

SERIAL PORT TOOL

Relay Timer Quick Start Guide

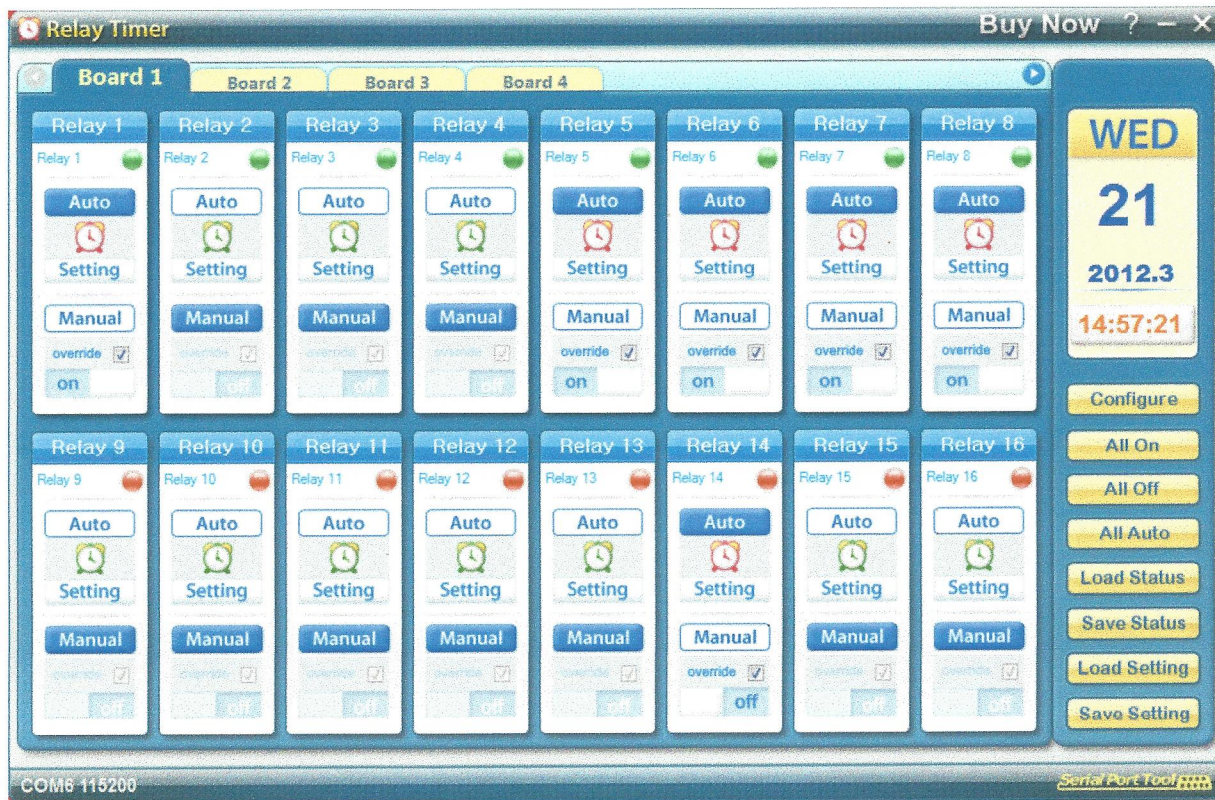


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Introduction

Real-Time Status & Control

Relay Timer is programmable timer software to control ProXR and ProXR Lite relay boards. It supports 1 ProXR relay board and up to 15 expansion boards with 16-channel on each. It's fit for controlling lights, motors, pumps, bells, audio, video and other applications related with home automation, science experiment, industry control, energy conservation and so on.


All The Features You Need...

