

PCS-1

Universal Infrared Remote PC Power Switch

General Description

The PCS-1 allows you to turn your PC on/off with your existing TV or universal infrared (IR) remote. This is especially useful for home theater PC (HTPC) users.

No soldering required. Splicers are included for connecting PCS-1 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-1 is not designed for notebook PCs.

The PCS-1 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.

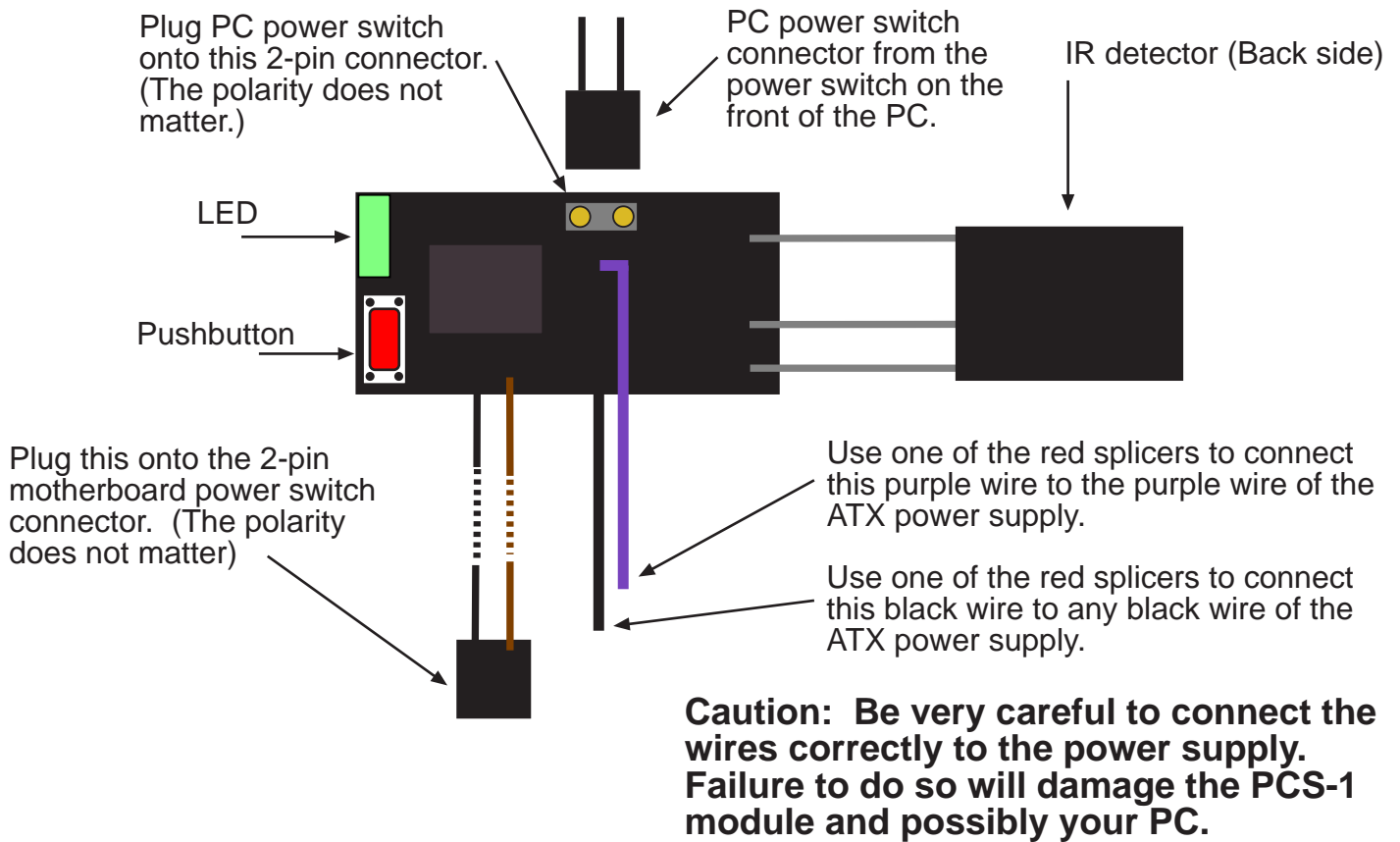
The following installation steps assume that the PCS-1 module will be installed onto the inside of the front cover plate of the PC. However, you can install it on any side you see fit.

