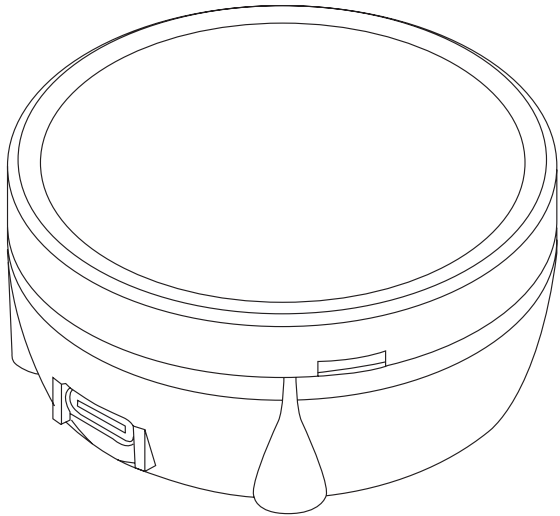


INSTRUCTIONS FOR USE

iSwitch 50 Bluetooth Switch



Pack Contents

Carefully check the contents of the box, which are:

- **iSwitch 50 unit**
- **Decal set**
- **USB-C charging cable**
- **These instructions for use**

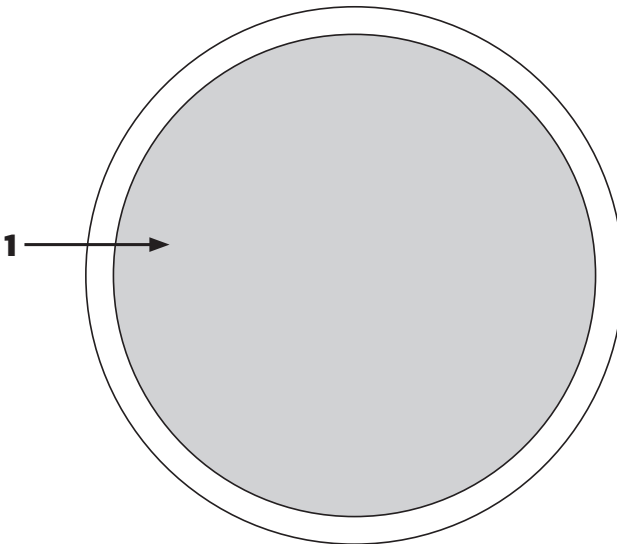
Product Description

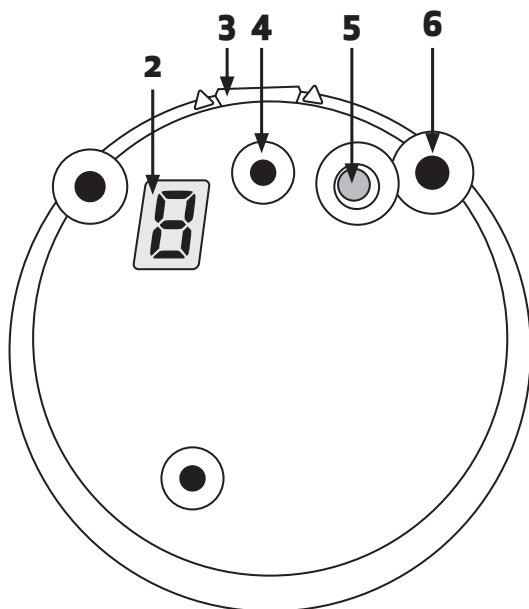
iSwitch 50 is a highly versatile switch access device specifically designed to give you access to switch adapted apps, iOS Switch Control/ Android Switch Access, music and camera.

Specifically designed around users' needs, **iSwitch 50** is simple to set up and use, but loaded with features to cater for all requirements. Although simple to operate, to ensure you get the best experience from using your new **iSwitch 50**, please take time to read these instructions for use.

Features

- **Integral 50mm switch.**
- **Pairs directly with any Bluetooth enabled device.**
- **Switch function may be selected using the built in display and button.**
- **Includes enhanced access to iOS Switch Control/Assistive Touch and Android Switch Access.**
- **Integral button allows on-screen keyboard to be displayed or hidden at any time (on iDevices).**
- **20m (64') operating range.**
- **Integral lithium-ion rechargeable battery.**
- **Charged from any USB socket.**
- **Automatic Snooze and Manual Sleep modes to conserve battery life.**
- **Choice of four switch colours (red, yellow, green, blue).**





Preparing your iSwitch 50 for use

First of all, choose the colour you would like **iSwitch 50** to be and attach the self-adhesive decal to the top surface [1], positioning it carefully to ensure good alignment with the recess in the mouldings. It's best to offer one edge of the decal into the recess first and then smooth it into place using a soft cloth.

