

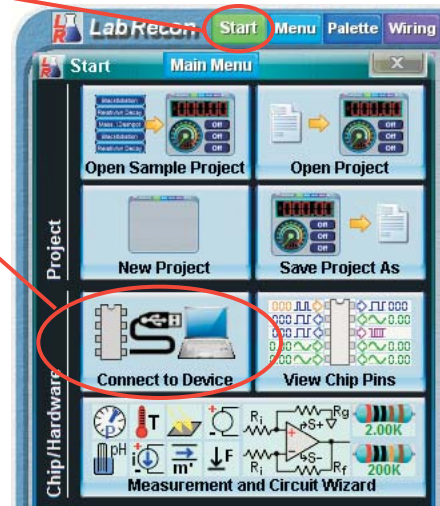
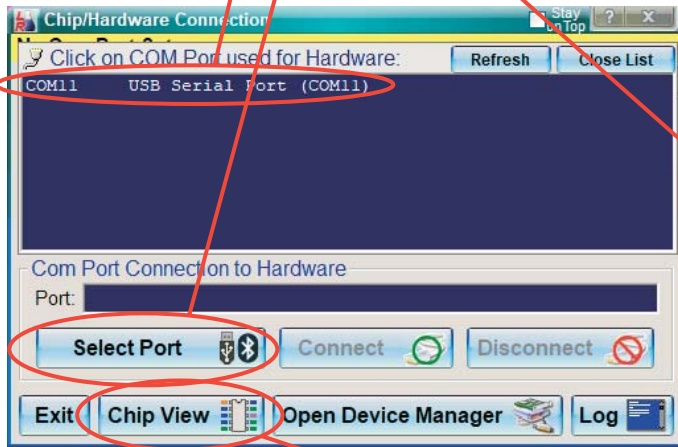
Getting started with LabRecon

This document begins with the connection of LabRecon hardware. If one wishes to start building a Panel without hardware, this section can be skipped.

Connecting to LabRecon hardware

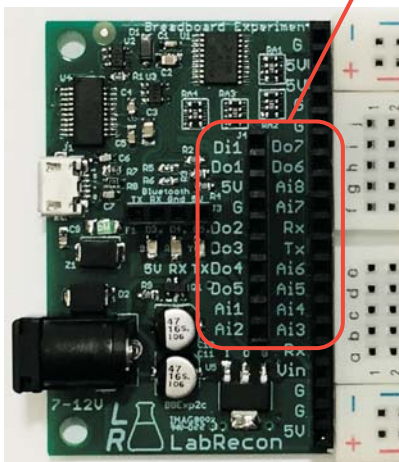
After the FTDI VCP drivers are installed and LabRecon hardware is connected follow these instructions.

- Click on **“Start”** on the main window
- Click on **“Connect to Device”**
- Click on **“Select Port”**
- Select proper port



After communications are established click on **“Chip View”** to view pin voltages.

Note that LabRecon chip pins have corresponding connections on LabRecon hardware.

