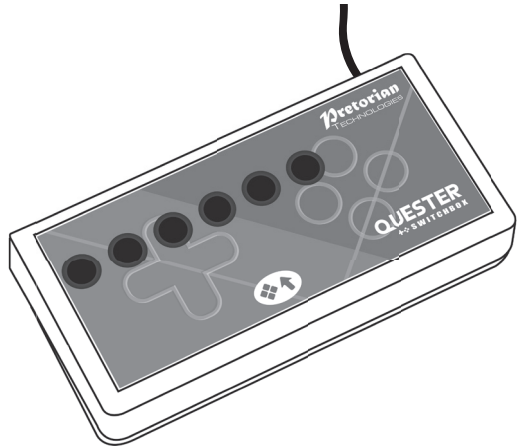# Pretorian TECHNOLOGIES

## INSTRUCTIONS

# QUESTER SWITCHBOX

## Pack Contents

Carefully check the contents of the box, which are:

**Quester Switchbox unit**
**Instruction booklet**

## Product Description

**Quester Switchbox** is a simple USB switch interface specifically designed for PC game play using assistive switches. Gaming is an uplifting experience for many disabled users - it is instantly engaging for many and also offers the benefit of being able to be part of a community shared by disabled and able-bodied gamers alike. **Quester Switchbox** has been developed by Pretorian to address access needs in PC gaming and, along with **Quester Joystick**, forms an essential part of the assistive PC gaming ecosystem.

Six 3.5mm sockets are provided, the functions of which are set by selecting one of four Levels. Levels 1-3 are fixed function, whereas each socket in Level 4 can be programmed to be any key on a standard keyboard or a mouse click, plus some gaming specific functions such as Latching W, A, S or D.

A seventh socket is dedicated to changing Level so the player can navigate between Levels without requiring assistance. Alternatively, this may be achieved using a button on the fascia of **Quester Switchbox**.

Levels 1 and 2 are configured for navigation within a range of games, whereas Level 3 allows weapons to be selected (or similar functions, dependent on the game). And due to its programmable nature, Level 4 can be configured to be whatever you need it to be.

Level 4 is programmed using a simple and unique method which requires no software to be loaded onto the PC. Once each socket on Level 4 has been configured, the settings are saved in the **Quester Switchbox** internal memory and are automatically recalled even if the computer is turned off or the switchbox moved to a different computer.

The provision of Latching W, A, S and D functions allows the player to walk or run in any direction indefinitely, leaving hands free for other functions. Sticky and Latching Modifiers further add to the programmability to allow unique combinations of functions to be created.

As with all Pretorian products, **Quester Switchbox** requires no drivers- simply plug and play!

- Specifically to provide accessibility and ease of function for PC game play- gives access to W, A, S and D and Arrow Key functions as separate switches.

- Three Levels with fixed functions, one programmable Level.

- Programmable Level 4 allows the function of each socket to be set to ANY keystroke including Modifier keys (Shift, Ctrl, Alt and Gui), or any mouse click.

- Ideal when partnered with a Quester Joystick

- Modifier keys can be Momentary, 'Sticky' or Latching.

- Latching W, A, S and D also available in Level 4.

- Also gives direct access to Left Click and Right Click.

- Six 3.5mm jack socket inputs allow any style of switch to be used.

- Seventh 3.5mm socket to allow Level to be selected by user.

