MiniDE
User Manual

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b) Resulting from attempts by those other than Apantac representatives to install, repair, or service the Product;
c) Caused by installation of the Product in a hostile operating environment or connection of the Product to incompatible equipment;

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1.0 WHAT'S IN THE BOX

1 x MiniDE Multiviewer

1 x Rack Mount Kit

1 x RJ50 to DB9 cable with terminal block for GPI/Tally

1 x RJ45 to DB9 cablec for RS-232

Important Note:

Default IP address: 192.168.1.151

2.0 Key Features

- Four universal inputs – HDMI/DVI, VGA, YPbPr, CVBS
- Windows can be re-sized freely
- Built-in web page setup, can be easily accessed by any web browser

3.0 Specifications

Description	4 input multiviewer
Software	Built-in web interface
Connectors	
IP	100 Base-Tx, Ethernet TCP/IP on RJ45 port
GPIO	8 lines on 10-wire RJ50 port (adapter cable/breakout provided)
RS232	Serial on RJ45 connector (adapter cable provided). (Serial port use not currently available in firmware)
DVI/HDMI	DVI/HDMI, VGA, YPbPr, Composite
EMI/RFI	Complies with FCC Part 15, Class A, CE, EU, EMC, C-tick
Power	DC 5-Volt, 3.2 Amp power adapter
Size	440mm W x 125mm D x 44mm H (not including rack mounting 'rack-ears')
Mounting	Rack mount, 1 rack unit in height

4.0 Front/Rear Panels

4.1 Front Panel

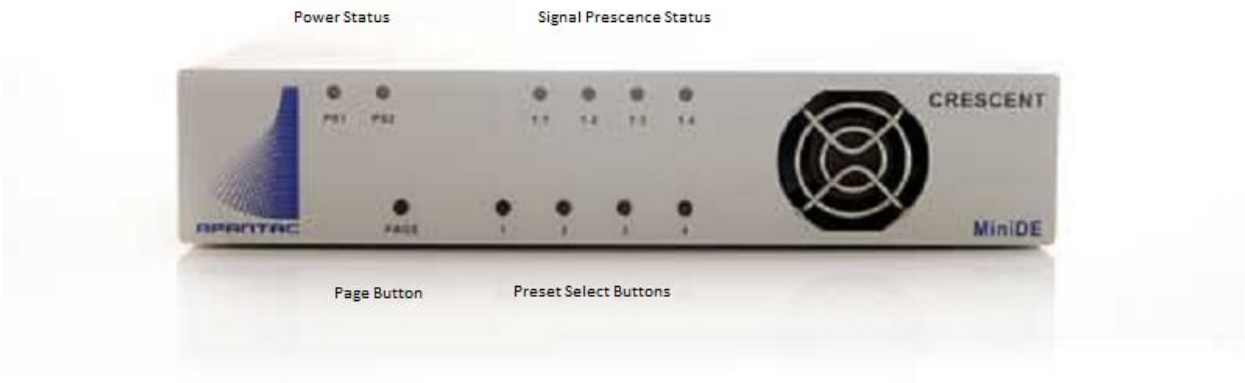
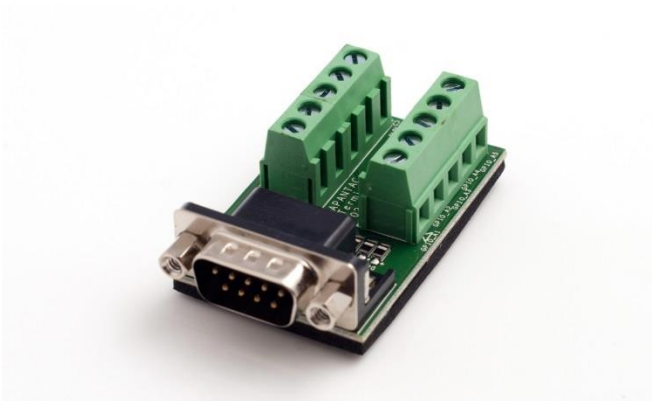


Figure 4-1 MiniDE Front Panel

4.2 Rear Panel

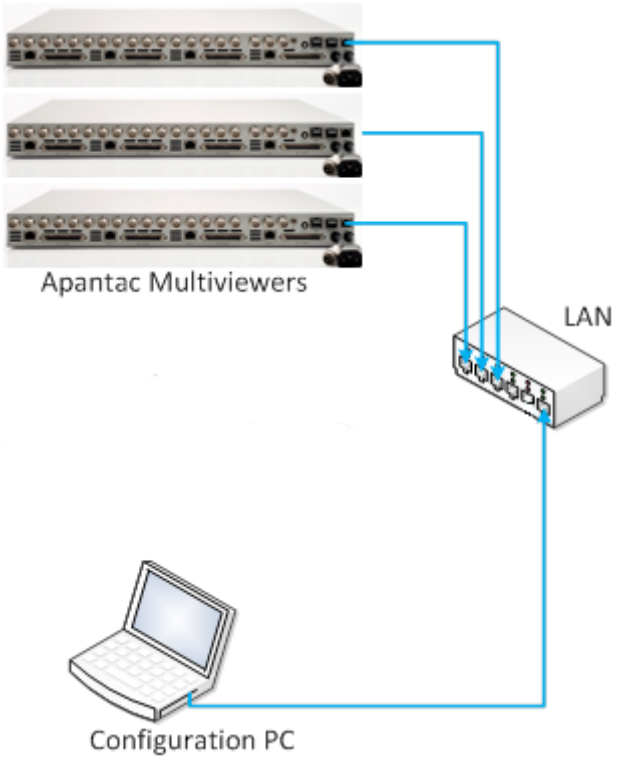
Figure 4-2: MiniDE Rear Panel

5.0 Accessories

Power Adapter	2 x Mounting Plate
RJ50 to DB9 Cable for GPI/O	RJ45 to DB9 Cable for RS-232
	
