![Digital Alert Systems logo]

Instruction Manual

LAN Hub Controller

Model R190A

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Warranty

Digital Alert Systems, Inc. (DAS) 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 Digital Alert Systems, 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.

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Return Policy to Factory

Materials returned to DAS must have a Return Material Authorization number. To obtain a RMA number, contact Customer Service at 585-765-2254, email support@digitalalertsystems.com, or fax 585-765-9330. Customers have 30 days to determine that the product ordered fills their need and performs as described in DAS'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 for 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. DAS 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
+ 12 volts DC; 100-240 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 terminal plug
Mounting Hardware

Front View

Rear View

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EAS Overview

The Digital Alert Systems' 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 DASDEC EAS Encoder/Decoder. The unit has 4 relays that are individually addressable. When used with the DASDEC they can be triggered based on FIPS codes.
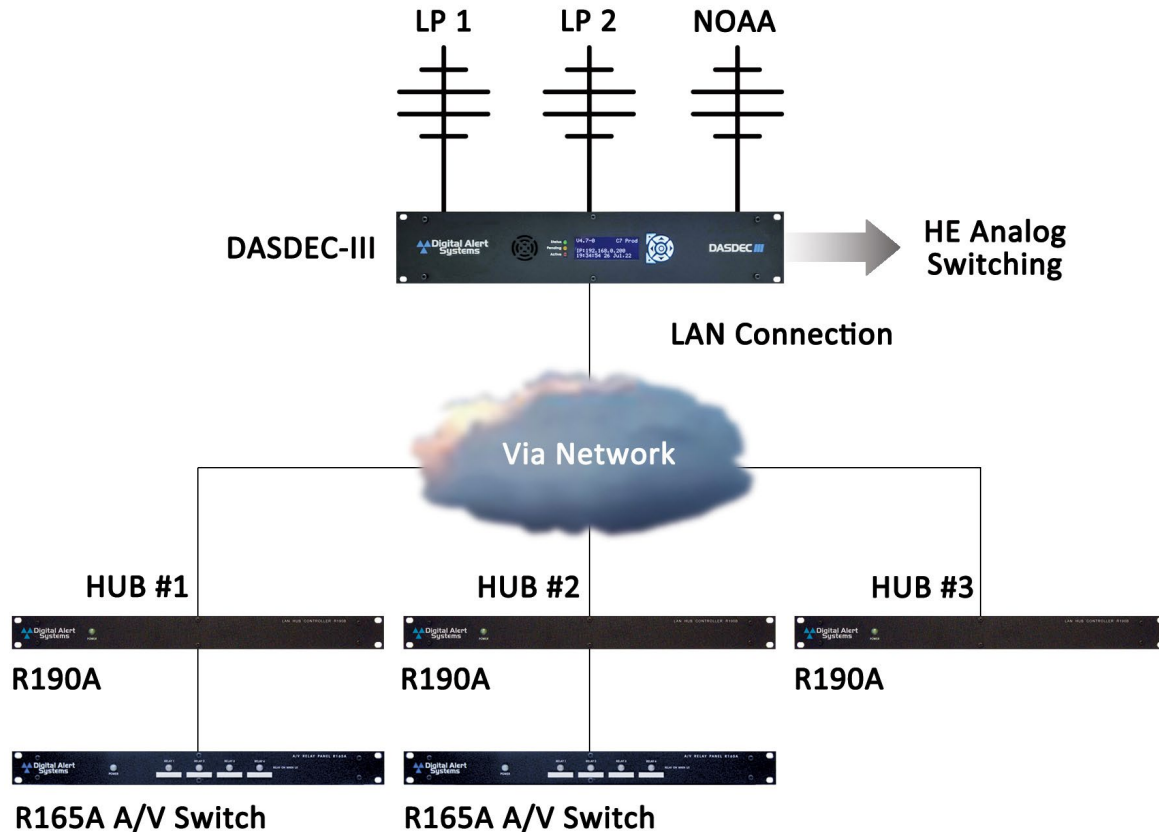
EAS Getting Started

Setting the IP address

The R190A has a default IP address of 192.168.1.2.
Access the device as follows:

Direct connection to a networked host computer

Connect a CAT-5E 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 PC to use the static IP address 192.168.1.3 with a net mask of 255.255.255.0. Once the R190A is powered 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.

