

Getting Started Instructions for the Access RF Prober

PC Recommended Requirements

The following recommendations are provided to assist you in purchasing the correct computer system to use with the Huntron Workstation software. These are the recommended minimum computer requirements:

- PC with multicore processor; Intel i7 or similar recommended
- Microsoft Windows 7 (Service Pack 1), 8 or 10
- Solid State hard drive
- DVD drive
- 8GB RAM or more
- 1920x1080 minimum video resolution
- Keyboard and Mouse
- Internet connection
- Available USB 2.0 ports – 2 ports with Tracker and Access Prober combinations

Installing the Huntron Workstation Software

NOTE: Install the software before installing or connecting any hardware.

Uninstall any previous versions of Workstation prior to installing the new version. Insert the Huntron Workstation DVD. The DVD should Autorun and begin the installation process. If your PC has Autorun disabled then open a browser window to the DVD and select WorkstationSetup.exe. This will begin the installation process. Follow the on-screen instructions to proceed to install Workstation.

During the install you will be asked (Yes or No) to install additional software for Access Probers. Select the appropriate response based on your Prober hardware. Follow on-screen prompts to install the additional software.

- Access USB Framer Grabber for Access and Access 2 Probers; selecting **YES** will install the Sensoray software necessary for the USB camera on an Access or Access 2
- DFK USB Camera driver installation: Select **NO** for this option.

If you purchased CAD Tools then install using the supplied DVD. Follow instructions listed in the CAD Tools Tutorial.

All of the Workstation tutorials are available on the Huntron web site:

www.huntron.com/sales-support/software.htm

Do not run the software at this point. The hardware must now be installed to complete the installation.

Keysight N9935A and IO Libraries Suite

Keysight IO Libraries Suite is required for operation of the Spectrum Analyzer. Go to "keysight.com" and search on "Keysight IO Libraries Suite" to locate the download page. Download Keysight IO Libraries Suite. Run the IO Libraries Suite installer. The install process should begin. Use default selections as prompted during the installation process as there are no special conditions needed for the spectrum analyzer hardware.

Copy the "**HuntronExternal1.dll**" file from the path "C:\Program Files\Huntron Workstation 4.3\E1N9935A" to the path "C:\Program Files\Huntron Workstation 4.3". Select "Yes" to overwrite the existing "HuntronExternal1.dll" file in that path. As an option, rename the existing "HuntronExternal1.dll" before pasting the N9935A "HuntronExternal1.dll" file. This will allow you to go back to the default configuration if needed.

Rohde & Schwarz FSH4

Install the support software provided with your model FSH4 spectrum analyzer.

Interchangeable Virtual Instrumentation (IVI) installations from other sources such as the Keysight IO Libraries Suite will also work with the FSH4.

Follow the information provided in the "Quick Start" guide provided with your FSH4 to setup PC connection for the instrument.

Copy the "**HuntronExternal1.dll**" file from the path "C:\Program Files\Huntron Workstation 4.3\E1RSFHS4" to the path "C:\Program Files\Huntron Workstation 4.3". Select "Yes" to

overwrite the existing "HuntronExternal1.dll" file in that path. As an option, rename the existing "HuntronExternal1.dll" before pasting the RSFSH4 "HuntronExternal1.dll" file. This will allow to go back to the default configuration if needed

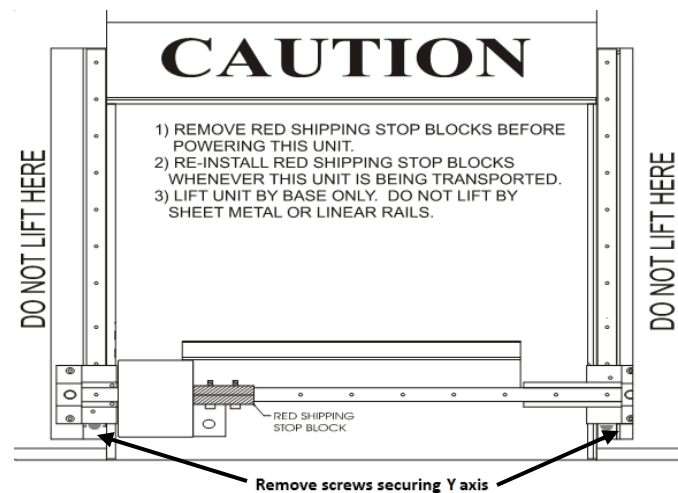
All of the Workstation tutorials are available on the Huntron web site:

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Do not run the software at this point. The hardware must now be installed to complete the installation.