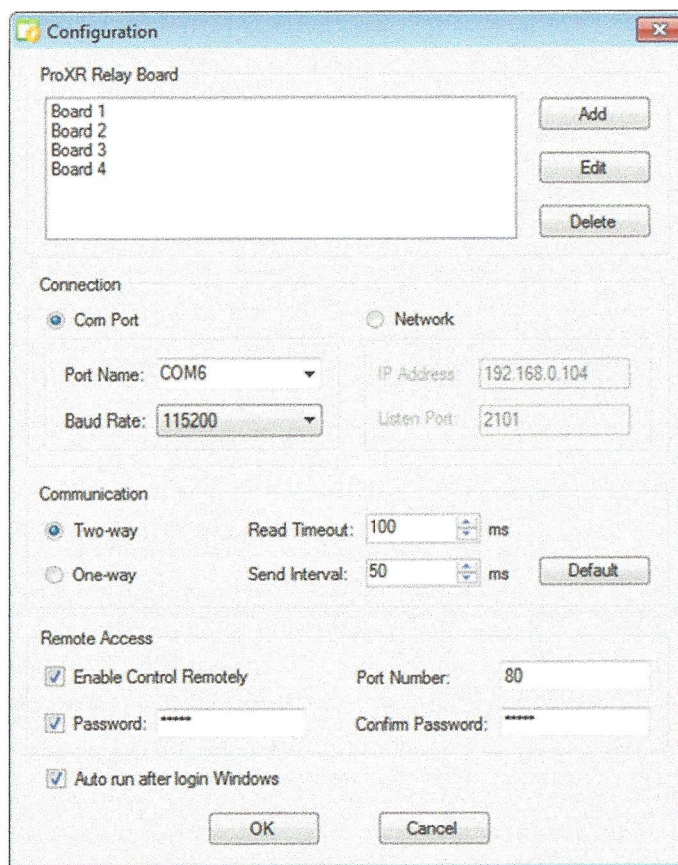
- Control Relay with Time Schedule
 - Easily Set Time Schedule
 - Multiple Schedule Setting
 - Settings for Reoccurring Times
 - Save Schedule for later loading
- Manually Take Control of Relays
 - Rapid Button to Control Relay Directly
 - Override Schedule at any Time
 - Turn Relay On/Off Manually
 - Automatically Switch Back to Auto Mode

Getting Started

How to Configure

In order to control your device with Relay Timer, be sure to connect your ProXR Relay Board with a computer. When connecting your device, connect with the relay board at first, and then set the configuration as below.

Click  button to open the **Configuration** dialog shown below.



The Configuration dialog box for the ProXR Relay Board contains the following sections and controls:

- ProXR Relay Board:** A list box containing "Board 1", "Board 2", "Board 3", and "Board 4". To the right are "Add", "Edit", and "Delete" buttons.
- Connection:** Two radio buttons: "Com Port" (selected) and "Network".
 - Com Port:** "Port Name" dropdown set to "COM6", "Baud Rate" dropdown set to "115200".
 - Network:** "IP Address" text box set to "192.168.0.104", "Listen Port" text box set to "2101".
- Communication:** Two radio buttons: "Two-way" (selected) and "One-way".
 - "Read Timeout" spinner box set to "100" ms.
 - "Send Interval" spinner box set to "50" ms.
 - A "Default" button.
- Remote Access:** Three checkboxes: "Enable Control Remotely" (checked), "Password: *****" (checked), and "Auto run after login Windows" (checked).
 - "Port Number" text box set to "80".
 - "Confirm Password: *****" text box.
- At the bottom are "OK" and "Cancel" buttons.

Configuring Dialog

Configuration

ProXR Relay Board

Board 1
Board 2
Board 3
Board 4

Add
Edit
Delete

Connection

☒ Com Port ☐ Network

Port Name: COM6 IP Address: 192.168.0.104
Baud Rate: 115200 Listen Port: 2101

Communication

☒ Two-way ☐ One-way

Read Timeout: 100 ms
Send Interval: 50 ms Default

Remote Access

☒ Enable Control Remotely Port Number: 80
☒ Password: ***** Confirm Password: *****
☒ Auto run after login Windows

OK Cancel

ProXR Relay Board: This panel is to manage your different ProXR Relay Extension Boards.

Connection: This panel is to choose if you want a Com Port connection or a Network connection.

Communication: This panel is to set your choice of communication, One-way or Two-way. The default communication is Two-way.

Remote Access: On this panel, to activate Remote Access, select the "Enable Control Remotely" checkbox. To control the Relay Timer from another computer, access the Host computer through its IP address.

Select the "Auto run after login Windows" checkbox and the Relay Timer will run automatically after logging into Windows.

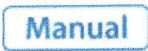
Click **OK** to finish changes to Configuration.


How to Turn On/Off Relay Board Manually

The light on the top right hand corner of the Relay Control Panel indicates the current status of the relay.


- Green means the Relay Board is ON.
- Red means the Relay Board is OFF.

Click the **Manual** button to go into Manual Operation Mode.

