

FURNACE DOCTOR PRO – WI-FI

USER MANUAL

Version Number 004



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TABLE OF CONTENTS

CONFIGURE THE MANNER OF OBTAINING IP ADDRESS 4
CONFIGURE THE RADIO FOR YOUR WIRELESS 5
USING THE CLIENT UTILITY 6
MAIN WINDOW 7
PROFILE WINDOW 10
STATUS WINDOW 14
DIAGS WINDOW 15
GLOBAL WINDOW 17
SETUP 18

CONFIGURE THE MANNER OF OBTAINING IP ADDRESS

To configure how your device will obtain an IP address on FDPRO, perform

the following tasks:

- Select **Utilities**, then **Set WiFi**
- Enter the Password

CONFIGURE THE RADIO FOR YOUR WIRELESS

You can configure radio and security settings, monitor performance and activity, and troubleshoot issues with the radio module using any of the following:

- The Client Utility
- Click **Admin Login** on the Main window to authenticate as an administrator (default password: SUMMIT)
- Create a profile on the Profile window, specifying all important parameters such as SSID, authentication method, and encryption type
- Save the profile using clicking **Commit**

To connect to your wireless network, go to the Main window and select the profile that you created.

USING THE CLIENT UTILITY

Using the Client Utility, an end user can:

- Disable the radio (turn it off) and enable the radio (turn it on)
- View the contents of configuration profiles, or profiles, each of which houses the RF, security, and other settings for the radio
- Select the profile to be used to connect to a WLAN
- View global settings, which apply to every profile
- View status information on the radio, the access point (AP) or WLAN router to which it is connected, and the RF connection or link between the two
- View in-depth diagnostic information on the connection and the radio, and perform various troubleshooting and diagnostic tests

After completing an administrator login to the utility, a user can perform these additional tasks:

- Create, rename, edit, and delete profiles
- Alter global settings, which apply to every profile radio.

MAIN WINDOW

Figure 1 below shows an example of a Main window:

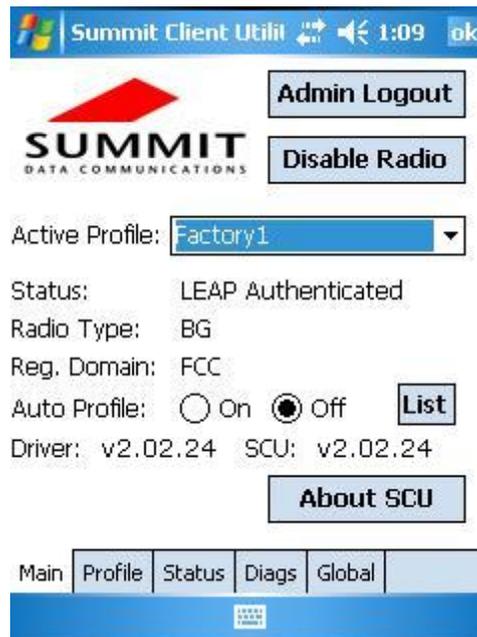


Figure1: Main window

Here are the Main window highlights:

- **Admin Login/Logout:** To login to Client Utility as an administrator, select this button when “Admin Login” is displayed and supply the correct admin password on the dialog box. The default password is **SUMMIT** (case sensitive). (The password can be changed through the Admin Password function on the Global window.) Once you are logged in as an administrator, clicking the button again logs you out as an administrator, leaving you with access only to end-user functions.

- **Enable/Disable Radio:** When the radio is enabled, selecting this button disables it; when the radio is disabled, selecting this button enables it.
- **Active Profile:** You can view the name of the active profile and, using the selection list, select a different profile. If you select **ThirdPartyConfig** then, after the device goes through a power cycle, WZC is used for configuration of the radio (NOT RECCOMENDED)
- **Status:** Indicates the radio's status.
- **Radio Type:** Indicates the type of radio in the device. "BG" means a radio that supports 802.11b and 802.11g.
- **Reg. Domain:** Indicates the regulatory domain for which the radio is configured. "WorldWide" means that the radio can be used in any domain. The domain cannot be configured by an administrator or user.
- **Auto Profile:** Enables the user to activate or deactivate an automatic profile selection facility. The facility uses a list of profiles that the user creates by tapping the List button and using a dialog box to select from among created profiles. When the facility is active and the Summit radio makes its first attempt (after a device startup or resume) to associate to an AP, CLIENT UTILITY runs through the list and tries each profile, one after the other, until the Summit radio associates to an AP using the values in a profile.