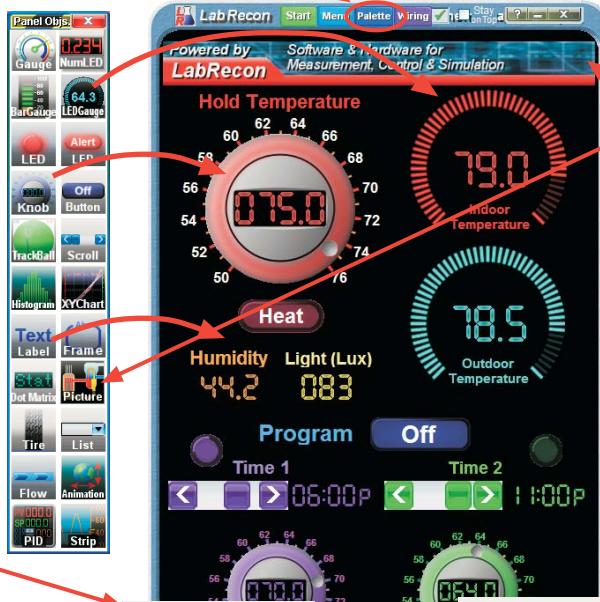


RPM	Di1	1	Di1	Do7	20	Do7	PWM
on/off	Do1	2	Do1	Do6	19	Do6	Servo
+5V	Vdd	3	5V	Ai8	18	Ai8	
GND	Gnd	4	Gnd	Ai7	17	Ai7	
on/off	Do2	5	Do2	Rx	16	Rx	
on/off	Do3	6	Do3	Tx	15	Tx	
PWM	Do4	7	Do4	Ai6	14	Ai6	
Servo	Do5	8	Do5	Ai5	13	Ai5	
	Ai1	9	Ai1	Ai4	12	Ai4	
	Ai2	10	Ai2	Ai3	11	Ai3	

Building a Panel

Click on "Palette" to open the Panel object palette

Drag and Drop objects onto the Panel

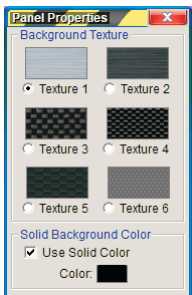


Drag one or more "Picture" objects, resize and Right-click to select "Properties" to import pictures.

By Right-clicking and selecting "Move to Back", objects can be placed over the picture.

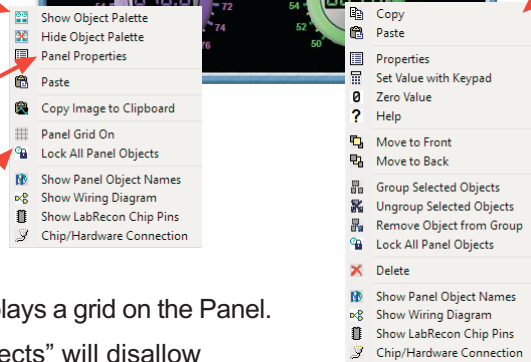
Right-clicking on the Panel background shows the following menu

"Panel Properties" allows the background texture and color to be changed.



"Panel Grid On" displays a grid on the Panel.

"Lock All Panel Objects" will disallow movement of objects.

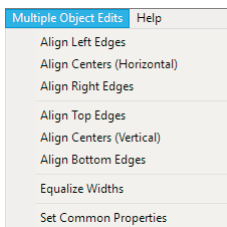


Right-clicking on a Panel Object shows the following menu.

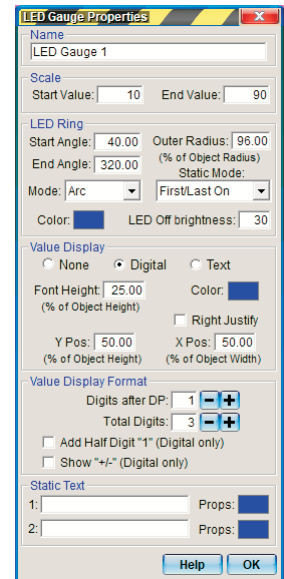
Like many drawing programs there are features such as **Copy/Paste**, **Move to Front**, **Move to Back** and the ability to **group objects**.

When clicking on objects for selection, **shift** can be held to **select multiple objects**.

Click on "Menu" at the Panel top and select "Multiple Object Edits" for the following editing options.



Right-click on any object and select "Properties" to adjust properties such as colors, range, etc.



