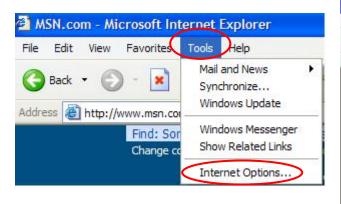
# Remote Viewer Application Note

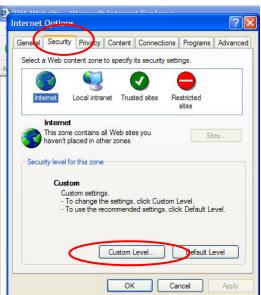
# Using the Remote Viewing & Web Pages of the Minitrend QX and Multitrend SX Recorders

The Remote Viewing function of the Minitrend QX and Multitrend SX recorders provide the user with the ability to view the recorder screen remotely from a PC and control what is being viewed as if the user were in front of the recorder pushing the buttons. The Remote Viewing function allows the user to easily view the recorder to check status and process parameters from the convenience of their office or remote location without using any special software program. Access is achieved using a standard Internet browser like Internet Explorer and linking to the recorder over the Internet. The Remote Viewing function requires that this option be enabled using the "Credits" function in the recorder and the recorder's Password system be enabled if the user wants to access the recorder and change screens or configuration parameters.

### Setting up the PC for Remote Viewing

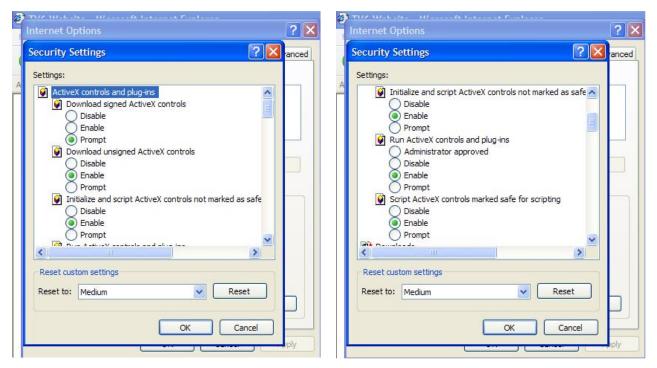
When using the Remote Viewing function, the recorder will write a small applet to the PC that will allow you to access the recorder remotely. In order for this to happen, there are certain security settings that must be set in the PC otherwise you will not be able to use the Remote Viewer. The user may need permission for their IT Administrator before being able to make these changes in their PC. If you are unsure about changing these settings, it is best to consult with your IT Administrator. If you have administrative rights to make the changes, open Internet Explorer and go to the Tools tab at the top of the Internet Explorer window and click on "Tools". Select Internet Options, which opens a new window called "Internet Options" as shown below; select the Security Tab and click on Custom Level to access the settings that need to be changed to allow the recorder to add the applet to the PC.





Once you have clicked on the "Custom Level" button, this will bring up a window that gives you access to the security settings you need to change on your PC. You will need to set the "ActiveX Controls and plug-ins" features to Enable or at least Prompt so the recorder can download it's

applet allowing you to view the recorder screens. The two screens below show the settings, if they are "Disable" this prevents the recorder from being able to write the applet to the PC; the settings would need to be changed to "Enable" to allow this. Click OK and close out these windows.



PC Screen where Active X Controls are Allowed

#### Setting up the Recorder for Remote Viewing

To use the Remote Viewing function, the recorder needs to have the Firmware Credits for the Remote Viewing function enabled along with Passwords if you plan to do the Remote Control part of this function. Passwords need to be set to prevent unauthorized access to the recorder over the Internet, providing a level of security that unauthorized individuals do not gain access to the recorder. The user can still access the standard Web Page feature of the recorder without enabling the password system. This allows viewing of the separate web pages of General Recorder Information, Pen Values, Alarms, and Hardware Information for the recorder but this does not show the actual recorder trends and displays like the Remote Viewing function nor does it allow changes to be made using the Remote Control capability.

