



Instruction Manual

**LAN Hub Controller**

Model R190A

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## **Warranty**

Monroe Electronics, Inc. warrants to the owners, each instrument and sub-assembly manufactured by them to be free from defects in material and workmanship for a period of two years after shipment from factory. This warranty is applicable to the original purchaser only.

Liability under this warranty is limited to service, adjustment or replacement of defective parts (other than fuses and batteries) on any instrument or sub-assembly returned to the factory for this purpose, transportation charges prepaid.

This warranty does not apply to instruments or sub-assemblies subjected to abuse, abnormal operating conditions, or unauthorized repair or modification.

Since Monroe Electronics, Inc. has no control over conditions of use, no warranty is made, or implied as to the suitability of our product for the customer's intended use.

THE WARRANTY SET FORTH IN THIS ARTICLE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESS, IMPLIED OR STATUTORY INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. Except for obligations expressly undertaken by Monroe Electronics, in this warranty, Owner hereby waives and releases all rights, claims and remedies with respect to any and all warranties, express, implied or statutory (including without limitation, the implied warranties of merchantability and fitness), and including but without being limited to any obligation of Monroe Electronics with respect to incidental or consequential damages, or damages for loss of use. No agreement or understanding varying or extending the warranty will be binding upon Monroe Electronics unless in writing signed by a duly authorized representative of Monroe Electronics.

In the event of a breach of the foregoing warranty, the liability of Monroe Electronics shall be limited to repairing or replacing the non-conforming goods and/or defective work, and in accordance with the foregoing, Monroe Electronics shall not be liable for any other damages, either direct or consequential.

## **Return Policy to Factory**

Materials returned to Monroe Electronics must have a Return Material Authorization number. To obtain a RMA number, contact our A/V Switching & Control Customer Service at 585-765-2254 or fax 585-765-9330. Customers have 30 days to determine that the product ordered fills their need and performs as described in Monroe's literature. Units returned for approved repair or credit, must be in the original packaging including all parts and paperwork plus be in very good physical condition. If not, the customer is billed the cost to refurbish the unit and for missing accessories and merchandise. No products may be returned for exchange or credit after 12 months of the shipment date. Monroe reserves the right to repair or replace units under warranty.

# Specifications

## **Number of relays**

4 Individually controlled rated for 1Amp at 28 Volts DC, SPDT, NO, NC. Latch ON, Latch OFF, and Momentary from .1 to 86,400 Seconds.

## **Connections**

10/100 baseT via RJ45

## **Power requirements**

+ 5 volts DC; 94-240 VAC wall unit supplied

## **Indicator lights**

One (1) to indicate Power on the front panel

Two (2) to indicate Connectivity, and Activity on the rear panel

## **Equipment Supplied**

Power Supply

14 position plug

## Front View



## Rear View

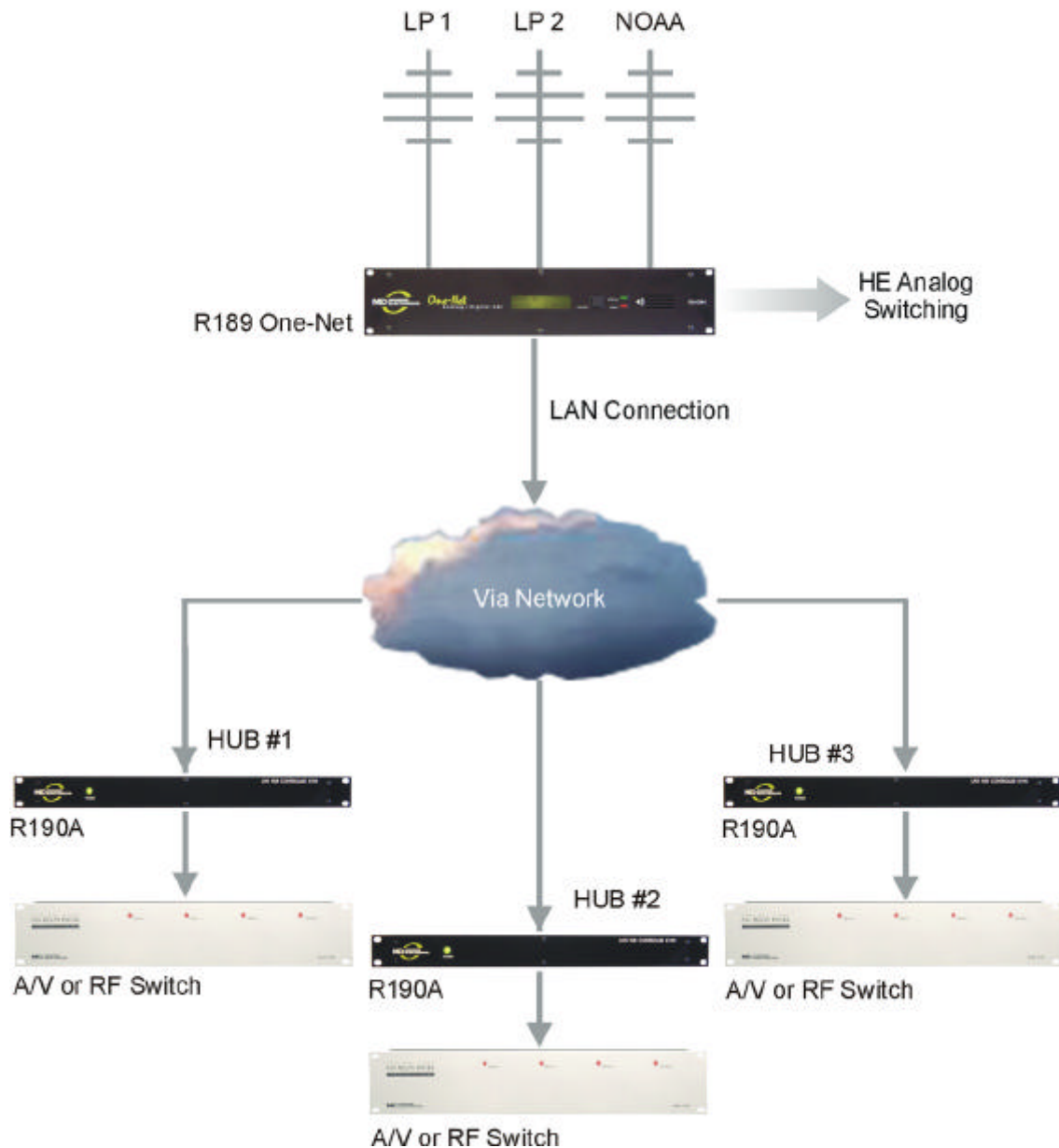


# Section 1 EAS

## General EAS Overview

The R190A Hub Controller provides the ability to switch equipment at a remote site or CATV Hub during EAS Alerts. It uses a LAN or WAN connection from a control device such as the R189 One-Net EAS Encoder/Decoder. The unit has 4 relays that are individually addressable. When used with the One-Net, they may be triggered based on FIPS codes.

