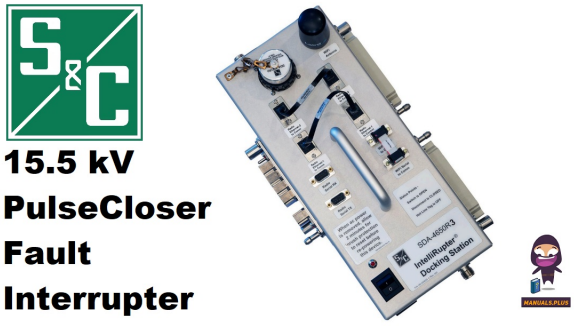

S and C 15.5 kV PulseCloser Fault Interrupter Instruction Manual

Contents

S and C 15.5 kV PulseCloser Fault Interrupter

FAQs

- **Q: Who should handle the installation and operation of the IntelliRupter Fault Interrupter Docking Station?**
  - A: Only qualified persons trained in working with electric distribution and transmission equipment should handle this product.
- **Q: How can I verify if the docking station is operating correctly?**
  - A: You can verify the correct operation by following the steps outlined in the user manual or contacting customer support for assistance.

Introduction

Qualified Persons

WARNING

Only qualified persons knowledgeable in the installation, operation, and maintenance of overhead and underground electric distribution and transmission equipment, along with all associated hazards, may install, operate, and maintain the equipment covered by this publication. A qualified person is someone trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from nonlive parts of electrical equipment
- The skills and techniques necessary to determine the proper approach distances corresponding to the voltages to which the qualified person will be exposed

- The proper use of special precautionary techniques, personal protective equipment, insulated and shielding materials, and insulated tools for working on or near exposed energized parts of electrical equipment

These instructions are intended only for such qualified persons. They are not intended to be a substitute for adequate training and experience in safety procedures for this type of equipment.

Read this Instruction Sheet

NOTICE

Thoroughly and carefully read this instruction sheet and all materials included in the product's instruction handbook before operating an IntelliRupter® fault interrupter Docking Station. Become familiar with the Safety Information The latest version of this publication is available online in PDF format at **sandc.com/en/contact-us/product-literature/**.

Retain this Instruction Sheet

This instruction sheet is a permanent part of the IntelliRupter fault interrupter Docking Station. Designate a location where users can easily retrieve and refer to this publication.

Proper Application

WARNING

The equipment in this publication is only intended for a specific application. The application must be within the ratings furnished for the equipment. Ratings for the IntelliRupter fault interrupter are listed in the ratings table in S&C Specification Bulletin 766-31. The ratings are also on the nameplate affixed to the product.

Special Warranty Provisions

The standard warranty contained in the seller's standard conditions of sale, as outlined in Price Sheets 150 and 181, applies to the IntelliRupter fault interrupter and its associated options except for the control group as applicable. For these devices, the first and second paragraphs of said warranty are replaced by the following:

General: The seller warrants to the immediate purchaser or end-user for 10 years from the date of shipment that the equipment delivered, except a radio, will be of the kind and quality specified in the contract description and will be free of defects of workmanship and material. Should any failure to conform to this warranty appear under proper and normal use within 10 years after the date of shipment, the seller agrees, upon prompt notification thereof and confirmation the equipment has been stored, installed, operated, and maintained by recommendations of the seller and standard industry practice, to correct the nonconformity either by repairing any damaged or defective parts of the equipment or (at seller's option) by shipment of necessary replacement parts. The seller's warranty does not apply to any equipment that has been disassembled, repaired, or altered by anyone other than the seller. This limited warranty is granted only to the immediate purchaser or if the equipment is purchased by a third party for installation in third-party equipment, the end user of the equipment. The seller's duty to perform under any warranty may be delayed, at the seller's sole option, until the seller has been paid in full for all goods purchased by the immediate purchaser. No such delay shall extend the warranty period. The seller further warrants to the immediate purchaser or end user that for two years from the date of shipment the software will perform substantially by the then-current release of specifications if properly used by the procedures described in the seller's instructions. The seller's liability regarding any of the software is expressly limited to exercising its reasonable efforts in supplying or replacing any media found to be physically defective or in correcting defects in the software during the warranty period. Seller does not warrant the use of the software will be uninterrupted or error-free. For equipment/services packages, the seller warrants, for one year after commissioning, that the IntelliRupter fault interrupters will provide automatic fault isolation and system reconfiguration per agreed-upon

service levels. The remedy shall be additional system analysis and reconfiguration of the IntelliTeam SG Automatic Restoration System until the desired result is achieved.

Warranty Qualifications

The standard warranty contained in the seller's standard conditions of sale, as set forth in Price Sheets 150 and 181, does not apply to major components not of S&C manufacture, such as batteries, customer-specified remote terminal units and communication devices, as well as hardware, software, resolution of protocol-related matters, and notification of upgrades or fixes for those devices. The seller will assign to the immediate purchaser or end user all manufacturers' warranties that apply to such major components. The seller's standard warranty does not apply to any components not of S&C manufacture that are supplied and installed by the purchaser or to the ability of seller's equipment to work with such components. Warranty of equipment/services packages is contingent upon receipt of adequate information on the user's distribution system, sufficiently detailed to prepare a technical analysis. The seller is not liable if an act of nature or parties beyond S&C's control negatively impact the performance of equipment/services packages; for example, new construction that impedes radio communication, or changes to the distribution system that affect protection systems, available fault currents, or system loading characteristics.

Safety Information

Understanding Safety-Alert Messages

Several types of safety alert messages may appear throughout this instruction sheet and on labels and tags attached to the product. Become familiar with these types of messages and the importance of these various signal words:

- **DANGER**
  - "DANGER" identifies the most serious and immediate hazards that will likely result in serious personal injury or death if instructions, including recommended precautions, are not followed.
- **WARNING**
  - "WARNING" identifies hazards or unsafe practices that can result in serious personal injury or death if instructions, including recommended precautions, are not followed.
- **CAUTION**
  - "CAUTION" identifies hazards or unsafe practices that can result in minor personal injury if instructions, including recommended precautions, are not followed.
- **NOTICE**
  - "NOTICE" identifies important procedures or requirements that can result in product or property damage if instructions are not followed.

Following Safety Instructions

If any portion of this instruction sheet is unclear and assistance is needed, contact the nearest S&C Sales Office or S&C Authorized Distributor. Their telephone numbers are listed on S&C's website **sandc.com**, or call the S&C Global Support and Monitoring Center at 1-**888-762-1100**.

NOTICE

Read this instruction sheet thoroughly and carefully before using the docking station.