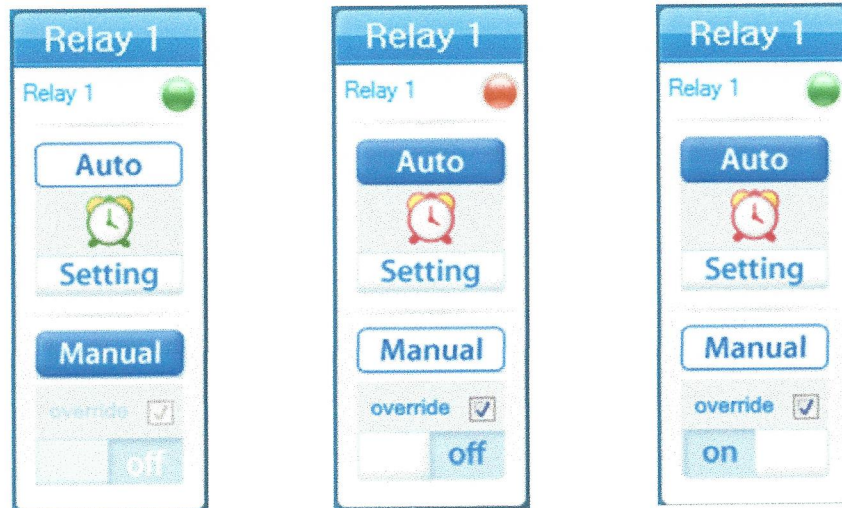
(After clicking the Manual button, it should look like this: )

You can turn the Relay Board on by moving the slider .


- The light should turn green to indicate the Relay Board is ON.


You can turn the Relay Board off by moving the slider .

- The light should turn red to indicate the Relay Board is OFF.




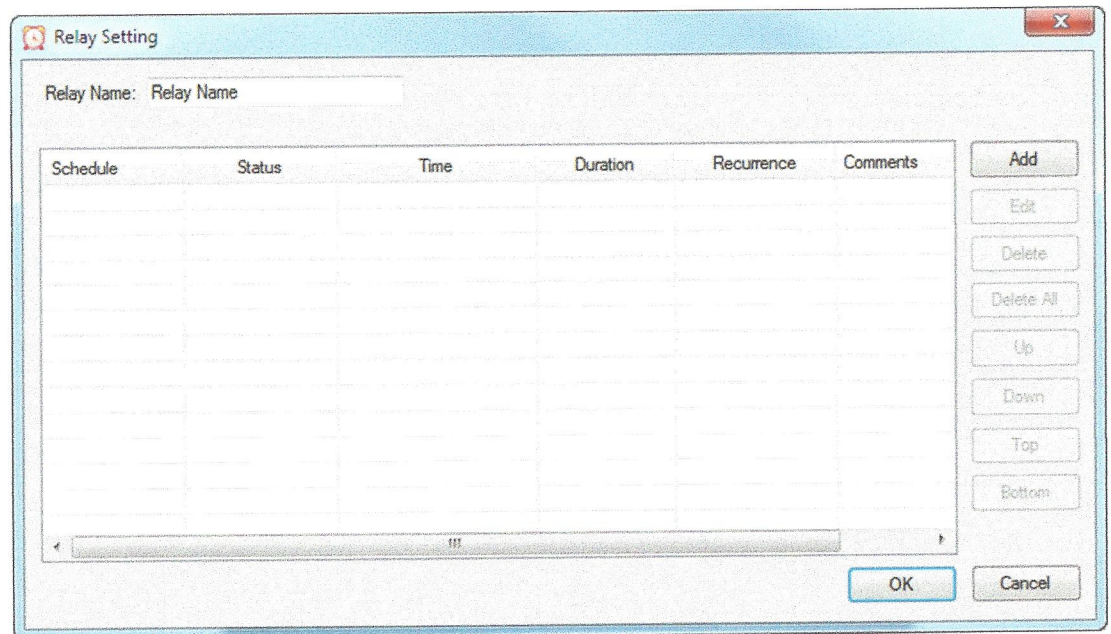
How to Turn On/Off Relay Automatically

Click the  button down to step into auto mode.

(After clicking the Auto button, it should appear as: )

The default mode is auto mode. To schedule Relays to turn off and on automatically you have to go to Relay Settings.

Click the  button on the relay control panel to open up the **Relay Setting** dialog.



The relay can be given a name here underneath **Relay Name**.