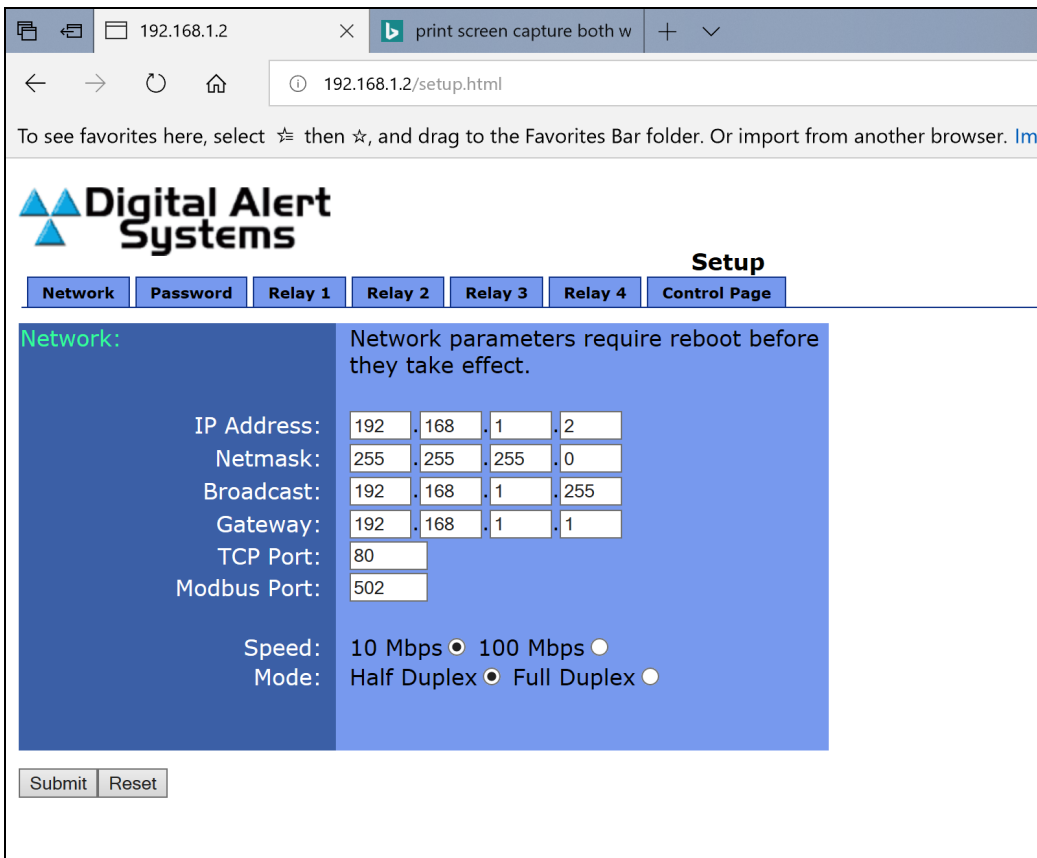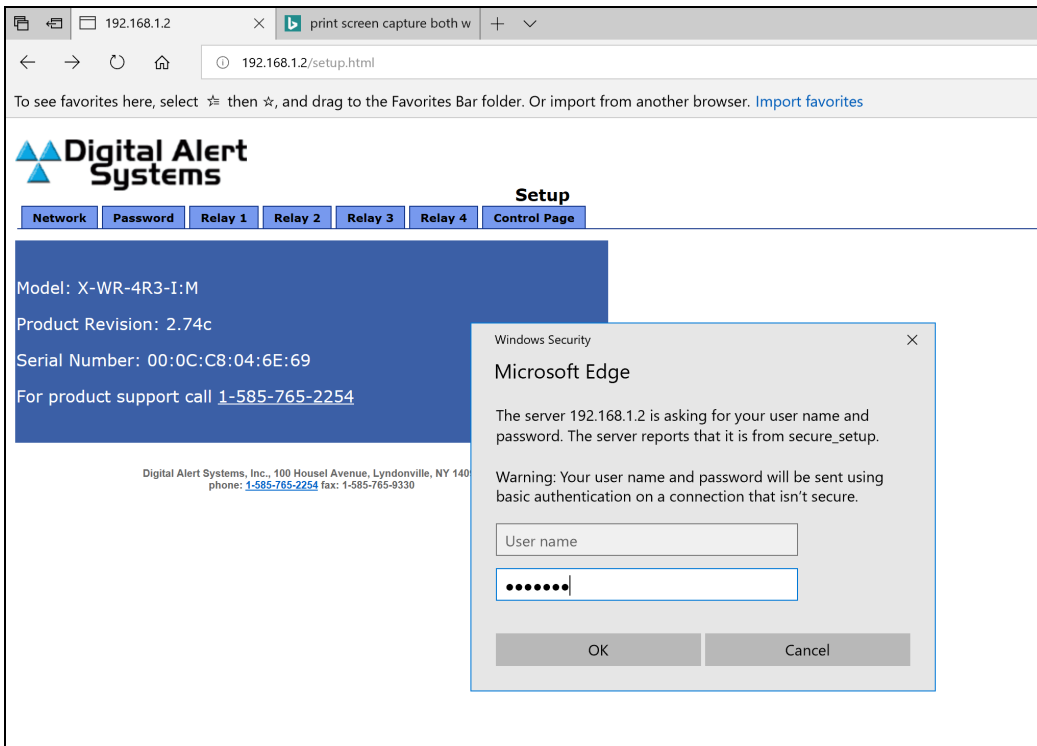**LAN connection with a networked host computer**

Connect a standard CAT-5E network cable from the RJ45 port at the back of the R190A into a routing hub or other network-switching device. Consult with your network administrator to ensure 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.