Replacement Instructions and Labels

If additional copies of this instruction sheet are required, contact the nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd. It is important that any missing, damaged, or faded labels on the equipment be replaced immediately. Replacement labels are available by contacting the nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

OVERVIEW

These instructions cover the procedure for operating the IntelliRupter PulseCloser Fault Interrupter docking station. This device powers the protection and control module when it is removed from the IntelliRupter fault interrupter. It also permits uploading and down-loading configuration settings by using a dedicated base memory module. The docking station can also be used with a communication module when it is removed from the IntelliRupter fault interrupter and installed in the docking station with a protection and control module. The protection and control module provides the power for the communication module and permits programming the radio, verifying radio operation, and charging the communication module battery.

The docking station may be used to monitor serial communication traffic between the protection and control module and the communication module using either a secure Wi-Fi connection to the computer or a direct connection to the serial-port-equipped computer. A user-furnished DNP test set, such as that manufactured by ASE, may be connected to the docking station to monitor DNP messages. The docking station includes a Wi-Fi radio antenna. Connectors are provided for a user-furnished SCADA radio antenna and a user-furnished Global Positioning System (GPS) receiver antenna. The docking station may be powered from 88 to 264 V, 50/60 Hz. It is intended for indoor use only.

NOTICE

To ensure previously programmed settings in the protection and control module are not lost when the module is installed in the docking station, the base memory module must be unplugged from the docking station. If the base memory module is not unplugged from the docking station when the docking station is powered up, the protection and control module will upload the most recently applied settings stored in the base memory module.

STEPS

Follow these steps to set up the docking station:

- **STEP** 1. Set the docking station on a sturdy work surface. If GPS operation is to be checked, place the docking station near a window so satellite signals can be received by the user-furnished GPS antenna.
- **STEP** 2. Connect the power cord to the docking station. Then, plug the power cord into a 110-V ac outlet.
- **STEP** 3. If a SpeedNet™ Radio is installed, insert the “Radio Ethernet to Control / RadioEthernet to Comm” jumper into the docking station.
- **STEP** 4. To directly connect the computer to the docking station to communicate with the protection and control module, instead of using the Wi-Fi connection:
  - (a) Remove the factory-installed “Wi-Fi Serial to Control / Wi-Fi Serial to Comm” jumper from the docking station.
  - (b) Plug the computer into the “Wi-Fi Serial to Control” port.
- **STEP** 5. Carefully attach the protection and control module to the docking station. Make sure the connector guide pins are aligned properly, and then insert them fully.
- **STEP** 6. Carefully attach the communication module to the docking station. Make sure the connector guide pins are aligned properly, and then insert them fully.
- **STEP** 7. If serial traffic between the protection and control module and the radio is to be monitored through a DNP test set, plug the DNP test set into the “RX” port.

- **STEP** 8. To preserve previously programmed settings in the protection and control module, unscrew the locking ring of the base memory module and unplug the module.
    - **NOTICE**
        - If the base memory module is not unplugged from the docking station when the docking station is powered up, the protection and control module will upload the most recently applied settings stored in the base memory module.
- **STEP** 9. Turn on the docking station power switch. The red lamp on the docking station will light and the status indicator on the protection and control module will start flashing for 1/2 second every 30 seconds.
    - **Note**: The Global Positioning System requires up to 5 minutes to “lock on” and provide timing signals. If desired, the protection and control module clock can be set manually on the IntelliLink Setup Software Setup>General>Time screen. See Figure 1. Follow the instructions on the screen.

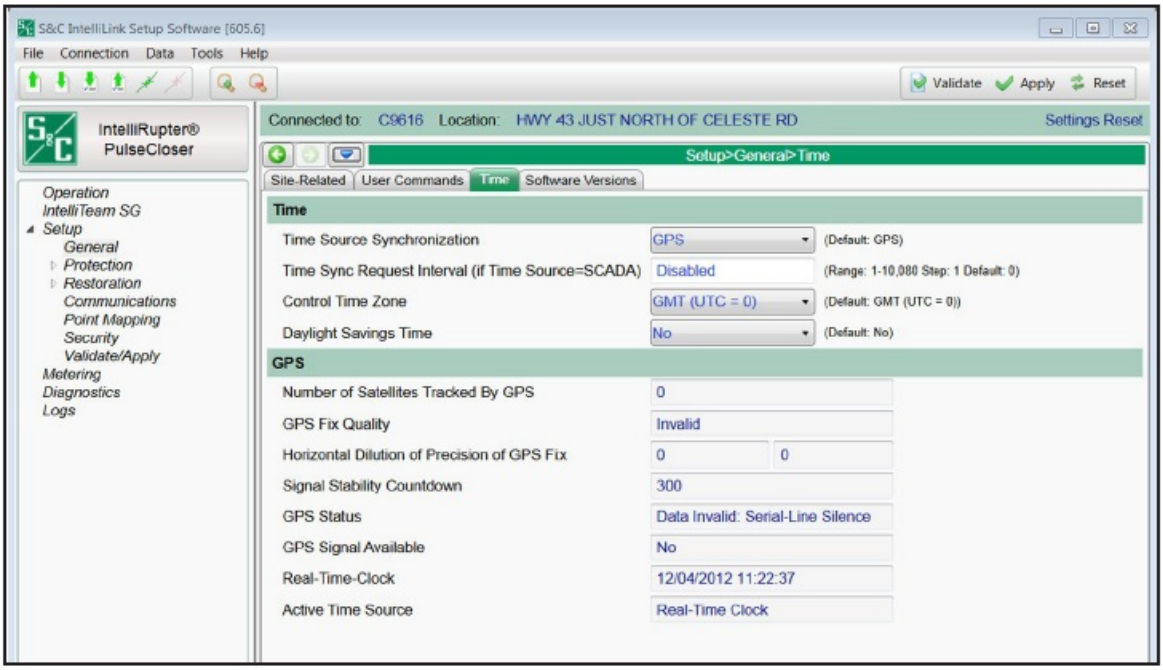

Figure 1. The *Setup>General>Time* screen.

Establishing Wi-Fi Connection

The Wi-Fi transceiver provides secure wireless point-to-point communication to a wireless-equipped personal computer operating under the IEEE 802.11b standard. Transmission range is typically 150 feet (46 m) or less.

- **STEP** 1. Click on the IntelliLink software or LinkStart icon or select Program Start>S&C Electric>LinkStart V3 on the computer. The LinkStart connection screen will appear. See Figure 2.