Click **Add** button to open up the **Schedule Setting** dialog.

Schedule Setting

Schedule Name
Schedule 1

Relay Status
☐ Turn On
☐ Turn Off
☒ Customize Action

Schedule Time
 Start: 15:04:20
 End: 16:04:20 Same Day
 Duration: 01:00:00

Recurrence Pattern
☒ Daily
☐ Weekly
☐ Monthly
☐ Yearly
☒ Every 1 day(s)
☐ Every working day

Recurrence Range
 Start: 3/ 2/2012
☒ No End Date
☐ End by: 3/ 3/2012

OK Cancel

- Edit the **Schedule Name**
- Select a **Relay Status**
- Set a **Schedule Time**
- Select a **Recurrence Pattern** and **Range**.

Click **OK** to return **Relay Setting** dialog.

Different schedules can be added by repeating this step.

Relay Setting

Relay Name: Relay Name

Schedule	Status	Time	Duration	Recurrence	Comments
Schedule 1	On	08:30:00 ~ 09:30:00	01:00:00	Daily	Every 1 day No end date
Schedule 2	On	12:30:00 ~ 13:30:00	01:00:00	Weekly	Recur every 1 week on W...
Schedule 3	On	18:30:00 ~ 19:30:00	01:00:00	Monthly	The first Thursday of ever...
Schedule 4	Customize	15:00:00 ~ 15:30:00	00:30:00	Daily	Every 1 day No end date

Buttons: Add, Edit, Delete, Delete All, Up, Down, Top, Bottom, OK, Cancel

Click **OK** to finish relay setting.

The relay will be turned on/off automatically according to the schedule list.

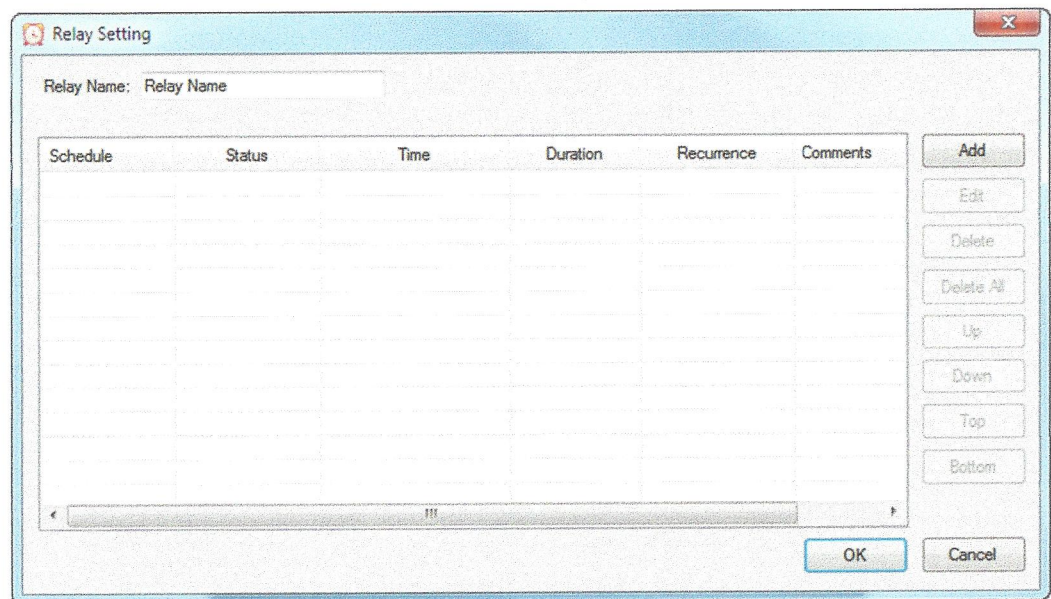
How to Customize Relay Functions

The on/off function of the Relay Board can be customized.

For example, a relay can be on 10 minutes, then off 5 minutes within the same hour, and on 20 minutes and then off 10 minutes during a different hour.

This can be set using the steps below.


Step1. Click the **Setting** button on the relay control panel to open the **Relay Setting** dialog.



Step 2. Click the **Add** button to open the **Schedule Setting** dialog.