- **Driver:** Indicates the version of the device driver that is running on the device.
- **CLIENT UTILITY:** Indicates the version of CLIENT UTILITY that is running on the device.
- **About CLIENT UTILITY:** When tapped, supplies information on CLIENT UTILITY that on a Windows application normally would appear under Help | About.

PROFILE WINDOW

Profile settings are radio and security settings that are stored in the registry as part of a configuration profile. When a profile is selected as the active profile on the Main window, the settings for that profile become active. An administrator can define up to 20 profiles, edit them, and delete them on the Profile window in CLIENT UTILITY.

Note: Profile changes made on the window are saved to the profile only when you click **Commit**.

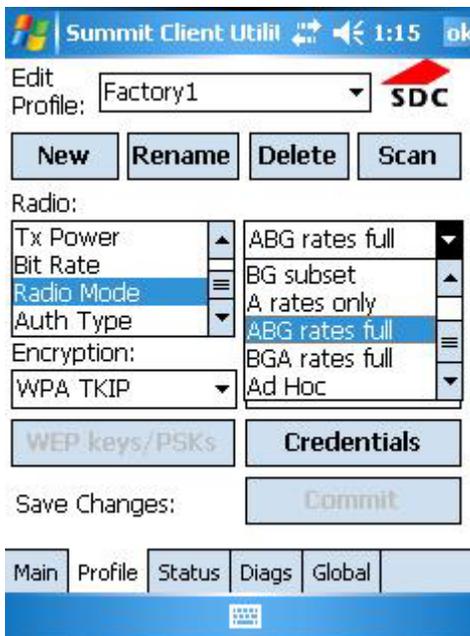


Figure 2: Profile window

Unless it is modified, the Default profile does not specify an SSID, EAP type, or method of encryption. If the Default profile is the active profile, then the radio will associate only to an access point that broadcasts its SSID and requires no EAP type and no encryption.

Figure 2 is an example of a Profile window. Here are the highlights:

- **Edit Profile:** This is used to select the profile to be viewed or, if you are an administrator, edited.

- **Actions:** Four actions are available, with the first three available only to an administrator:
 - **New** – Create a new profile with default settings and give it a unique name (and then change settings using other selections on the window).

 - **Rename** – Give the profile a new name, one that is not assigned to another profile.

 - **Delete** – Delete the profile, provided that it is not the active profile.

 - **Scan** – Open a window that lists access points that are broadcasting their SSIDs. Each time you click **Refresh**, you view an updated list of APs, with each row showing an AP's SSID, its received signal strength indication (RSSI), and whether or not data encryption is in use (true or false). You can sort the list by clicking on the column headers. If you are authorized as an administrator, select an SSID in the list, click **Configure**, and click **Yes** on the dialog box, then CLIENT UTILITY creates a profile for that SSID and enables you to edit that profile.

- **Radio:** Radio attributes in the list box can be selected individually. When an attribute is selected, the current setting or an appropriate selection box with the current setting highlighted appears on the right.
- **Security:** Values for the two primary security attributes, EAP type and encryption type, are displayed in separate dropdown lists, with the current values highlighted. When you as an administrator select an EAP type, the Credentials button appears; when you click it, a dialog box appears that enables you to define authentication credentials for that EAP type. When you as an administrator select an encryption type that requires the definition of WEP keys or a pre-shared key, the PSKs/WEP Keys button appears; when you click it, a dialog box appears that enables you to define WEP keys or a PSK.
- **Commit:** To ensure that changes to profile settings made on the window are saved in the profile, you must **Commit**.

