



GH Everywhere Application Note Ameritron RCS-10

Using a GHE device to control the RCS-10 offers the following advantages:

- Adds ability to share your RCS-10 among operating locations and eliminate clumsy control boxes.
- Adds ability to control your RCS-10 remotely over the internet.
- Uses GHE Client software to allow custom computer screen controls and/or automatic antenna selection. Control RCS-10 switch position with mouse, hot-keys, touchscreen or GHE-Knob.
- Can eliminate expensive control cable if GHE Remote is located at the relay. In many cases, the control cable savings alone would pay for the GH Everywhere device(s) required.
- Can eliminate the through-the-wall cable problems.
- If you use the GHE Wireless Remote, you will eliminate the possibility that lightning strikes will propagate up the control cable into the shack.

Here are some of the possible ways to connect to your RCS-10:

- Use a GH Base within USB reach of a shack computer. Wire as shown to the cable connected to the RCS-10. An external 12V supply must be utilized to power the ICE relays because the base is USB powered and does not have 12V available to supply the necessary relay voltage. Note that in this case we are actually not using any wireless signal.
- Use GH Remote at the RCS-10 in the shack. The power supply for the GHE Remote may also supply the power for the RCS-10 relays. The DC pin connection on the Remote to a station accessory power supply is the simplest way. You must have a GH Base unit to communicate with this Remote.
- Use a GH Remote at some outside location. This allows use of a filter far away from the operating position without having to run cables. Power options include an external supply, or the use of GHE Bias 'T' Remote for through the coax power. You must have a GH Base to communicate with the remote.

OPTIONAL:

You may elect to continue to use the Ameritron manual control box when not operating remotely. This is easy to do by simply paralleling the connections with the GHE device. Then, in order to avoid conflicts, you may provide +12V power to the manual control box using an additional output from the GHE Base or remote as shown in the connection drawing. The WIO Profile shown below includes this option into the on-screen control.



GREEN HERON ENGINEERING

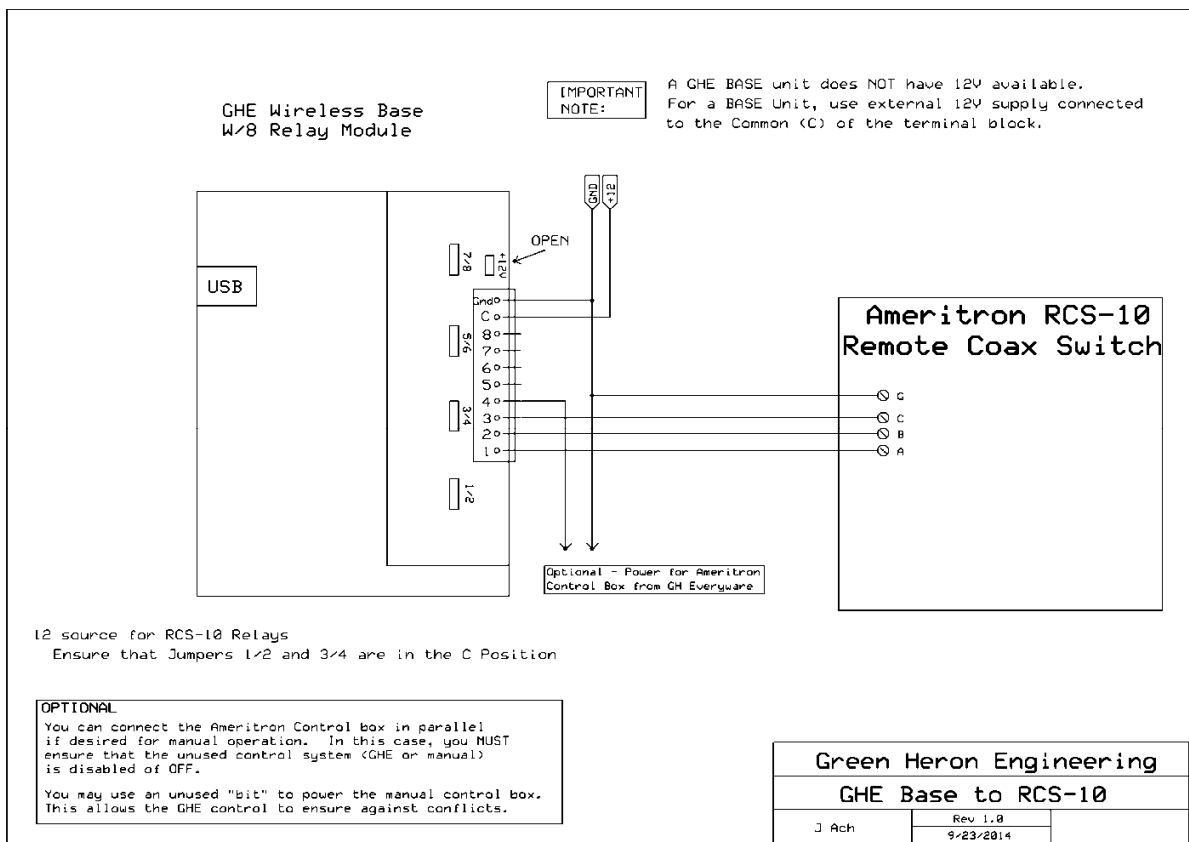
1107 Salt Road, Webster, NY 14580

(585) 217-9093

Create a WIO Profile using GHE Server Device Manger to create the on-screen display that you desire. Here's an example you can use that includes the use of bit 4 to control the power to the Ameritron manual control box.

NOTE: The RCS-10 uses BCD coding to select up to 8 antennas using only three wires, therefore, there is no OFF position with no relays selected. With no power, or no output selections, antenna 1 is selected. If you desire an OFF position, you must NOT use antenna "One" and call this position OFF in your WIO Profile.

Name	1	2	3	4	5	6	7	8
One	Off	Off	Off	Off	n/c	n/c	n/c	n/c
Two	On	Off	Off	Off	n/c	n/c	n/c	n/c
Three	Off	On	Off	Off	n/c	n/c	n/c	n/c
Four	On	On	Off	Off	n/c	n/c	n/c	n/c
Five	Off	Off	On	Off	n/c	n/c	n/c	n/c
Six	On	Off	On	Off	n/c	n/c	n/c	n/c
Seven	Off	On	On	Off	n/c	n/c	n/c	n/c
Eight	On	On	On	Off	n/c	n/c	n/c	n/c
Manual	Off	Off	Off	On	n/c	n/c	n/c	n/c





GREEN HERON ENGINEERING

1107 Salt Road, Webster, NY 14580

(585) 217-9093

