GH Everyware Application Note

DXE RR8 Antenna Relay

Using a GHE device to control the DXE antenna relay offers the following advantages:

- Adds ability to share the relay among operating locations and eliminate clumsy control boxes.

- Adds ability to control relay remotely over the internet.

- Uses GHE Client software to allow custom computer screen controls and/or automatic antenna selection. Allows advanced applications that require more than one relay to be selected at the same time as would be required for phased arrays.

- 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 Everyware 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 Antenna Relay:

- Use GH Remote out at the relay to eliminate control cable. Wire as shown connecting the C terminal of the GH Remote to GH Remote +12V. Obtain power via the available Bias T Remote, OR external 12V if you are not using the Bias T Remote. You must have a GH Base to communicate with the Remote.

- Use a GH Remote at the shack end (or wherever) of a cable run. This is an ideal "back room" or just outside the shack solution to eliminate the problem of running cables through walls. You must have a GH Base to communicate with the remote.

- Use a GH Base inside within USB reach of a shack computer. Wire as shown to the control cable, an external 12V supply must be utilized as the base is USB powered and does not have 12V available to run the Remote Relay. Note that in this case we are actually not using any wireless signal.
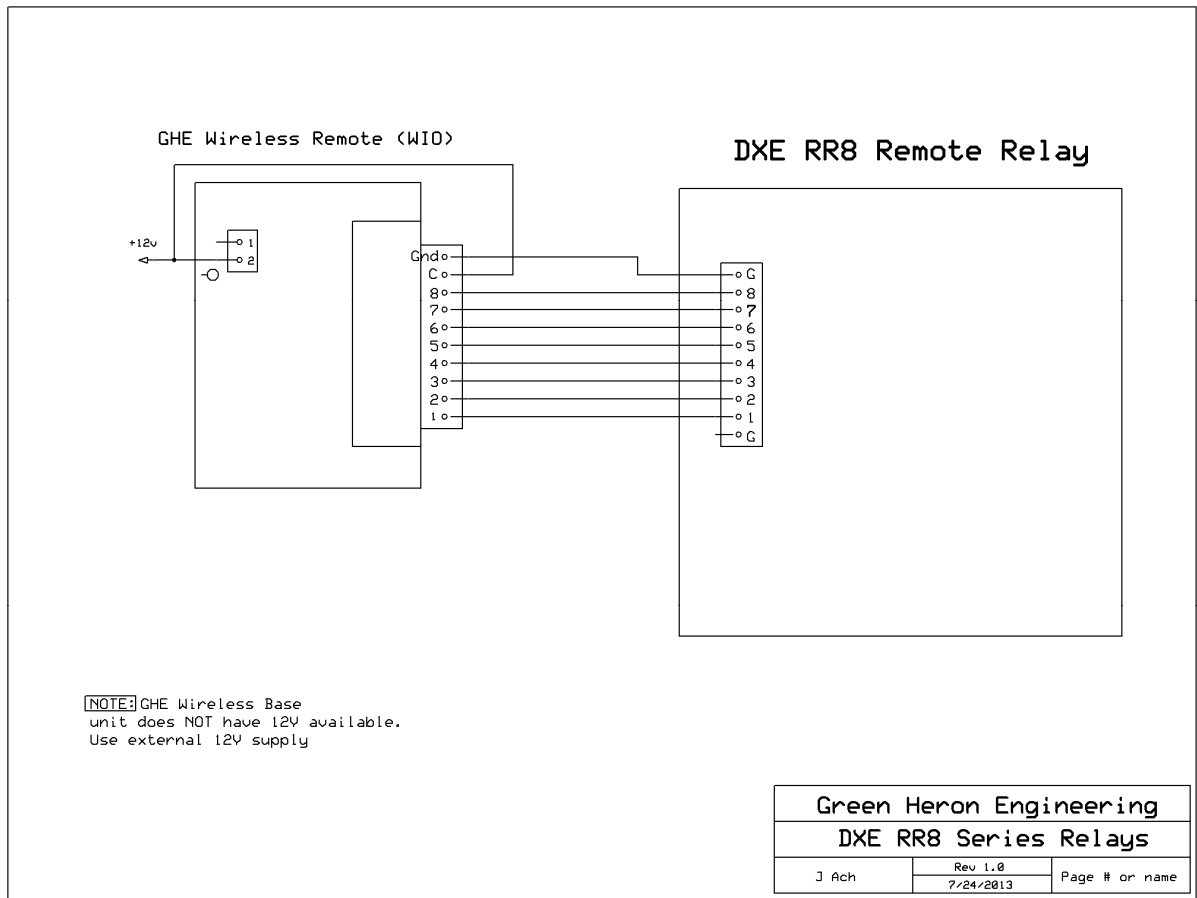
  NOTE: You may parallel the connections with the DXE EC-8 or similar control box if desired. You MUST remember to turn off the control box when using GH Everyware, and to disconnect GHE or use OFF position when using the control box

GHE Wireless Remote (WIO)

DXE RR8 Remote Relay

+12v

1
2

Gnd
C
8
7
6
5
4
3
2
1

G
8
7
6
5
4
3
2
1
G

NOTE: GHE Wireless Base
unit does NOT have 12V available.
Use external 12V supply

Green Heron Engineering		
DXE RR8 Series Relays		
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Create a WIO Profile using GHE Server Device Manger to create the on-screen display that you desire. Here's an example of a Button Display entry. Change the name of each position to match your requirements.

Name	1	2	3	4	5	6	7	8
Name 1	On	Off	Off	Off	Off	Off	Off	Off
Name 2	Off	On	Off	Off	Off	Off	Off	Off
Name 3	Off	Off	On	Off	Off	Off	Off	Off
Name 4	Off	Off	Off	On	Off	Off	Off	Off
Name 5	Off	Off	Off	Off	On	Off	Off	Off
Name 6	Off	Off	Off	Off	Off	On	Off	Off
Name 7	Off	Off	Off	Off	Off	Off	On	Off
Name 8	Off	Off	Off	Off	Off	Off	Off	On
OFF	Off	Off	Off	Off	Off	Off	Off	Off