To cause a Summit radio to connect to a typical business WLAN, you must select a profile that specifies the SSID, EAP type, and encryption type supported by the WLAN:

- **SSID:** This is the name or identification of the WLAN.
- **EAP type:** This is the protocol used to authenticate the device and its user if the WLAN uses the Enterprise version of Wi-Fi Protected Access (WPA) and WPA2. CLIENT UTILITY supports six EAP types:

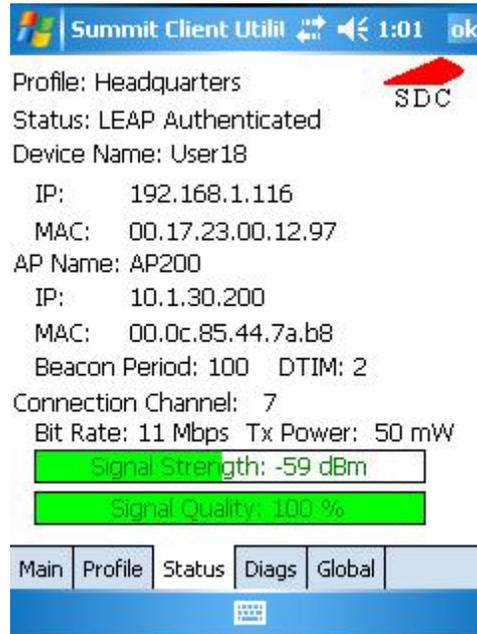
PEAP with EAP-MSCHAP (PEAP-MSCHAP), PEAP with EAP-GTC (PEAP-GTC), EAP-TTLS, EAP-TLS, LEAP, and EAP-FAST

- Encryption: This specifies the type of key used to encrypt and decrypt transmitted data and how that key is specified or derived. Encryption options include:
 - WPA2 or WPA with dynamic keys (derived from the EAP authentication process)
 - WPA2 or WPA with pre-shared keys
 - Static WEP keys

Consult the user's guide for details on all profile settings, including security settings.

STATUS WINDOW

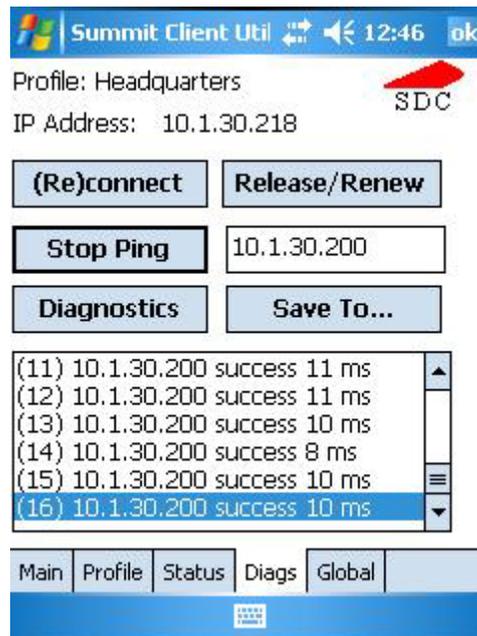
The Status window provides status information on the radio. A sample Status window is shown in Figure 3.



Here are the highlights:

- Active profile
- Radio's status: Down (not recognized), Disabled, Not Associated, Associated, or [EAP type] Authenticated
- Client info: Name, IP address, and MAC address
- AP info: Name, IP address, MAC address, beacon period, and DTIM interval
- Connection info: Channel, data rate, transmit power, signal strength, and signal quality

DIAGS WINDOW



A sample Diags, or troubleshooting, window is shown in Figure 4. Here are the functions available on the Diags window:

- (Re) connect: Disable and enable the radio, apply or reapply the current profile, and attempt to associate and authenticate to the wireless LAN, logging all activity in the output area at the bottom.
- Release/Renew: Obtain a new IP address through DHCP release/renew, and log all activity in the output area at the bottom.
- Start Ping: Start a continuous ping to the address in the edit box next to it. Once the button is clicked, its name and function will change to Stop Ping. Moving to an CLIENT UTILITY window other than Status or Diags also will

stop the ping, as will Pings will continue until you tap the Stop Ping button, move to an CLIENT UTILITY window other than Diags or Status, exit CLIENT UTILITY, or remove the radio.