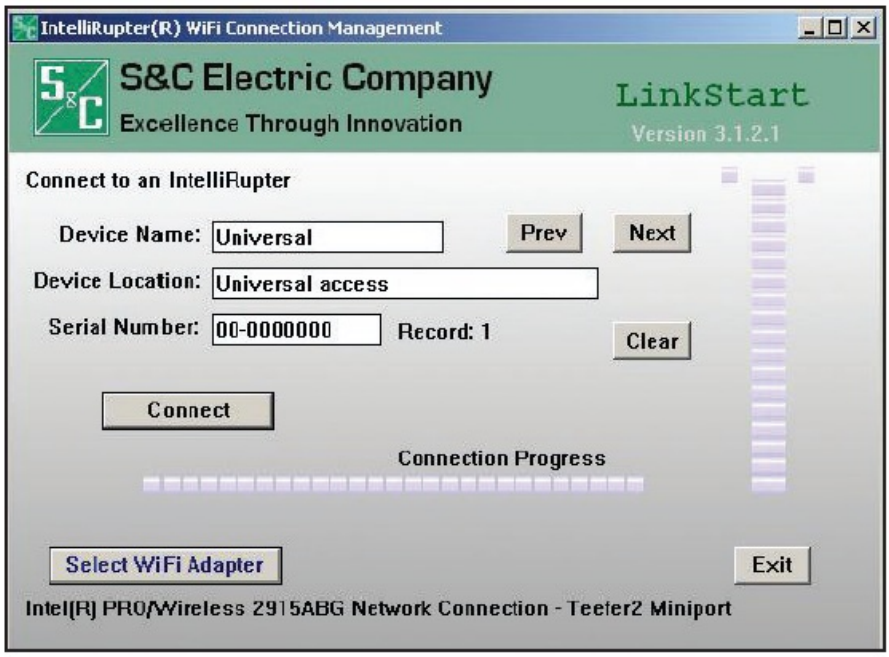

Figure 2. The *LinkStart connection* screen.

- If the base memory module is unplugged: The default universal access serial number (00-0000000) will be used.
- If the base memory module is plugged in: Type in its serial number (in this example, 08-9000014).

- **STEP** 2. Click on the Connect button. The Wi-Fi connection process will begin. See Figure 3.

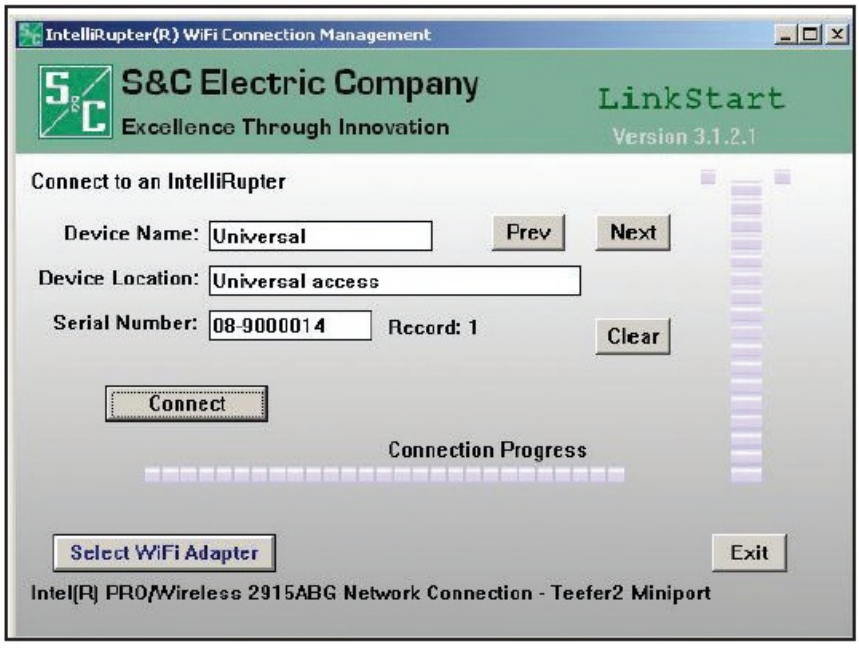

Figure 3. Screen showing the Wi-Fi connection in progress.

- The secure connection device driver will begin transmitting an encrypted, invisibly addressed “wake-up” message to the communication module. Progress is noted on the horizontal indicator bars. In addition, the status indicator on the protection and control module pulsates, dim to bright, while the Wi-Fi connection is being established. After the IntelliRupter fault interrupter recognizes the wake-up message and its source, it will proceed with authentication. Encrypted messages are exchanged that require correct decryption keys in both the personal computer and the protection and control module. When the link is successfully established, the Active status indicator becomes green. Signal strength is continuously shown on the vertical indicator bars. See Figure 4.

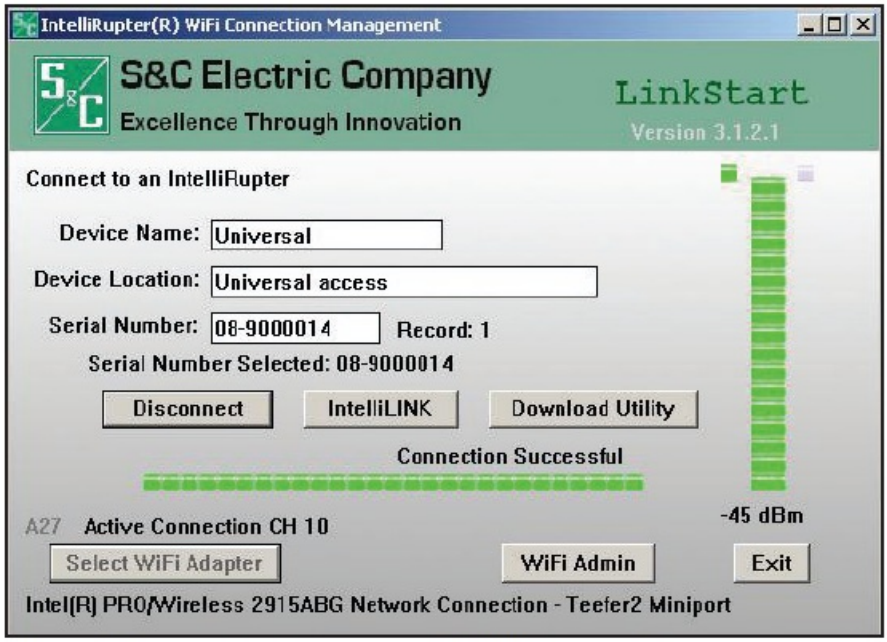

Figure 4. Screen showing a successful Wi-Fi connection.

- **STEP** 3. Click on the IntelliLink button. The IntelliLink Setup Software will open.
  - After logging in, the settings in the protection and control module can be reviewed and changed as appropriate. The download event logs and diagnostic screens can also be reviewed. Refer to S&C Instruction Sheet 766-530, “IntelliRupter PulseCloser Protection and Communication Setup: Instructions.”
  - **NOTICE** Settings suitable for radial, IntelliTeam® II or IntelliTeam® SG Automatic Restoration Systems, and loop restoration can be entered into the protection and control module while it is connected to the docking station. But only the settings actually suitable for the control group, specified by the IntelliRupter fault interrupter catalog number suffix “-C0,” “-C1,” or “-C7,” can be used when the protection and control module is installed in the IntelliRupter fault interrupter base.
  - **NOTICE** Commands to open or close the IntelliRupter fault interrupter will result in errors because the docking station does not provide operation feedback. To clear the errors, navigate to the Diagnostics>Errors screen and click on the Clear Errors button. See Figure 5.