### Typical R190A Application



# Section 1 EAS

## EAS Getting Started

**Setting the IP address** – The R190A comes with a default IP address of 192.168.1.2. One of the following methods can be used to access the device:

### **Directly connecting a networked host computer**

Connect a CAT-5 network crossover cable to the RJ45 port at the back of the R190A and to the RJ45 port of the network interface card (NIC) of a standalone PC or notebook computer. Configure the standalone PC to use the static IP address 192.168.1.3 with a net mask of 255.255.255.0. After the R190A powers up it can be accessed via a Web browser on the host computer.

Launch a Web browser application and direct the URL to <http://192.168.1.2/>. The R190A will provide a gateway page and quickly redirect to the R190A Home page. To edit the R190A's IP address type the following IP address <http://192.168.1.2/setup.html>.

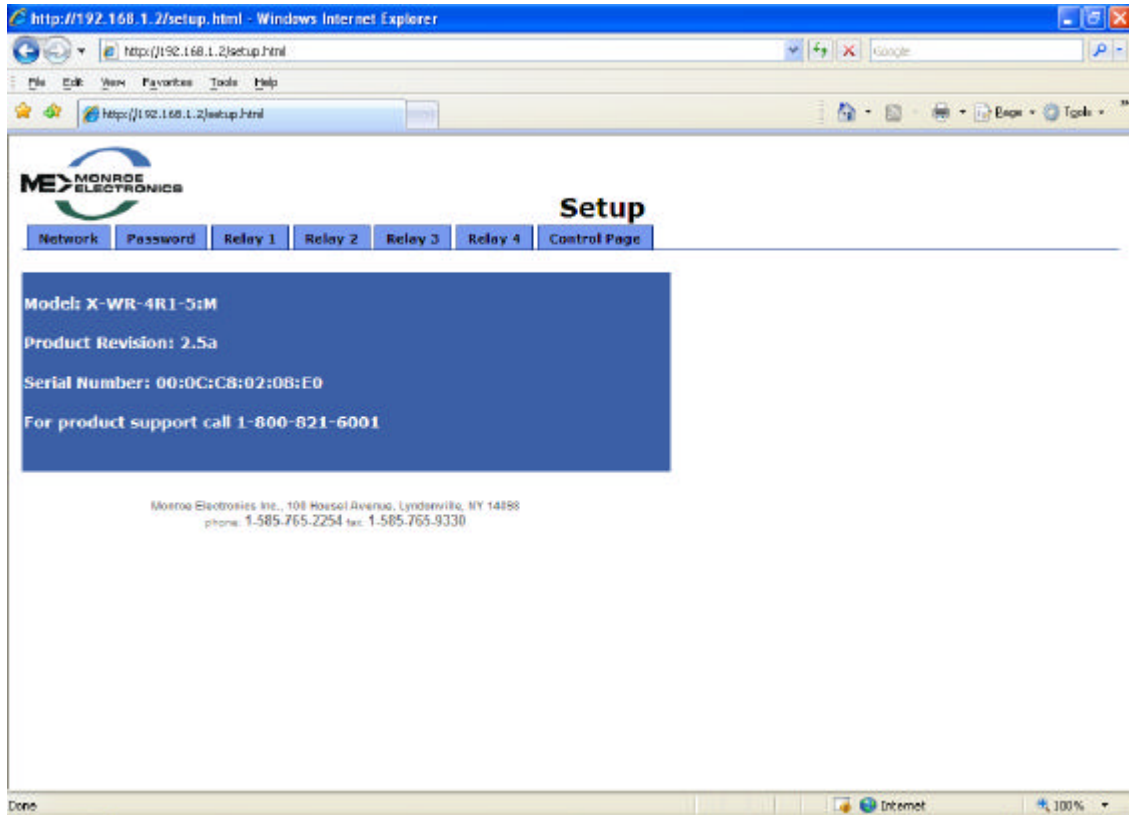
### **LAN connection with a networked host computer**

Connect a standard CAT-5 network cable from the RJ45 port at the back of the R190A into a routing hub or other network-switching device. You will likely need assistance from a network administrator to insure the R190A's default network address of 192.168.1.2 will be visible on the network, or will not clash with an existing node. Once the R190A is powered up it can be accessed via a Web browser from any remote computer on the LAN routed to see the address 192.168.1.2.

WHEN A SUCCESSFUL CONNECTION IS ESTABLISHED TO THE R190A THE FOLLOWING SCREEN WILL BE DISPLAYED THROUGH THE BROWSER:

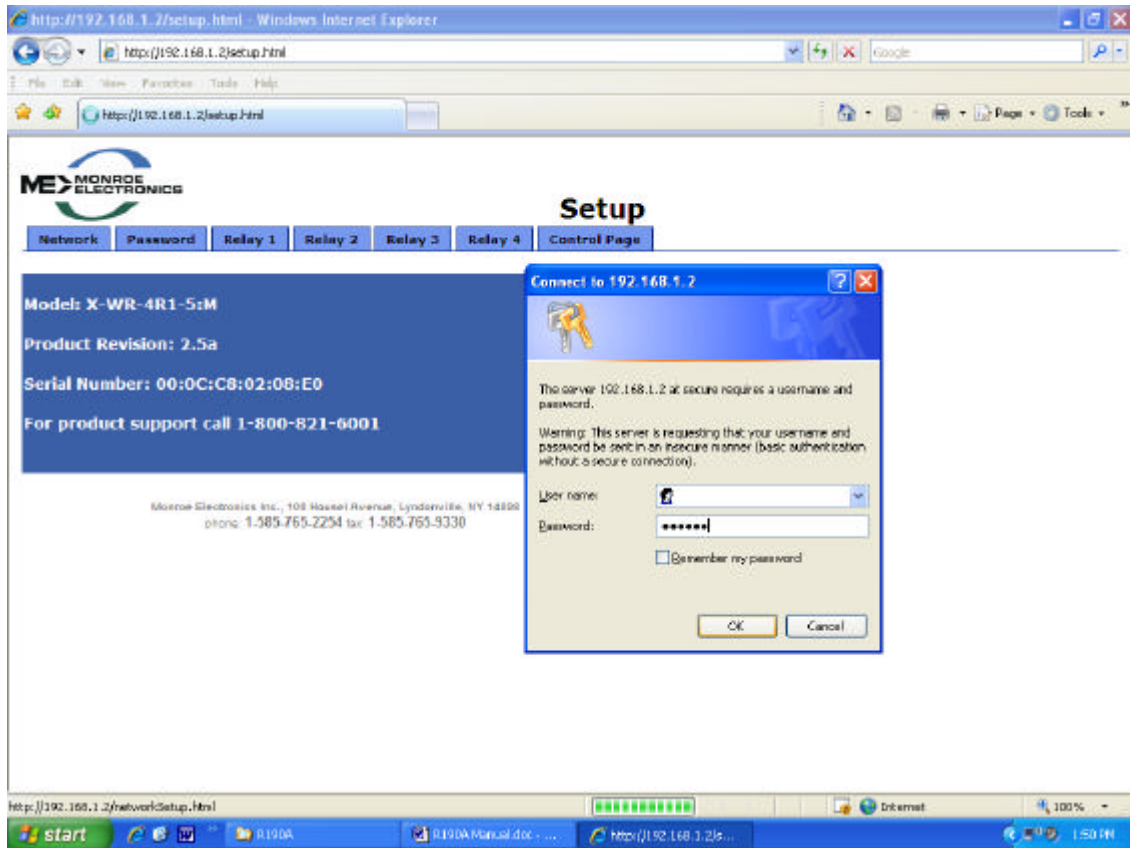
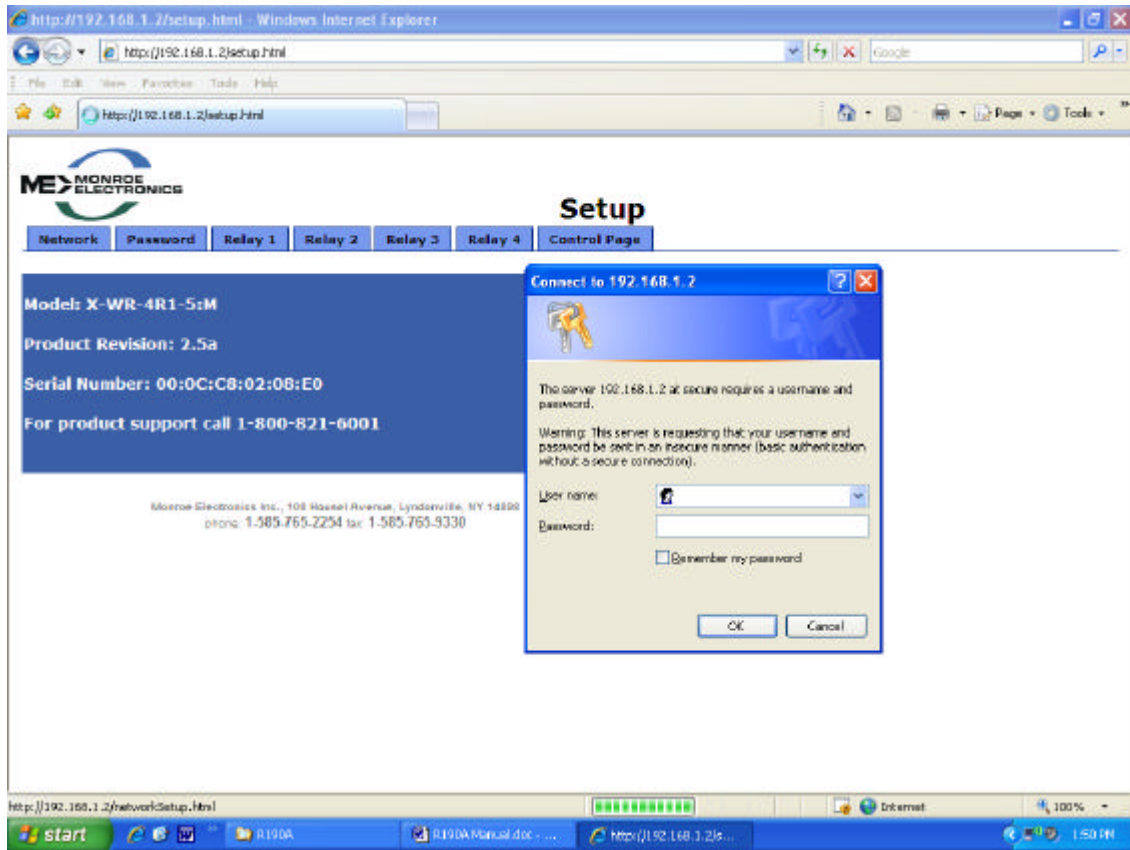
# Section 1 EAS

**Setup Configuration** – The Setup mode of the R190A allows you customize several settings. Some of the settings are the unit's IP address, Netmask, Gateway, network speed, mode and passwords. There is no user name required to log into the Setup, and the default password is shown in bold between the quotes "**monroe**". The following screenshots show the setup pages.