Terminal Block for GPI/O	

6.0 Installation

Ethernet Wiring

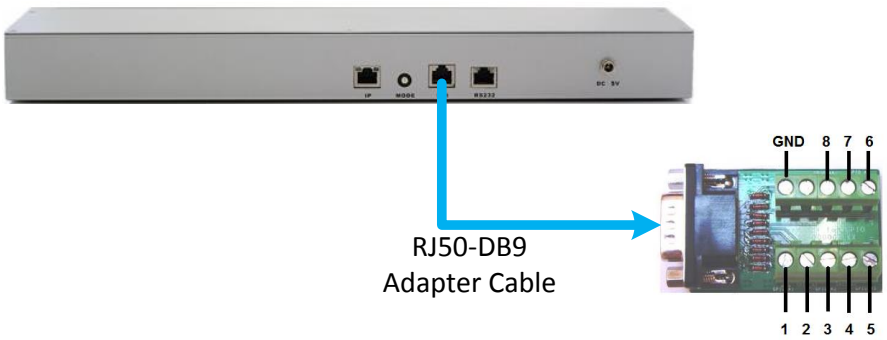


GPI/O Wiring

Connect the GPI port to the DB9 breakout wiring block using the RJ50-DB9 adapter cable.
(NOTE: The RJ50 connector has 10 contacts and a metal shielded end.)

GPI inputs can be provided by either relay contact closures or open-collector circuits of external equipment. GPI connections must include the ground (GND) reference. The input is activated when it is brought to the ground reference level.

GPO outputs provide a 5volt output level from the MiniDE when active, and ground level when inactive.



7.0 Configuration and Programming

7.1 Getting Started

The MiniDE is designed to be a low cost quad split multiviewer. It has a built-in web browser interface that makes setup easy.

7.2 Connecting to the MiniDE with a Web Browser

The default address for the MiniDE is 192.168.1.151. Open a web browser and type 192.168.1.151 in the URL address line. When connected the login page will be displayed.

The default username is "apantac", the default password is "apantac". The username and password are case sensitive.

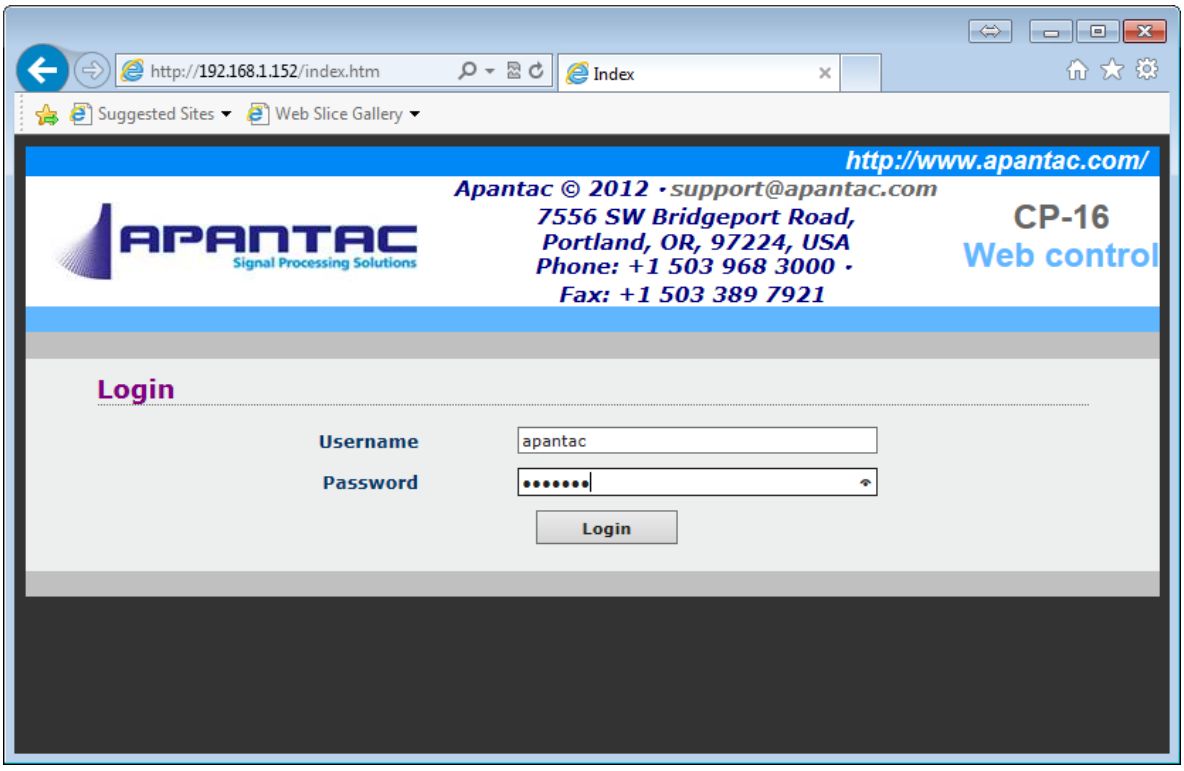


Figure 7.1: MiniDE login page

7.3 MiniDE Administration Setup

After you logon to the MiniDE page, you will be able to access 3 tabs, Setup, Advance and Adminstration. Click the Administration tab.