Typical installation:

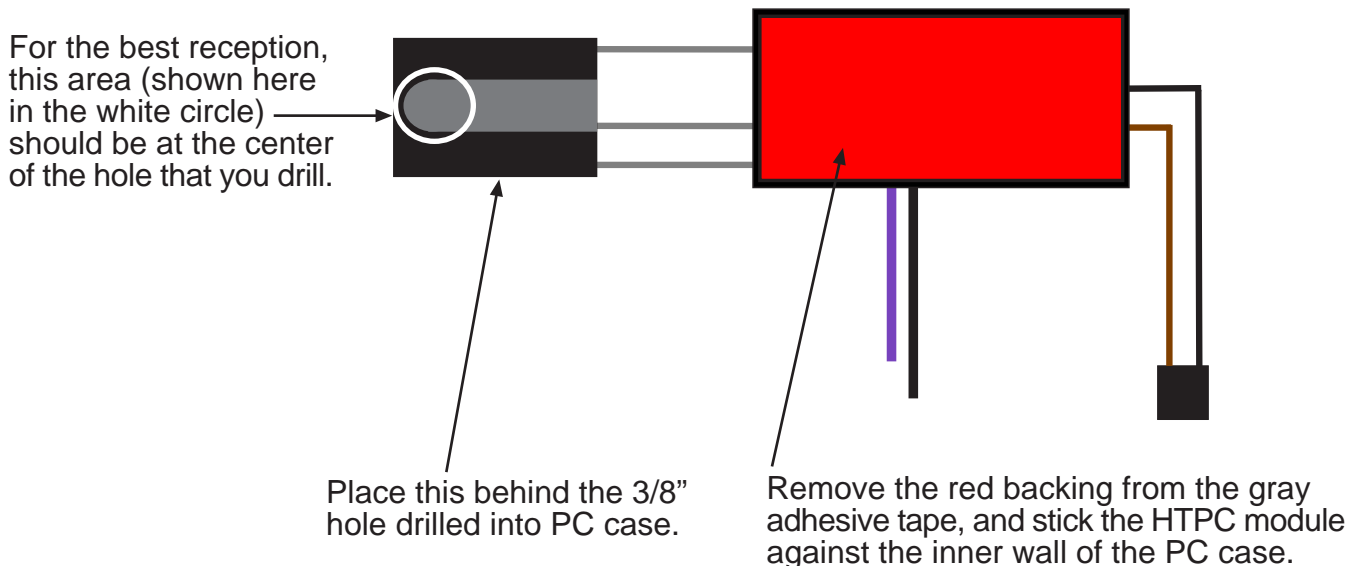
1. Locate a spot on the front of your PC case where you will drill the hole for the IR receiver. Note that this must be in a location that is unobstructed during normal PC operation.
2. Verify that your PC is disconnected from AC power.
3. Remove the cover of your PC so that you can access the motherboard and ATX power supply.
4. If possible, remove the front cover plate of the PC for drilling the hole.
5. It's recommended that you drill successively larger holes. For example, start with a 1/8" drill bit, then 1/4", then finally 3/8". 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-1 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-1 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 on the PCS-1 module. The polarity does not matter, as the PCS-1 will auto-detect. Plug the brown and black cable from the PCS-1 module into the 2-pin power connector on the motherboard. Again, polarity doesn't matter.
10. Refer to the diagram on the next page to connect the black and purple power wires.