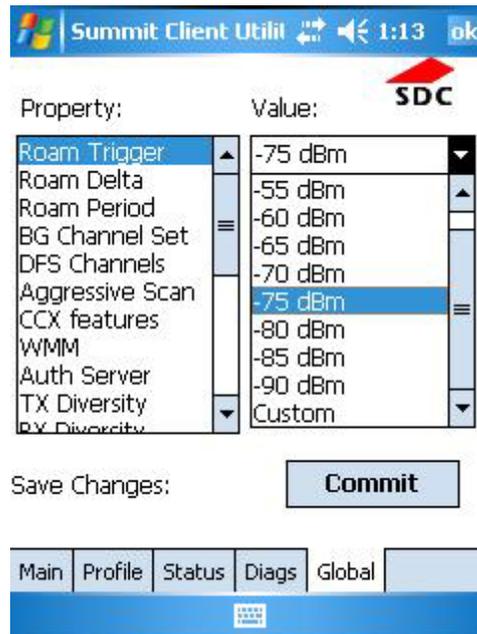
- **Diagnostics:** Attempt to (re)connect to an AP, and provide a more thorough dump of data than is obtained with (Re) connect. The dump will include radio state, profile settings, global settings, and a BSSID list of APs in the area.
- **Save To...:** Save the diagnostics output to a file

GLOBAL WINDOW

Global settings include:

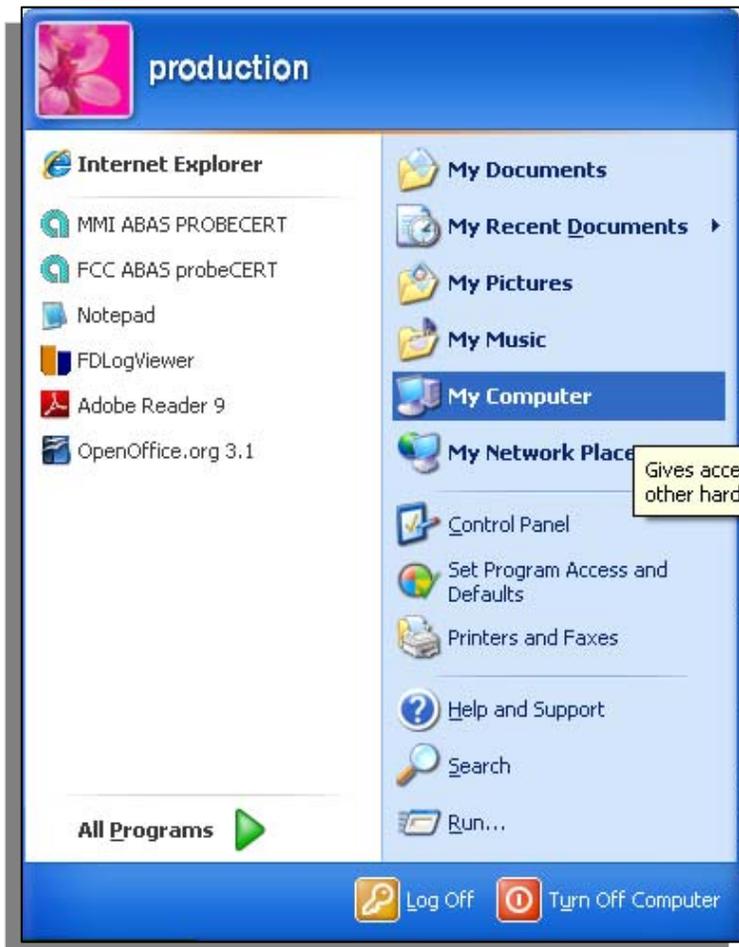
- Radio and security settings that apply to all profiles
- Settings that apply to CLIENT UTILITY itself

An administrator can define and change most global settings on the Global window in CLIENT UTILITY.