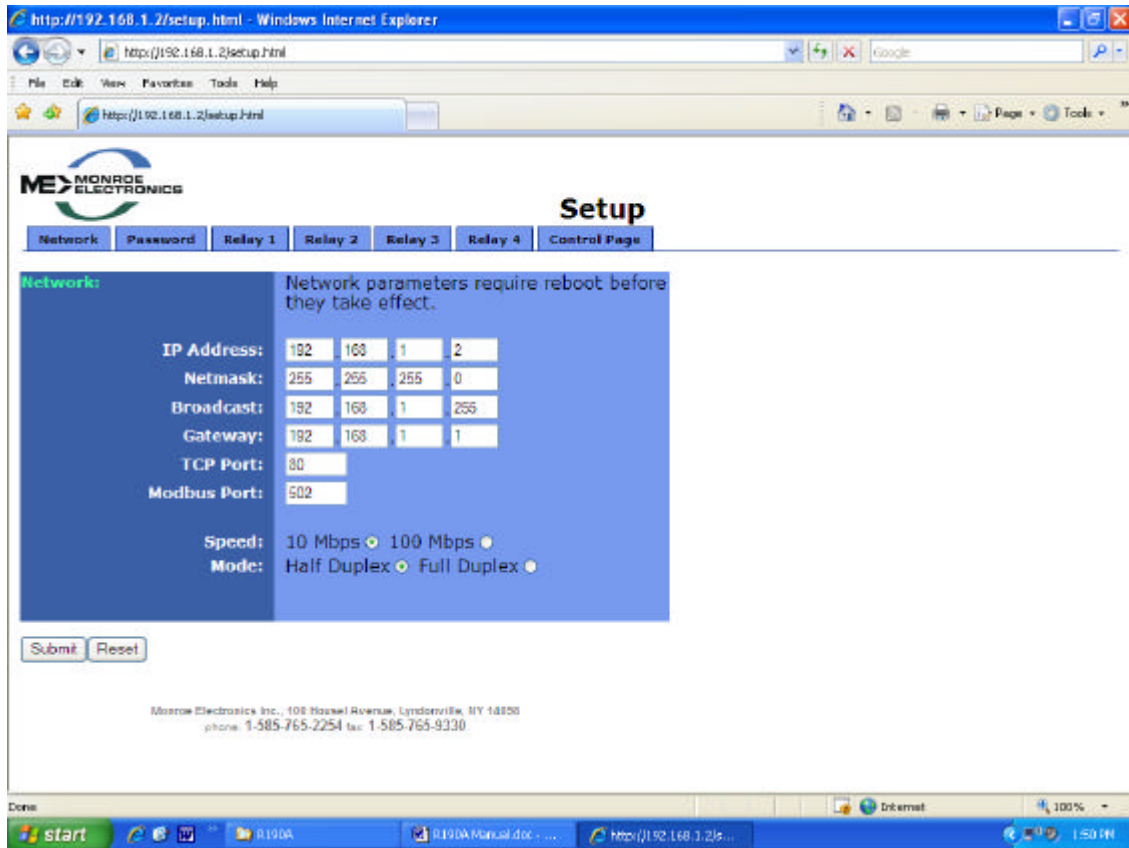




# Section 1 EAS



# Section 1 EAS



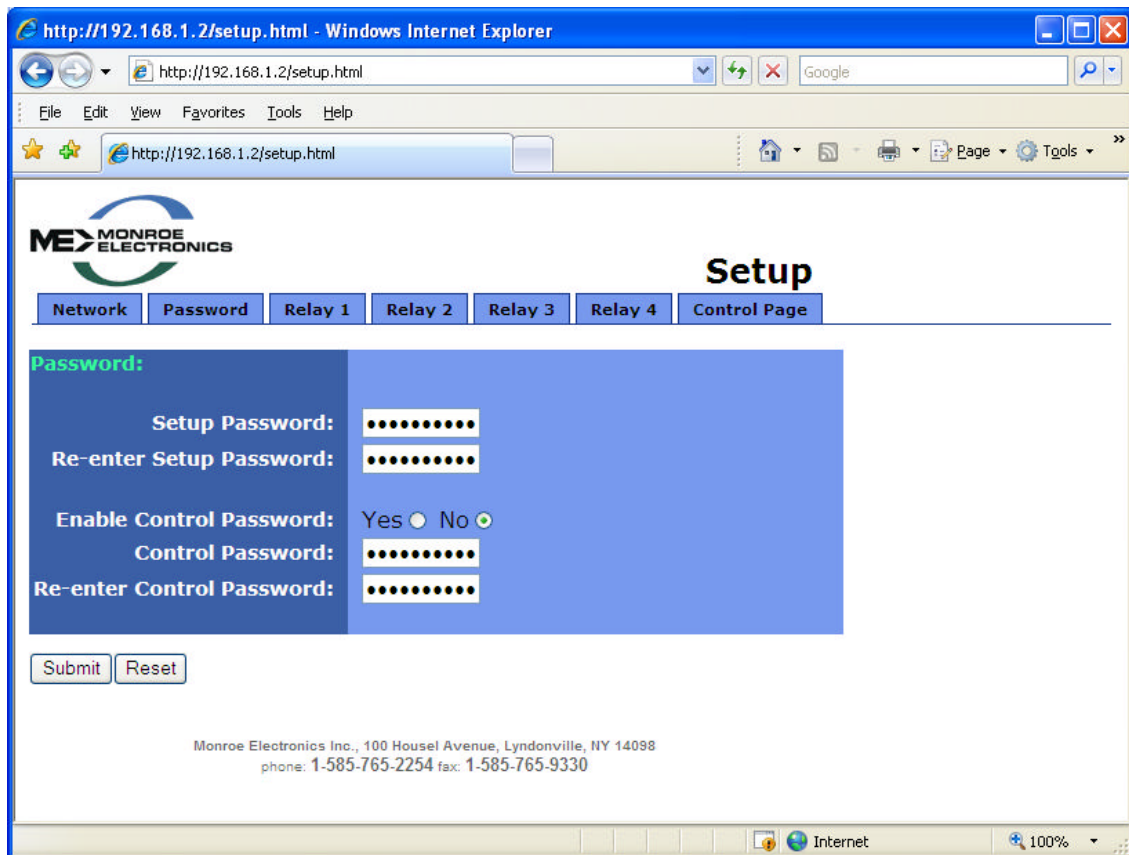
**Changing the IP address** – Type the new IP address into the boxes following “IP address” shown above. To upload the address into the R190A click on “Submit”. The unit will be updated to the new address. You will no longer be able to communicate with the unit with the old address. Change the address in your browser to the new address and reconnect to the unit.

**Note:** The new address has been entered into the unit but is not yet stored into permanent memory. If a mistake in entering the address has been made, you can set the unit back to the default setting by removing the power from the unit, pressing and holding the Reset button on the back of the unit, and reconnecting the power to the unit. After approximately 10 seconds you can release the Reset button and the unit will be set back to the default IP address of 192.168.1.2.

**Permanent storage of IP change** – After a connection has been reestablished with the unit, using the new address, you can choose to store the new IP address in memory by removing and reapplying the power to the unit.

# Section 1 EAS

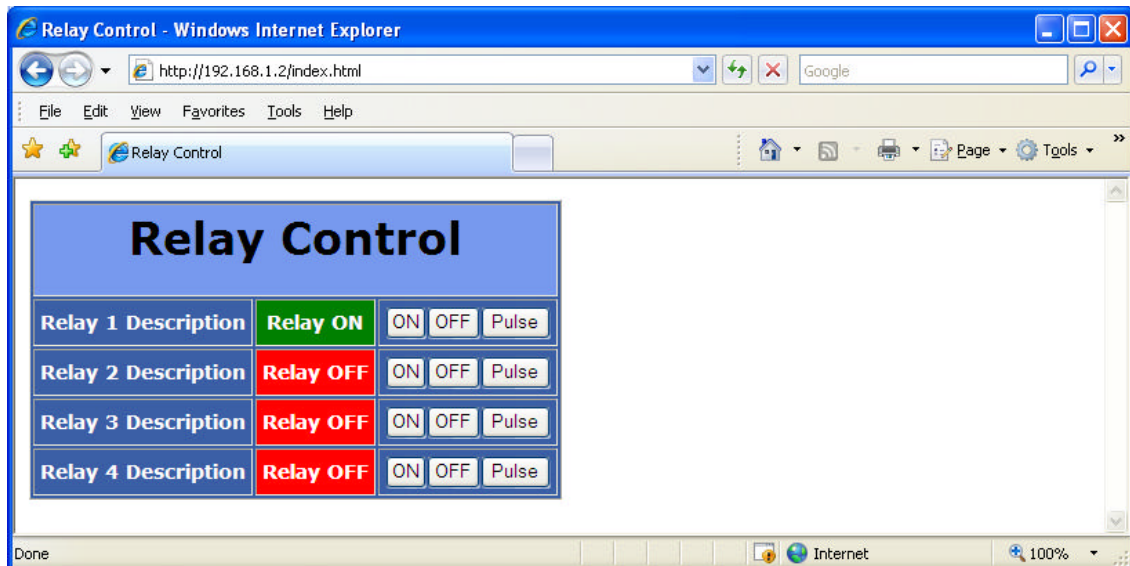
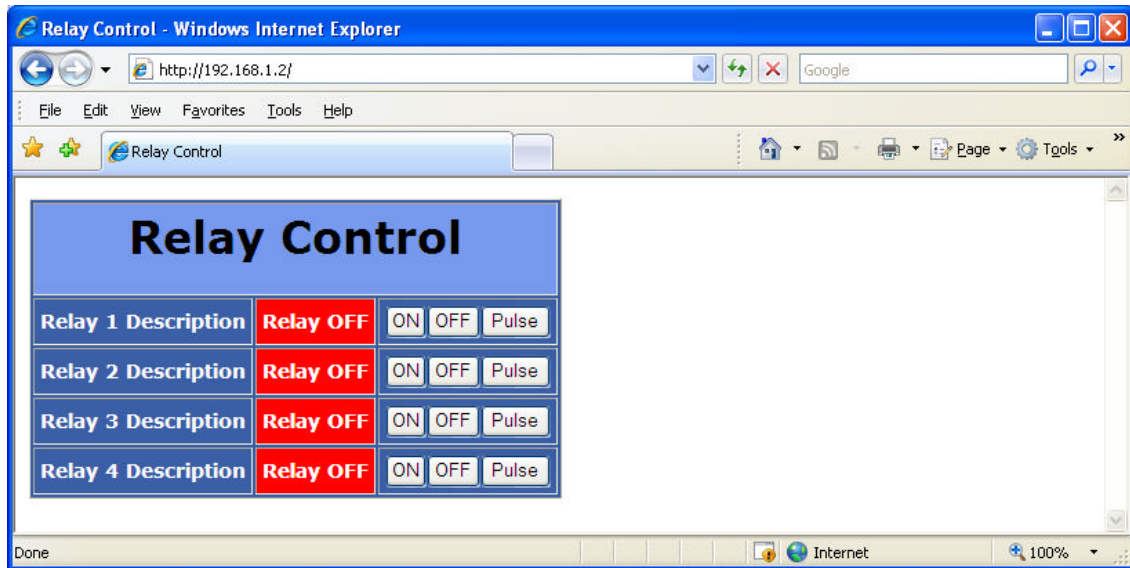
**Password Settings** – The R190A allows you to program a Setup and a Control password. The unit is defaulted with a Setup password of “monroe”, and the Operation password is disabled. If changes are made to either the Setup or the Operation password, you must click on the “Submit” button to store the change. Passwords may be up to 10 characters in length. If the passwords are forgotten, the R190A can be set back to factory defaults by removing the power from the unit, pressing and holding the Reset button on the back of the unit, and reconnecting the power to the unit. After approximately 10 seconds you can release the Reset button and the unit will be set back to the default password of “monroe” for the Setup and no password for the Control. **Caution:** Pressing the reset switch will reset ALL user settings back to default. This includes network IP address and associated settings.