Installing the Hardware

1. Locate the unpacking sheet that was supplied with the Prober.
2. Follow the unpacking steps as outlined in the unpacking sheet. Lift the unit by grabbing the base only. Do not lift the unit by grabbing the sheet metal covers or the X axis mechanism.



3. Place the Prober on a strong, stable table or desk.
4. Remove the Red Shipping Stop Block from the X axis rail using the Hex Allen tool attached to this sheet or in the tool kit. Do not discard this block as it will be needed again if transporting the Prober to another location. Access RF Probers have the Y axis secured with two screws that insert through the left and right stop blocks.
5. Remove the red **Z Probe locking thumb screw** located near the top right side of the Z assembly. Do not discard this screw. You will need this screw for locking the Z probe assembly when transporting the unit. The probe head should now be able to move freely by hand.

Setting the Line Voltage

The power entry module includes the power switch (0 = OFF, 1 = ON), power cord connector, and a removable fuse tray which selects the line voltage and holds the line fuses. If the

correct voltage is not selected, open the tray door, remove the fuse tray. Turn the fuse tray over and reinsert and close the door. The correct voltage should be visible when the tray door is closed.

Connecting the Prober USB Interface to the Computer

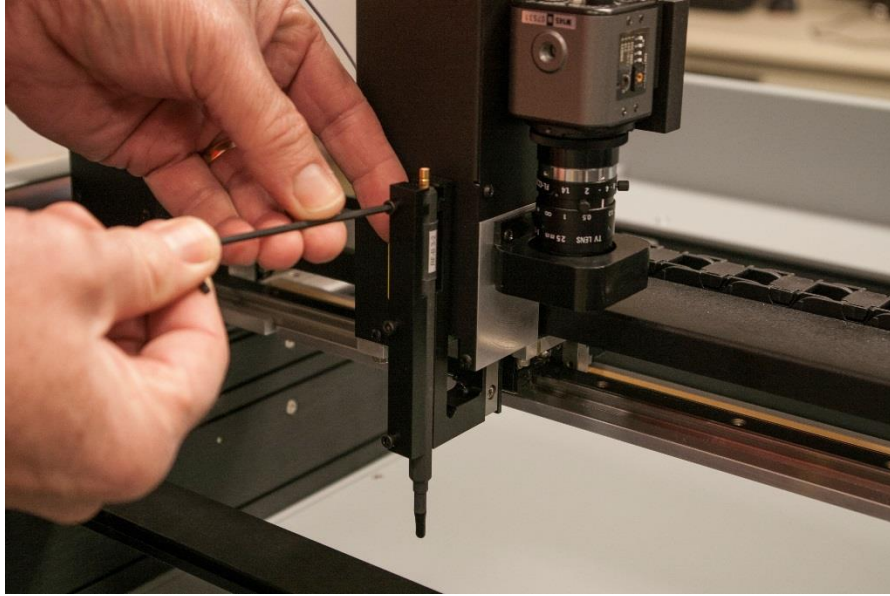
Locate the USB cable and connect the correct end to the Prober USB port. Connect the other end to the appropriate USB port on the computer.

Installing the RF Probe and Connecting the Spectrum Analyzer

Remove the front piece of the RF Probe clamp from the Probe Holder assembly mounted on the Prober Z axis. Hold the RF probe while placing the front piece of the RF Probe clamp back in place. Note that the top of the RF probe is pressed against the top of the Probe clamp.