Setup Configuration – The Setup mode of the R190A permits several custom settings, these include the unit's IP address, Netmask, Gateway, network speed, mode and passwords. No username is required to log into Setup, and the default password is shown in bold between the quotes "digital". The following screenshots show the setup pages.

Please note: Rev H units and earlier the password is 'monroe'.
**Beginning with Rev I units and later the password is 'digital'.**

Browser 1:
- Address: 192.168.1.2/setup.html
- Tab: print screen capture both w
- To see favorites here, select ≒ then ☆, and drag to the Favorites Bar folder. Or import from another browser. Import favorites

Digital Alert Systems

Setup

Network | Password | Relay 1 | Relay 2 | Relay 3 | Relay 4 | Control Page

Model: X-WR-4R3-I:M

Product Revision: 2.74c

Serial Number: 00:0C:C8:04:6E:69

For product support call 1-585-765-2254

Digital Alert Systems, Inc., 100 Housel Avenue, Lyndonville, NY 140
phone: 1-585-765-2254 fax: 1-585-765-9330

Windows Security ✕

Microsoft Edge

The server 192.168.1.2 is asking for your user name and password. The server reports that it is from secure_setup.

Warning: Your user name and password will be sent using basic authentication on a connection that isn't secure.

User name

••••••

OK | Cancel

Browser 2:
- Address: 192.168.1.2/setup.html
- Tab: print screen capture both w
- To see favorites here, select ≒ then ☆, and drag to the Favorites Bar folder. Or import from another browser. Imp

Digital Alert Systems

Setup

Network | Password | Relay 1 | Relay 2 | Relay 3 | Relay 4 | Control Page

Network:

Network parameters require reboot before they take effect.

IP Address: 192 . 168 . 1 . 2
Netmask: 255 . 255 . 255 . 0
Broadcast: 192 . 168 . 1 . 255
Gateway: 192 . 168 . 1 . 1
TCP Port: 80
Modbus Port: 502

Speed: 10 Mbps ⊙ 100 Mbps ○
Mode: Half Duplex ⊙ Full Duplex ○

Submit | Reset

Changing the Network settings – Enter the new network settings as desired. Click on "Submit" to save. These new changes will show up in the Network tab *but will not take effect until power is removed and reapplied to the unit*.

Permanent storage of IP change – To store the new Network settings into memory, remove the power from the unit, wait approximately 10 seconds, and reconnect the power to the unit.
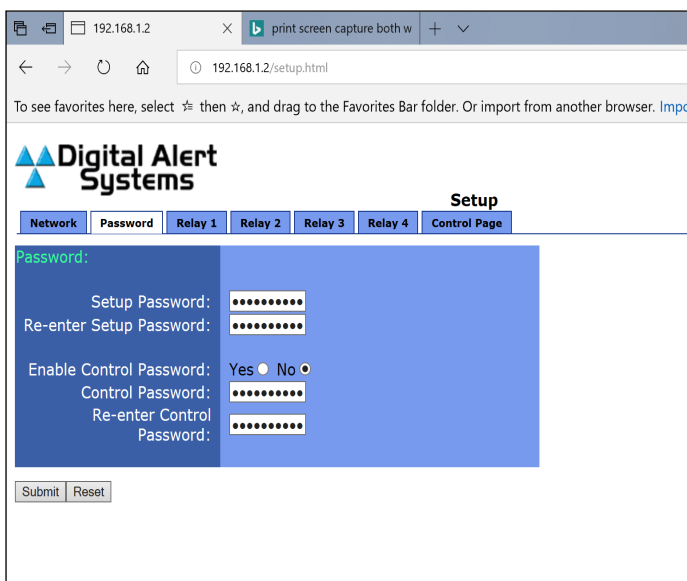
Note: To set the unit back to the default factory settings, remove the power from the unit, press and hold the Reset button on the back of the unit, and reconnect the power to the unit. After approximately 10 seconds release the Reset button and the unit will be set back to the default IP address of 192.168.1.2.