Be very careful to connect the power wires to the correct colors. Not doing so will damage the module and possibly your PC power supply.

PCS-1 Back View



PCS-1 Front View



IMPORTANT: Before continuing, verify your wiring.

Programming the PCS-1 to Recognize an IR Remote Button

1. Select the button on the IR remote that you wish to use for switching the PC on/off -- typically any button that is currently 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-1, 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. The LED should go off. Pin 3 will go back high after about 2 seconds.

Repeat step 4 three more times.
5. After the above steps are completed, the LED will flash several times, then go off. This indicates that the IR code has been learned.
6. Test that the IR code is learned by aiming the remote at the receiver and pressing the IR button that you just programmed into the PCS-1. Again, the remote should be at least 15" (38cm) from the receiver when doing this. The PC should power up. If you press the IR button again within a couple of seconds, the PC should power down.

Replace the PC covers/panels.

Troubleshooting

After installing and programming the PCS-1, the LED on the PCS-1 should blink shortly each time the remote button is pressed. This verifies that installation and programming are correct.

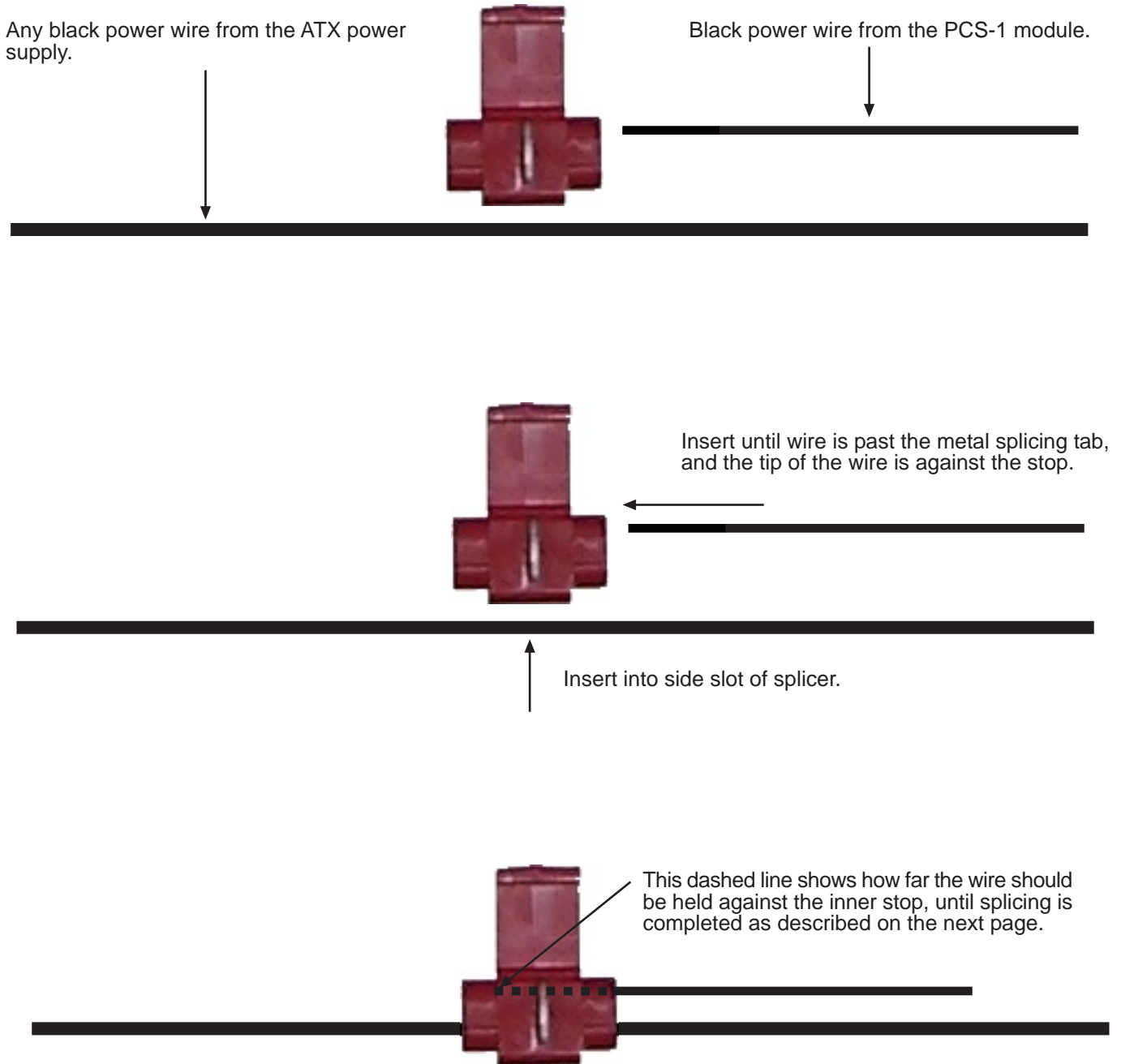
If the LED of your PCS-1 blinks each time you press the programmed IR remote button, but the PC does not power on/off, then it is most likely that your motherboard requires a "hi" pulse instead of the "low" pulse that the PCS-1 is set to by default -- as over 90% of motherboards use this setting.