Make sure your **iSwitch 50** is fully charged using the cable provided. Simply insert the USB-C plug into the corresponding socket [3] and plug the other end into a computer or charger socket. Once charging begins, the charging LED [4] lights green. When the LED goes out, charging is complete.

Note that if you should lose your charger cable, replacements can be purchased either from a Pretorian reseller or any electronics or on-line retailer. You should request a 'USB-A to USB-C cable' (or USB-C to USB-C if your charger also uses USB-C).

Once charged, you may now make the required settings to the unit so that it behaves as you need it to. Please refer to the following sections for instructions on how to configure each aspect.

Connecting to your Device

When new, or when the **iSwitch 50** has been manually put to sleep, wake it up by pressing the Mode button [5]*.

Go to the Bluetooth menu on your device (on iDevices, Settings → Bluetooth) and first of all ensure Bluetooth is turned on (on iDevices, using the slider at the top of the screen).

After a few seconds the **iSwitch 50** should appear as a 'discoverable' device. It will appear as something similar to:

iSwitch50-V162.0-ABC1

Tap or click on the name and the pairing process will begin. Typically it takes around 5 seconds to connect, after which the device will state that the **iSwitch 50** is 'Connected'. Your **iSwitch 50** is now ready for use.

* **iSwitch 50** is shipped in Sleep mode - please refer to page 6 for more details.

Mode Settings

iSwitch 50 ships pre-set to give Space when the button is pressed. To change this setting, press the Mode button [5] briefly to show the current setting on the display [2]. To change it, press the Mode button repeatedly until the desired setting appears on the display. Table 1 shows the available settings. If no further changes are made, the display is extinguished after a few seconds to save power and the settings are automatically saved in memory.

Note that the Keyboard Up/Down function is recognised only by iDevices.

Setting R is 'Home' and is exactly equivalent to swiping upwards from the bottom of the screen on iPad. Note that this setting can be used whether in Switch Control or not and does not need to be programmed within Switch Control.

The Enter/Home setting (T) gives Enter on a brief press and Home on a longer press. This is extremely useful when combined with Auto Scanning, since it allows the integral switch to carry out virtually every task without needing any other switches.

When choosing mouse click functions (left click, right click and double click) on iDevices, you may need to turn on Assistive Touch.

Mode	Class	Function
0	Keyboard	Numeral 0
1	Keyboard	Numeral 1
2	Keyboard	Numeral 2
3	Keyboard	Numeral 3
4	Keyboard	Numeral 4
5	Keyboard	Space
6	Keyboard	Enter
7	Keyboard	-1
8	Keyboard	-3
9	Keyboard	Up Arrow
A	Keyboard	Down Arrow
B	Keyboard	Left Arrow
C	Keyboard	Right Arrow
D	Op. System	Keyboard Up/Down
E	Media	Play/Pause
F	Media	Skip Forward
G	Media	Skip Back
H	Media	Volume Up/Camera Shutter
J	Media	Volume Down/Camera Shutter
L	Media	Mute
N	Media	Timed Play 10s
P	Media	Timed Play 30s
R	Switch Control	Home
T	Switch Control	Enter/Home
U	Mouse	Left Click
Y	Mouse	Right Click
=	Mouse	Double Click

Table 1:
Switch Functions

Accessing Camera, Music & Media apps

Many of the settings in Table 1 give access to camera and/or media functions rather than to switch adapted Apps. These can be a powerful way to engage reluctant users. Play/Pause, Skip Forward and Skip Back may be used with music and media apps such as Apple Music, Spotify and YouTube. To make sure these commands are directed to the correct app, it is best to make sure that only one such app is open at once.

Volume Up and Volume Down may also be used to take photos or start/stop video recording in the camera app. This is a great way to engage first-time users.

Timed Play 10s and Timed Play 30s allow you to create a 'reward' for pressing a button, completing a task, or any number of other outcomes and is particularly useful for helping to engage reluctant switch users. Because this setting uses the 'Play/Pause' command, which is a 'toggle action', it is important that the device is paused (not playing) before you press the switch, otherwise it will pause for a timed period instead of playing.