Password Settings – The R190A allows programming of a Setup password and a Control password. Setup default password is "**digital**", with the Control password disabled. Passwords can be up to 10 characters in length. To save changes to either the Setup or the Control password, click on the "Submit" button.

If the password(s) are forgotten, the R190A can be reset 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 release the Reset button and the unit will be set back to the default password of "**digital**" 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.

Please note: Rev H units and earlier the password is 'monroe'.
Beginning with Rev I units and later the password is 'digital'.

Operation

Test the unit in the same manner it was accessed and 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.

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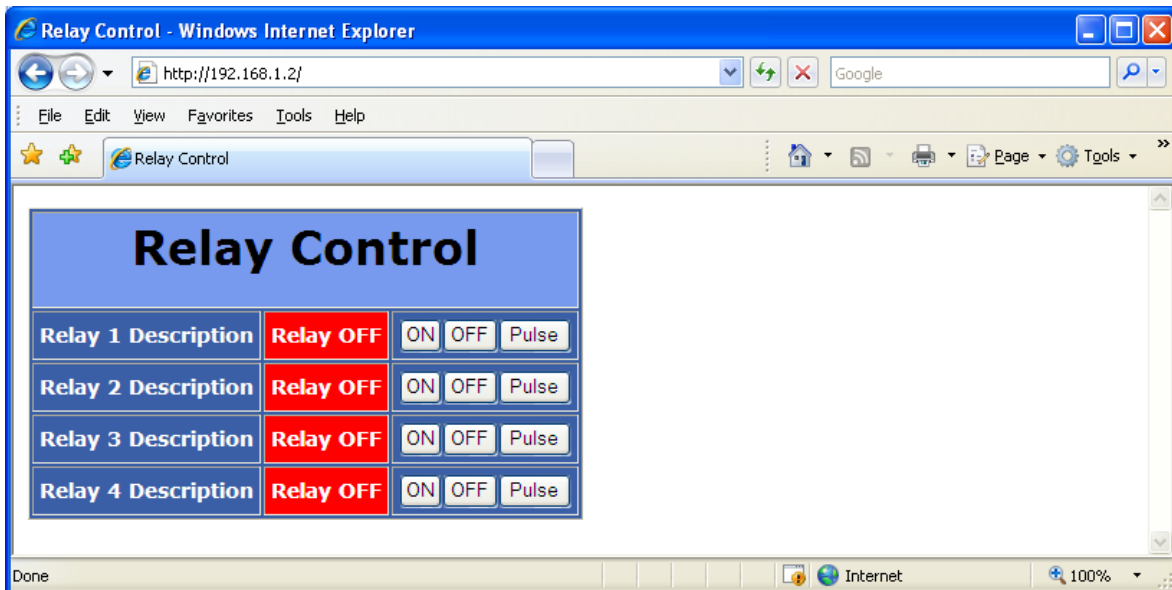
Configure your DASDEC EAS Encoder/Decoder

Digital Alert Systems' DASDEC EAS Encoder/Decoder can be used in conjunction with the R190A for remote hub switching if local access channels are to be overridden during EAS alerts. The R190A LAN controlled device has four independently controlled relays. Each relay can be programmed to activate by a choice of three triggers. In addition to the three triggers it can be set up to filter its activation by FIPS code(s) and EAS code(s). The DASDEC can control up to 8 of these hub controllers.

Setup > Net Alerts > Net GPIO

> **Note: Before enabling the Hub Controller, THE R190A MUST BE SET TO AN IP ADDRESS THAT IS WITHIN YOUR INTERNAL LAN.**

Enable Interfaces by checking the box as shown above, then enable the individual client interface by checking the box also shown above. Enter the new IP address for the R190A as shown in the following screen. The DASDEC will attempt to ping the R190A and display the status. Verify that the status is OK.   Accept changes. You can also program the password if desired.

Select the required condition to close each relay. Once selected the Activating FIPS and Activating EAS Codes boxes will be displayed. The default setting is "Any FIPS" and "Any EAS Codes" which triggers the relay when an alert is detected.

Setup > Alert Agent > Net GPIO - FIPS Groups and EAS Code Groups

Relay activation can be programmed to close when Alerts for specific FIPS areas or EAS codes are present.