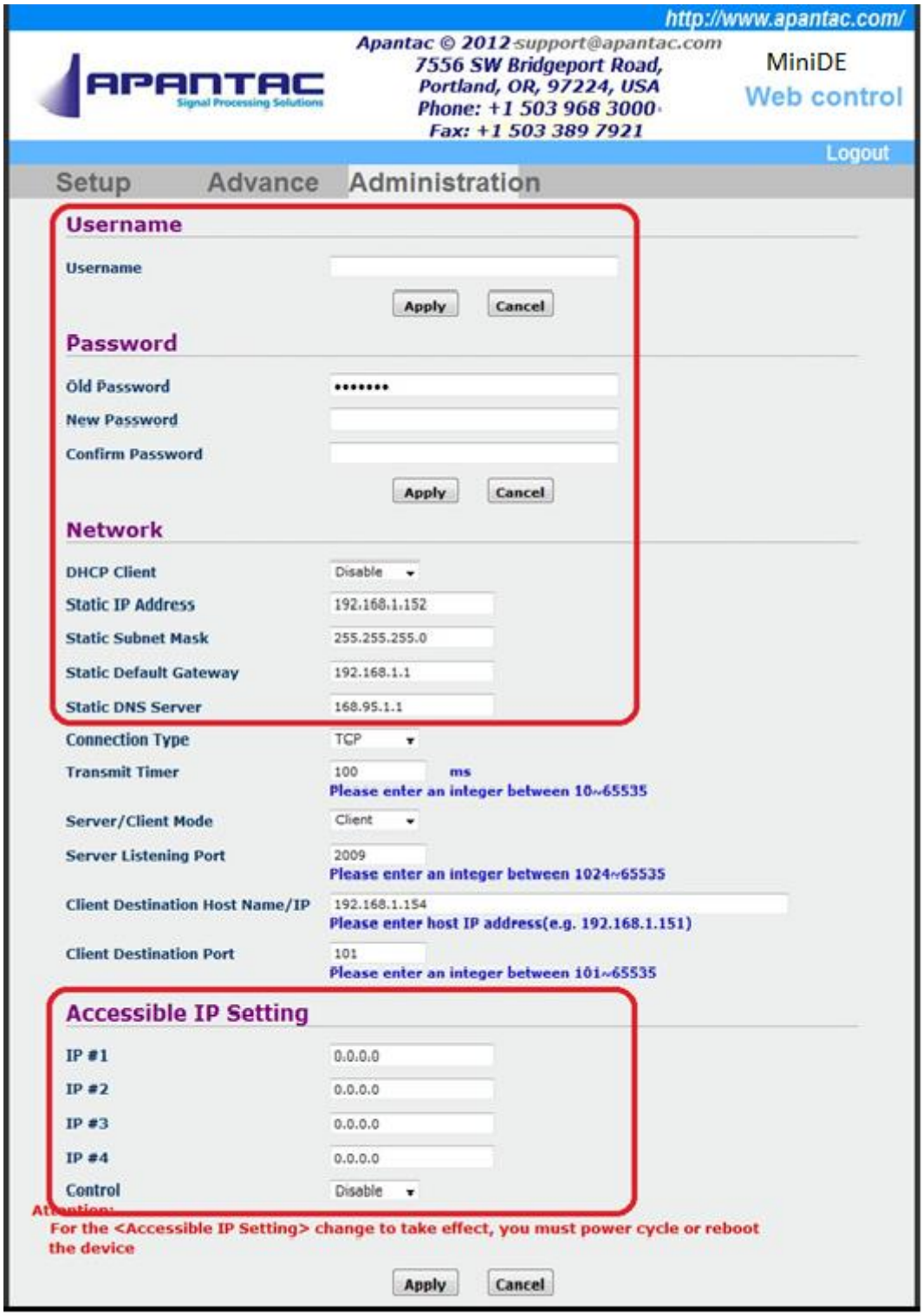


Figure 7.2: Administration Tab, MiniDE settings

7.3.1 MiniDE Module Setup

The areas outlined in red in the figure 7.2 above pertain to the MiniDE module itself.

- **Username**
  The default username for logging on to these setup webpage is "apantac". This can be changed to your preference. Click the corresponding "Apply" button after entering your information.
- **Password**
  The default password for logging on to these setup webpage is "apantac". This can be changed to your preference. Click the corresponding "Apply" button after entering your information.

- **DHCP Client**
  DHCP can be Enabled or Disabled. Enabling DHCP will cause your network's DHCP server (server or router) to assign the MiniDE an IP Address of it's choice. Not knowing the assigned IP Address will make displaying the setup webpages difficult. If your I.T. department insists on DHCP, they should program their DHCP server (router) to assign a known, preselected IP Address to the MiniDE unit. To apply these changes click the 'Apply' button at the bottom of this webpage and then click the 'Reboot' button on the Setup tab.

  NOTE: If DHCP is Enabled, the following four network settings will be ignored. (Your Network's DHCP server will assign them.)

- **Static IP Address**
  The IP Address of the MiniDE module. This should be set to an address on the same subnet as the multiviewers it will control.
- **Static Subnet Mask**
  Default subnet masks depend on the class of your network.

Network class	Network IP addresses	Subnet Mask
Class A	10.xxx.xxx.xxx	255.255.0.0
Class B	172.xxx.xxx.xxx	255.255.240.0
Class C	192.168.xxx.xxx	255.255.255.0

- **Static Default Gateway**
  Not applicable when MiniDE and Multiviewers are on the same local subnet network.
- **Static DNS Server**
  Not applicable when MiniDE and Multiviewers are on the same local subnet network.

Accessible IP Setting

WARNING: If enabled, only computers with these IP addresses can login to the MiniDE's webpages.

- **IP #1 through IP #4**

  Enter the IP addresses of the computer's to be permitted to login to, access, and change the MiniDE's settings.

- **Control**

  This will enable or disable the 'Accessible IP Setting' function and settings. See the above warning prior to enabling this function.

7.3.2 Multiviewer Connection Setup

The areas outlined in red in the figure below pertain to the MiniDE connecting to the Computer.