The first step in setting up the recorder is to make sure the Credits are enabled to allow Remote Viewing. To see if the Remote Viewer is enabled; go to the STATUS menu and check the Status of the Options by scanning down the Options list to see that the Remote Viewer is checked ON, if it is not, you need to enable this under the Configuration>Setup>Edit>General>Factory>Credits. Once this has been set, select Finish and Commit to allow these changes to take effect. The next step is to enable the Password system and set up a user or multiple users. Refer to the product manual for detailed information on enabling the password system and setting up a user. Once the password system is enabled and users are established; click Finish and Commit to allow these changes to take effect. The user will establish their own unique password when they first try to log in and gain access to secure areas of the recorder. They will need to use the first time default password which is "password" to gain entry; once they have logged on the first time, they are required to change their password. Passwords are used with the remote viewing function in order to prevent unauthorized access to the recorder.

#### **Establishing an IP Address**

Since access to the recorder's web pages or the Remote Viewer uses a web browser, the recorder's communication parameters must also be set to allow this access. The key setting is the recorder's IP address, which is set up under the Configuration>Setup>Edit>Comms>TCP/IP Settings. As the user, you need to decide if you will be using a "Fixed" - Static IP address or set it for a dynamic (DHCP) addressing scheme, where the network server provides IP addresses based on the dynamics of the network and what is the next available IP address. DHCP addressing is set by "X-ing" out the Static IP address, if the Static IP is  $\sqrt{\text{(checked)}}$ ; this allows the user to set a fixed IP address for each recorder; IP addresses use a format of XXX.XXX.XXX.XXX. If the recorder is set for dynamic addressing, the IP address is assigned by the network; the IP address will be "grayed out" but can be viewed. You need to note or record this IP address, as you will need it when using the Internet Browser in order to access the specific recorder's web page and Remote Viewing function. If you are setting up the recorder with a local network and using static IP addressing, you will need to establish a compatible IP address for your PC. Depending on the Windows Operating System you have on the PC will affect how you access and set the IP address in the PC for your local network. To set the IP address on your PC, this is generally done under the Network Neighborhood, Properties, TCP/IP Protocols settings in the PC.

## Accessing the Web Page and the Recorder's Remote Viewing Function

To gain access to the recorder's web page or the Remote Viewer is as simple as opening up the web browser, such as Internet Explorer, on the PC and entering the IP address of the recorder you want to access. If passwords were enabled you will see a screen as shown below on the left that asks you to log in. You would log in with the User Name and Password that had previously been established on the recorder. The recorder can support up to 50 users with their own unique passwords. If passwords were not enabled on the recorder, you can still access the web pages and the Remote Viewer of the recorder; you just would not be able to use the control function of the Remote Viewer.