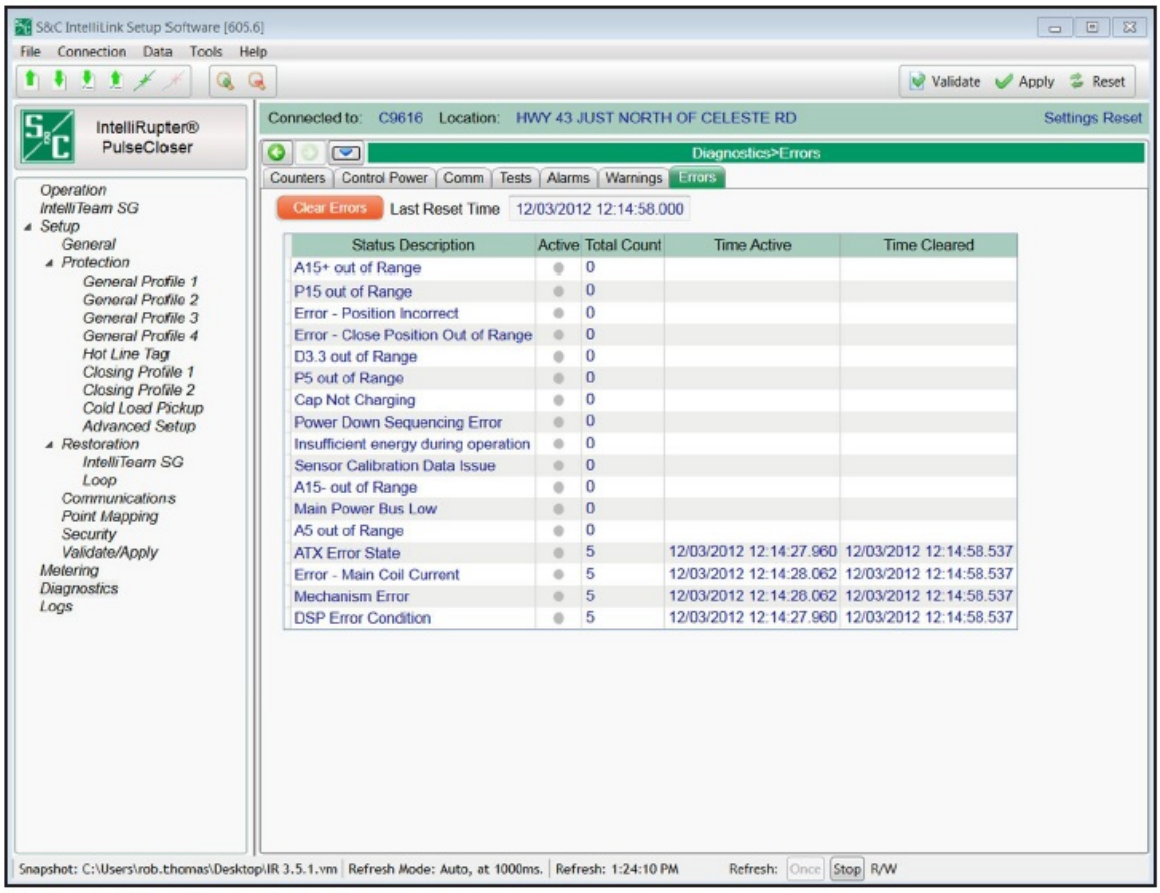

Figure 5. The *Diagnostics>Errors* screen.

- new settings have been programmed in the protection and control module and they should be used when the module is installed in the IntelliRupter fault interrupter base, go to the Setup>General>Site-Related>Operation screen. In the On Next Power-up, Use Settings From field, select “Control.”

- **STEP** 4. Go to the Setup>Validate/Apply screen and click on the Apply button before shutting down. See Figure 6.

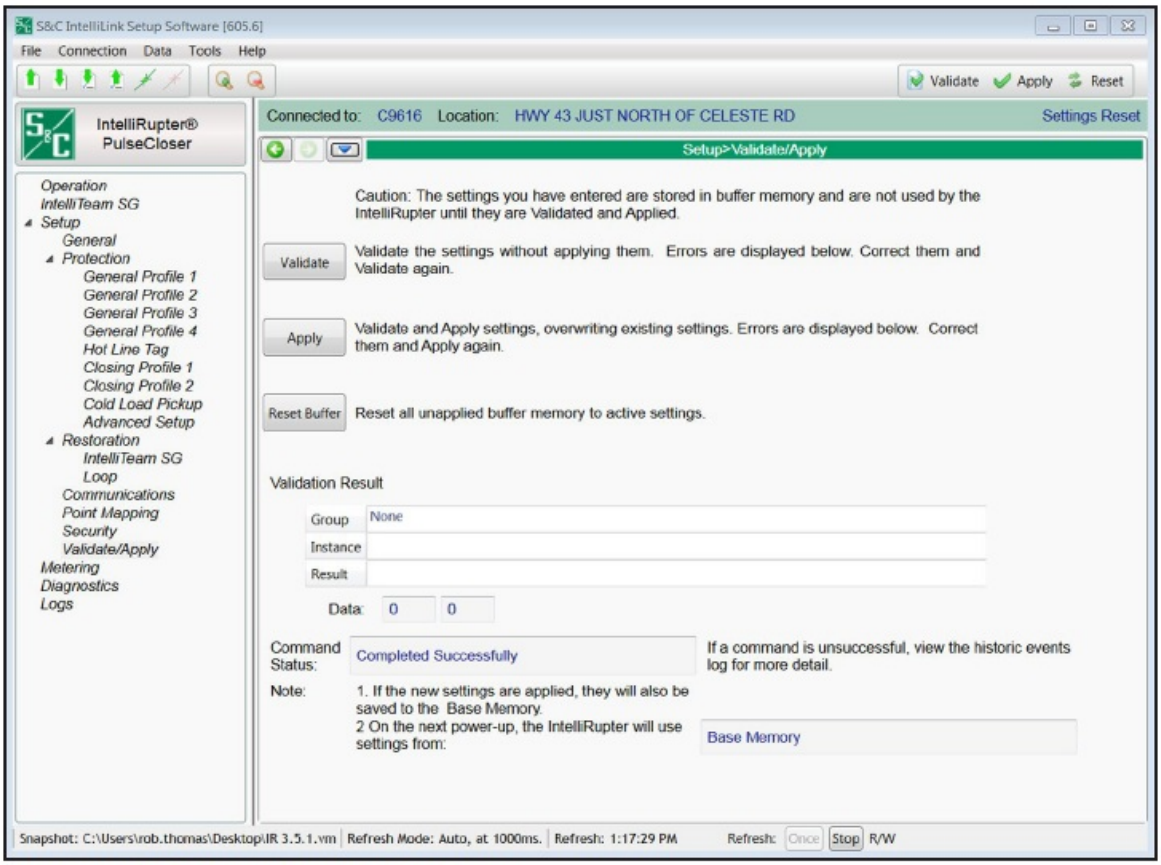

Figure 6. The *Setup>Validate/Apply* screen.