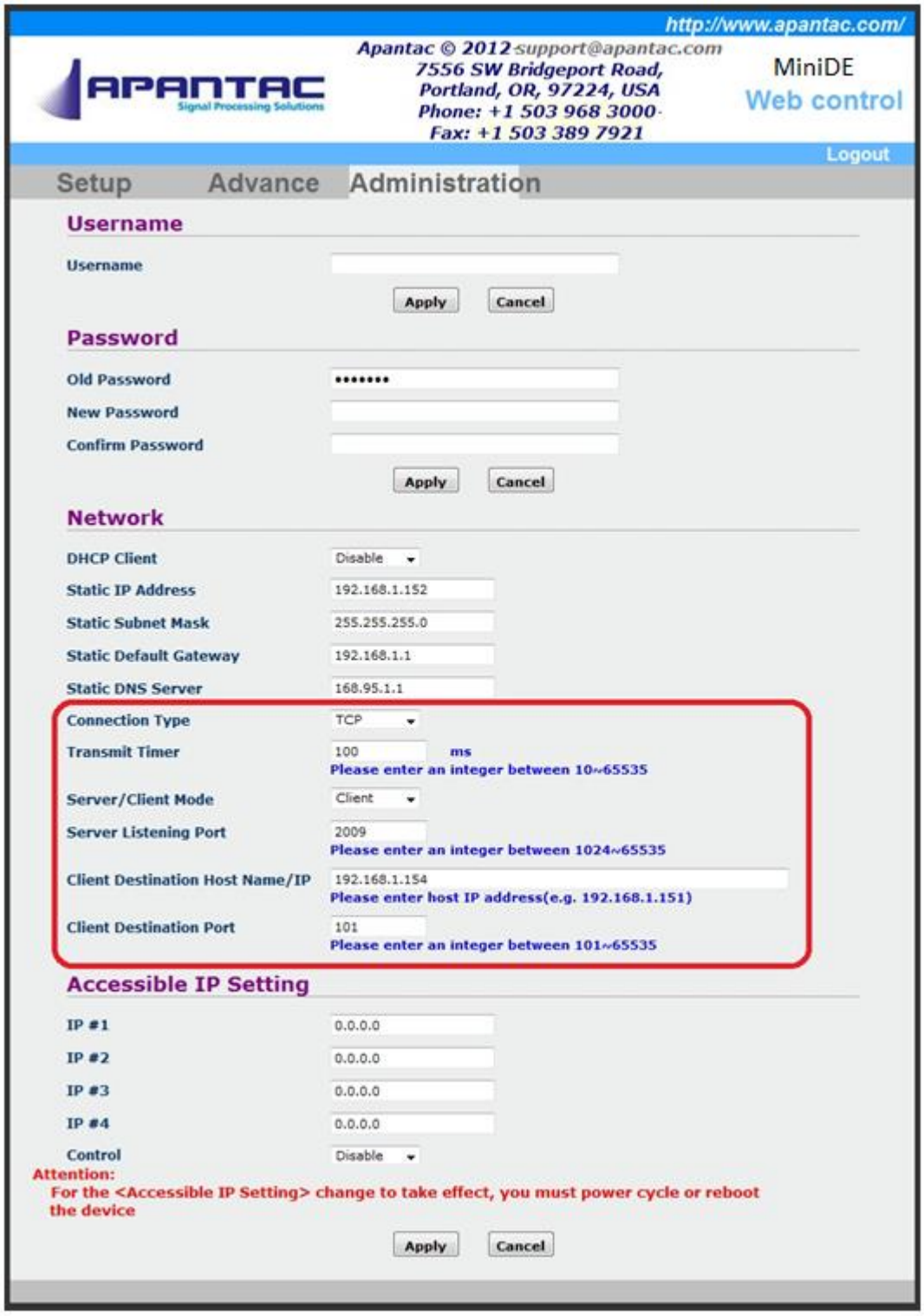


Figure 7.3: Administration Tab, Multiviewer settings

- **Connection Type**
  TCP or UDP protocol. Default is TCP (Apantac Tahoma multiviewers utilize TCP protocol.)
- **Transmit Timer**
  Transmission timeout limit. Default is '100'. Change to 200 or 300 ms if experiencing trouble with the multiviewer not receiving commands and no other reason can be found.
- **Server / Client Mode**
  Default is 'Client' and cannot be changed.
- **Server Listening Port**
  Default is '2009'.
- **Client Destination Host Name / IP**
  N/A
- **Client Destination Port**
  Default is '101', do not change. (Apantac Tahoma multiviewers utilize port 101 for receiving AXP command protocol.)

7.4 MiniDE Operation

The Setup tab provides for programming the MiniDE output format, input source format, window coordinates and position, and zoom settings