On-Screen Keyboard on iDevices

Because your **iSwitch 50** appears to an iDevice as a keyboard, it automatically turns off the on-screen keyboard. This can cause inconvenience when using apps that require typed input.

To overcome this, **iSwitch 50** allows you to deploy the on-screen keyboard manually at any time. Simply press and hold the Mode button [5] while the display [2] is off. After approximately two seconds, the bottom segment of the display will light. Now release the Mode button and the on-screen keyboard will be deployed automatically. To turn it off again, press and hold the Mode button once again until the bottom segment lights, then release.

Mode setting 'D' allows **iSwitch 50** to be configured to deploy the on-screen keyboard using the main switch [1], although it is usually only useful when multiple Bluetooth switches are present and paired with the device.

iDevices remember your on-screen keyboard preference so there's no need to press to deploy every time.

Note that the iDevices only allows the on-screen keyboard to be deployed when a text input box is selected.

iOS Switch Control

Switch Control allows users to scan apps, menu items and the on-screen keyboard without using the touch screen. It is an extremely powerful way to enable disabled users access to all of the features of iDevices. **iSwitch 50** may be used as the Bluetooth switch device to allow you to scan and select items.

Before enabling Switch Control, first decide what type of switch interface will be best for the user. For example, this could be a single select switch in combination with the Auto-Scanning feature in Switch Control, or it may comprise several switches to allow manual scanning and selection.

If **iSwitch 50** is the only Bluetooth switch device connected to the iDevice, you will need to operate in Auto-Scanning mode and set it to be the select switch. If automatic scanning is not suitable for the user, consider using more than one **iSwitch 50**, each paired with the iDevice, or it may be more cost-effective to use a single Pretorian Bluetooth product with more switch inputs, for example iSwitch or APPLICATOR.

Almost any switch setting in Table 1 categorised as 'Keyboard' may be used to effect Switch Control functions. However, it is important not to use both -1 and -3, since iOS accepts the first character only and both begin with the ~ (tilde) character. Media functions such as Play/Pause and Skip Forward cannot be used.

With **iSwitch 50** already paired to your iPad, go to Settings → Accessibility → Switch Control and tap on 'Switches'. Then tap on 'Add New Switch' and 'External'. You will be asked to activate your external switch. Press the switch briefly and iOS will ask you to give the switch a name. This may be anything, but consider using a name that will help to identify which switch it refers to such as 'Red iSwitch 50'.

Next, iOS will ask you to assign the switch to a particular task. If using Auto-Scanning mode, Select Item will probably be the most appropriate setting.

Tutorial videos are available on the Pretorian Technologies website - please visit www.pretorianuk.com/iswitch50 and click on Videos. There are also lots of videos on YouTube showing various aspects of Switch Control functionality.

Guidance on using Bluetooth

Although it is sometimes said that Bluetooth is unreliable, this is almost always due to a lack of understanding of how Bluetooth works. In fact, Bluetooth is a very stable connection format and a well designed host and switch can form an extremely robust and reliable connection. This section gives some detail on how Bluetooth switches connect to their hosts which may help in understanding how they work and avoiding potential pitfalls.

During the pairing process, the host and switch negotiate a unique number that is recorded at both ends. The switch sends its data along with the number and when it does so, the host knows it's from a device it recognises and accepts it.

If the switch is removed from the host's Bluetooth range (typically 20m/ 60 feet), the host knows it's gone but can no longer communicate with it. If it subsequently returns, the host immediately recognises it again by the number and the connection is restored.

However, if the switch remains out of range of the host, it becomes available again and can potentially be paired with a different host. A new number is negotiated, and this is certain to be different to the one negotiated with the original host. The switch now works with the new host.

If the switch is subsequently returned within range of the original host, it can no longer communicate with it because the number is different, even though the original host still shows the switch in its list of connected devices. The switch remains available because it can no longer connect to the original host.

The only way to fix this is to 'forget' the connection on the original host and re-pair it. A new number is now negotiated, connection to the original host restored, and connection to the second host lost.

Now put this in the context of an AT professional. They pair their Bluetooth switch with their own host in the office. All good. They then go off site to assess a disabled user and pair it with their host. Still good. However, they then return to the office, notice the switch is still showing in their host's list of devices and expect it still to work. It cannot, because the numbers are different. Only forgetting and re-pairing will recover the situation.