# Section 1 EAS

## Operation

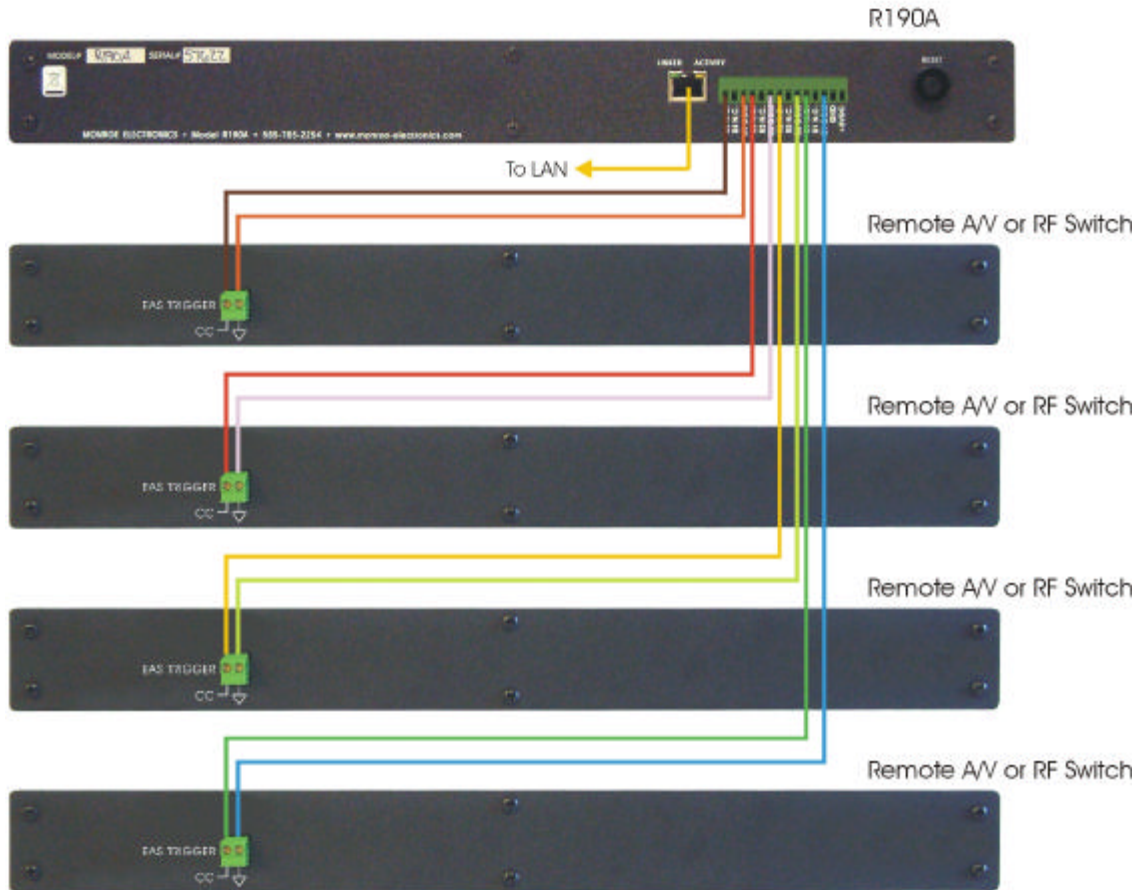
Testing the unit can be done by accessing the unit in the same manner it was programmed. Enter the unit's IP address into your browser and the following display will be shown. Triggering any of the four relays can be done in either a latching mode or Pulse. Clicking on the button, On, Off, or Pulse, on the desired relay will allow you to test that the device being controlled by the R190A is functioning properly. The color of the relay status will change from red to green when the relay is closed.



# Section 1 EAS

To configure your R189 One-Net EAS Encoder/Decoder to talk the R190A, refer to section 5.10 of the R189 Manual for programming instructions.

## Typical R190A Wiring Diagram



## SECTION 2 REMOTE CONTROL

## **Section 2 Remote Control**

### **General Remote Control Overview**

In its basic configuration, the R190A is a simple remote control that allows the user to command 4 DPST relays at a remote location. These commands are transported from any computer with a web browser through a network connection to the R190A. Items within the power limits of the relay contacts can be directly connected to the R190A and be easily controlled from any network location. In addition, the R190A can be directly connected to any of the contact closure controlled switches manufactured by Monroe Electronics so that audio/video, IF or RF type switching can be accomplished.

Set-up and configuration is done by using the built-in web page where IP address, password and relay labels are entered.