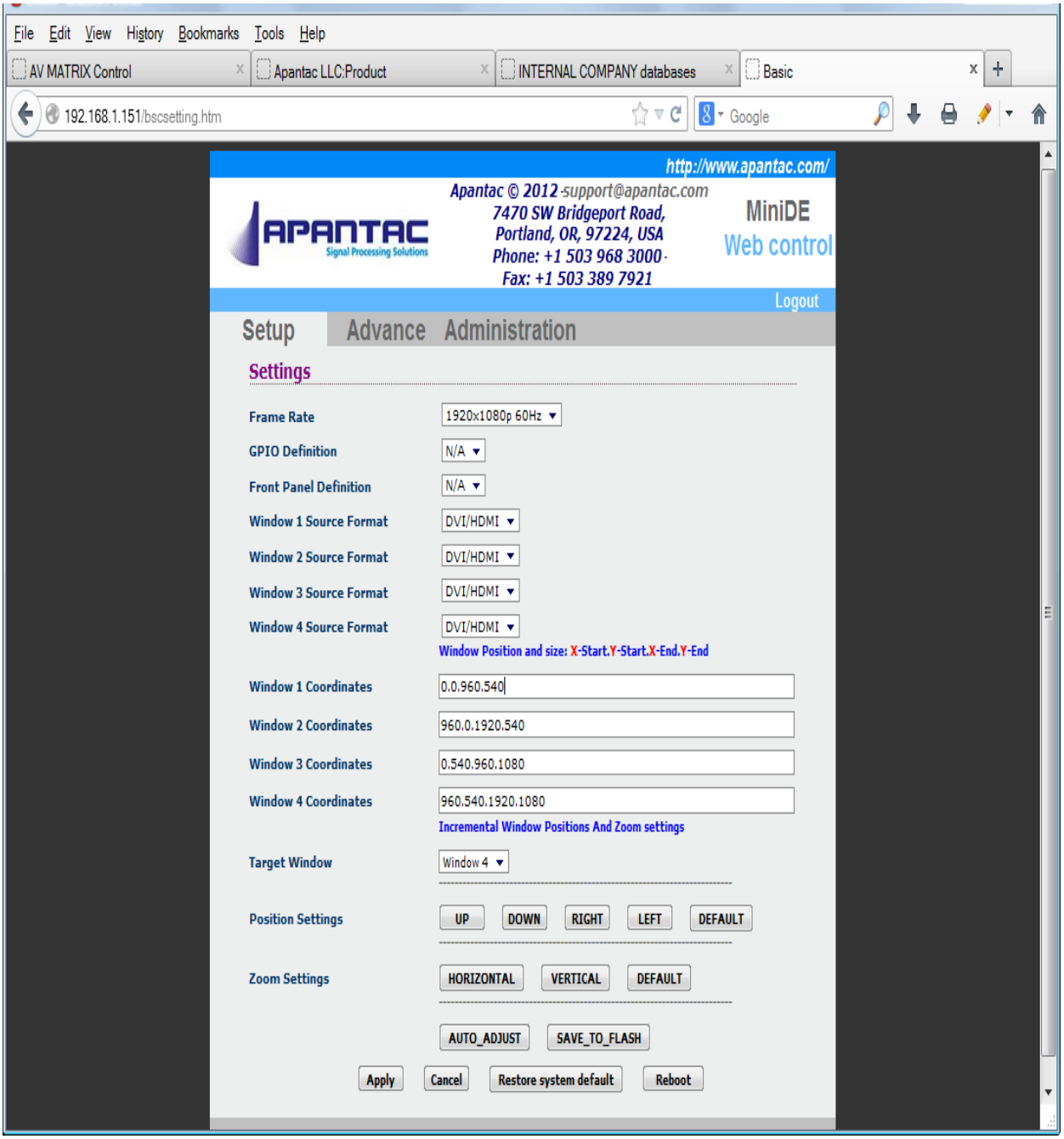
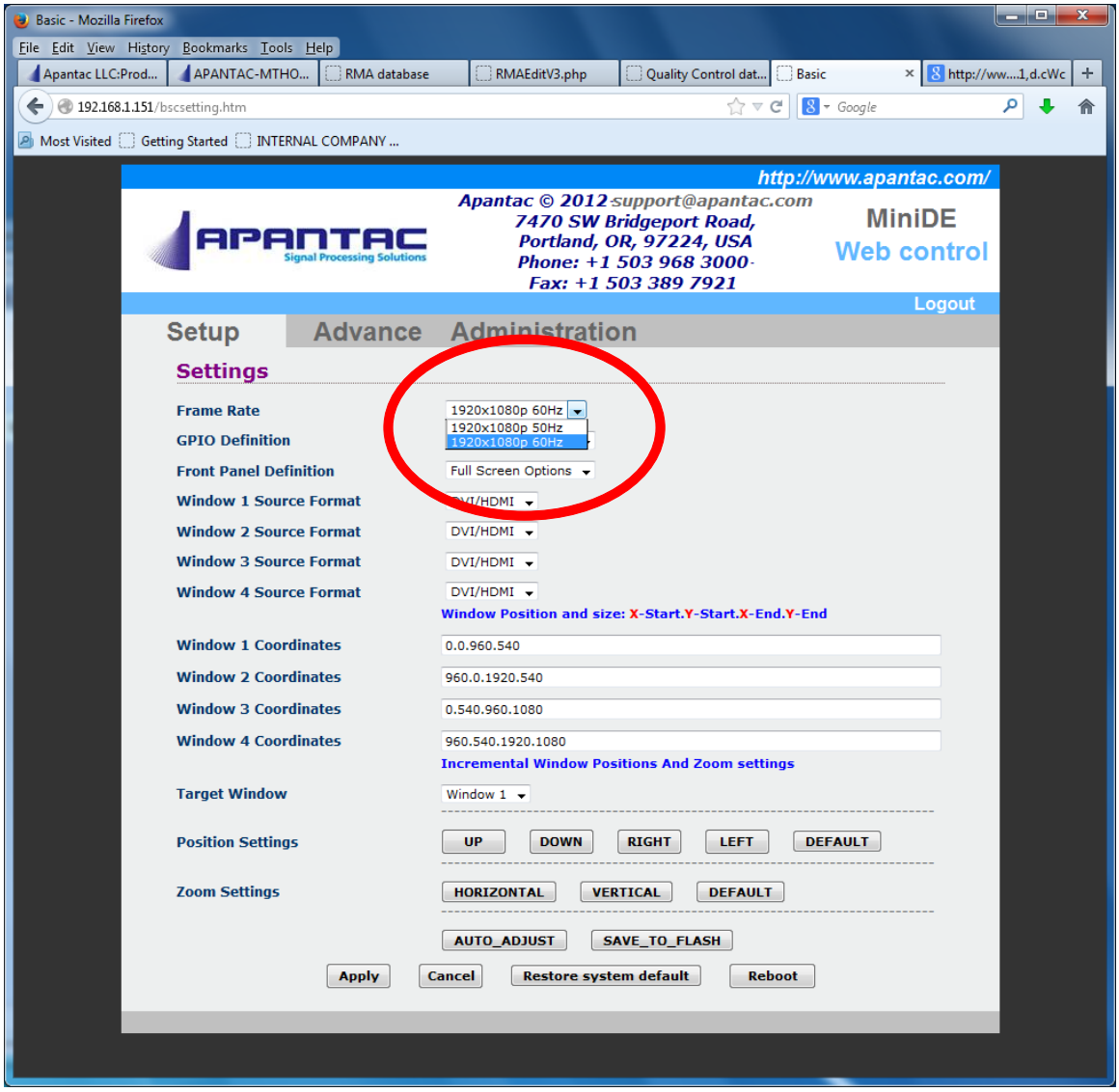