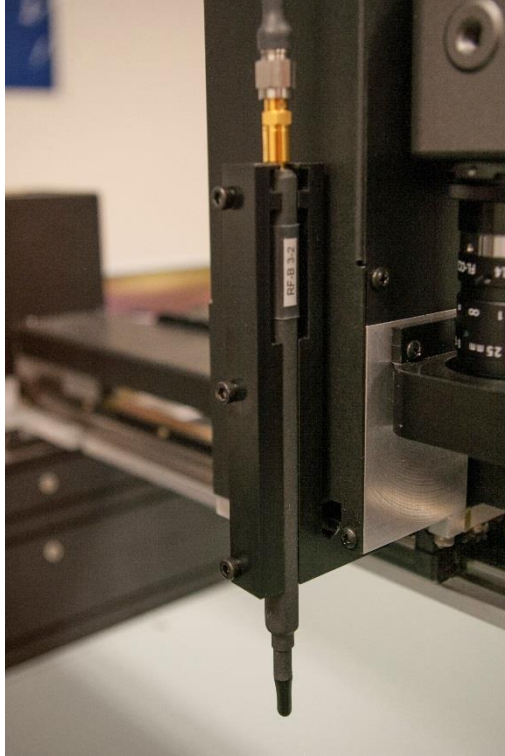


Tighten the Probe clamp screws so the probe is secure. Do not overtighten the screws.



Connect the RF cable to the top of the RF Probe by pressing it firmly down on press fit connector.

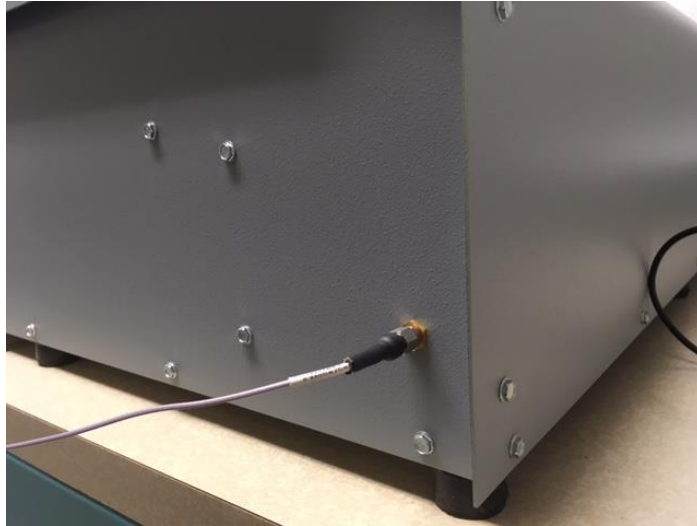




Connect the supplied RF coax cable to the spectrum analyzer SA RF Input connector (Port 2 for N9935A; Port 1 for RSFSH4) using the supplied adapter.



Connect the other end of the RF coax cable to the connector on the left rear panel of the Access RF prober.



Connect the supplied Ethernet cable to a PC Ethernet port or connected Ethernet hub.
Connect the other end of the Ethernet cable to the spectrum analyzer LAN port.



Installing the Device Drivers

The device drivers below may install in a different order on some PCs than specified below. If so, find and follow the steps below that pertain to the drivers as they are loaded.

Note for Windows 64bit users: Some of the device drivers will attempt to auto install and fail. After following the steps below (they may not all occur), open device manager and look for items with yellow exclamation points. Update these drivers by right clicking on them. Select the install DVD for the source of the drivers as described below.

1. Turn on your computer and allow Windows to boot.
2. Insert the Huntron Workstation DVD in your DVD drive.
3. Open Windows Device Manager.
4. Look for a device called "Huntron Prober" that will be marked with a yellow exclamation point.
5. Right-click on the "Huntron Prober" device and select **Update Driver**.
6. A window will pop up asking where to search for the driver. Select "**Browse my computer for driver software**".
7. The next window will allow you to browse to the driver location Click the **Browse** button and select the DVD root as the location (typically this will be the **D:** drive).
8. Click the **Next** button to continue.
9. If a message appears indicating that the driver has not passed Windows Logo testing, click "Continue anyway". Click Finish.
10. In Windows Device Manager the Huntron Prober device should now be located in a Huntron Device folder.
11. In Windows Device Manager locate "USB Device (Sensoray 2250)" that will be marked with a yellow exclamation point.
12. Right-click on the Unknown Device and select **Update Driver**.
13. A window will pop up asking where to search for the driver. Select "**Browse my computer for driver software**".
14. The next window will allow you to browse to the driver location Click the **Browse** button and select the DVD root as the location (typically this will be the **D:** drive).
15. Click the **Next** button to continue.
16. If a message appears indicating that the driver has not passed Windows Logo testing, click "Continue anyway". Click Finish.

