AFS-16-1

Automated Fallback Switch

Quick Start Guide

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Warnings and Cautions:
Installation Instructions

Secure Racking

If Secure Racked units are installed in a closed or multi-unit rack assembly, they may require further evaluation by Certification Agencies. The following items must be considered.

1. The ambient within the rack may be greater than room ambient. Installation should be such that the amount of air flow required for safe operation is not compromised. The maximum temperature for the equipment in this environment is 45°C. Consideration should be given to the maximum rated ambient.

2. Installation should be such that a hazardous stability condition is not achieved due to uneven loading.

Input Supply

Check nameplate ratings to assure there is no overloading of supply circuits that could have an effect on overcurrent protection and supply wiring.

Grounding

Reliable earthing of this equipment must be maintained. Particular attention should be given to supply connections when connecting to power strips, rather than direct connections to the branch circuit.

No Serviceable Parts Inside; Authorized Service Personnel Only

Do not attempt to repair or service this device yourself. Internal components must be serviced by authorized personnel only.

- **Shock Hazard - Do Not Enter**

Two Power Supply Cables

Note that the AFS-16-1 features two separate power inputs, and a separate power supply cable for each power input. Make certain to disconnect both power supply cables from their power source before attempting to service or remove the unit.

Disconnect Power

If any of the following events are noted, immediately disconnect the unit from the outlet and contact qualified service personnel:

1. If the power cord becomes frayed or damaged.

2. If liquid has been spilled into the device or if the device has been exposed to rain or water.

1.   Introduction

This Quick Start Guide describes a simplified installation procedure for the AFS-16-1 hardware, which will allow you to communicate with the unit in order to demonstrate basic features and check for proper operation.

Note that this Quick Start Guide does not provide a detailed description of unit configuration, or discuss advanced operating features in detail. For more information, please refer to the AFS-16-1 User's Guide, which can be found on our web site at the address below, or by scanning the QR Code to the right.

www.wti.com/uguides

2.   Hardware Installation

2.1. Apply Power to the AFS-16-1

Refer to the safety precautions listed at the beginning of this User's Guide, and then connect the unit to a 100 to 240 VAC power source. Connect the power supply cables to the unit's power inlets and then connect the cables to appropriate power supplies.

Set the Power Switch on the AFS-16-1 Power Module to the ON Position. The ON LED on the Power Module and the A/B indicators on the Control Module should light. After about 90 seconds, the A/B indicators should go out, indicating that the unit is ready to receive commands.

2.2. Connect Your PC to the AFS-16-1

The AFS-16-1 can either be controlled by a local PC Serial Port, controlled via optional external modem, or controlled via TCP/IP network. In order to select parameters or control switching functions, commands are issued to the AFS-16-1 via either the Ethernet Port or RS232 Console Port.

- **Ethernet Port:** Connect your 10Base-T or 100Base-T network interface to the AFS-16-1 Control Module 10/100Base-T Network Port.

- **RS232 Port:** Use the supplied Ethernet cable and adapter to connect your PC COM port to the RS232 Console Port on the AFS Control Module as described in the User's Guide. For a description of the RS232 Port Interface, please refer to the User's Guide.

- **Modem:** If desired, an optional external modem can also be installed at the RS232 Port. For more information, please refer to the User's Guide.

3.   Communicating with the AFS-16-1

When properly installed and configured, the AFS-16-1 will allow command mode access via Telnet, Web Browser, SSH client, modem, or local PC. However, in order to ensure security, both Telnet and Web Browser access are disabled in the default state. To enable Telnet and/or Web Browser access, please refer to the User's Guide.

Notes:

- Default AFS-16-1 serial port parameters are set as follows: 9600 bps, RTS/CTS Handshaking, 8 Data Bits, One Stop Bit, No Parity. Although these parameters can be easily redefined, for this Quick Start procedure, it is recommended to configure your communications program to accept the default parameters.

- The AFS-16-1 features a default IP Address (192.168.168.168) and a default Subnet Mask (255.255.255.0.) This allows network access to command mode, providing that you are contacting the AFS-16-1 from a node on the same subnet. When attempting to access the AFS-16-1 from a node that is not on the same subnet, please refer to the User's Guide for further configuration instructions.