Figure 7.4: Setup Tab

7.4.1 MiniDE Programming

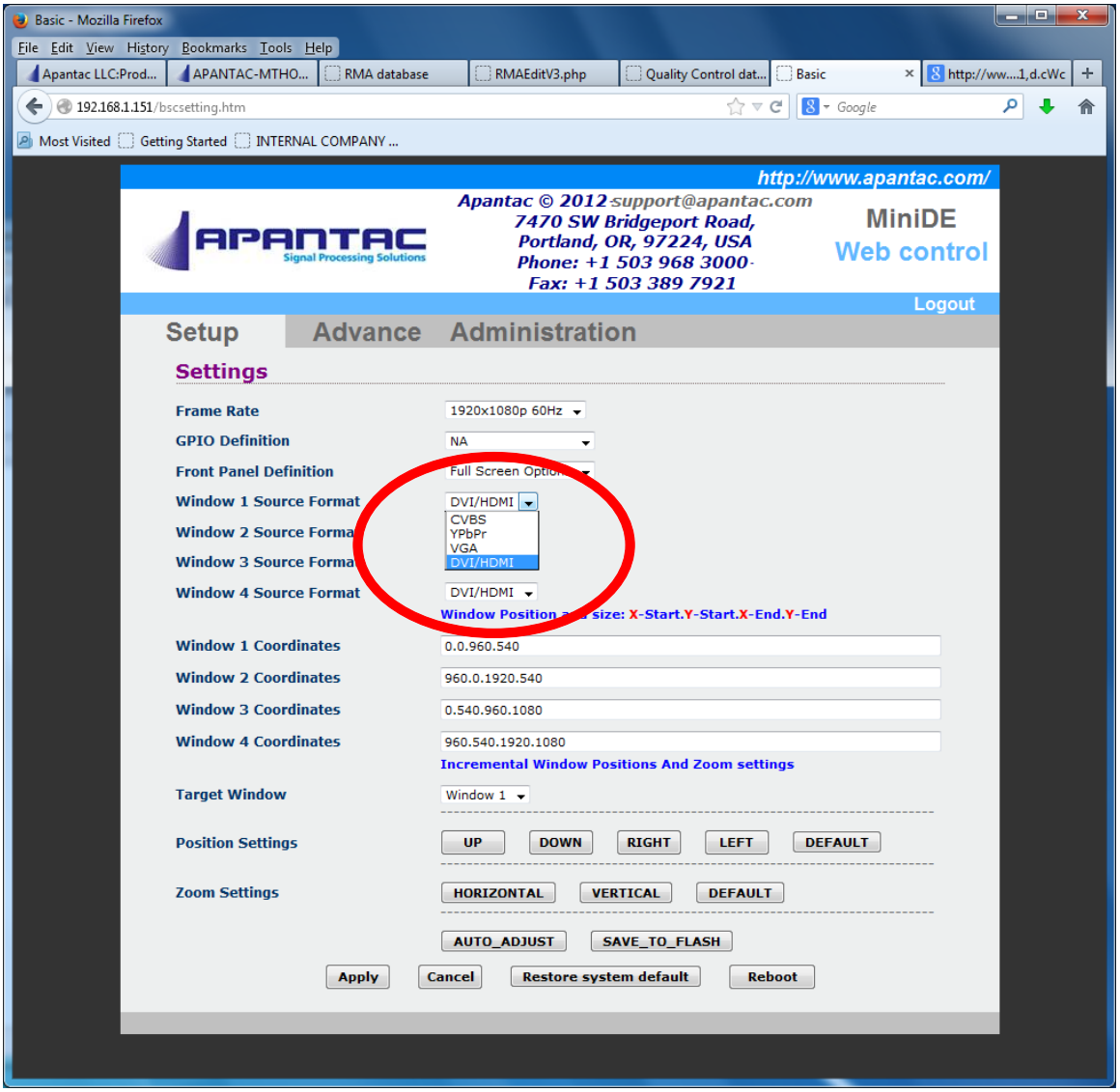
- **Frame Rate**

The first line in the Setup screen is Frame Rate. A pull down menu displays all available selections. At the time of this publication only two formats are available: 1080p at 60Hz or 50Hz/