Serial Connection With A Docking Station

If event communication with an IntelliRupter fault interrupter control module cannot be established over the Wi-Fi link, a direct serial connection can be made to the module when it is installed in the docking station. The serial connection will permit inspection of control operation and, if necessary, allow reloading of control firmware.

These are needed to establish a serial connection:

- An IntelliRupter fault interrupter docking station, communication module, and control module
- A straight-through 9-pin serial cable
- A personal computer loaded with the latest IntelliRupter fault interrupter software

Follow these steps to establish a serial connection:

- **STEP** 1. Power the docking station and make sure the red LED is on.
- **STEP** 2. Locate the serial jumper cable on top of the docking station. It should connect the two ports labeled “Wi-Fi Serial to Control” and “Wi-Fi Serial to Comm.” Unplug the end of the jumper connected to “Wi-Fi Serial to Comm,” and plug the male end of the serial cable into the jumper. See Figure 7. The jumper functions as a gender changer.
- **STEP** 3. Plug the other end of the serial cable into the serial port on the computer, and make note of the COM port number. If there is no serial port on the computer, use a serial-to-USB adapter cable.

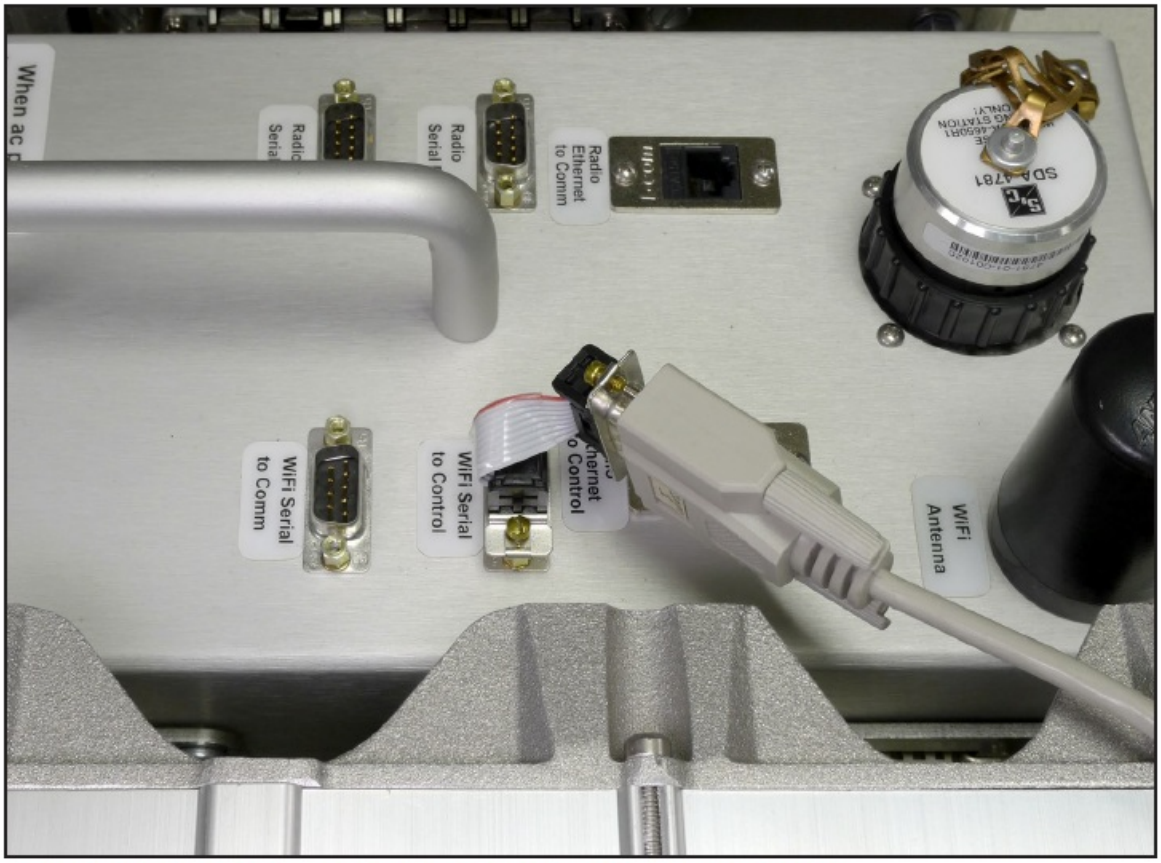

Figure 7. A serial cable connected to the Wi-Fi serial-to-control input.

Serial Connection for Version 3.4.x and Earlier

Connect with IntelliLink® Setup Software

NOTICE The following procedure is used with IntelliRupter fault interrupter installer versions 3.4.x and earlier. For newer installer versions, go to the next section, starting on page 19.

Follow these steps to make a serial connection with software version 3.4.x and earlier:

- **STEP** 1. IntelliLink Setup Software is installed by default in the C:\Program Files\S&C Electric\IntelliLink folder. Double-click on the ilink.exe file to launch the IntelliLink software. The location of this file is shown in Figure 8.