Click on the "FIPS Group" link to select FIPS codes from the FIPS pools. When the desired FIPS codes are selected click the "Accept Changes" button and they will be added to the FIPS list to the right. When finished, return to
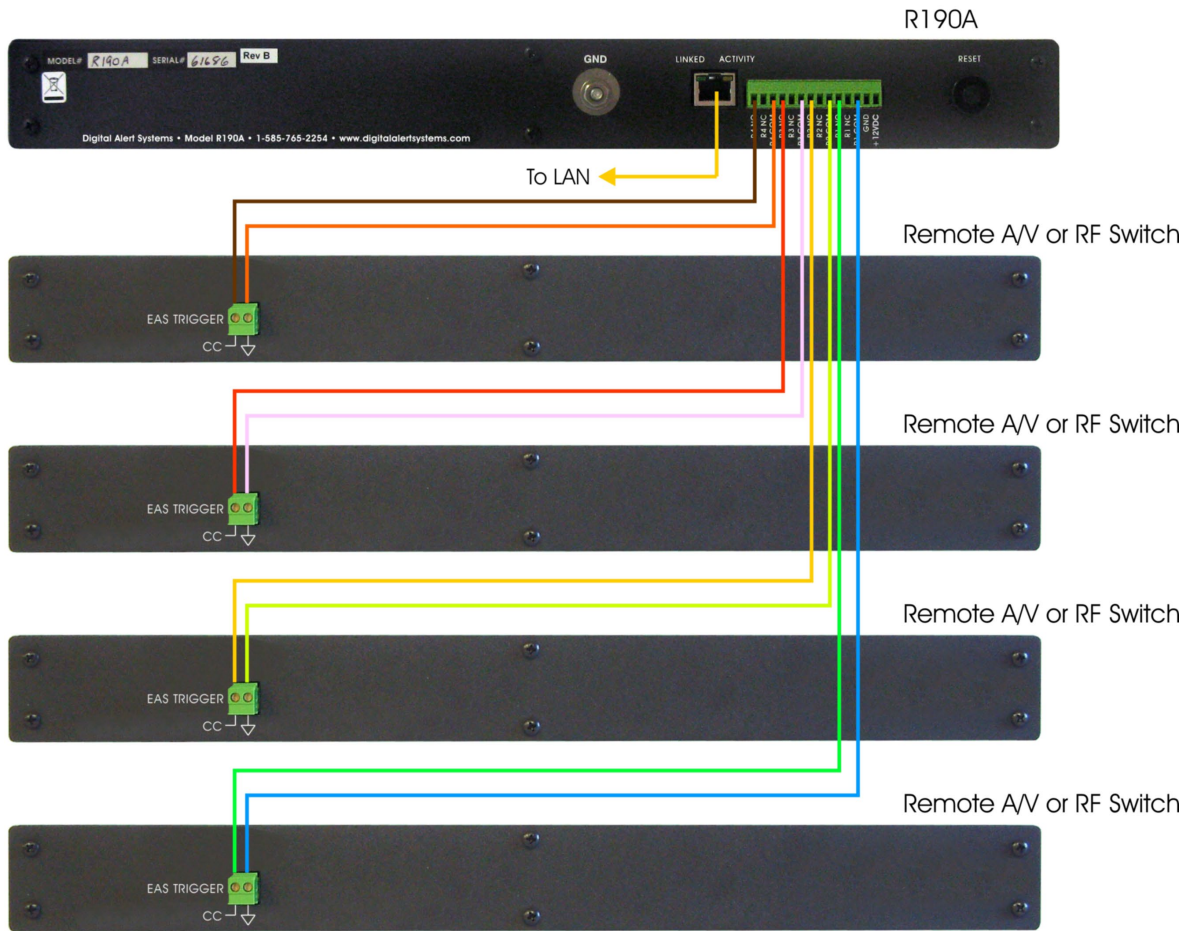**Setup > Net Alerts > Net GPIO**
Repeat this step for all of the required relays.

The same process is used for editing the activating EAS codes.

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Click on the "EAS Group" link to select EAS codes from the EAS pools. When the desired FIPS codes are selected click the "Accept Changes" button and they will be added to the FIPS list to the right.
When finished, return to **Setup > Net Alerts > Net GPIO**
Repeat this step for all of the required relays.

Typical R190A Wiring Diagram

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 can be issued from any computer with a web browser through a network connection to the R190A.

Equipment within the power limits of the relay contacts can be directly connected to the R190A and be easily controlled from any network location.

Additionally, the R190A can be directly connected to any of the contact closure-controlled switches manufactured by Digital Alert Systems so that audio/video, IF or RF type switching can be accomplished.

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

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

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, including the unit's IP address, Netmask, Gateway, network speed, mode and passwords. No username is required to log into Setup, and the default password is shown in bold between the quotes "**digital"**. The following screenshots show the setup pages.