Wiring objects



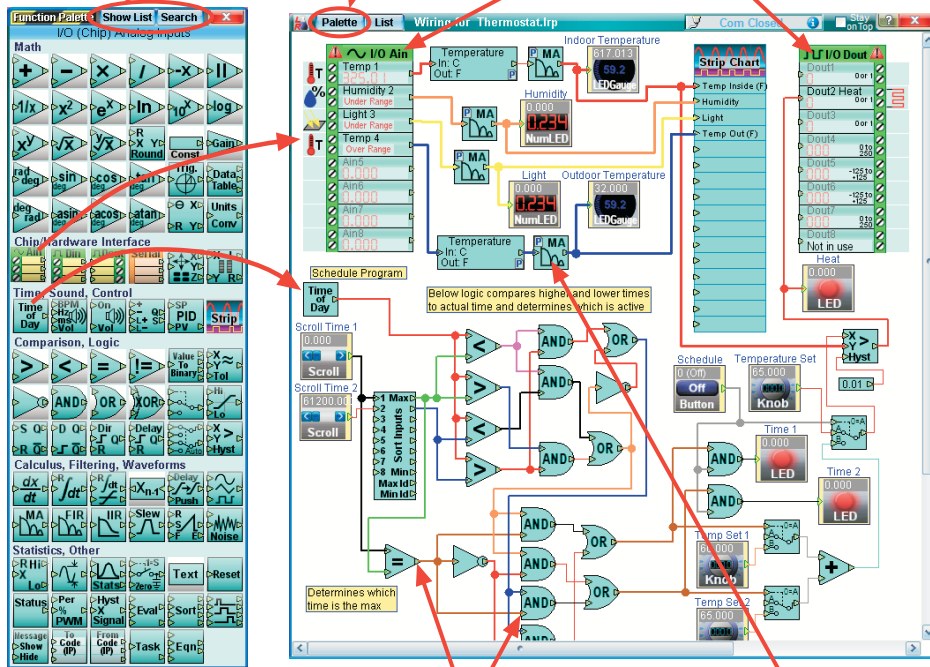
Click on "Wiring" at the top of the Panel.

Click on "Show List" or "Search" as alternatives to the symbol view

Click on "Palette" to open the Wiring object palette

Note the I/O Ain and I/O Dout objects, which are "interfaces" to LabRecon hardware

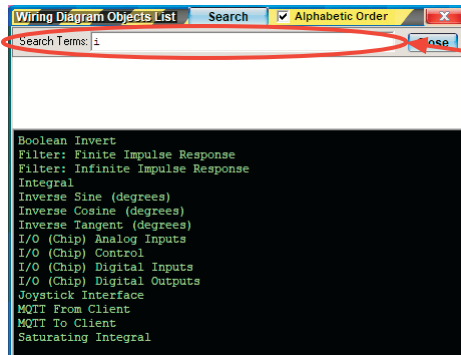
Drag and Drop objects onto the Wiring view



Left-click on Connection Points to run wires between objects.

Right-click on objects with "P" symbols and select "Properties" to adjust parameters

Clicking on the Palette's top "Search" button results in the below palette view



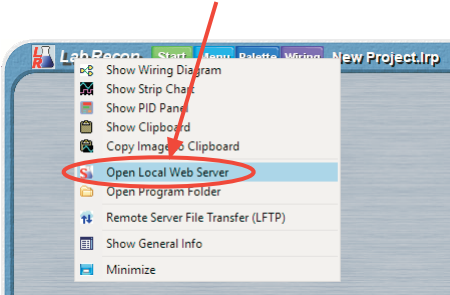
As search terms are typed matching results are shown.

The text name can be dragged onto the Wiring view.

Running the LabRecon server

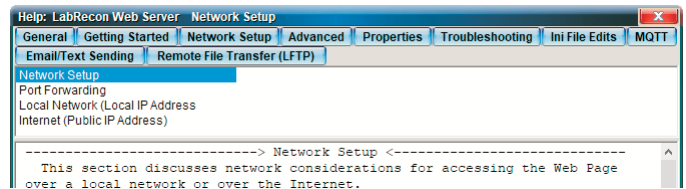
Right-click on the Panel's top title bar and select "Open Local Web Server"

If a firewall message pops up, the server must be allowed Internet access.

