Using WebRelay™ for Remote Reboot

WebRelay is very versatile and can be used for many purposes including remote reboot. Three different reboot configurations are described below.

**Option 1: Traditional Reboot**

With “traditional” reboot servers, the device to be re-booted plugs into a power outlet that can be switched on and off remotely. WebRelay does not have a built-in power outlet, but it can be wired to control an external outlet. This can be accomplished by wiring the line power in series with the relay contacts (only qualified electricians should perform this type of connection). If wiring is not convenient, another option is to connect WebRelay to a relay controlled outlet such as the “Mini Power Minder”.

The Mini Power Minder is a device that is designed to control computer peripherals using the USB port of a computer. When the computer is on, it provides 5 volts to the Mini Power Minder and the Mini Power Minder turns the outlet on. When the computer is off, the 5 volts from the computer is turned off so Mini Power Minder turns the outlet off.

Instead of connecting the USB cable to a PC, the cable can be modified and connected to WebRelay. In this case as users turn WebRelay on and off from remote locations, WebRelay turns the 5V control voltage on and off to the Mini Power Minder. This in turn turns the device to be controlled on and off.

Figure 1 (below) illustrates how WebRelay can be connected to Mini Power Minder for remote reboot.

_Note:_ Figure 1 illustration shows the ‘Normally Closed’ and ‘Common’ contacts used to switch the 12V control voltage. This means that when the relay is off, the control voltage is on and when the relay is on, the control voltage is off. This configuration is used assuming that the device to be controlled is on most of the time which means the relay is off most of the time saving power. This function can be reversed by connecting the control voltage to ‘Normally Open’ and ‘Common.’
**Figure 1:** Option to reboot and control devices using a relay controlled outlet.
Option 2: Reboot by Resetting the Motherboard

Many computers cannot be re-booted by using traditional reboot servers (or Option 1 described above). This is because it is common with many computers to require the user to press the power button after power is applied before the computer will begin to boot. The solution to this is to connect WebRelay directly to the reset terminals inside the computer instead of cycling the power. This option is shown in Figure 2.

Figure 2: Option to reboot a computer by resetting motherboard.
Option 3: Reboot Low-Voltage Device Servers

Device servers, such as camera and video servers, are usually powered using low-voltage wall transformers. These devices can be re-booted by connecting WebRelay to a Mini Power Minder as described in Option 1, or WebRelay can be wired in series with the power supply as shown in Figure 3. This option eliminates the need for a Mini Power Minder device.

Cut one wire in the power supply cable and connect to WebRelay contacts.

**Figure 3:** Option to reboot a low-voltage device server.