Please note: Rev H units and earlier the password is 'monroe'.
Beginning with Rev I units and later the password is 'digital'.
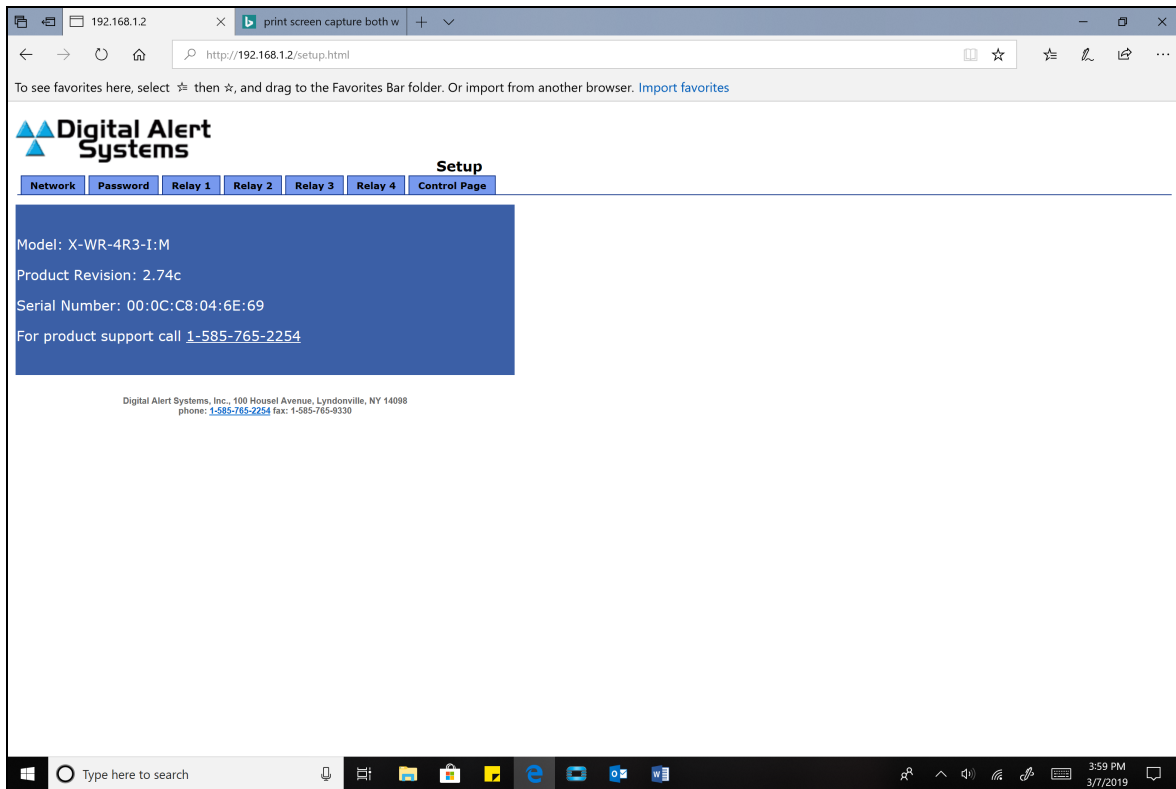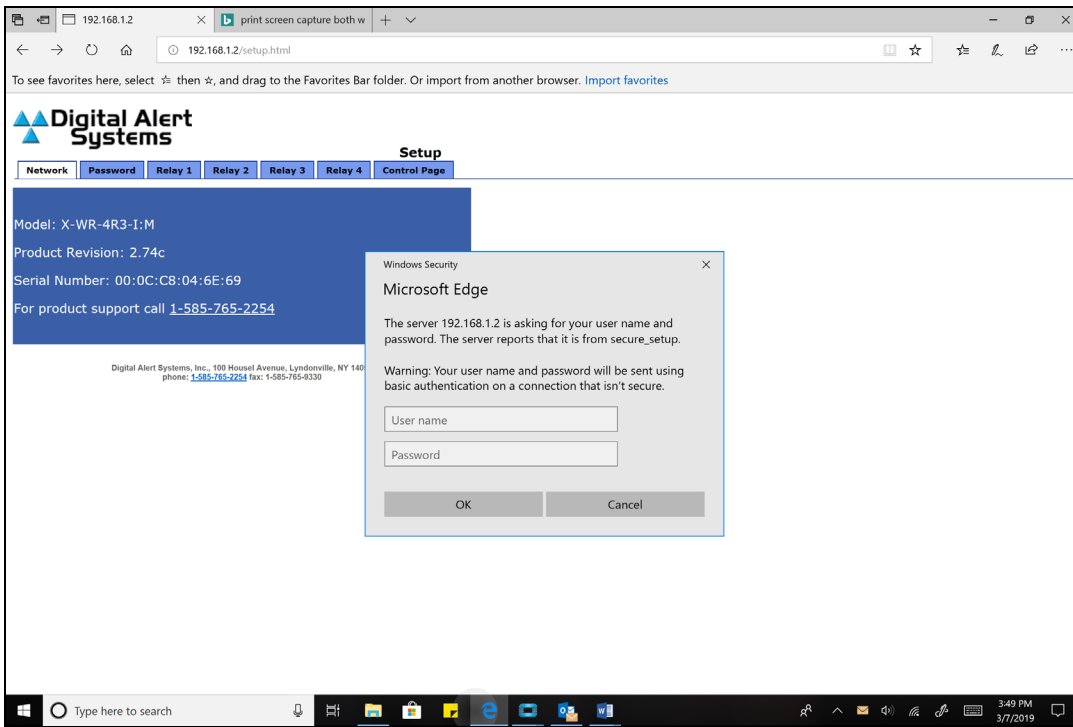
Click NETWORK to change the IP address and other Network settings.