Schedule Setting

Schedule Name
Schedule 2

Relay Status
☒ Turn On
☐ Turn Off
☐ Customize Action 

Schedule Time
 Start: 09:00:00
 End: 11:00:00 Same Day
 Duration: 02:00:00

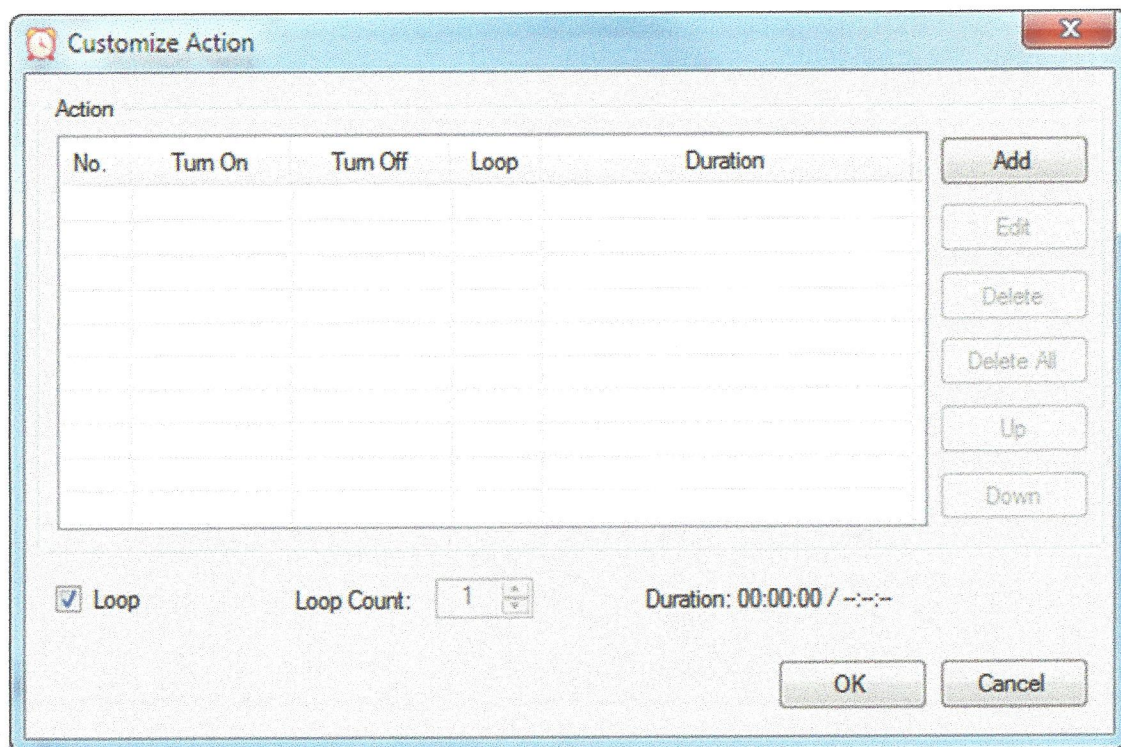
Recurrence Pattern
☒ Daily
☐ Weekly
☐ Monthly
☐ Yearly
☒ Every 1 day(s)
☐ Every working day

Recurrence Range
 Start: 3/ 5/2012
☒ No End Date
☐ End by: 3/ 6/2012

OK Cancel

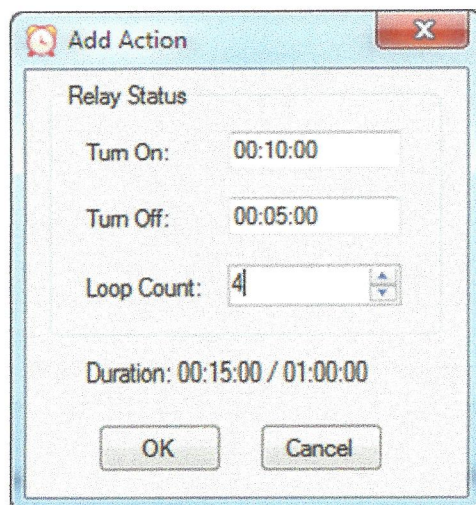
- Edit the **Schedule Name**
- Set a **Schedule Time** (2 hours)
- Select a **Recurrence Pattern** and **Recurrence Range**

Step 3. Click the **Customize Action** button or the  button beside it to open up the **Customize Action** dialog.

