PCS-2

Universal Infrared Remote PC Power Switch

General Description

The PCS-2 allows you to switch your PC / HTPC on-off with your existing TV or universal infrared (IR) remote.

Single button mode allows switching the PC on/off with a single IR remote button.

Dual button mode allows the PC to be switched on with any IR remote button, and off with any second button.

Forced shutdown option.

No soldering required. Splicer is included for connecting the PCS-2 to PC power supply (ATX).

Auto-detect feature makes electrical connections a snap.

Requirements

PC with an ATX power supply. (Most PCs are ATX.)

The PCS-2 is designed to fit behind a 3/8” hole that the user must drill into their PC case.
Installation Steps

Caution! Before beginning the installation, unplug the AC power from your PC.

The following installation steps assume that the PCS-2 module will be installed onto the inside of the front cover plate of the PC. However, you can install it on any side you see fit.

Typical installation:

1. Locate a spot on the front of your PC case where you will drill the hole for the IR receiver. Note that this must be in a location that is unobstructed during normal PC operation.
2. Verify that your PC is disconnected from AC power.
3. Remove the cover of your PC so that you can access the motherboard and ATX power supply.
4. If possible, remove the front cover of the PC for drilling the hole.
5. It’s recommended that you start with a 1/8” drill bit, then finish with 1/4”. This will make for a hole with a smooth edge.
6. Once the hole is drilled, remove the red backing of the tape on the PCS-2 module.
7. (See the diagram on the next page for alignment details.) On the inside of the front panel, place the IR receiver behind hole you drilled, and carefully press the PCS-2 module against the inside face so that the tape sticks.
8. Disconnect the PC power button cable from the motherboard and connect it to the 2-pin connector located near the end of the twisted-wire pair of the PCS-2. The polarity does not matter, as the PCS-2 will auto-detect. Plug the end of the twisted-wire pair from the PCS-2 module onto the 2-pin power switch connector on the motherboard. Again, polarity doesn’t matter.
9. Refer to the diagram on the next page for connecting the power wires.

Caution: Be very careful to connect the purple wire correctly to the power supply. Failure to do so will damage the PCS-2 module and possibly your PC.
PCS-2 Back View

Plug PC power switch onto this 2-pin connector. (The polarity does not matter.)

Plug this onto the 2-pin motherboard power switch connector. (The polarity does not matter)

Use one of the red splicers to connect this purple wire to the purple wire of the ATX power supply.

This 4-pin pass-through connector is free to connect to a hard drive or other internal device.

PC power switch connector from the power switch on the front of the PC.

LED under corner edge.

IR detector (Back side)

Pushbutton

Connect any 4-pin power plug from the power supply to here.

Caution: Be very careful to connect the purple wire correctly to the power supply. Failure to do so will damage the PCS-2 module and possibly your PC.

PCS-2 Front View
(no wiring shown)

Place this behind the hole drilled into PC case.

Remove the red backing from the gray adhesive tape, and stick the HTPC module against the inner wall of the PC case.
IMPORTANT: Before continuing, verify your wiring.

Programming the PCS-2

The following is for programming the PCS-2 to recognize 2 different IR codes from your remote control. The first IR code will switch your PC on, and the second IR code will switch your PC off. If you want to be able to switch your PC on/off with a single IR code, then simply program the same IR code (ie same button on your remote) for both “on“ and “off“.

1. Select the button(s) on the IR remote that you wish to use for switching the PC on/off -- typically button(s) not being used for anything else.

2. Connect the PC to AC power. If your ATX power supply has a switch, make sure that it is on.

3. Press the button on the PCS-2, and the LED should light.

4. While holding the IR remote at least 15" (38cm) away from the receiver and aiming at the receiver, press the IR remote button that you want to switch the PC “on”. When the LED goes out, release the remote button. The LED will re-light.

   Repeat step 4 three more times.

5. After the above steps are completed, the LED will flash several times, then stay on. This indicates that the first IR code is learned.

   Now program the second IR code for switching the PC “off”...

6. While holding the IR remote at least 15" (38cm) away from the receiver and aiming at the receiver, press the IR remote button that you want to switch the PC “off”. When the LED goes out, release the remote button. The LED will re-light.

   Repeat step 6 three more times.

7. After the above steps are completed, the LED will flash continuously. Press and hold the power switch on the front of the PC until the PC powers up.

The LED should be off, and programming the PCS-2 is complete.

You can test the programming at this point by letting the PC boot completely, then pressing the button on the IR remote that you selected for “off.“ This should cause the PC to shutdown/hibernate/standby, depending on how your system is configured.
Forced Shutdown Option

When the forced shutdown option is enabled, the PCS-2 will force the PC to shutdown if it has not already shut itself down within 1 minute of the user requesting that the system shut down. This is especially useful if your system has a background application that tends to prevent the system from automatically shutting down.

By default forced shutdown is disabled.

To enable forced shutdown, hold down on the PCS-2 button until the LED flashes several times.

Note that forced shutdown will only work if the 4 second power-down option is enable in the PC BIOS. (This is enabled by default on virtually all PCs.)
How to Properly Splice the Power Wire

Purple wire from the ATX power supply.

Purple power wire from the PCS-2 module.

Insert until wire is past the metal splicing tab, and the tip of the wire is against the stop.

Insert into side slot of splicer.

This dashed line shows how far the wire should be held against the inner stop, until splicing is completed as described on the next page.
To complete the splice, it is now necessary to use pliers to press the metal tab into the two wires. It is important that the pliers are aligned with the metal tab before applying pressure. Below are the incorrect and correct alignments. (Note: For purposes of clearer illustration, that the wires are not shown in the splicer below.)

**INCORRECT ALIGNMENT**

This can result in the wire from the PCS-2 module not being properly captured.

The angle of the pliers is not directly on top of the metal splicer tab here. 

The pliers should be set to the wider setting here.

**CORRECT ALIGNMENT**

The pliers are directly on top of the metal splicer tab here.

The pliers are set to the wider setting here.

**Complete the Splice**

Once alignment is correct as above, squeeze the pliers until the metal tab is flush with the plastic housing. The metal tab should not be above the housing at all.

Lastly, fold the plastic cover over the metal tab slot so that it clicks securely. The final product will look like this:
If you do not see a purple wire on your ATX power connector, then the below images are provided to indicate which wire is the standby power wire to be spliced to the purple PCS-2 wire. First determine if you have a 20-pin or 24-pin ATX power connector.

For 20-pin ATX connectors, splice to the wire located in this location. (In this image the wire is purple, but your wire may not be.)

Note that the actual splice can be anywhere on the wire.

Location of standby power wire for a 24-pin ATX connector.

This view is of the connector as you look down onto the motherboard.