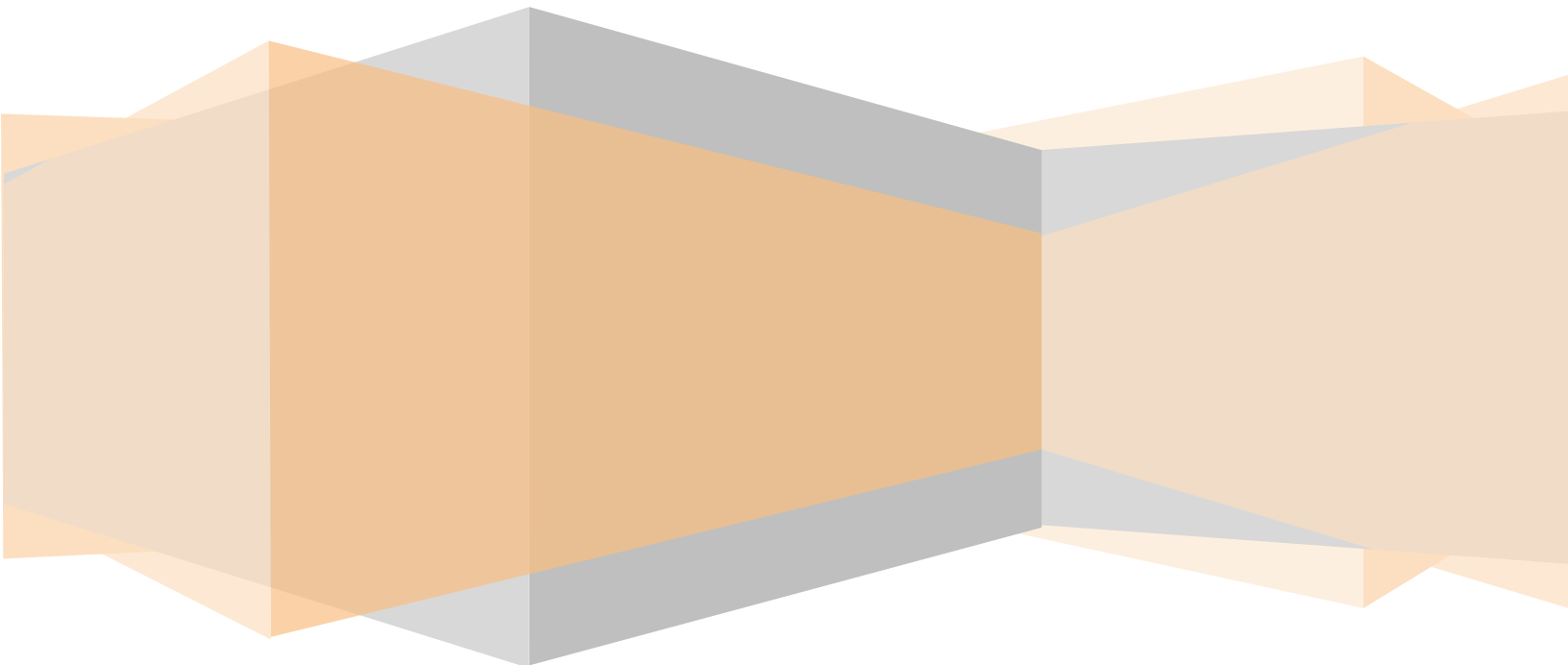




WebIO

Expansion Port Manual For WebIO v3 and v4

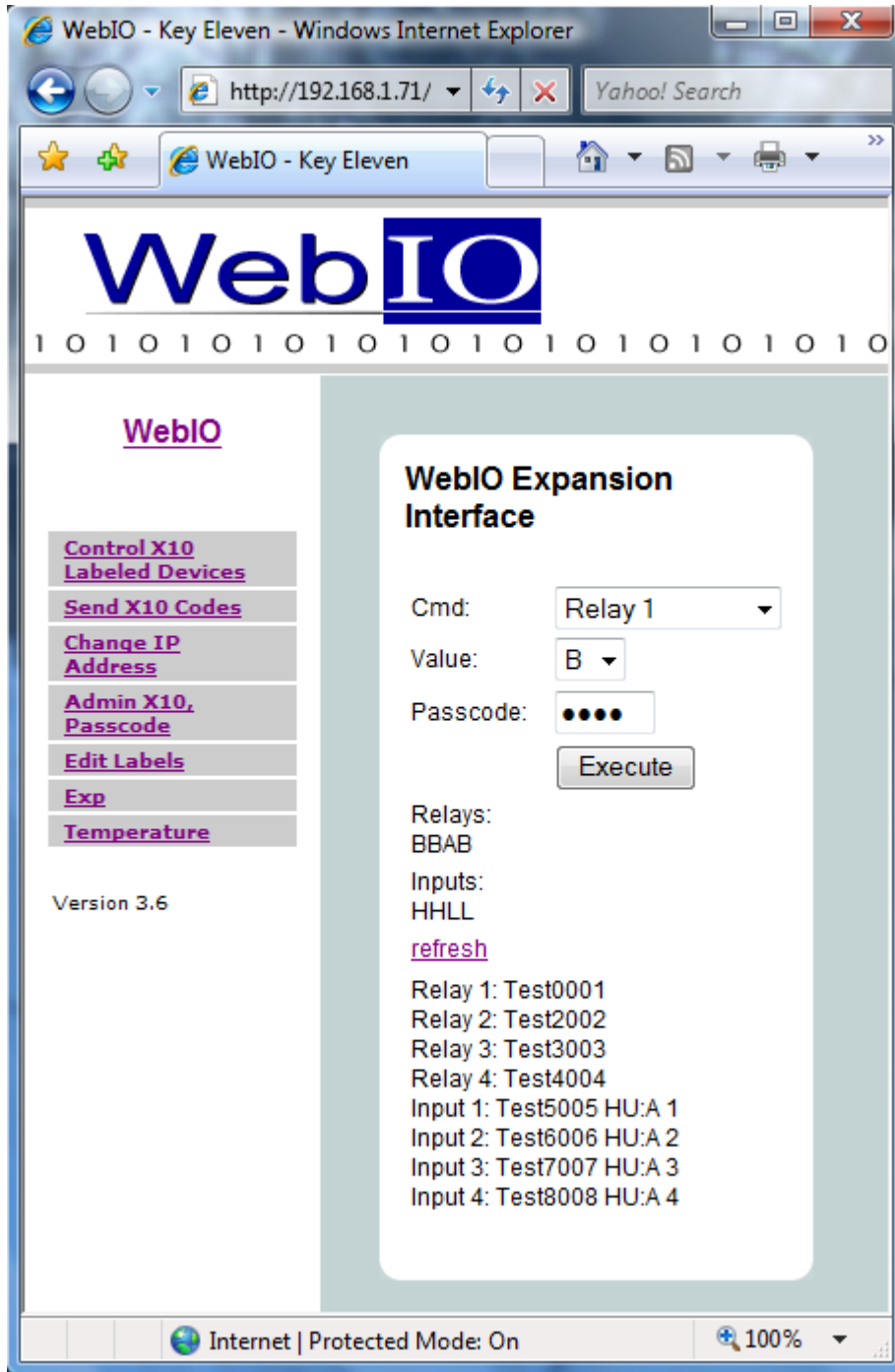
Draft 1.2, 02/04/2011



WebIO Expansion Port

The WebIO Expansion Port is a serial output provided as an RJ12 Modular connector.

WebIO provides an “Exp” web page that allows sending data out the Exp port. Both WebIO v3 (wireless temperature) and WebIO v4 (wireless sensors) provide an “Exp” web page that is geared toward using the Exp Port for controlling an external relay board that contains 4 SPDT relays and 4 optically isolated Inputs.



Above: WebIO v3 “Exp” web page.

WebIO Exp web page inputs:

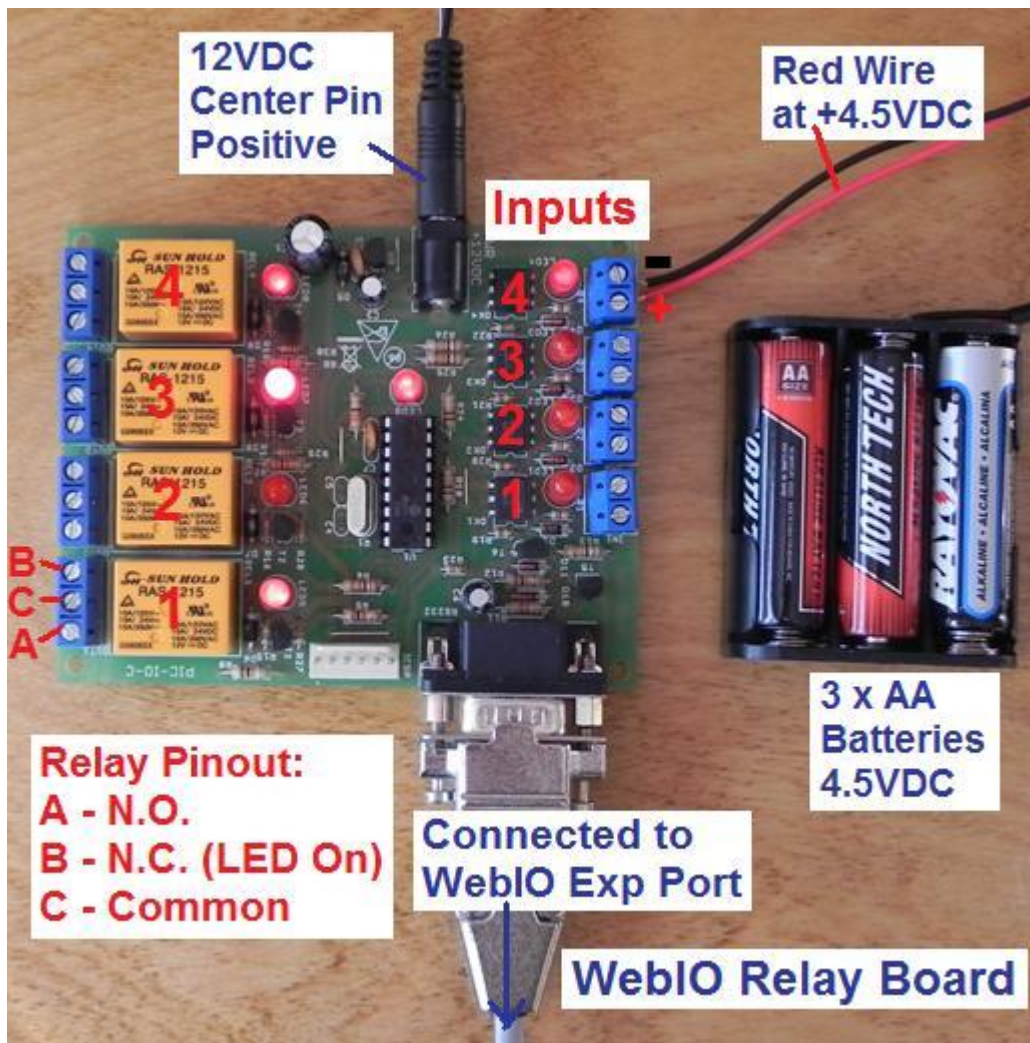
- **Cmd** – Select relay 1-4 or select to refresh screen page with current Input states
- **Value** – Select “A” to place selected relay into position “A” (Normally Closed, LED Off), or Select “B” to place selected relay into position “B” (Normally Open, LED On).
- **Passcode** – Enter WebIO passcode if a passcode is defined

WebIO Exp web page displayed values:

- **“Relays:”**- Displays the current state of each of 4 relays in order 1-4
- **“Inputs:”** – Displays the current state of each of 4 inputs in order 1-4, where L=Low and H=High State
- **“Relay 1-4:”** – Displays the user assigned label/name for the Relays. Relay labels are assigned using the WebIO-TM or WebIO-KeyOn software (feature not yet available).
- **“Input 1-4:”** – Displays the user assigned label/name for each Input 1-4. Input labels are assigned using the WebIO-TM or WebIO-KeyOn software (feature not yet available). Input label is followed by the inputs assigned automation, showing the X10 house code and unit code assigned to the input, such that the input going into a High State will send an X10 “On” command for the assigned House/Unit code and a the input going into a Low State will send an X10 “Off” state for the assigned House/Unit code. The assigned House/Unit code automation is assigned using the WebIO-TM or WebIO KeyOn software (feature not yet available).

Expansion Relay Board

The WebIO Expansion port Relay Board has 4 SPDT relays and 4 optically isolated Inputs.



Power

The relay board requires 10-14v DC power, center pin positive barrel connector. (note: same power supply as the WebIO power supply)

Data connector

The relay board data connector (DB9) connects to the WebIO EXP port RJ12/Modular connector.

The relay board should be provided with a cable for connection to WebIO. See Exp cable section below for cable pinout.