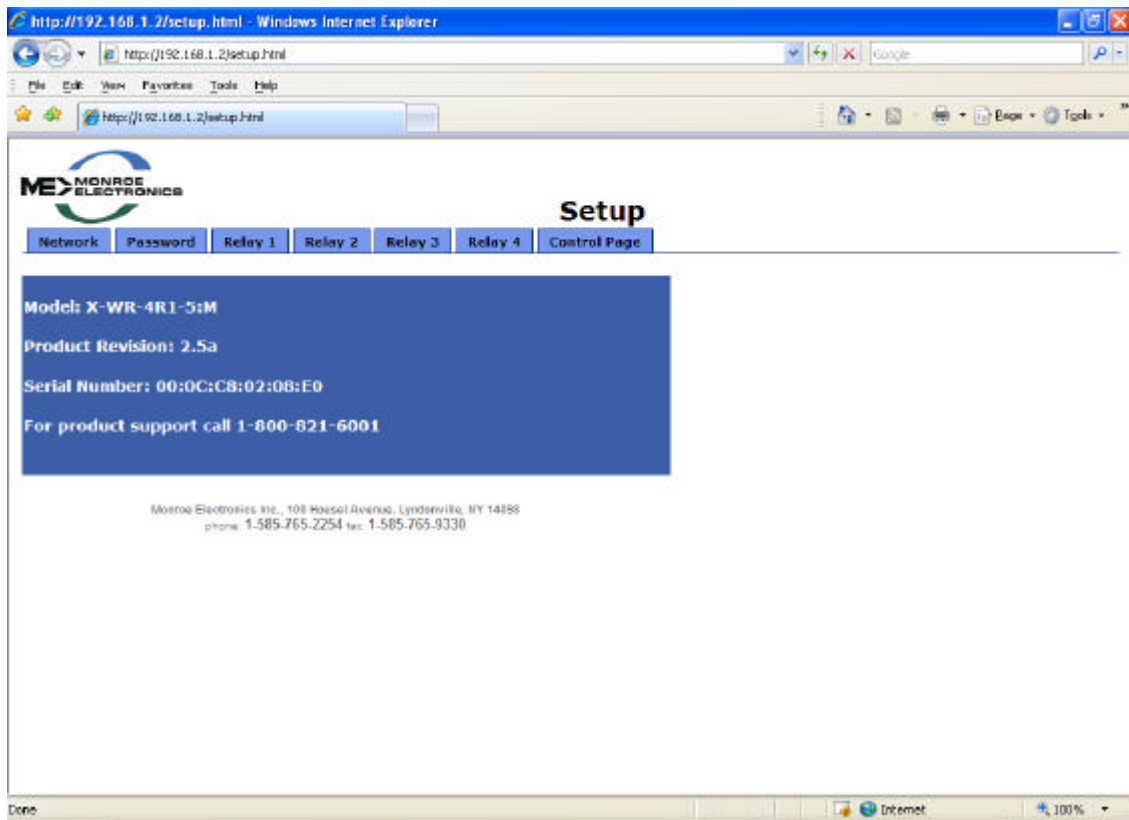
Once configured for the users network, on, off or momentary relay control can be accomplished by clicking a button on the web page.

## Section 2 Remote Control

### Remote Control Getting Started

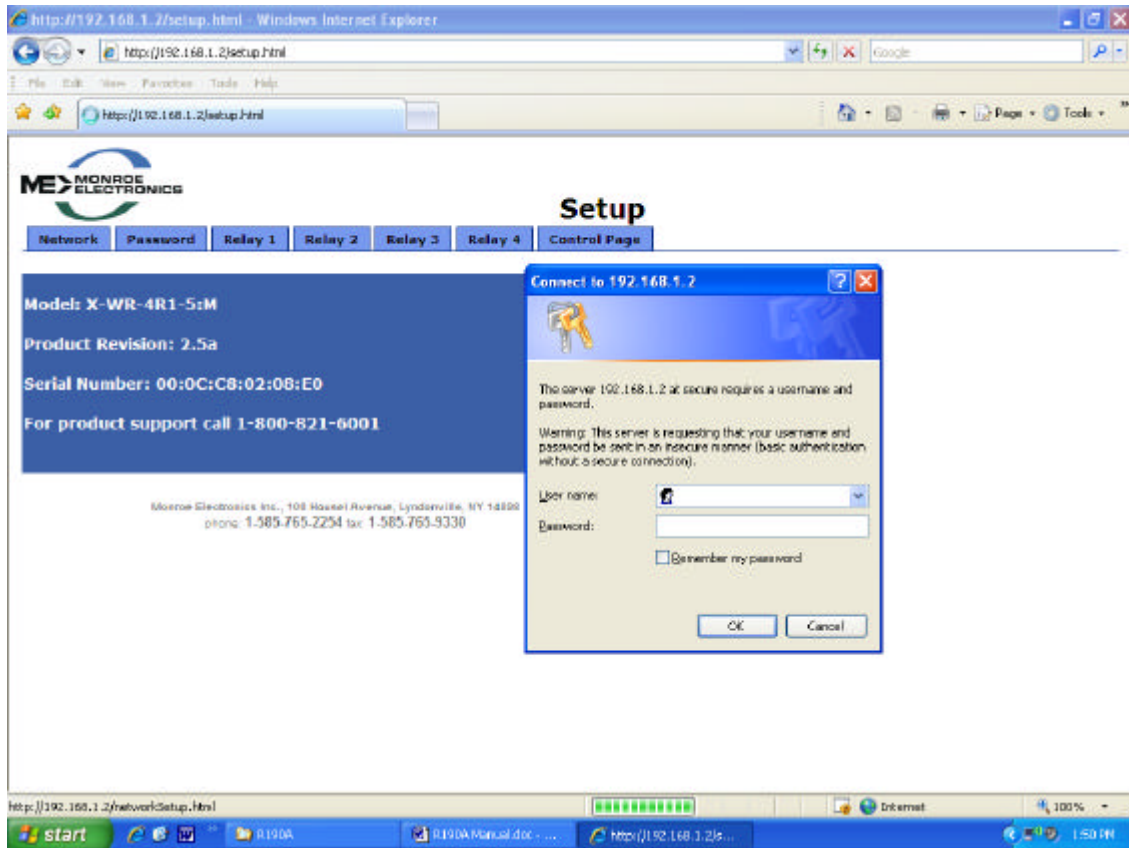
**Setting the IP address--** Setting the IP address for remote control applications is identical to the procedure used for EAS applications. Follow the steps in the EAS Getting Started section to set the device IP address for your network.

**Setup Configuration –** The Setup mode of the R190A allows you customize several settings. Some of the settings are the unit's IP address, Netmask, Gateway, network speed, mode and passwords. There is no user name required to log into the Setup, and the default password is shown in bold between the quotes "**monroe**". The following screenshots show the setup pages.