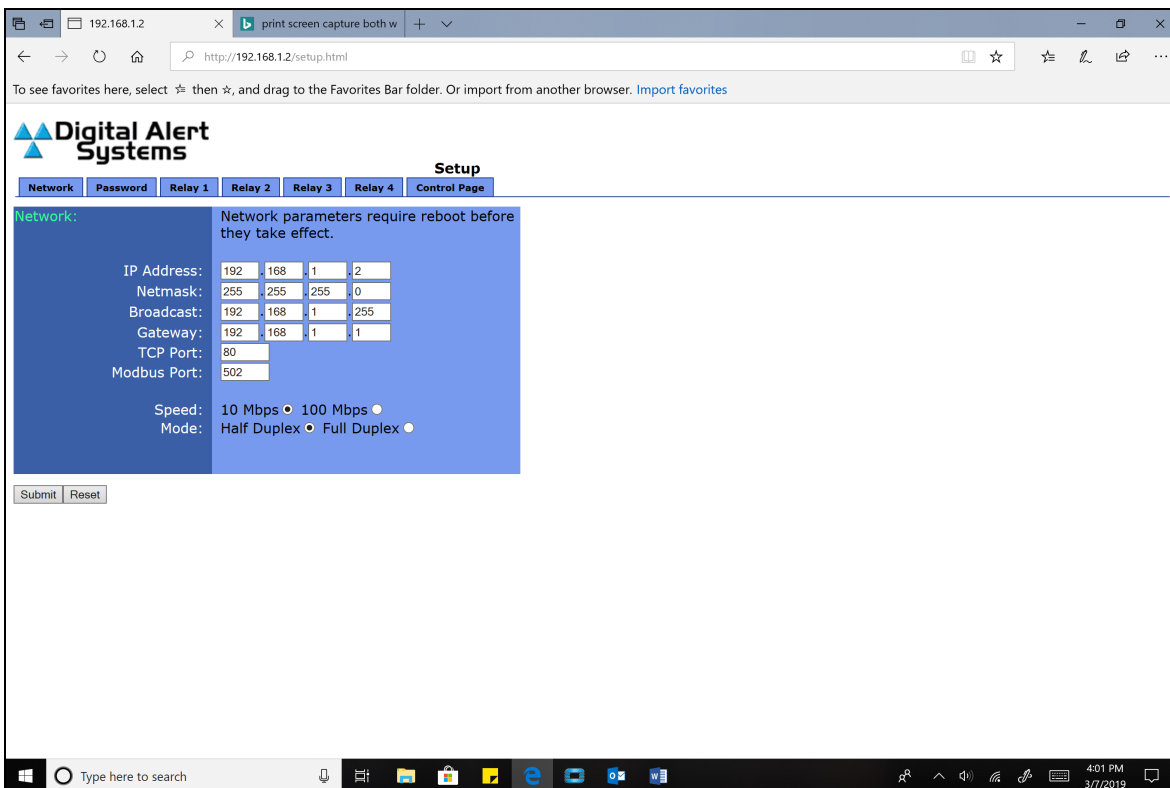
Changing the Network settings – Enter the new network settings as desired. To save click on "Submit". These new changes will show up in the Network tab but will not take effect until the power is removed and reapplied to the unit.

