PW-LAN Direct Connect

www.poolwardentraining.com PoolWarden, MiniWarden & SmarterPool Data Service





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A New Era In Pool & Spa Chemical Automation!

PoolWarden Direct Connect

Making a direct connection to the SmarterPool, MiniWarden or PoolWarden (controller) requires an IP address that will get to the controller. There are two network types of connections:

Local: If trying to connect on the local network use the local IP address of the controller.

Remote: If trying to connect from the other side of the networks firewall that the controller is on, a remote IP address will be required and the router at the location will need to route that remote request to the local IP address that the controller is on.

DHCP Setup: When the controller is turned on the router will assign it an IP address. If not using the direct connect feature it doesn't really matter what the local IP address is. If using direct connect it is important the IP address is always the same. If it changes you would need the new IP address to be able to make the connection. In the controller's LAN menu DHCP can be disabled and a static IP address assigned which will ensure that the controller always has the same IP address. If unsure of what a good IP address is leave DHCP enabled and in the LAN menu the Information selection will show the local IP address that the router assigned, then disable DHCP and use that IP address as the static IP. The MAC ID is also displayed in the Information screen that can be used by the router.



Router Configuration

| TP-LINK [®] | | | | | | | | | |
|----------------------|------|----------------|------------------------|--------------|----------|---------|--|--|--|
| | | | | | | | | | |
| Status | | | | | | | | | |
| Quick Setup | V | /irtual Server | S | | | | | | |
| WPS | | | | | | | | | |
| Network | | | | | | | | | |
| Wireless | D ID | Service Port | Internal Port | IP Address | Protocol | Status | | | |
| Guest Network | 1 | 1451 | 80 | 192.168.0.51 | TCP | Enabled | | | |
| DHCP | 2 | 1452 | 80 | 192.168.0.52 | TCP | Enabled | | | |
| Forwarding | 3 | 1453 | 80 | 192.168.0.53 | TCP | Enabled | | | |
| - Virtual Servers | 4 | 1454 | 80 | 192.168.0.54 | TCP | Enabled | | | |
| - Port Triggering | | | | | | | | | |
| - DMZ | | dd New | Enable All Disable All | Delete All | | | | | |
| - UPnP | | | | Ducte All | | | | | |
| Security | - | | | | | | | | |
| Parental Control | | | | Previous | Next | | | | |

There are many routers and ways to accomplish the configuration. The above shows a TP-LINK TL-WR841N that was purchased on Amazon for less than \$20. 4 Controllers are all connected and the routers Forwarding / Virtual Server feature is used to handle the routing. When an incoming connection on port 1451 comes in xxx.xxx.xxx.1451, the router will send that to the local IP address 192.168.0.51. The controller always uses port 80.

Virtual servers can be used for setting up public services on your LAN. A virtual server is defined as a service port, and all requests from Internet to this service port will be redirected to the computer (controller)

specified by the server IP. Any PC (controller) that is used for a virtual server must have a static or reserved IP address because its IP address may change when using the DHCP function.

Service Port - The External Service Port.

Internal Port - The Internal Service Port of the controller (always 80)

IP Address - The local IP address of the controller

Protocol - The protocol used by the controller (TCP)

Status - The status of this entry, "Enabled" means the virtual server entry is enabled

Virtual Display

When making a connection to a controller a representation of the controller will be rendered in the web browser that is similar to the controller. The buttons may not be in the same place and the alphanumeric characters are not shown. The page will also scale automatically to fit the browser enabling a nice experience on smart phones and tablets.

The page will show a box that matches the 80 character display on the controller. When the connection is made, the letter "R" will display in the lower right corner on the display indicating Remote Connection and the buttons will be locked out on the controller.

The keypad will also display and the buttons are links that can be clicked. If security isn't enabled in the controller, pressing "Back" will not access the main menu.

Refresh Link: The page doesn't automatically refresh, pressing Refresh will re-display the page.

Terminate Link: Press Terminate when finished. This will reset the passwords if entered and remove the "R" from the lower right corner.

Config Link: Press Config to see the internal settings in the controller. Not all settings are displayed.

Data Link: The controller has the ability to record up to 8200 lines of measurements and the data time spacing is setup in the Data menu. Pressing the Data link will bring up a summary page with the lines of data per day that can be selected for viewing.

MiniWarden Virtual Display

SN: 790138 09:10:55 AM Thursday 03/31/16



Refresh | Terminate | Config | Data

Relay Status

| Relay | Sts | On Today | Cnt | This Month | Last Month |
|-------|-----|-------------|-----|---------------|---------------|
| pН | OFF | 00:00:00 | 0 | 001:11 | 000:00 |
| ORP | ON | 01:05:45 | 66 | 006:50 | 000:00 |