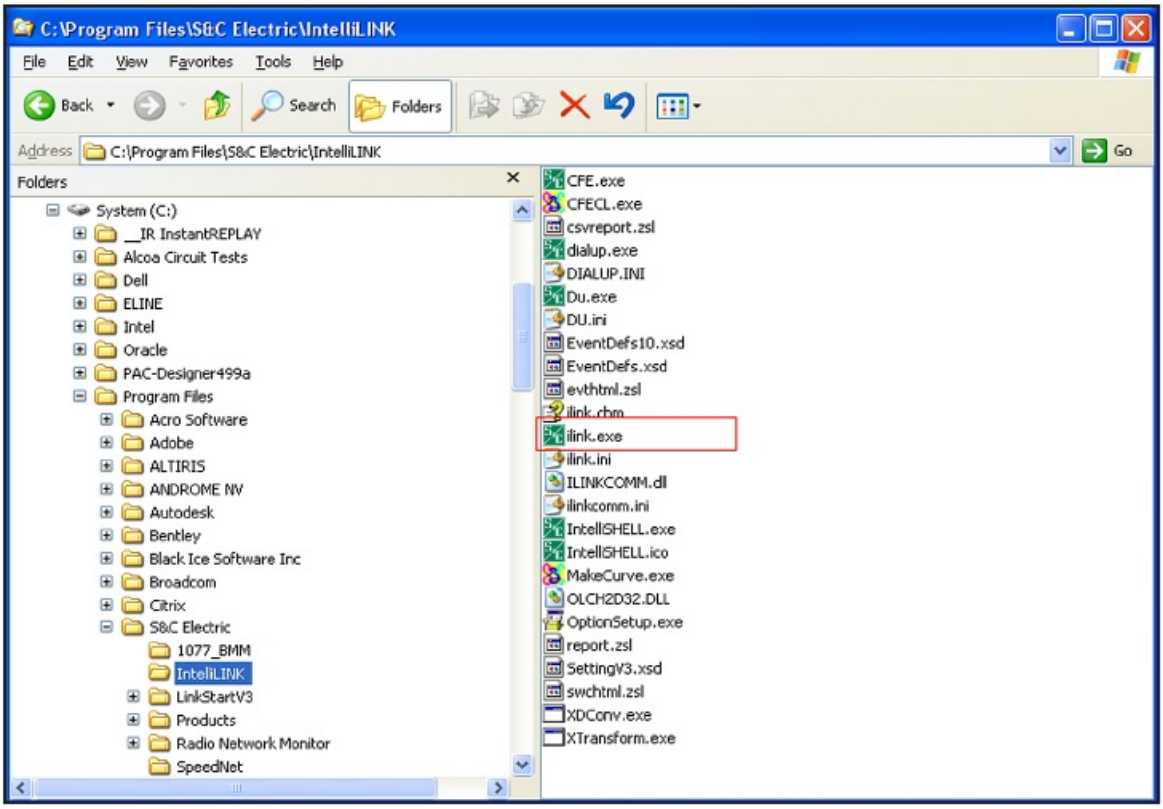

Figure 8. Location of the IntelliLink Setup Software application file.

- **STEP** 2. When the IntelliLink software is launched, it is configured by default to connect to the control over a wireless link. It automatically attempts to establish this connection. Wait for the connection attempt to time-out. Messages in the Connect field should be approximately the same as shown in Figure 9.

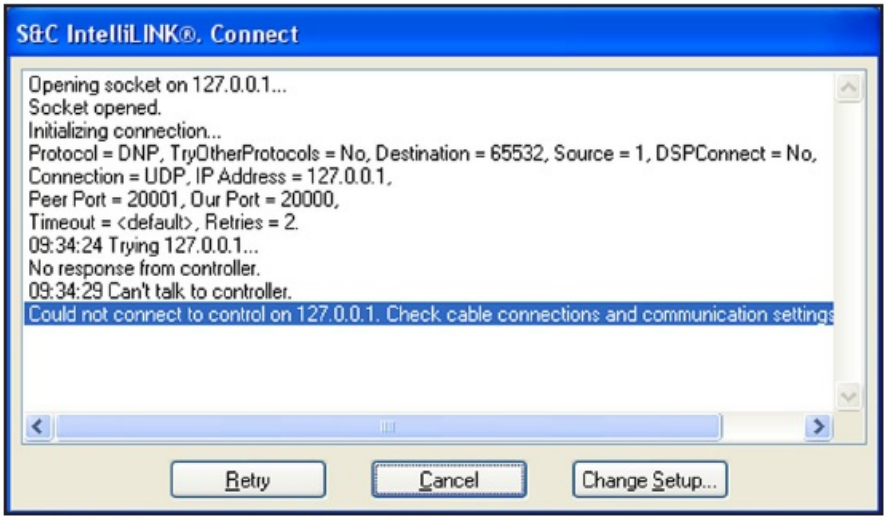

Figure 9. The IntelliLink Connect dialog box.

- **STEP** 3. Click on the Change Setup… button. This will open the Options dialog box. Click on the Communications tab, shown in Figure 10. Change the connection from UDP/IP to Serial and select the correct COM port. In this case, the port is “COM1.” The Baud Rate setting should be “57600.” No other options should be changed.

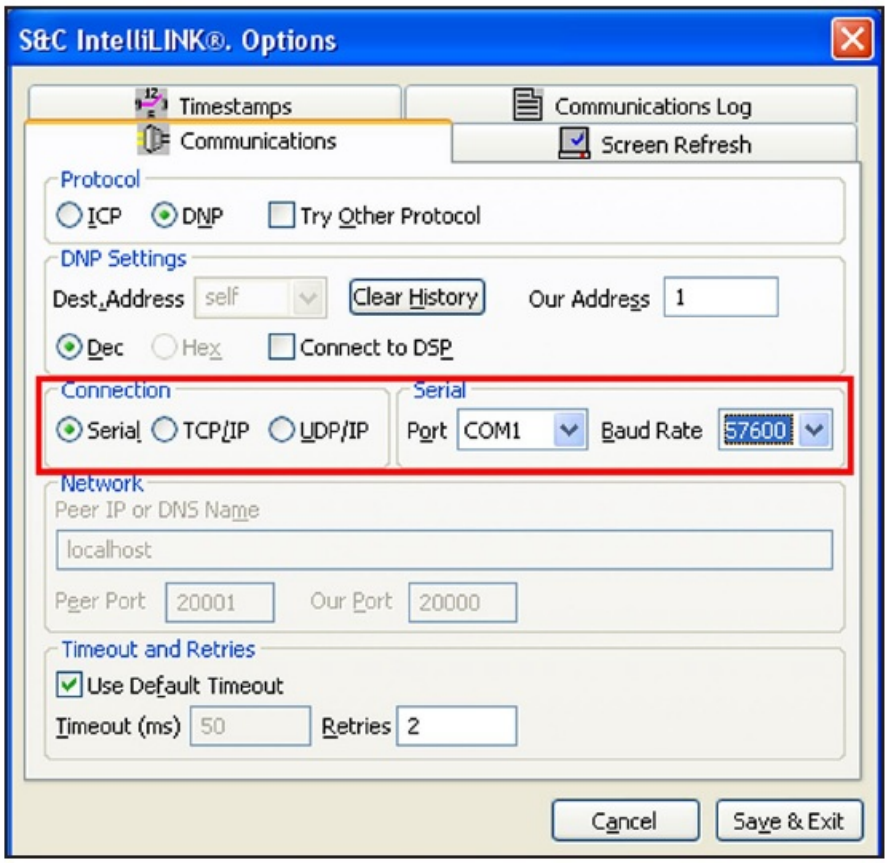

Figure 10. The IntelliLink Options dialog box.