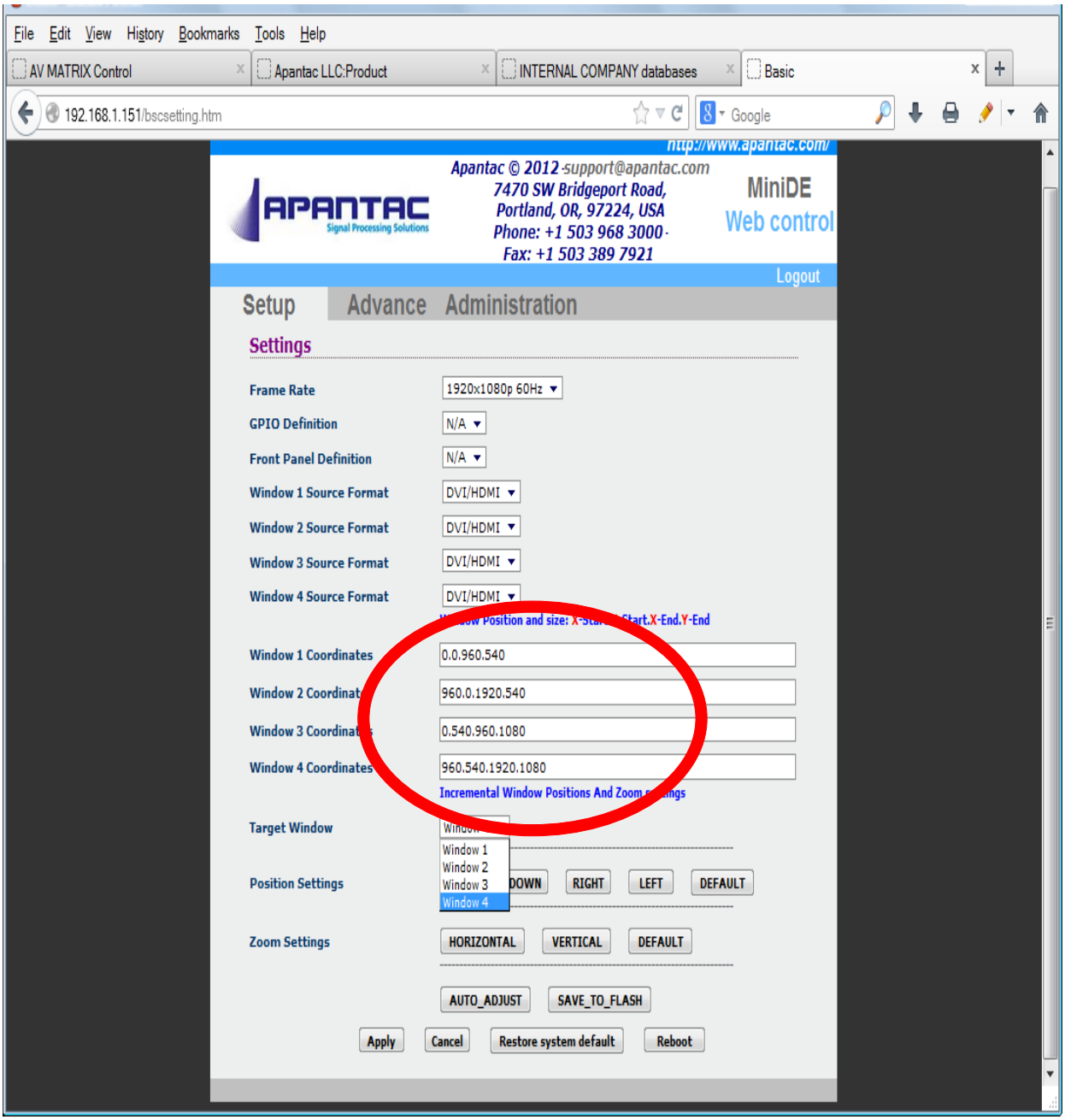
- **Window Source Format**

The next available setting is the Window Source Format. This is a pull down menu that allows selection of the input source format. The options are CVBS, Component, VGA and HDMI/DVI.