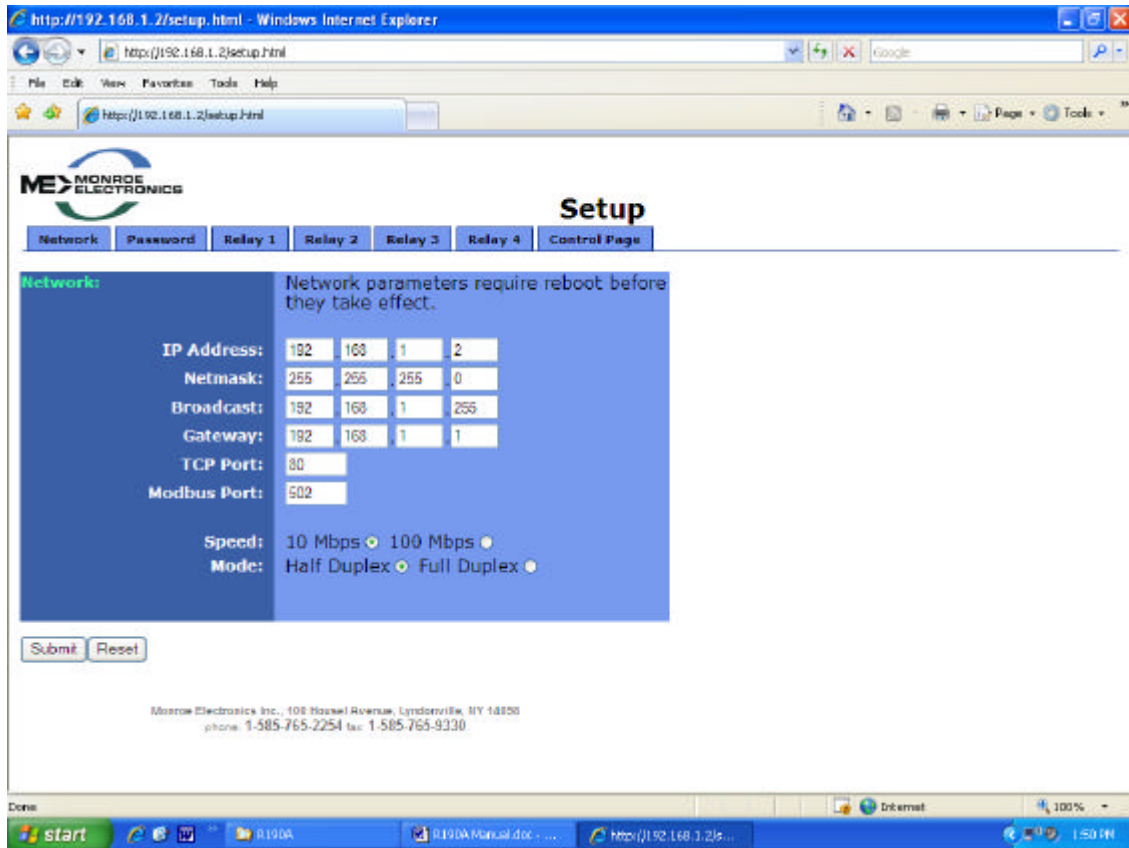


## Section 2 Remote Control



Click NETWORK to change the IP address.

## Section 2 Remote Control



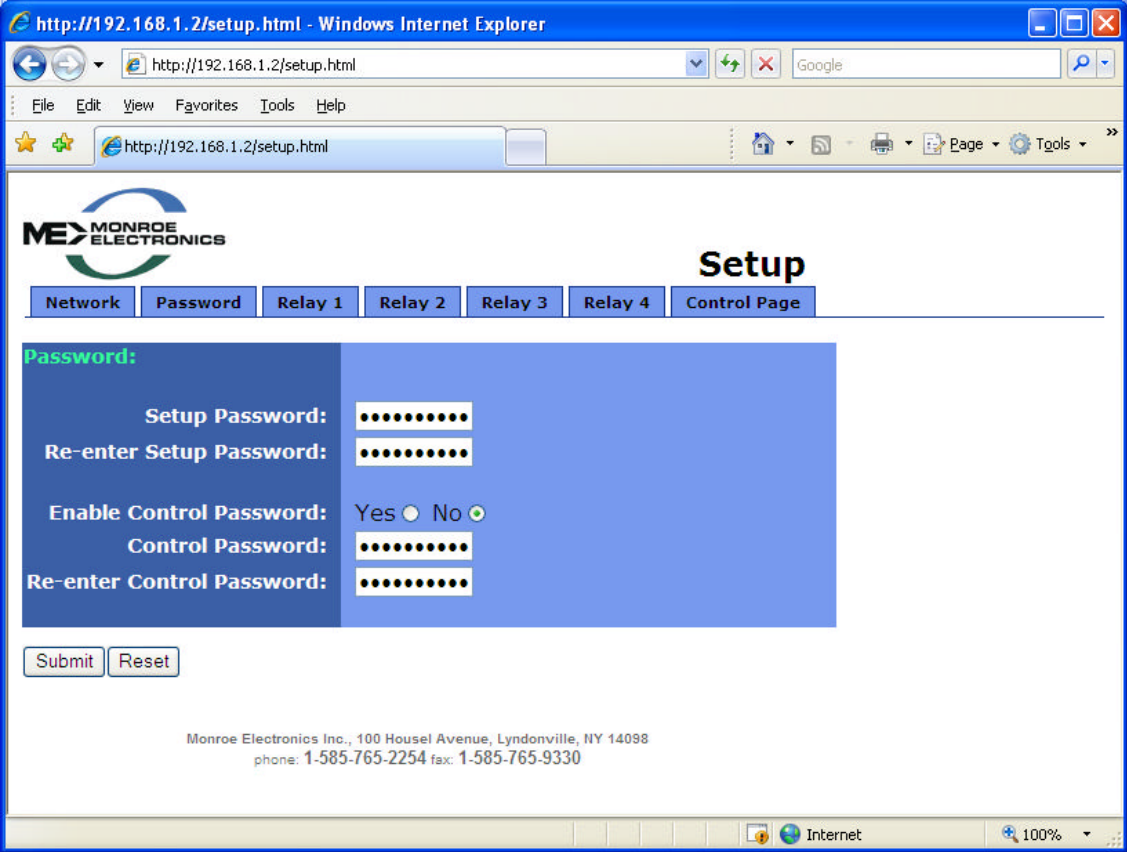
**Changing the IP address** – Type the new IP address into the boxes following “IP address” shown above. To upload the address into the R190A click on “Submit”. The unit will be updated to the new address. You will no longer be able to communicate with the unit with the old address. Change the address in your browser to the new address and reconnect to the unit.

**Note:** The new address has been entered into the unit but is not yet stored into permanent memory. If a mistake in entering the address has been made, you can set the unit back to the default setting by removing the power from the unit, pressing and holding the Reset button on the back of the unit, and reconnecting the power to the unit. After approximately 10 seconds you can release the Reset button and the unit will be set back to the default IP address of 192.168.1.2.

**Permanent storage of IP change** – After a connection has been reestablished with the unit, using the new address, you can choose to store the new IP address in memory by removing and reapplying the power to the unit.