- Easy 'plug and play' installation, does not require driver software.
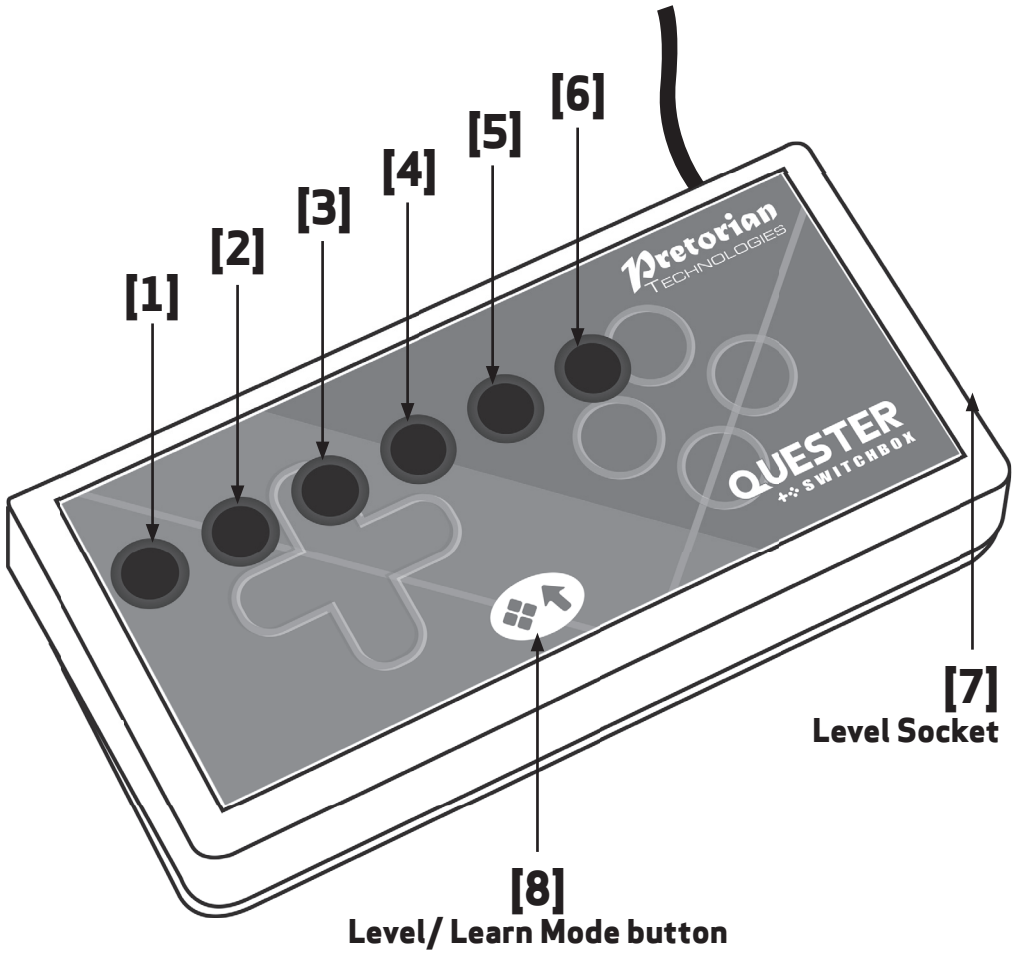
**[1]**

**[2]**

**[3]**

**[4]**

**[5]**

**[6]**

**[7]**
**Level Socket**

**[8]**
**Level/ Learn Mode button**

# Compatibility

**Quester Switchbox** works on any USB compatible computer but is primarily intended for gaming on a PC. It does not work on legacy PS/2 connectors even via an adapter.

# Installation

Simply plug your **Quester Switchbox** into a spare USB socket on your computer. It doesn't matter whether the computer is on or off. The first time you install **Quester Switchbox** the operating system may take a few seconds to build a driver. There are no driver files to load onto the computer- the computer's resident drivers are always used to help simplify installation.

# Getting Started

**Quester Switchbox** is supplied set to Level 1 by default, giving access to W, A, S, D and Left Click/ Right Click- see Table 1. To change Level, you can either press a switch plugged into the Level socket [7] or the Level button [8]. The Level button is ideal when a player needs support to change Level, whereas the Level socket may be used to empower the gamer to do it for themselves.

Note that there is a short 'ignore repeats' period when using the Level socket [8] to change levels to ensure that only one level change is made per press even if users are prone to make multiple presses due to poor motor control.