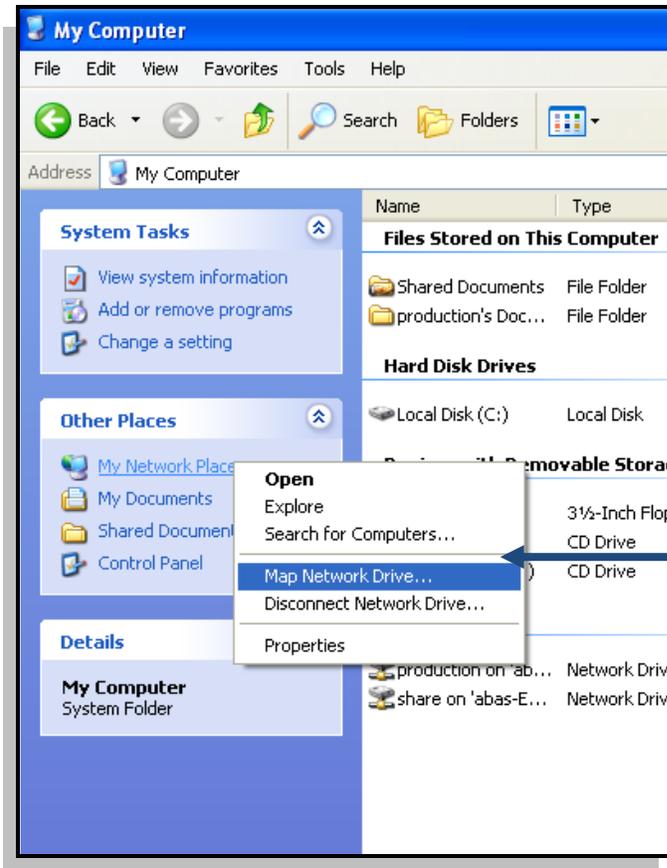


SETUP

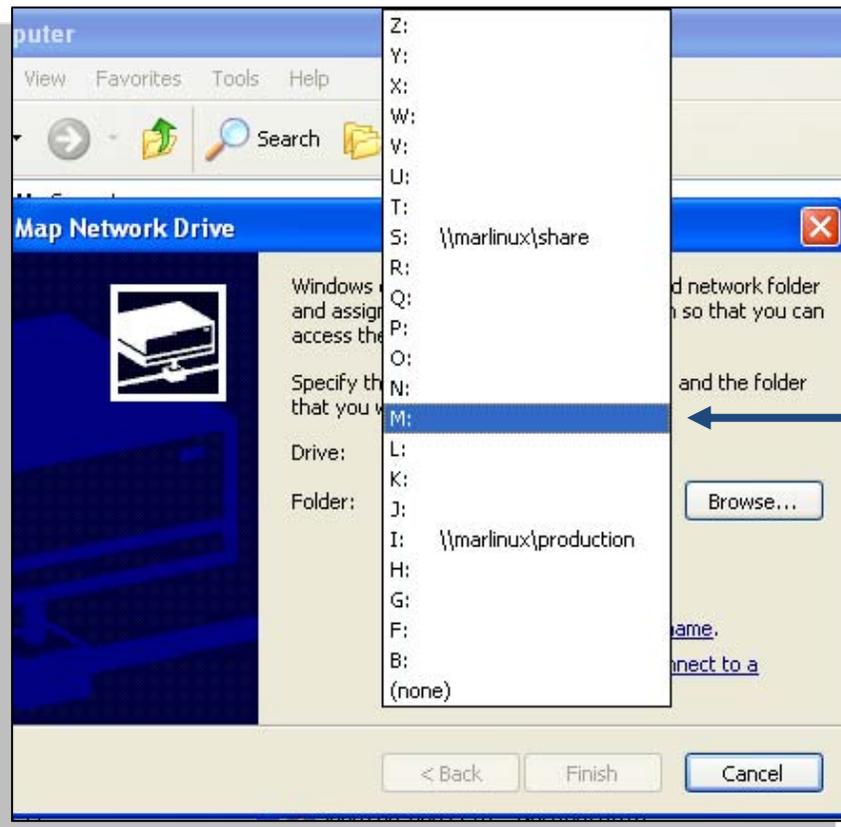
To use your computer to browse to the Log files on your Furnace Dr PRO you will need to setup your network.