12. In Windows Device Manager locate "USB Device (2250 WIS)" that will be marked with a yellow exclamation point.
13. Right-click on the USB Device and select **Update Driver**.
17. A window will pop up asking where to search for the driver. Select "**Browse my computer for driver software**".
18. The next window will allow you to browse to the driver location Click the **Browse** button and select the DVD root as the location (typically this will be the **D:** drive).
19. Click the **Next** button to continue.
20. If a message appears indicating that the driver has not passed Windows Logo testing, click "Continue anyway". Click Finish.
21. In Windows Device Manager a "Sensoray 2250 A/V Capture" device should now be located in a Sound, Video and Game Controllers folder.

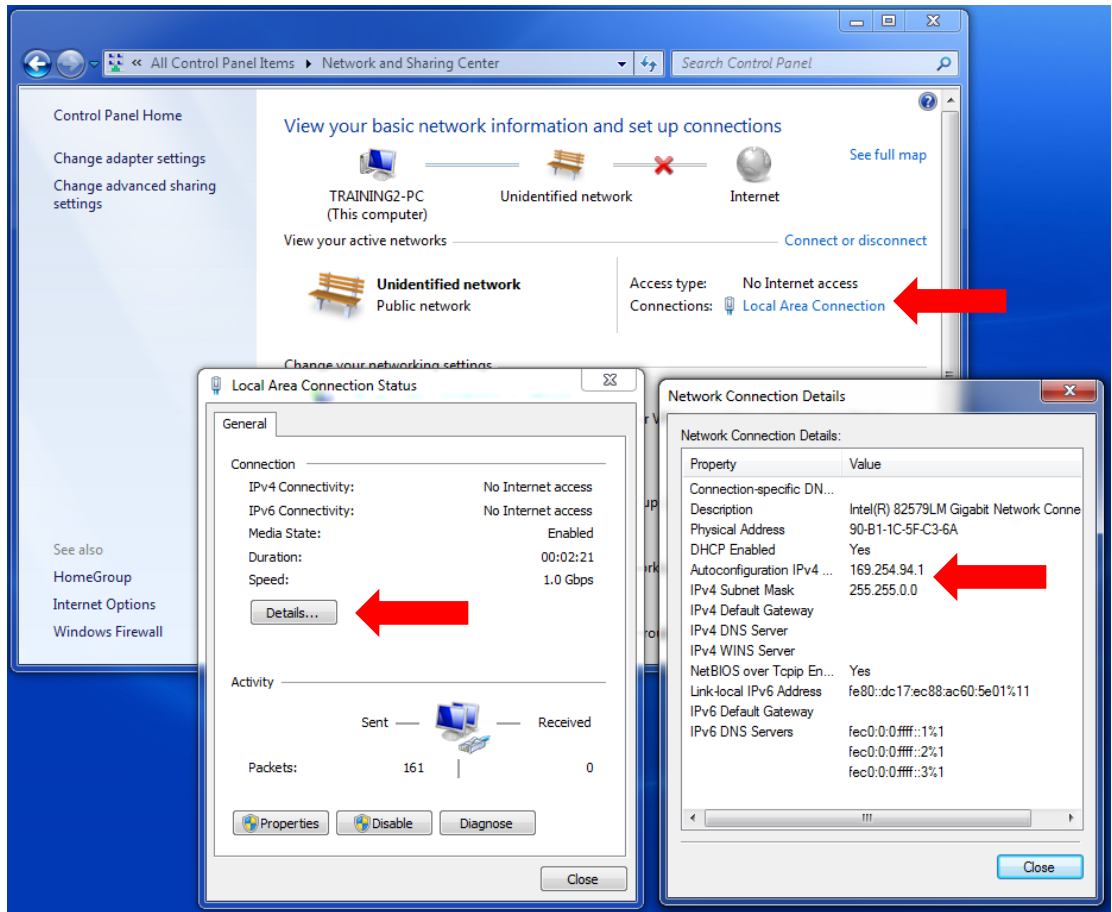
Configuring the Spectrum Analyzer

The supported Spectrum analyzers use a Local Area Network (LAN) connection to communicate with the PC. You will need to identify and configure IP addresses to establish communication.