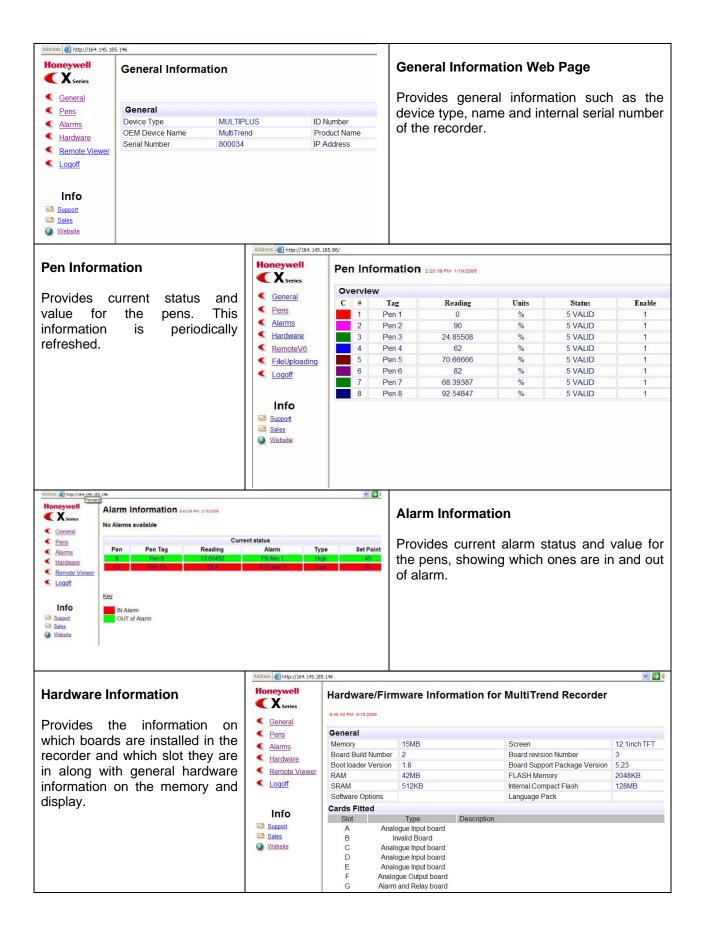




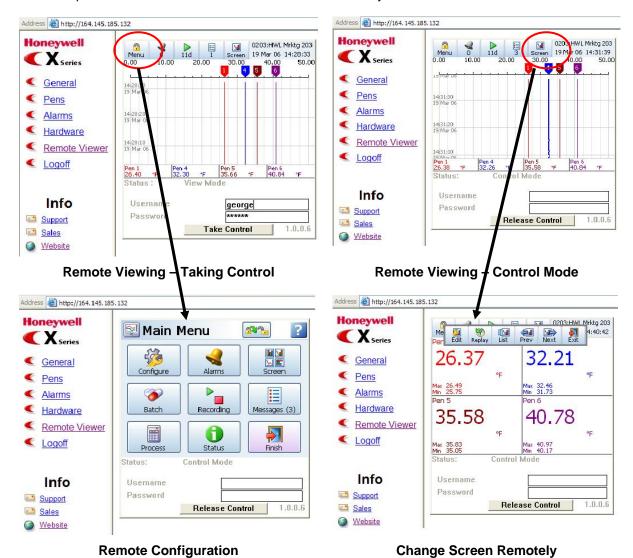
**Logging Screen for Remote Viewing** 

Screen to access Web Page - No Log-in

Once you have gained access to the recorder, you will see the recorder's "General Information" web page. There are several different web pages that can be viewed; these include the Pen data, Alarm information and Hardware information. To access these other web pages, click on the link on the left hand side of the web page. The web pages will refresh automatically or they can be refreshed manually if desired. Each of the web pages for the recorder is shown below.



To use the Remote Viewing and Control function, click on the Remote Viewer link on the left hand side of the web page. Once you have done this, the current screen on the recorder should appear in the screen of your PC. At this point, you are in the "View Mode" which is indicated below the recorder screen alongside the Status indication. In order to take control, you must again enter a valid user name and password in the area for Username and Password and click on Take Control. Once you have control, the Status indication will change to "Control Mode", indicating that you have control and the action button changes to "Release Control". Once you have control, you can navigate around the recorder as if you where standing in front of the recorder pushing the buttons simply by moving the mouse to one of the recorder's button and clicking on it. Each time you change to a different screen, the display at the PC will be updated to show the new recorder screen. Only one user can have control at any given time and the user at the recorder itself has the highest priority. Therefore, if someone at the recorder activated one of the recorder's buttons they would automatically take control from the Remote User. You would have to log off and log back on to regain control, but you could only gain control of the recorder remotely if they had finished and returned to a normal run time screen. You can still do viewing remotely regardless of who has control. Up to three individuals can view the recorder remotely.



As you can see from the above screens, you have the ability to easily view the recorder's display remotely and to securely change screens or even the recorder configuration all under password control.