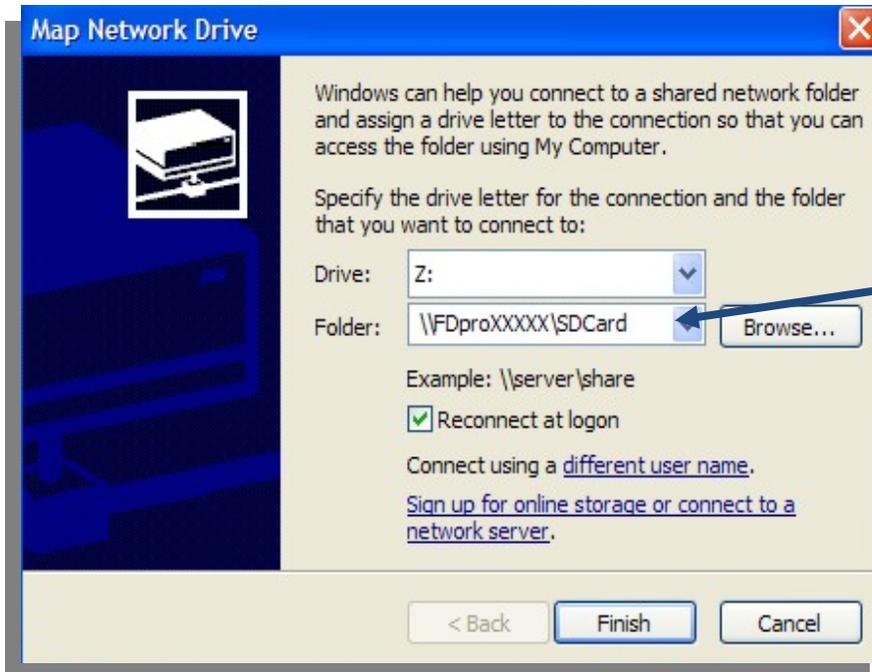
1. Start by navigating to My Computer from Windows Explorer. (Push 'Start' button or push 'Windows key' + E at the same time.)



2. Right click on My Network then go down and click on Map Network Drive



3. Select the Drive Letter you wish to use. The drive must be unused to begin with.



4. Type the folder address exactly as shown:

\\FdproXXXXX
X\SDCard

Note:

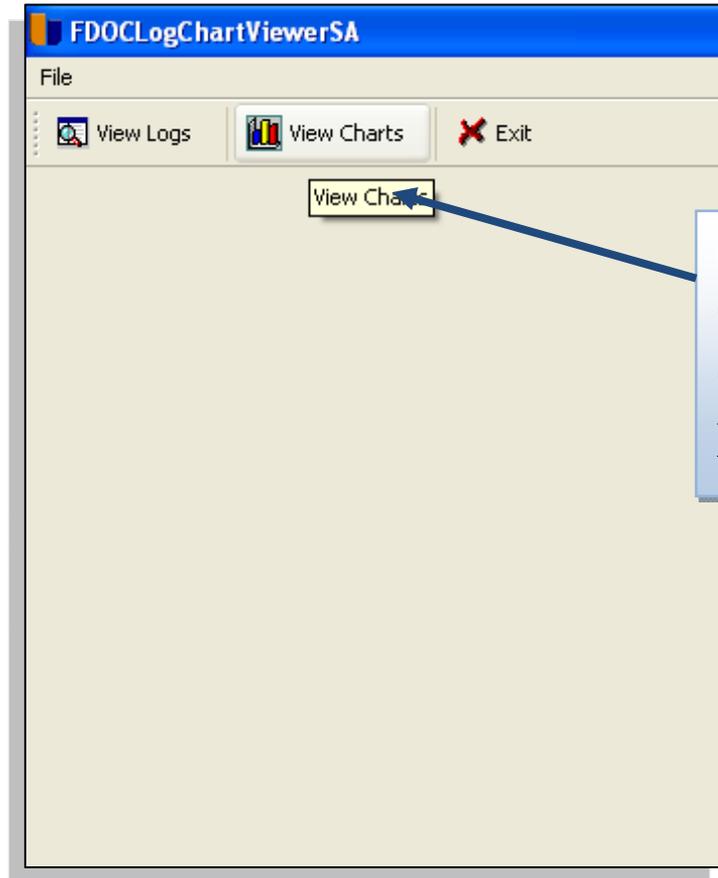
XXXXXX – last
6 digits of
FDPRO serial
number.

Click Finish.