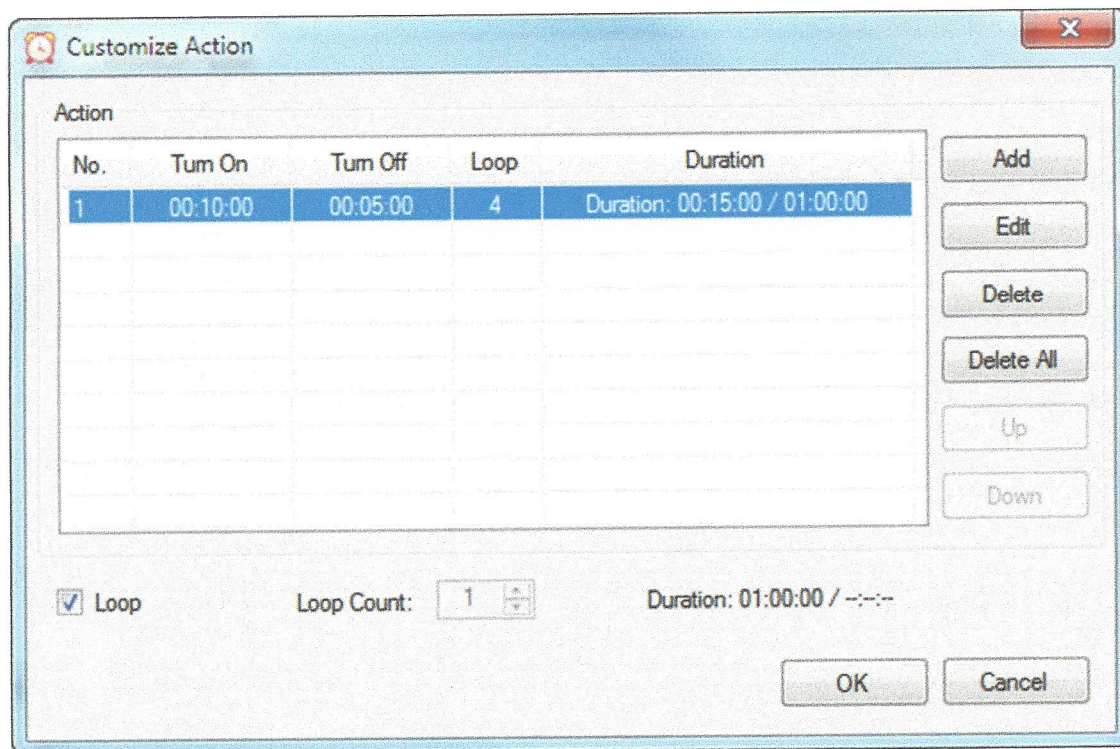


Step 4. Click the **Add** button to open the **Add Action** dialog.

Set **Turn On** 10 minutes, **Turn Off** 5 minutes and **Loop Count** 4.

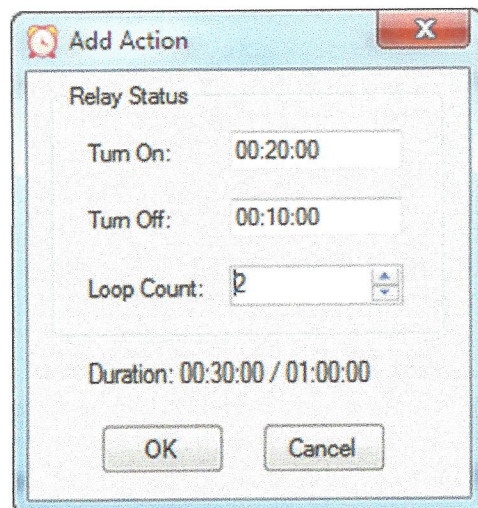


Click **OK** to return to the **Customize Action** dialog. The action you added will be shown in the list of actions.