Permanent storage of IP change – To store the new Network settings into memory, remove the power from the unit, wait approximately 10 seconds, and reconnect the power to the unit.

Note: To reset to the default factory network settings, remove the power from the unit, press and hold 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.

Password Settings – The R190A allows programming of a Setup and a Control password. Setup default password is "**digital**", with the Control password is disabled. Passwords can be up to 10 characters in length. To save changes to either the Setup or the Control password, click on the "Submit" button.

If the password(s) are forgotten, the R190A can be reset 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 "**digital**" 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.

Please note: Rev H units and earlier the password is 'monroe'.
Beginning with Rev I units and later the password is 'digital'.

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, 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).

OPERATION

Test the unit 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.
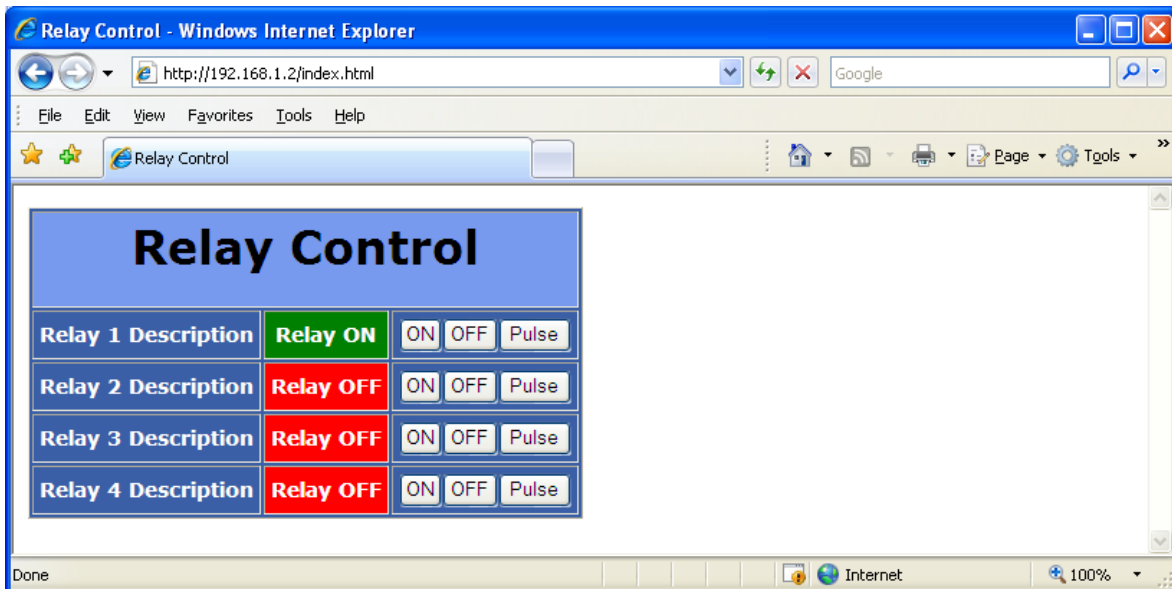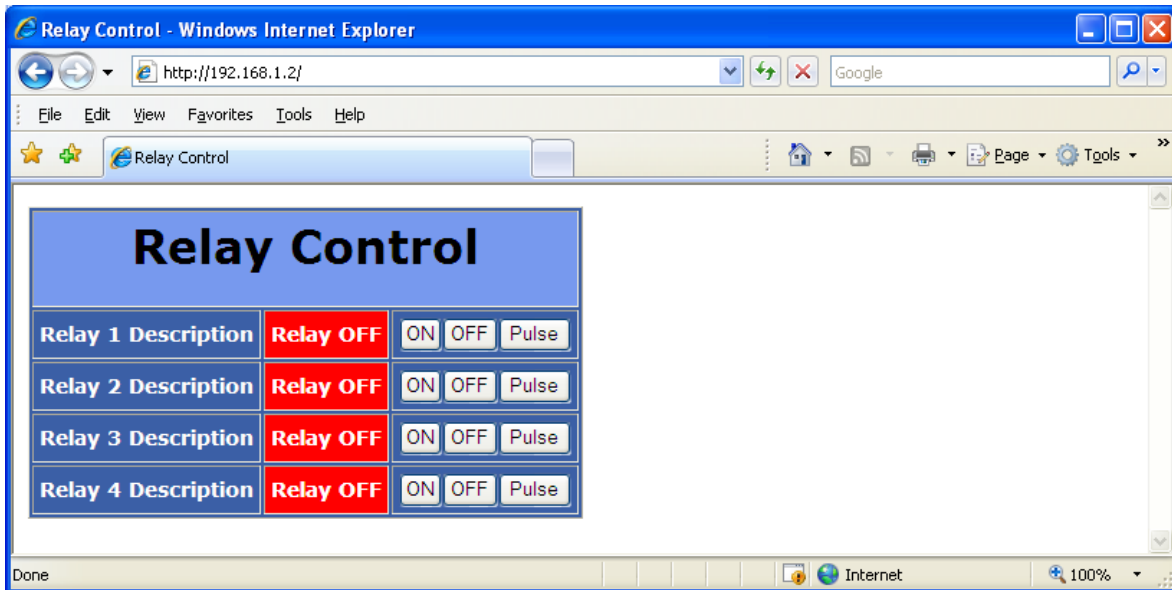
Applications

The R190A will 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 will control all of the contact closure operated switches manufactured by Digital Alert Systems. A general wiring application of these switches is shown below.

Typical R190A Wiring Diagram