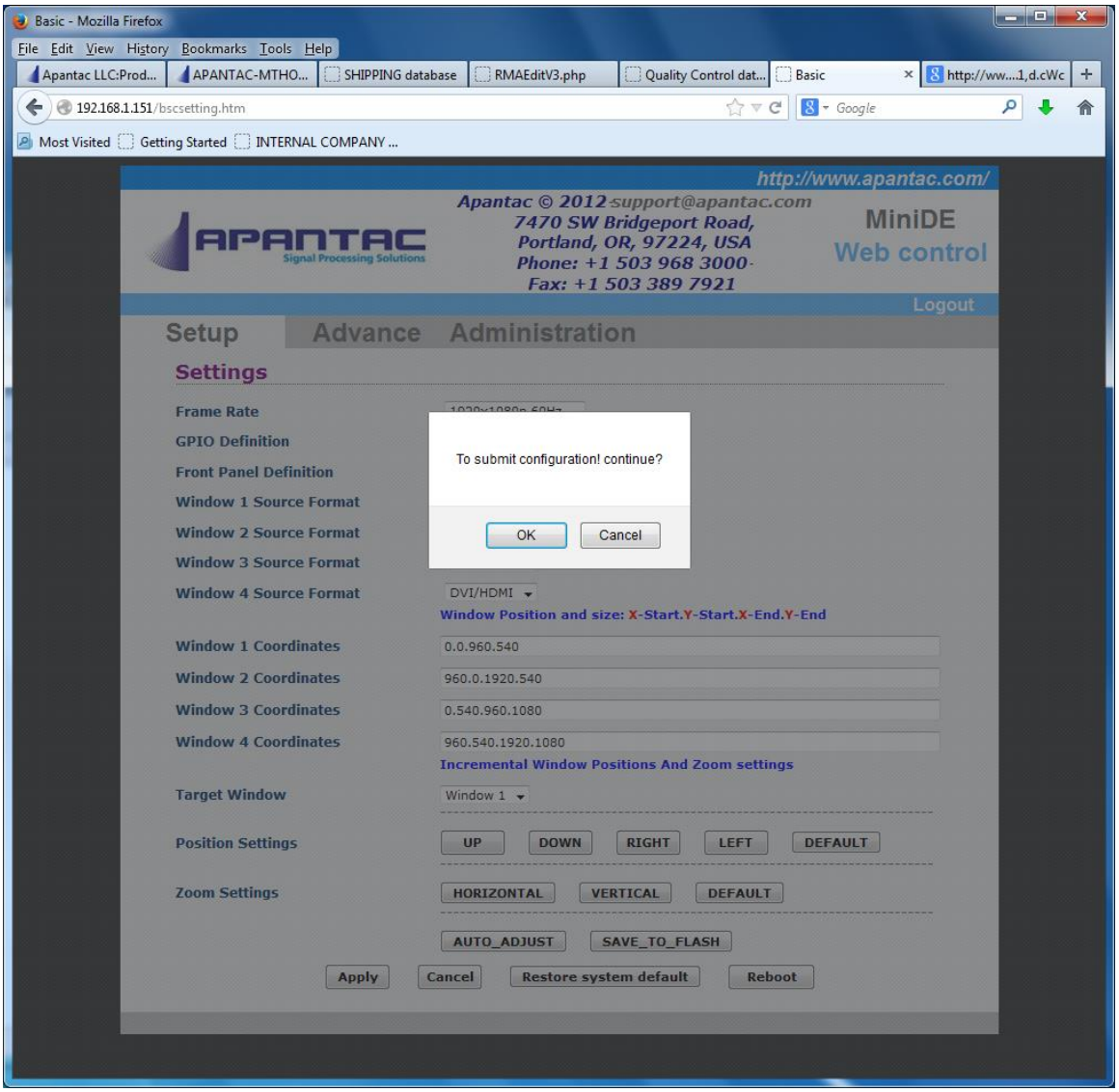


- **Window Coordinates**

Below the Source Format cells are the four window coordinates. These position the windows on the screen. The values are in pixels. With a 1080p Frame Rate, the picture is 1920 pixels wide by 1080 pixels tall. In this example the four windows are evenly spaced in to four quadrants

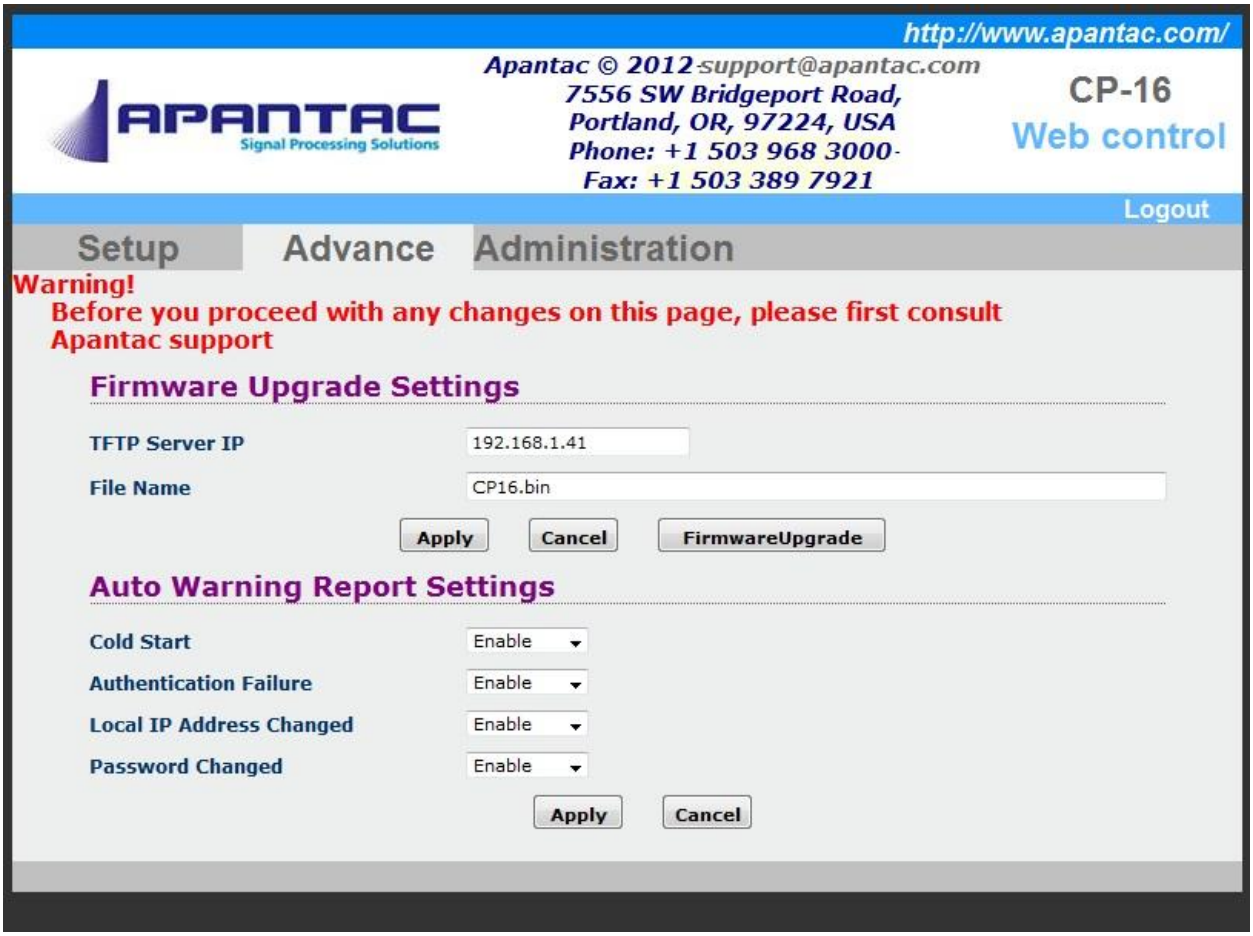


When the “Apply” button is clicked, the controller with respond with a confirmation pop-up. You must click “OK” to apply the changes.



7.5 MiniDE Advance tab

The Advance tab provides further administration setup and service.



- **Firmware Upgrade Settings**

  For use by authorized service personnel only. Contact Apantac Technical Support prior to making any changes on this page.

- **Auto Warning Report Settings**

  When certain setup actions are performed an alternate webpage is displayed as standard warnings. These are enabled by default and there are no reasons to alter these settings.