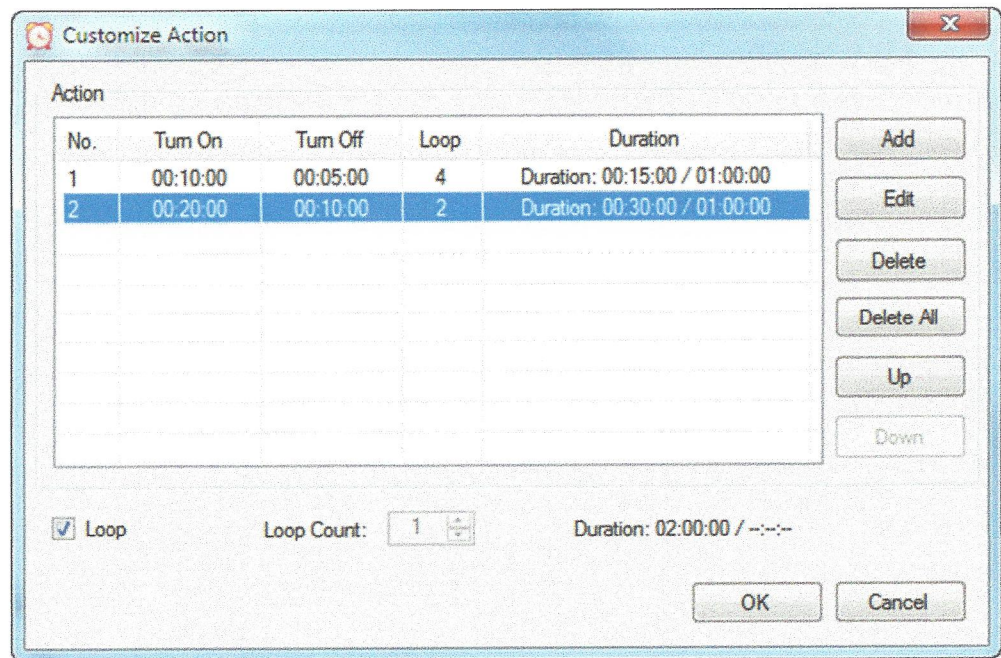


Step 5. Click Add button to open the **Action Rule** dialog again.

Set **Turn On** 20 minutes, **Turn Off** 10 minutes and **Loop Count** 2.

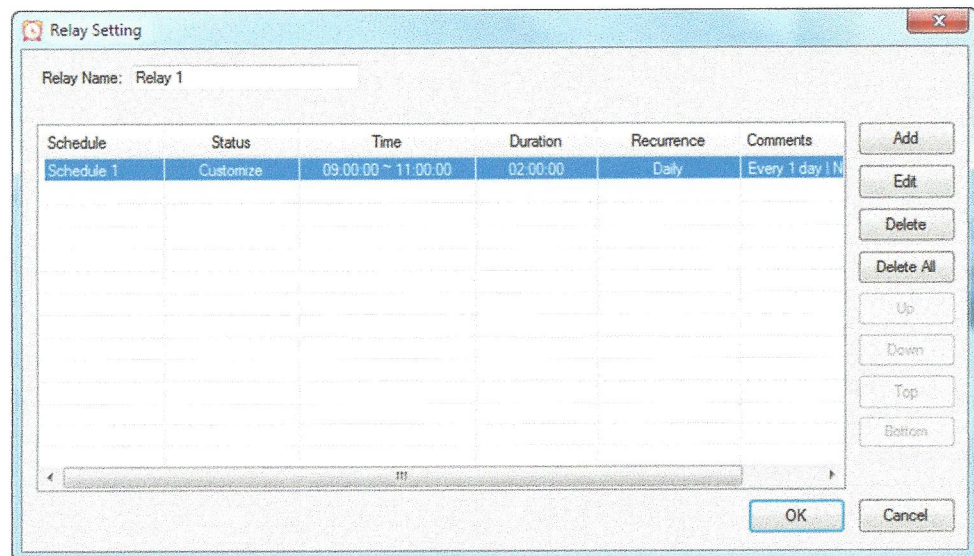


Click **OK** to return to the **Customize Action** dialog. The action you just added will also be shown in the list.



Click the **OK** button to return to the **Schedule Setting** dialog.

Click the **OK** button again to return **Relay Setting** dialog.



Click **OK** to finish the changes to the Relay's settings.

The relay will be turned on/off automatically according to the customized setting.

How to Control Relay Remotely

The Relay Timer can be controlled remotely from other computers.

Click the **Configure** button to show the [Configuration](#) dialog.