- **STEP** 4. When the communications parameters have been set on the Options dialog box, click on the Save & Exit button.
- **STEP** 5. When the Options dialog box closes, the Connect dialog box will appear. Click on the Retry button. See Figure 9 on page 14. The IntelliLink software will attempt to establish a connection using the new communication parameters.
    - Depending on the firmware state in the control, a warning or an error message may appear when a connection has been established.
    - If an error message is received or the firmware does not download through the Wi-Fi connection to upgrade the control, follow the instructions in the “Reloading Firmware With the Download Utility” section below. If this procedure was done to determine whether the control is operational and did not generate warnings or errors, contact S&C Electric Company for support. The problem is probably not related to control firmware.

Reloading Firmware with the Download Utility

Reloading control firmware should only be started after an attempt to connect to the control with the IntelliLink software has generated errors or warning messages indicating incorrect versions or maintenance mode conditions.

Follow these steps to reload firmware with the Download Utility application:

- **STEP** 1. To avoid communication conflicts, close any open instances of IntelliLink software before launching the Download Utility application.
- **STEP** 2. The DU application, by default, is installed in the C:\Program Files\ S&C Electric\IntelliLink folder. See Figure 11.

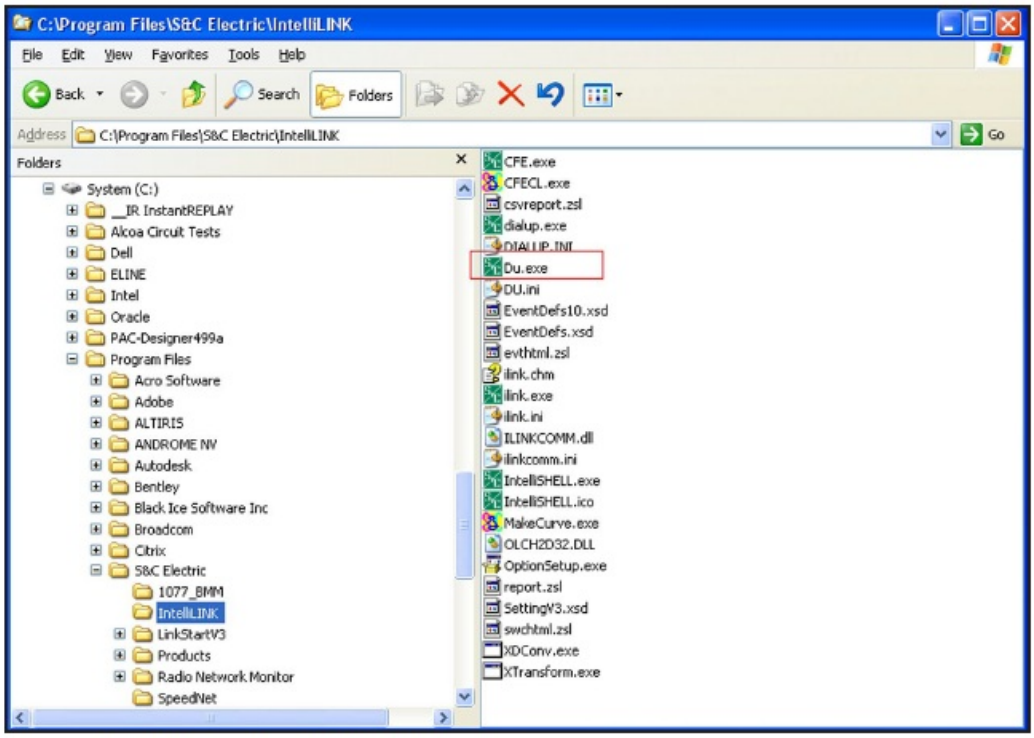

Figure 11. The Download Utility file location.

- The Download Utility application will try to automatically establish communication with the control but will eventually time-out. The connection status for the DU is displayed in the lower left hand corner. See Figure 12.

  Figure 12.

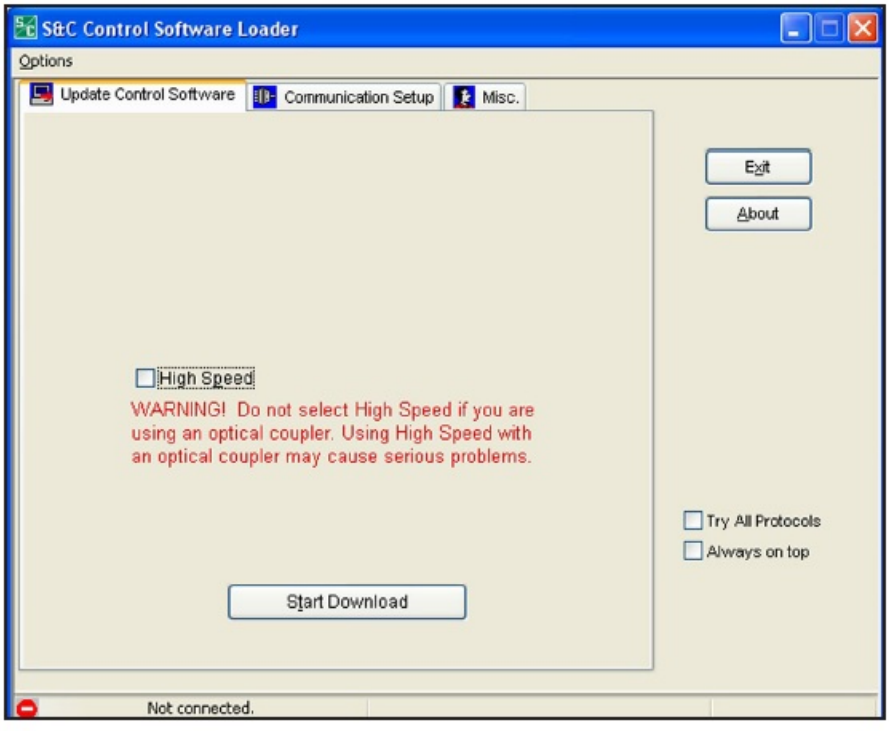

Figure 12. The Download Utility connection status, shown on the Control Software Loader dialog box.

- **STEP** 3. When the DU connection status changes from Trying connection on 127.0.0.1 to Not connected, click on the Communications Setup tab at the top center of the dialog box. A new dialog box appears. See Figure 13.