To switch to "hi" pulse mode, simply press and hold the red button on the PCS-1 for several seconds until the LED blinks several times. (If you need to switch back to "low" pulse mode, press and hold the red button on the PCS-1 for several seconds until the LED goes back off.)

How to Properly Splice the Power Wires

Both power wires from the PCS-1 module are painted green on the ends to aid in splicing as show below.

The following example is for the black power wire. The procedure is the same for the purple power wire.



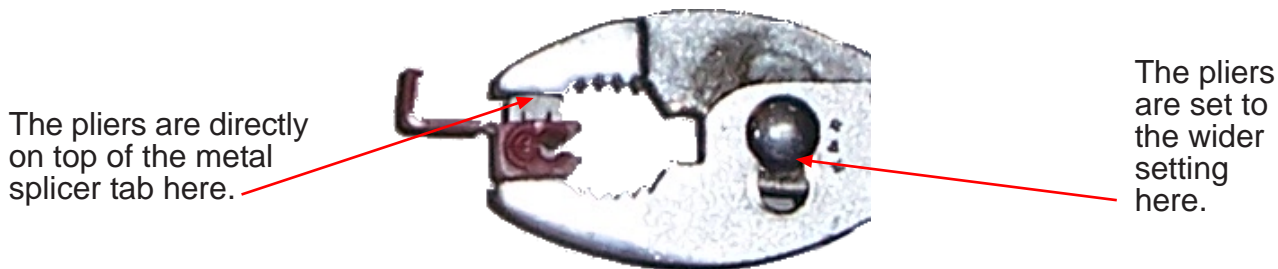
To complete the splice, it is now necessary to use pliers to press the metal tab into the two wires. It is important that the pliers are aligned with the metal tab before applying pressure. Below are the incorrect and correct alignments. (Note: For purposes of clearer illustration, that the wires are not shown in the splicer below.)

INCORRECT ALIGNMENT

This can result in the wire from the PCS-1 module not being properly captured.



CORRECT ALIGNMENT



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:



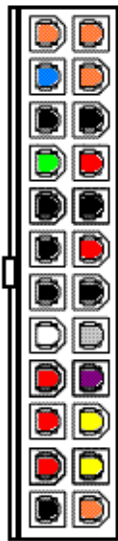
If you do not see a purple wire on your ATX power connector, then the below images are provided to indicate which wire is the standby power wire to be spliced to the purple PCS-2 wire. First determine if you have a 20-pin or 24-pin ATX power connector.



ATX 20-pin

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.



ATX 24-pin

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

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