1. **Access Command Mode:** The AFS-16-1 includes two separate user interfaces; the Text Interface and the Web Browser Interface. The Text Interface is available via Local PC, SSH Client, Telnet, or Modem and can be used to both configure the AFS-16-1 and create connections between ports. The Web Browser interface is only available via TCP/IP network, and can be used to configure the unit, but cannot create connections between ports.

   a) **Via Local PC:** Start your communications program and then press **[Enter]**.

   b) **Via SSH Client:** Start your SSH client, enter the default IP address (192.168.168.168) for the AFS-16-1 and then invoke the connect command.

   c) **Via Web Browser:** Make certain that Web Browser access is enabled as described in the User's Guide. Start your JavaScript enabled Web Browser, enter the default AFS-16-1 IP address (192.168.168.168) in the Web Browser address bar, and then press **[Enter]**.

   d) **Via Telnet:** Make certain that Telnet access is enabled as described in the User's Guide. Start your Telnet client, and enter the AFS-16-1's default IP address (192.168.168.168).

   e) **Via Modem:** Use your communications program to dial the number for the external modem (optional) that you have connected to the AFS-16-1's RS232 port. For more information on connecting a modem, please refer to the User's Guide.

2. **Username / Password Prompt:** A message will be displayed, which prompts you to enter your username (Login) and password. The default username is "**super**" (all lower case, no quotes), and the default password is also "**super**". If a valid username and password are entered, the AFS-16-1 will display either the Main Menu (Web Browser Interface) or the Circuit Status Screen (SSH, Telnet, or Modem.)

3. **Review Help Menu:** If you are communicating with the AFS-16-1 via the text interface (SSH, Telnet or Modem), type **/H** and press **[Enter]** to display the Help Menu, which lists all available AFS-16-1 commands. Note that the Help Menu is not available via the Web Browser Interface.

3.4. Fallback Switching

A/B fallback switching can be controlled via the Text Interface or via the Web Browser Interface.

3.4.1. Fallback Switching - Text Interface

Access the Text Interface as described in Section 3 in this Quick Start Guide and then proceed as follows:

1. **Manual A/B Switching:** Use the manual circuit switches to change A/B paths. Note that this example assumes that the Master A/B Gang Switch and individual circuit module switches have not been disabled.

    a) **Master A/B Gang Switch:** Toggle the Master A/B Gang Switch between the "A" and "B" positions. The LED indicators should follow the Master Switch, indicating that each circuit has switched the "A" and "B" paths.

    b) **Circuit Module A/B Switch:** Choose an individual Circuit Module and toggle the module's A/B Switch between "A" and "B". The LED indicators should indicate that the module has switched the A/B path.

3. **Code Activated Switching:** To control A/B fallback switching using ASCII commands, invoke the following commands at the AFS command prompt:

    a) Type **/T *,B** and press **[Enter]**. All Circuit Modules should switch to the "B" path.

    b) Type **/T 1,A** and press **[Enter]**. Circuit Module number 1 should switch to the "A" path.

    c) Type **/T 2,3,4,A** and press **[Enter]**. Circuit Modules 2, 3, and 4 should switch to the "A" path.

4. **Exit Command Mode:** To exit command mode, type **/X** and press **[Enter]**.

3.4.2.   Fallback Switching - Web Browser Interface

The Web Browser Interface will not be available until you have enabled Web Access as described in the User's Guide. After Web Access has been enabled, access the AFS-16-1 Web Browser Interface as described in Section 3 in this Quick Start Guide and proceed as follows:

1. **Access the Circuit Control Menu:** Click on the "Circuit Control" link on the left hand side of the screen to display the Circuit Control menu. The Circuit Control menu includes a series of dropdown menus that are used to select the desired switching action for each Circuit Module.

2. **Select the Switching Action:** Use the dropdown menu to select an A/B switching operation for the desired Circuit Module. For example, to switch Circuit 1 to the B position, click on the down arrow in the "Action" column for Circuit 1 to display the dropdown menu, select the "B" option from the dropdown menu and then click on the "Confirm Circuit Actions" button.

Notes:

- The dropdown menu for each circuit allows you to select position A, position B or the default position. Normally, the "Default" option will switch the circuit to the user-defined Default position which can be selected as described in the User's Guide. However, in the case of this Quick Start procedure, the Default circuit positions have not yet been defined.

- The Circuit Control Menu also includes the ability to switch all AFS-16-1 Circuit Modules. If desired, the dropdown menu in the "All Circuits" row can be used to switch all AFS-16-1 circuits.

3. **Confirm Switching Actions:** After you click on the "Confirm Circuit Actions" button, the AFS-16-1 will display a screen which summarizes the selected switching operation(s) and asks for confirmation before executing the command. To proceed with the selected switching operation, click on the "Execute Circuit Actions" button.

4. The AFS-16-1 will execute the switching operation and then display the Circuit Status screen.

5. **Exit Command Mode:** Click on the "LogOut" button on the left hand side of the screen to exit command mode.

This completes the Quick Start procedure for the AFS-16-1. Prior to placing the unit into operation, it is recommended to refer to the AFS-16-1 User's Guide for important information regarding advanced configuration capabilities and more detailed operation instructions. If you have further questions, please contact WTI Customer Support as described in Appendix C in the User's Guide.