5. Click on the
FDLOGVIEWER
icon on your
desktop.

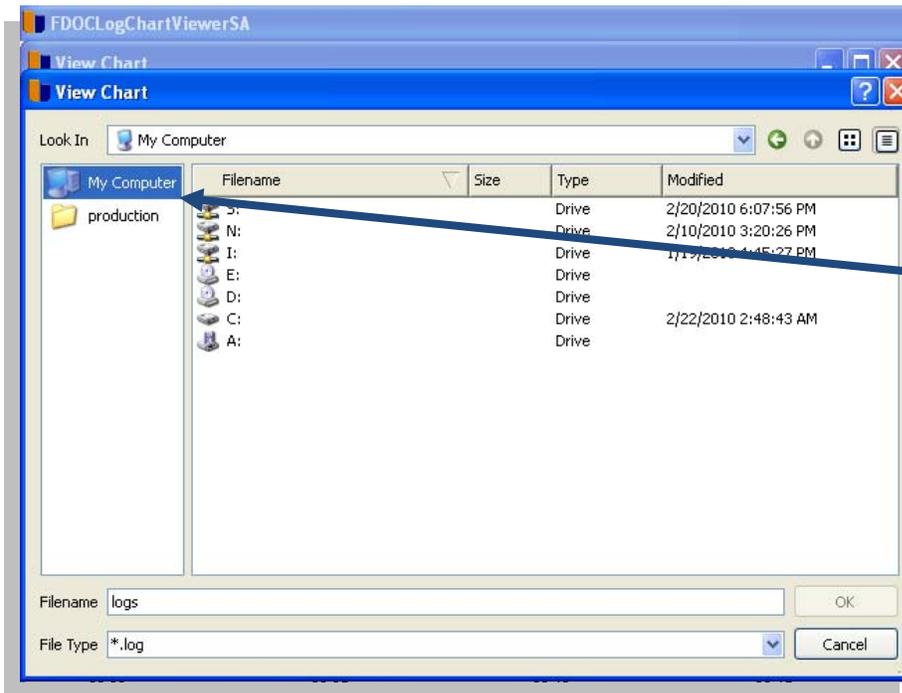
This application
is on the CD that
comes with your
FDPRO.



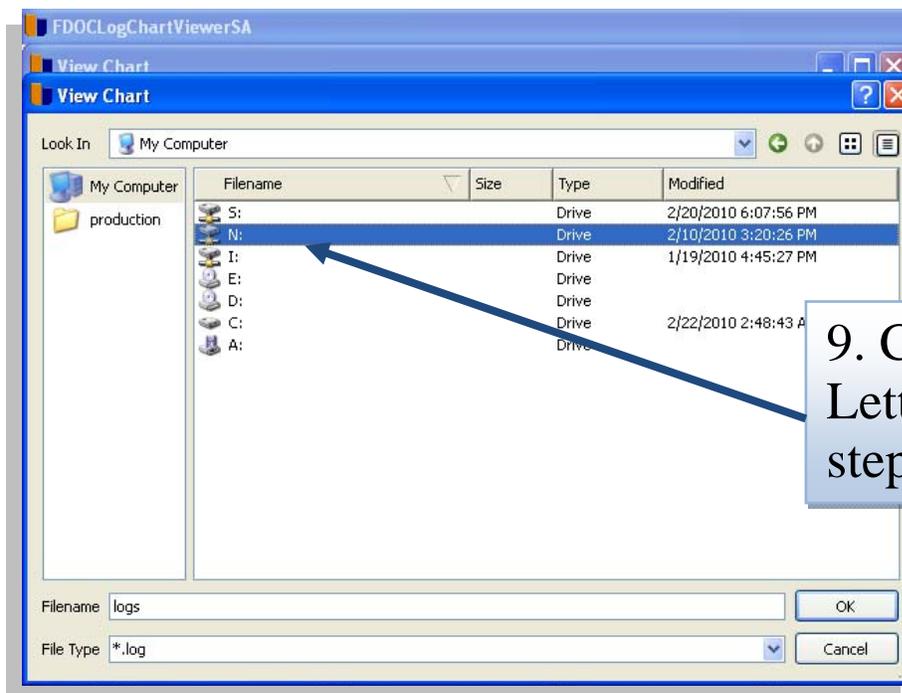
6. Click on View Chart or View Logs, depending on your preference.



7. Click the OPEN folder



8. Click on My Computer



9. Click on the drive Letter you selected in step #3.

