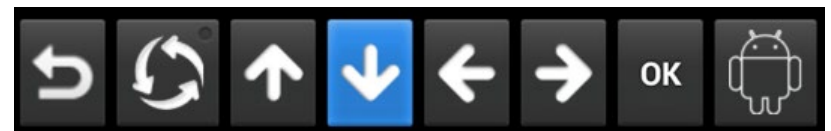
- The Back key can be used to send a “Back” command. This key is often included as a hardware button in Android handsets.
- The Repeat key is a toggle key, when active (green dot) the next directional arrow that is selected will repeat until another switch is pressed.
- The directional arrows navigate the elements of the user interface (icons, buttons, menus, etc.).
- The OK key activates user interface elements.
- The last key on the right (Android) allows access to other functions:

Android Keyboard Functions



- The keyboard key shows the full typing keyboard.
- The microphone key allows quick access to voice commands.
- Volume down key.
- Volume up key.
- The magnifying glass allows quick access to Google Now. The green Android returns to the navigation keyboard.

In self-scanning mode, the items on the keyboard are automatically highlighted at intervals set in the “Scanning speed” setting. A switch connected to Switch Port 1 in the Tecla Shield (or any other switch where the action is configured as “Select Highlighted” in the “Configure switch actions” settings) will activate the highlighted key. In inverse scanning mode, scanning is initiated when you press and hold the switch, with selection of a keyboard item occurring when this switch is released.



When using 2 switches or more, you can control scanning by assigning the “Step-scan next” and/or “Step-scan previous” actions to any secondary switch by using the **Configure switch actions** setting in the Tecla Access Settings App.

Typing Keyboard

Typing keyboards can be navigated in a row/column scanning fashion, by first selecting a row and then an item on the selected row.



While scanning individual keys, there will be a pause between the last key and the first key before looping around in the selected row. If you activate the switch assigned to “Select highlighted” during this pause, key scanning will be cancelled and the keyboard will start scanning by row again.

You can select the key on the bottom left corner to return to the navigation keyboard.

Other Features

Long-press Reset Delay

You can press and hold any switch for more than 3 seconds (except in inverse scanning mode) to send a Home command, which will take you back to either the Launcher or Home screen, regardless of what state the device is in. This is useful when inaccessible elements block your interaction with the device.

Any Switch Answers Call

When the phone is ringing, press any switch to pick up the call.



Troubleshooting

If you cannot establish a connection between the Tecla Shield and the Android device, or if it keeps connecting and reconnecting, follow these steps:

- 1 Uncheck “Connect to Tecla Shield” in Tecla Access settings.
- 2 Turn Tecla Shield off.
- 3 Wait a few seconds.
- 4 Turn Tecla Shield back on.
- 5 Check “Connect to Tecla Shield” in Tecla Access settings.



Tecla Access Settings

General Settings

Vibrate on Keypress

Provides tactile feedback on keypress when active.

Sound on Keypress

Provides auditory feedback on keypress when active.

Auto-Capitalization

Provides automatic capitalization of words after punctuation marks when active.

Show Accent Keys

Adds a key to enable accents and other character variants to the Tecla keyboard.

Alternative Input Settings

Connect to Shield

Searches and connects to a nearby Tecla Shield.

Configure Switch Actions

Change the actions assigned to each switch input.

Restore Default Actions

Reset switch actions to default values.

Long Press Reset Delay

Adjusts the long press delay before returning to Home, the delay can be set from 3 to 40 seconds using the slider bar.

Full Screen Switch Mode

Allows use of the entire screen as a single switch.

Navigation Keyboard Timeout

Adjusts the delay before the navigation keyboard automatically hides. Options range from “Immediately” (hides instantly), 4, 8, 15, 30 or 60 seconds to “Never” (always shown).

Scanning Settings

Enable Self-Scanning

Scans the keyboard automatically at intervals set in “Scanning speed”. Activate the switch to select the highlighted item.

Enable Inverse Scanning

This option starts scanning the keyboard when the switch is pressed and selects the highlighted item when the switch is released. When inverse scanning is enabled, the long press reset delay (available in “Configure switch actions” settings) is set to the maximum (40 seconds) to prevent sending a premature reset.

Scanning Speed

Adjusts the scanning speed.

Morse Input Settings

Enable Mouse Input

Provides a Morse input method that replaces the standard keyboard.

Show Morse HUD

Displays a set of Morse keys/values above the keyboard.

Morse Input Method

Select the input method from triple-key, double-key or single-key modes.

Morse Time Unit

Set Morse time unit when in single or double key modes.

Configure Repeat Frequency

Adjusts the repeat frequency of a dit/dah when holding down a switch.

Advanced Input Settings

Always use speakerphone

Turns on speakerphone for voice calls, voice commands and voice input.

Enable Voice Input

Adds a key for quick access to voice commands and speech recognition.

Temporarily Disconnect

Activate to allow another device to connect to the Tecla Shield (currently not active).

Show Navigation Keyboard

Shows the navigation when not entering text.

Word Suggestion Settings

Quick Fixes

Corrects commonly typed mistakes.