The screenshot shows the 'Configuration' dialog box for the 'ProXR Relay Board'. It has several sections: 'ProXR Relay Board' with a list of boards (Board 1 to Board 4) and 'Add', 'Edit', 'Delete' buttons; 'Connection' with 'Com Port' (selected) and 'Network' options, including fields for 'Port Name' (COM6), 'Baud Rate' (115200), 'IP Address' (192.168.0.104), and 'Listen Port' (2101); 'Communication' with 'Two-way' (selected) and 'One-way' options, including 'Read Timeout' (100 ms) and 'Send Interval' (50 ms) fields, and a 'Default' button; and 'Remote Access' which is highlighted with a red box. The 'Remote Access' section contains 'Enable Control Remotely' (checked), 'Password' (masked with asterisks), 'Port Number' (80), 'Confirm Password' (masked with asterisks), and 'Auto run after login Windows' (checked). 'OK' and 'Cancel' buttons are at the bottom.

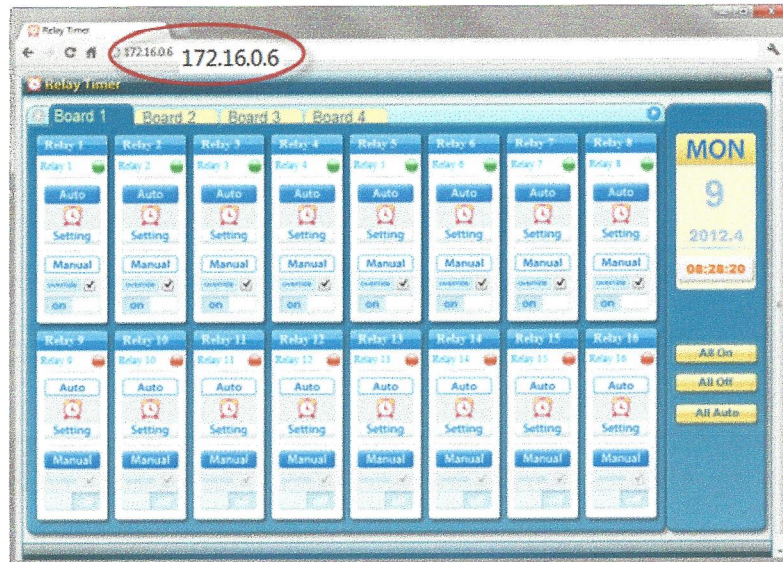
Select the **Enable Control Remotely** checkbox. You can set the Port Number or keep the default value of 80.

Select **Password** to set a password for Remote Access.

Click **OK** to finish your changes.

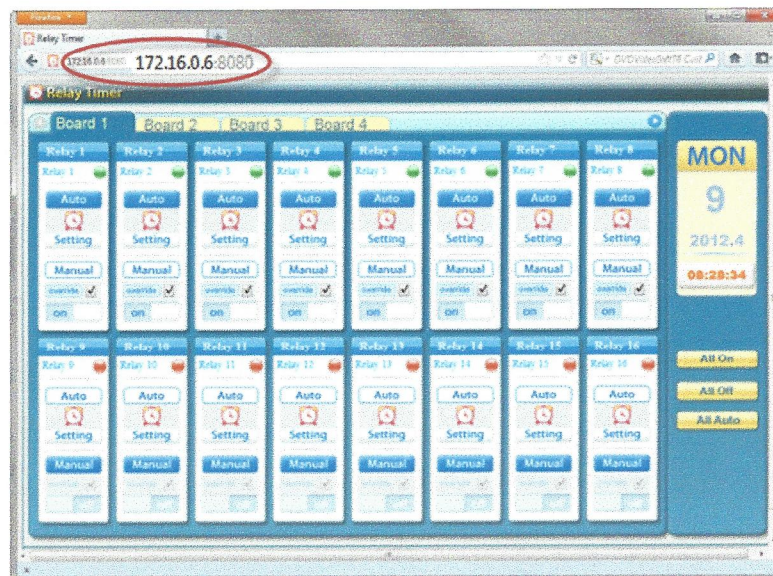
SERIAL PORT TOOL

The Relay Timer can be controlled on another computer by typing the main computer's IP address in the internet browser.



If the Port Number is 80, you just need to type the IP address in the browser, as shown above.

If the Port Number is modified, you need add the number after the IP address, shown as below.



Rapid Buttons

Configure	Click to load a *.cfg file to see the settings of all relays.
All On	Click to turn all of the relays on.
All Off	Click to turn all of the relays off.
All Auto	Click to set all relays into auto mode.
Load Status	Click to load a *.sts file to set status of all relays.
Save Status	Click to save the current status all relays to a file (*.sts)
Load Setting	Click to load a *.sch file to show settings for all relays.
Save Setting	Click to save the settings of all relays to a file (*.sch)