

# Technote 43 - Relay Control

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Contact closure outputs can be changed using an HTTP transaction with the AcquiSuite A8812, Data Acquisition Server. The AcquiSuite will support the operation with either GET or POST so you can encode the command in a URL for ease of use in an AJAX enabled web page.

The cgi tool that processes this request is /setup/relaywidget.cgi on the AcquiSuite system.

The following are the form variables that are processed to change the output state.	The following are the form variables that are processed to report the current state.
OPTION=SETRELAY	OPTION=GETRELAY
ADDRESS=250 [Modbus address of device, 1-255 allowed]	ADDRESS=250 [Modbus address of device, 1-255 allowed]
POINT=40 [data point number]	POINT=40 [data point number]
STATE=ON [ON or OFF]	CACHE=YES [optional, set to YES or NO]

The output from the relaywidget.cgi tool will provide an xml-style report of the current status of the output terminals.

```
<relayoutput>
  <address>250</address>
  <point>40</point>
  <state>1</state>
</relayoutput>
```

Note that the same result is given for both the SETRELAY and GETRELAY options shown above. Point 40 corresponds to the data point in the A8812 onboard i/o Modbus interface page. Note that the points are numbered 0 to 41, and the relay points are the last two data point items.

The CGI tool is protected with HTTP Basic Authentication. You must provide a HTTP request with proper authentication encoded in the post data. Typically, your web browser will prompt and request this information from you, however if you are creating an automated tool, you will need to add the auth info. The relaywidget.cgi expects the "admin" login name and password and will reject all others.

## Example

The following url (all on one line) will request the output 1 be turned on the A8812. You can test this url in a standard browser such as MSIE or Firefox.

<http://192.168.40.50/setup/relaywidget.cgi?OPTION=SETRELAY&ADDRESS=250&POINT=40&STATE=ON>