Automatic Snooze Mode

To conserve battery life, **iSwitch50** automatically enters a low-power Snooze Mode if it remains unused for an hour. Pressing the switch [1] or the Mode button [5] instantly wakes it again. While snoozing, the connection with the device is lost but is automatically re-established within a few seconds of wake-up.

If the unit remains unpaired for more than 5 minutes, it will also enter Snooze Mode. Press the switch or Mode button to wake it.

Manual Sleep Mode

When the unit goes into Snooze Mode, pressing the switch will wake it. This is very convenient, but if the unit is to be transported while not in use (for example in a moving vehicle), unintentional presses of the switch will wake the unit, reducing battery charge. To avoid this situation, there is an option to manually put the unit into Manual Sleep mode, where only the Mode button [5] will wake it. Because the Mode button is recessed, this is very unlikely to be pressed during transportation.

Simply press and hold the Mode button [5] until all the LEDs light (about four seconds), then release*. **iSwitch50** goes into Sleep Mode and will not wake when switch [1] is pressed. Instead, press the Mode button [5] briefly to wake the unit.

* Note that after two seconds of pressing and holding the Mode button, the bottom segment of the display [2] will light to show that it has been pressed for long enough to send the Keyboard command. If you intend to place the unit into Sleep Mode, do not release the button at this stage. Instead, continue pressing until ALL the display segments light, then release.

Battery Life and Battery Charging

A fully charged battery gives approximately 20 hours of operation, depending on the amount of use. When the battery is getting low, the Charging LED [4] begins to blink red. This is an indication that you should charge the battery soon. Plug the charging cable into the charging socket [3] and then into a charger or computer.

While charging, the Charging LED [8] will be illuminated green. Once charging is complete (a matter of around an hour if fully discharged) the charging LED will be extinguished. You can then unplug the cable.

Note that you can continue using **iSwitch 50** while it is charging.

iSwitch 50 plugs into a computer USB port for charging purposes only - it does not give a functional connection this way.

Mounting

iSwitch 50 may be mounted where necessary using the two threaded mounting holes on the underside of the unit. The distance between them is 31.75mm (1.25"), which is frequently referred to by mounting manufacturers as the 'Buddy button' system.

Please note that the threaded holes require 3mm metric screws. Maximum length inside the unit is 8mm. In North America, please refer to a Pretorian reseller for availability of suitable metric screws.

Cleaning & Maintenance

Cleaning may be achieved with a slightly dampened soft cloth. Do not use any detergents, cleaning chemicals or solvents, the use of which will void the warranty.

Your **iSwitch 50** has no user serviceable parts. If repair becomes necessary, the unit should be returned to Pretorian Technologies or an authorised supplier.

iSwitch 50 contains a rechargeable lithium-ion battery that isn't user replaceable. Although the unit uses the very latest battery and charging technology, it may eventually need to be replaced, in which case it should be returned to Pretorian Technologies or an authorised supplier.

Disposal of batteries is often subject to local laws. Please consult your local authorities for information relating to your locale. Never dispose of a battery in fire.

Warranty

Your **iSwitch 50** is warranted for two years against defects in manufacture or component failure. The unit is designed for use in domestic, educational, health and commercial applications. Use outside these areas is not authorised and will invalidate the warranty. Unauthorised repair or modification, mechanical abuse, immersion in any liquid or connection to incompatible equipment will also invalidate the warranty.

iSwitch 50 is not authorised for use with safety critical, mission critical or life-sustaining apparatus of any kind.

Troubleshooting Guide

If your **iSwitch 50** doesn't operate correctly, please use the following guide to determine the cause. If, after following this guide, your unit still doesn't operate, please contact Pretorian Technologies or your supplier before returning it.

Symptom	Possible Cause/Remedy
My iSwitch 50 is not 'discoverable' on my device.	• Ensure battery is charged. • Ensure unit is awake by pressing Mode button. • Ensure Bluetooth is enabled on the device. • Unit may be connected to another device which is in range. Use 'forget this device' in Bluetooth menu of other device to make unit available again.
My iSwitch 50 has been connected to this iPad before but won't connect now.	• Re-connection should be automatic but if difficulties persist, try 'forget this device' and then re-connect. This usually resolves any connection issues. Refer to the Guidance on using Bluetooth section of these instructions.
My iSwitch 50 does not wake up when I press the switch.	• It has been put to sleep manually. Press the mode button to wake the unit.
When I select timed play, the music stops.	• Ensure iPad playback is paused before selecting a timed play function.

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Product
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For use with firmware versions 162.0 onwards.

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