Relays

The 4 relays (labeled in picture above) are numbered 1-4. The pinout of the SPDT relay connector is connection "B" (Left/top, power connector side of board) is Normally Open and LED lights when this connection is closed. Common Ground is the middle connection and "A" connection (Right) is the Normally Closed connection.

Relays are controlled by the WebIO EXP web page.

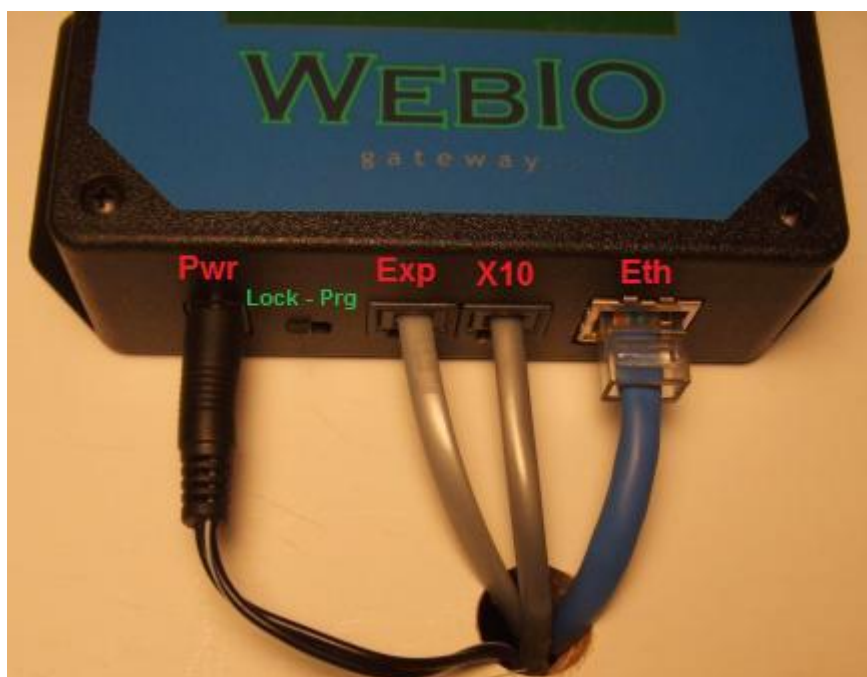
Relay states can be assigned an internal WebIO automation triggered by wireless sensor events.

Inputs:

The inputs require 4-9 Volts DC to operate as a High input state. The inputs are labeled 1-4 in the image above. Note the polarity of the input connector, such that the positive connection for each input is closest to the DB9 connector. When Input is provided with power (4VDC) it will go into a high state and notify WebIO of the state change. WebIO will then perform any X10 automation assigned to the Input and send a Network UDP message to the WebIO-TM or WebIO-KeyOn software for additional automation and/or notification.

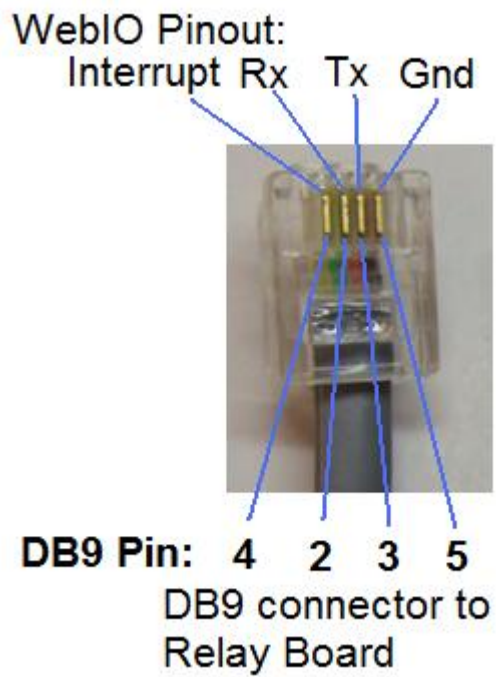
WebIO Connection Panel, EXP port

The image below shows the WebIO Expansion port RJ12/Modular connector. Use this connection to connect to the relay board.



WebIO EXP port to Relay Board Cable Pinout

The image below shows the WebIO cable pinout for connection to the Relay Board. The relay board includes a cable. This information maybe useful for making your own cable.



WebIO Information

For more information go to:

www.KeyEleven.com

www.webio.us

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