****Note:** If you are connecting to the spectrum analyzer through a network, consult your IT department for assistance with the spectrum analyzer LAN settings.**

PC IP Address

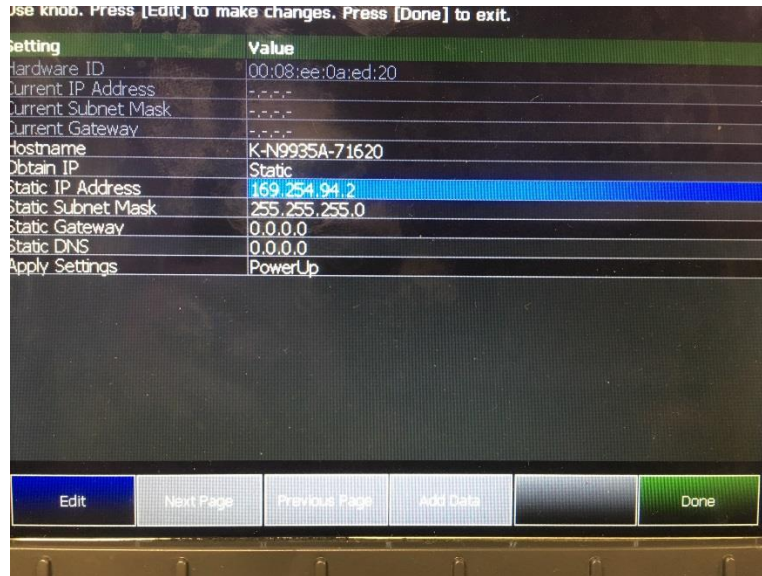
To identify the PC IP address go to the Windows **Control Panel** and select **Network and Sharing Center** (name may vary based on Windows version). Select the **Local Area Connection** link (arrow). In the Local Area Connection Status window, click the **Details** button (arrow). Make note of the computer's IPv4 address and IPv4 Subnet Mask (arrow).



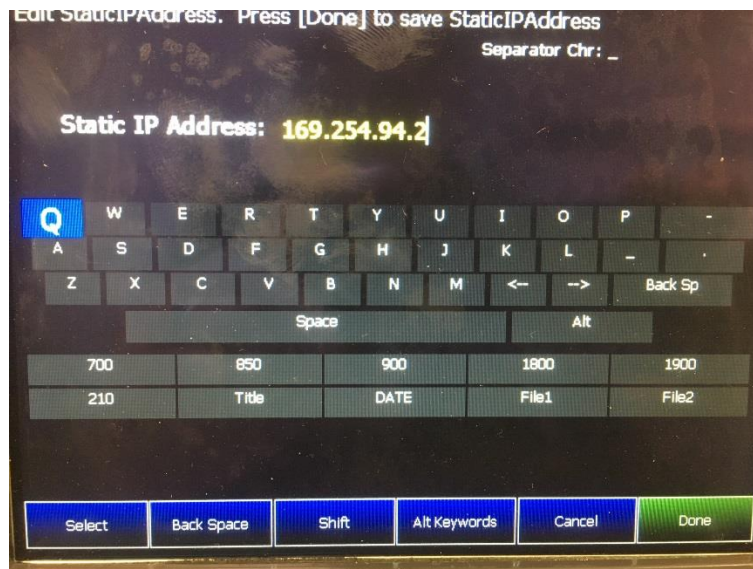
Setting the N9935A IP Address

Power on the N9935A spectrum analyzer. Once it is fully started up, perform the following using the front panel buttons:

- Hold the **MODE** button and press **7**
- Select **System Configuration** from the screen menu (press the button directly underneath)
- Select the **More** from the screen menu
- Select **LAN** from the screen menu to display the screen shown below



- Using the scroll wheel or Up/Down arrow buttons, highlight the **Obtain IP Address** field and press **Edit**
- Press **Obtain IP** to switch from **DHCP** to **Static**.
- Using the scroll wheel or Up/Down arrow buttons, highlight the **Static IP Address** field and press **Edit**
- Using the front panel number buttons, type in the IP address that was shown as the PC address but **add 1** to the last number set, example: if the IP address of the PC was **169.254.94.1** then set the spectrum analyzer address to **169.254.94.2**



- Press the **Done** button
- Make sure the **Static Subnet Mask** is set to **255.255.255.0** (this should be the default). Change it if necessary using steps similar to those used to change the IP Address.
- The **Static Gateway** and **Static DNS** should be set to **0.0.0.0** . Change these settings if necessary.
- Press the **Done** button to exit the LAN screen
- Power down the spectrum analyzer and then restart it

At this point you will need to start Huntron Workstation and configure the program to connect to the N9935A. Please refer to the Huntron Workstation Access RF tutorial.