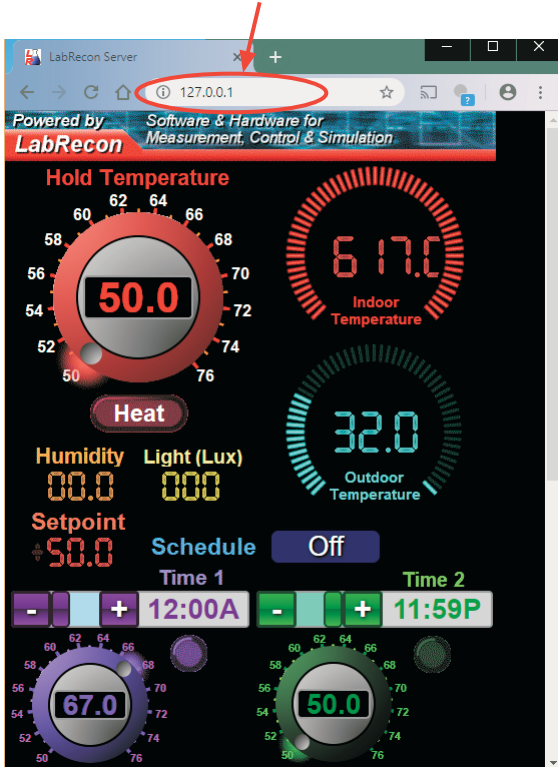


LabRecon Web Server

Click on "Help" to access various help topics.



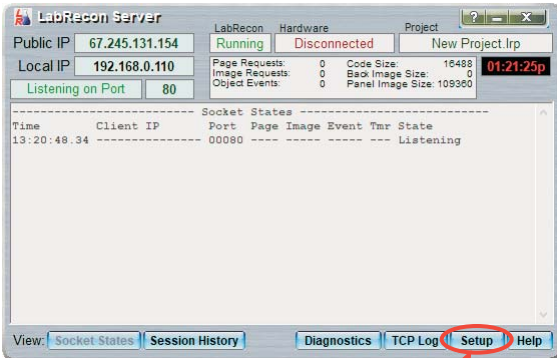
Open a browser and type 127.0.0.1 into the address bar to display the generated web page



As the Panel is edited the browser view should follow. If it does not, refresh the page after edits.

To access the web page over the Internet, one must configure their router for "Port Forwarding". This is commonly done for gaming and there is much general information on the Internet including that for particular router models. "Network Setup" in the LabRecon Server help provides further information.

One can also configure their router for "DHCP Reservation" to insure the computer running LabRecon always has the same local IP address.

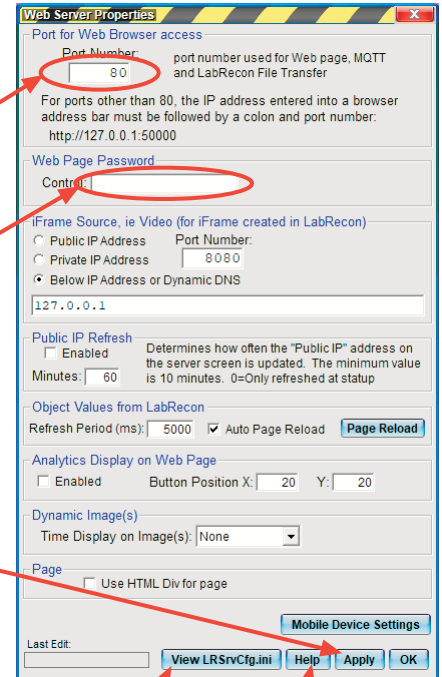


Click on **"Setup"** to access Web Server properties

A listening port number other than 80 can be set.

Setting a password will allow control objects, such as buttons, scrolls, knobs, etc. to be set only after the password is entered. Note that the web page will still be viewable without entering a password.

Click **"Apply"** for settings to take affect.



Click **"Help"** for further information on properties.

Click **"View LRSvcCfg.ini"** to access advanced properties.

Additional Documents at www.LabRecon.com/Documents

LabRecon - Getting Started with LabRecon.pdf
LabRecon - Getting Started with the Measurement Wizard.pdf
LabRecon - Getting Started with Simulations.pdf
LabRecon - Getting Started with Robotics.pdf
LabRecon - Chip Datasheet (rev 2.0).pdf
LabRecon - MiniDAQ Datasheet (rev1.0).pdf
LabRecon - Chip Quick Start Sheet.pdf
LabRecon - Breadboard Experimenter (rev0).pdf
LabRecon - Photovoltaics.pdf
LabRecon - Reflow Oven PID Control.pdf
LabRecon - Measurement Configuration.pdf

Instructional Videos

www.LabRecon.com/videos

Revisions to this Document

Rev 0 Initial release

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