# Section 2 Remote Control

**Password Settings** – The R190A allows you to program a Setup and a Control password. The unit is defaulted with a Setup password of “monroe”, and the Operation password is disabled. If changes are made to either the Setup or the Operation password, you must click on the “Submit” button to store the change. Passwords may be up to 10 characters in length. If the passwords are forgotten, the R190A can be set back to factory defaults by removing the power from the unit, pressing and holding the Reset button on the back of the unit, and reconnecting the power to the unit. After approximately 10 seconds you can release the Reset button and the unit will be set back to the default password of “monroe” for the Setup and no password for the Control. **Caution:** Pressing the reset switch will reset ALL user settings back to default. This includes network IP address and associated settings.



## Section 2 Remote Control

### Relay Configuration

From the main menu, click the **Relay 1** tab to setup how the relay 1 section of the control page will be displayed.

**Main Header** - If desired, enter text to be displayed for the main header on the control page.

**Auto Refresh Page & Duration** – Controls whether or not to continuously refresh the relay control page to update the relay status. The duration sets the time the page is held before it is refreshed. This time can be from 1 to 32 seconds.

**Relay Description** - If desired, enter text to be displayed in the relay name box on the control page.

**Display Relay Status** – Click the yes or no radio button to turn on or off updating relay 1 status.

**Status ON Colors** – Select the desired color to be displayed when the relay is turned on.

**Status ON Text** – Enter the text to be displayed when the relay is turned on.

**Status OFF Color & Text** – Enter colors and text to be displayed when the relay is turned off.

**ON/OFF Buttons** –

**Button 1 & 2 Labels** – Enter the desired text to be displayed on the relay actuator buttons.

**Pulse Button** – Click the corresponding radio button to turn on or off the display of the pulse button.

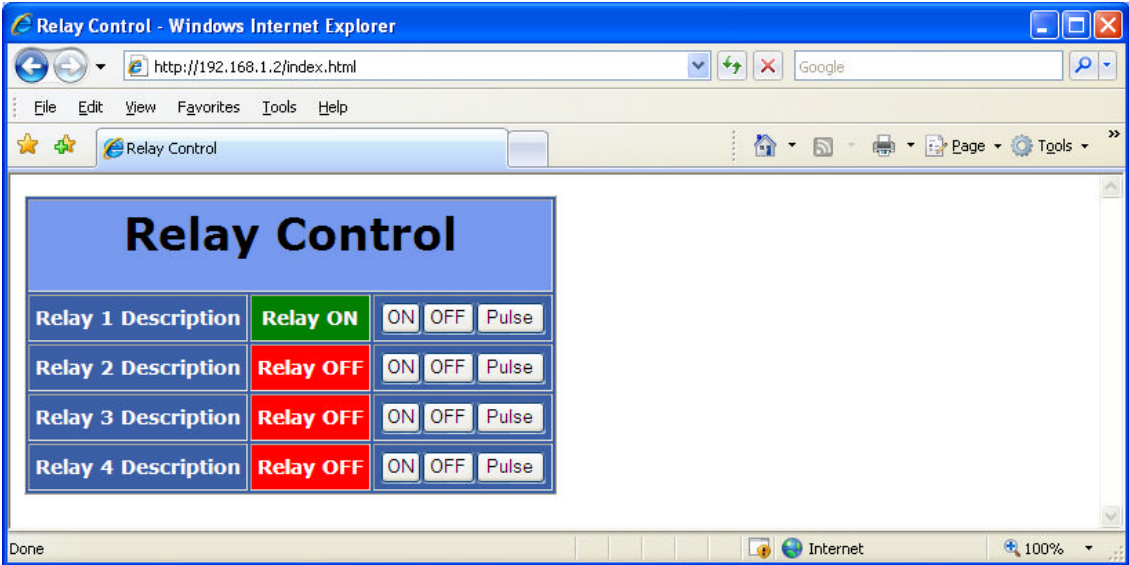
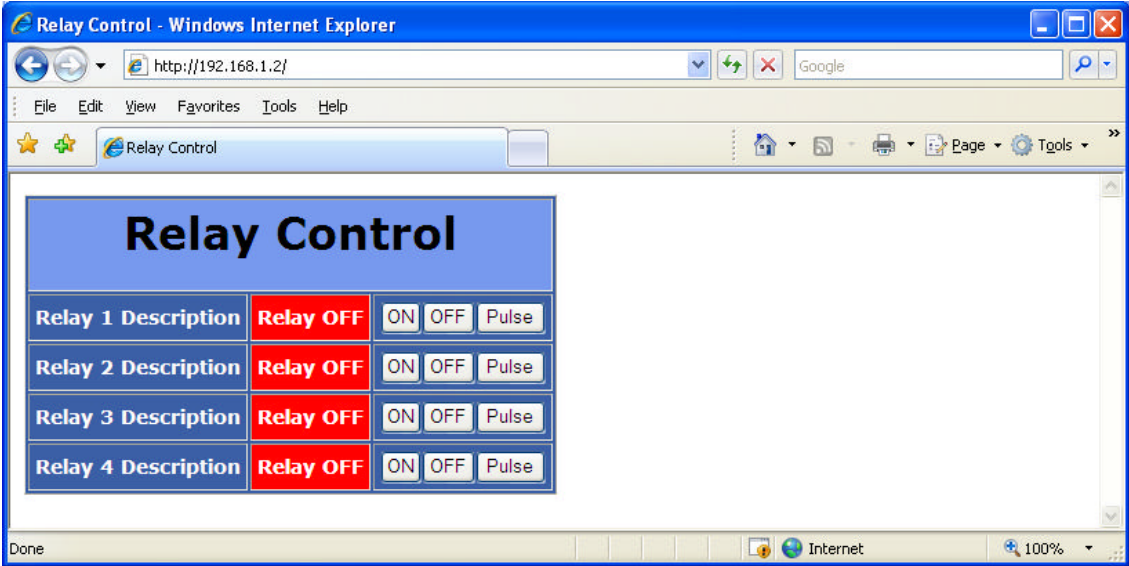
**Pulse Button Label** – Enter the desired text for the pulse button.

**Pulse Duration** – Enter the time desired for the relay contacts to be momentarily closed. Time can be from 0.1 seconds to 86,400 seconds (1 day).

# Section 2 Remote Control

## OPERATION

Operating the unit can be done by accessing the unit in the same manner it was programmed. Enter the unit's IP address into your browser and the following display will be shown. Enter any applicable passwords. Triggering any of the four relays can be done in either a latching mode or Pulse. Clicking on the button, On, Off, or Pulse, on the desired relay will allow you to operate the device being controlled by the R190A. The color of the relay status will change from red to green when the relay is closed.



# Section 2 Remote Control

## Applications

The R190A can control any device within the power limits of its relay contacts. Adding a power relay that is energized by the R190A can control devices consuming additional power.

The R190A can control all of the contact closure operated switches manufactured by Monroe Electronics. General application of these switches is shown below.

### Typical R190A Wiring Diagram