Each time the Level is changed, a number of beeps is emitted from the unit, where one beep indicates Level 1, two beeps indicates Level 2 and so on.

|  | Level 1 | Level 2 | Level 3 | Level 4 (Defaults) |
|---|---|---|---|---|
| Socket 1 | W | ↑ | 1 | Space |
| Socket 2 | A | ← | 2 | Tab |
| Socket 3 | S | ↓ | 3 | Shift |
| Socket 4 | D | → | 4 | Ctrl |
| Socket 5 | Left Click | Escape | 5 | Latching-w |
| Socket 6 | Right Click | Enter | 6 | Caps |

*Table 1: Quester Switchbox functions*

Note that the functions listed in Table 1 for Level 4 are the defaults that the unit is supplied with. These may be changed at any time using Learn Mode- next page.

Any functions that may be on-going as you change Level will be cancelled automatically to prevent keys running on indefinitely. This is especially important when using latching W, A, S and D, for example.

# Learn Mode

Learn Mode is used to set the functions of each socket in Level 4. They are stored in the device's memory and are automatically recalled each time the unit is powered on, even when it is moved to a different computer. You do not need to be in Level 4 to enter Learn Mode.

Before entering Learn Mode, ensure that there is a switch plugged into sockets 1 and 2 and then open a text editor on your computer such as Notepad, WordPad or Word and ensure it has 'focus' by clicking within it. Now *press and hold* the Level button [8] until a warbling tone is heard as the unit enters Learn Mode.

*NB: While you are in Learn Mode, please don't click away from the text editor and do not type anything on the computer keyboard. Note that you cannot use the Level Socket [7] to enter Learn Mode.*

The moment you enter Learn Mode you will begin to see text appear in the text editor showing the current function of Socket 1 in Level 4. The example below indicates that socket 1 is set so the switch plugged into it sends a space when pressed.

```
Untitled - Notepad
File   Edit   Format   View   Help

socket 1- space
|
```
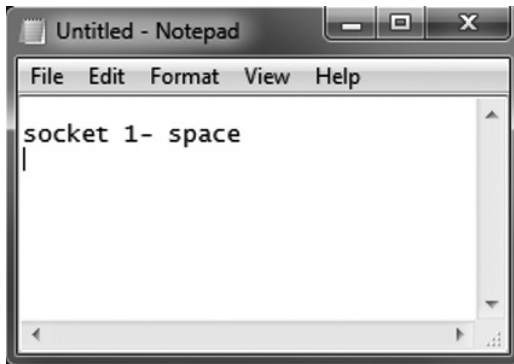
The switch plugged into socket 1 may be used to move forwards through the list of possible functions in Table 2, whereas the switch in socket 2 may be used to go backwards through the list.

When you have selected the required function for socket 1, press the Level button [8] *briefly* to go on to socket 2 and again use the switches in sockets 1 and 2 to set the required function. You do not necessarily need to make any changes- if the current socket is set as you wish, simply press the Level button [8] to go to the next socket.

```
Untitled - Notepad
File   Edit   Format   View   Help

socket 1- space
socket 2- tab|
```
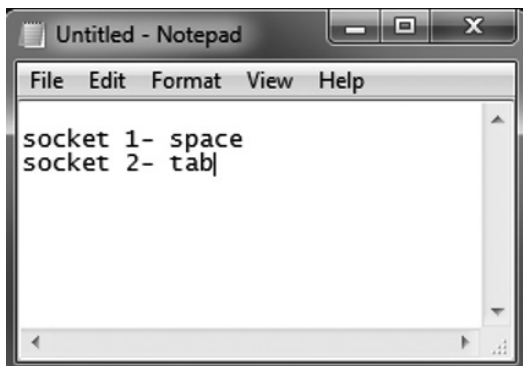
When selecting socket functions, please also refer to the section beneath Table 2 to gain an understanding of the special functions provided such as latching keys, modifiers and 'sticky' functions.
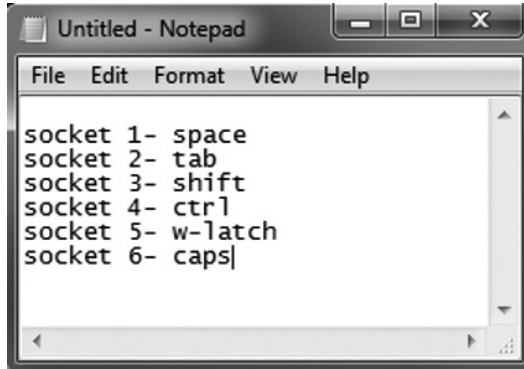


The function of all six sockets may be set this way but not the Level socket [7], the function of which is fixed. When you have entered all of the functions you need, you can edit them further by continuing to press the Level button briefly (in which case the next press will begin again with socket 1), or you can exit Learn Mode by pressing and holding the Learn button, in which case the unit will add the text 'leaving learn mode' as it exits and the unit will emit a warbling beep. You may close the text editor at this point and there is no need to save changes in the editor when asked.