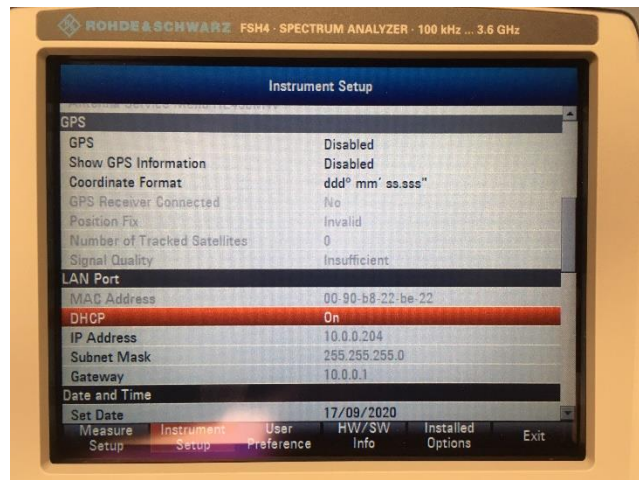
Setting the Rohde & Schwarz FSH4 IP Address

Power on the RSFSH4 spectrum analyzer. Once it is fully started up, perform the following using the front panel buttons:

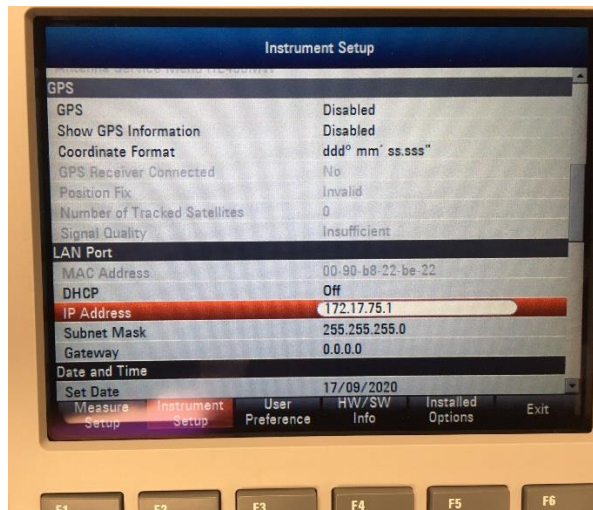
- Press the **Setup button**.



- Press the **F2 button** for the Instrument Setup.
- Use the **arrow buttons** to scroll to the LAN section of the Setup menu.



- If the instrument is connected to an ethernet hub then DHCP should be enabled and an IP address displayed (i.e. 10.0.0.204). Note this address to be used is Huntron Workstation.
- If the instrument is connected to the PC directly then you will need to configure the IP address identified earlier. Press the **Select button** (center of scroll wheel) and use the **arrows keys** to turn **DHCP Off**.
- Use the arrow keys to select the IP address field and press the **Select button**. Modify the IP address and subnet mask as needed using the keypad.



- Press **F6** to Exit when complete.

Starting the software

A Huntron Workstation icon will be created on your Windows desktop. Double click this icon to start the software.

The Huntron Workstation Activation dialog is displayed. This software is only licensed to be used on one Prober. The activation codes are generated by Huntron and are specific to the Prober serial numbers. The activation codes are printed on the software DVD. If you cannot find activation codes, call Huntron technical support (425-743-3171) and provide the serial numbers for the Prober.

Follow the software tutorial.

Huntron Workstation Access RF tutorial is included in the software DVD Documents folder and in the default installed folder (C:\Program Files\Huntron Workstation\Documents).

It is also available in Tutorial section of the Help menu in the Huntron Workstation software. The file requires Adobe Acrobat Reader to be installed. The tutorial will enable a new user to get acquainted with most of the software features.

Whenever you need detailed information, click Help in the appropriate screens. The help feature is context sensitive, so you can click on the green highlighted text to get additional information on related topics.

All user's manuals are located on the Manual CD (06-5217) included in your package. Refer to the appropriate manual for the hardware you have.

If you need further assistance, call the Huntron Technical support at

1-(800)-426-9265 or (425)-743-3171

email: info@huntron.com