If you do not make any changes in Learn Mode for a period of two minutes, the unit will automatically exit Learn Mode, although any changes to the socket functions will be saved in memory as if you had exited manually. It will emit a warbling beep and add the text 'leaving learn mode' as it exits, as usual.

| |
|---|
| Letters a-z |
| Numbers 0-9 |
| ↑↓ ➞ ← |
| Latching w, a, s and d |
| All punctuation marks |
| Momentary Modifier keys (Shift, Alt, Ctrl, Gui) |
| Sticky Modifier keys |
| Latching Modifier keys |
| F1-F12 keys |
| Space, Backspace, Tab, Escape, Caps |
| Left Mouse Click, Right Mouse Click |

*Table 2- Available functions in Level 4*

*Notes relating to Table 2:*

*Latching W, A, S and D are provided to allow the gamer to walk in any direction indefinitely, leaving hands free to operate other functions. Pressing the same switch always cancels the latching key, as does moving from one Level to another.*

*In some games the player can run in any direction if Shift is also selected. Latching Shift may prove useful in this case.*

*As with a standard keyboard, modifier keys apply to ALL other keys simultaneously. Therefore, if a switch set to Latching Shift is pressed and then two sockets set to a and b are pressed consecutively, the result will be A and B.*

*Sticky Modifier keys stay set once pressed either until another switch is pressed and released, or the sticky watchdog timer times out. This is set to 20 seconds and is included to prevent sticky modifiers remaining set for long periods when no further switches are pressed to cancel them. You can also cancel a sticky modifier by pressing the sticky modifier switch a second time.*

*If a Sticky Modifier is pressed followed by an extended press of a key (or a latching key), the sticky function cancels once the latching key is released. For example, Sticky Shift followed by an extended press of a switch set to w will give WWWWWW and not Wwwwww.*

*Latching Modifiers are toggled on and off with alternating presses. For example, if you were to press Latching Shift, then Latching Shift again, then w, the result would be w and not W. Similarly, pressing Latching Shift, then w, then a, then finally Latching Shift again would result in W followed by A.*

*Suggestion: In the Windows Settings menu, there is an option list to control shortcuts for Sticky, Toggle and other key shortcuts on a normal keyboard for general use. Some of these shortcuts require 5 presses of the Shift key and this toggles a range of shortcuts on and off. If you will be using the Shift key within your custom setup, it may be a good idea to ensure they are all unticked before playing the game*

# Power On Settings

When the unit is powered up, either because it was previously unplugged or because the computer was powered off, all of the socket settings in Level 4 are recalled and also the previous Level setting, allowing gaming to continue from where you left off.

# Maintenance

Your **Quester Switchbox** has no user serviceable parts. If repair is necessary, the unit should be returned to Pretorian Technologies or an authorised distributor.

# Warranty

Your **Quester Switchbox** is warranted for 24 months from the date of purchase against defects in manufacture or component failure. The unit is designed for domestic, educational and commercial applications. Use outside these areas will invalidate the warranty. Unauthorised repair or modification, mechanical abuse, immersion in any liquid or connection to any equipment other than a compatible host computer will invalidate the warranty.

# Troubleshooting

| Symptom | Possible Cause | Remedy |
|---|---|---|
| I can't move in the game | • Wrong Level is selected | • Select the correct Level for the functions you need |
| I can't move through the game quickly enough | • Walking is selected- use run instead | • Configure a socket to be Shift, Sticky Shift or Latching Shift |

S040118
For use with firmware 127.0

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