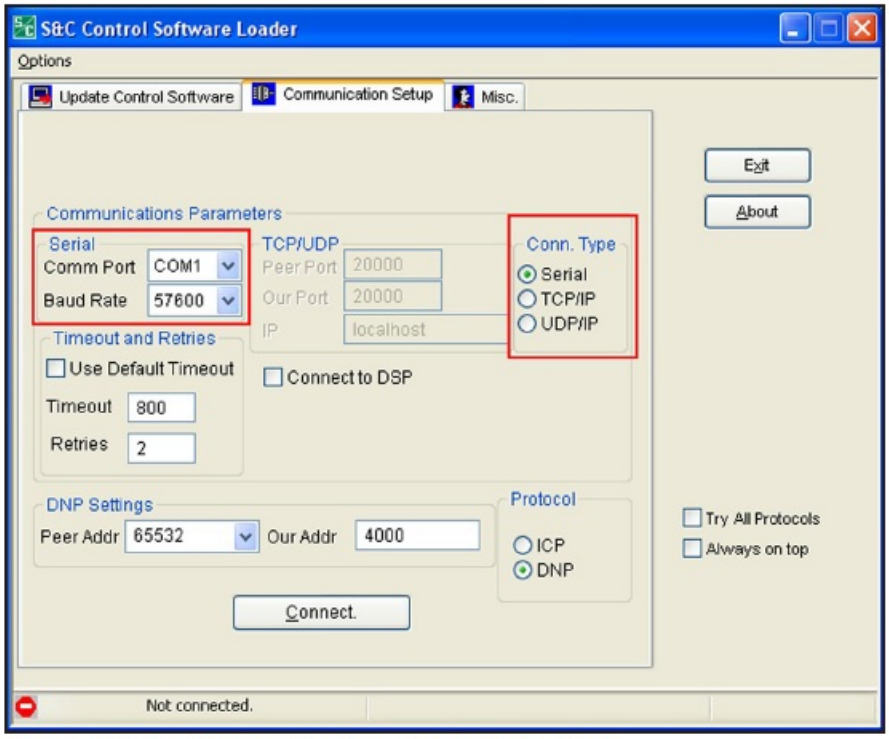

Figure 13. The Communications Setup dialog box.

- **STEP** 4. The settings may not exactly match Figure 13, but the important parameters are shown there. Set the Conn. Type to “Serial” and select the correct Comm Port. The Baud Rate should be set to “57600.”
  Do not change the DNP Settings, the Peer Addr, or Our Addr entries. Use the configured settings.
- **STEP** 5. When all parameters on the Communication Setup tab have been entered, click on the Connect button.
- **STEP** 6. When the status indicators show the Download Utility application is connected, navigate to the Download/Upload tab and click on the Start Download button. When prompts appear asking whether to skip a download, click on the No button.
- **STEP** 7. When the download is complete, do not exit the Download Utility application. Navigate back to the Communication Setup tab and change the Conn. Type setting back to “UDP/IP.” Then, click on the Exit button to close the Download Utility application.

Verification of Correct Operation

After the control firmware has been successfully loaded, verify the control is operating correctly using the IntelliLink software.

Follow these steps to verify correct operation:

- **STEP** 1. After closing the update dialog box, the IntelliLink software will prompt for log-in. Enter the appropriate username and password.
- **STEP** 2. On the Operation screen, check the control’s status in the upper right corner. Verify the control is in the Okay state. If there are any alarms, warnings, or errors, contact S&C Electric Company.
- **STEP** 3. Check the Setup>General>Revisions screen. See Figure 14. Determine whether the correct firmware has been installed. After verification is complete, change the communication parameters of IntelliLink software back to the default settings.

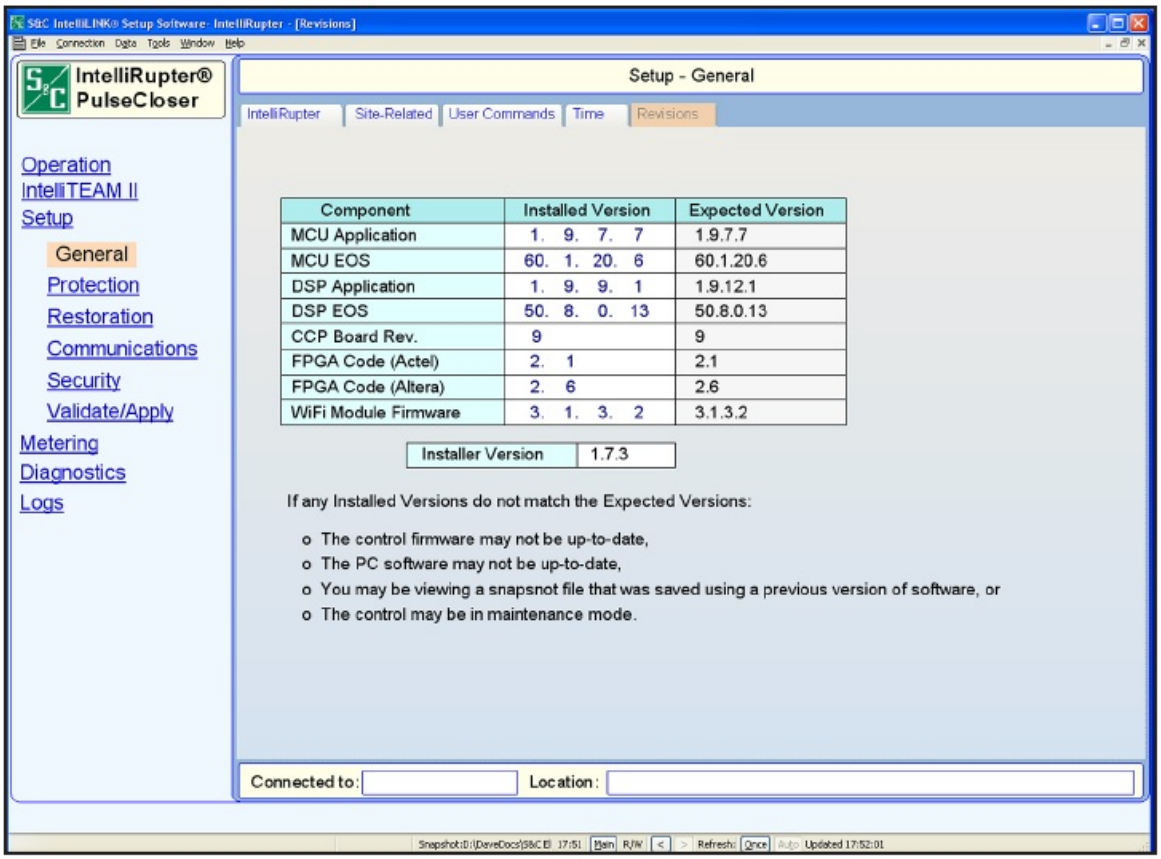

Figure 14. The IntelliRupter *Setup>General>Revisions* screen.

- **STEP** 4. Locate the Tools menu option at the top of the screen. The communication parameters are on the Tools>Options menu. See Figure 14. Change the Connection Type setting to “UDP/IP” and click on the Save & Exit button. Close the IntelliLink software.
- **STEP** 5. Disconnect the serial cable, and reconnect the jumper to the “Wi-Fi Serial to Comm” connector on the docking station. The control and communication modules should now correctly respond to a LinkStart connection attempt.

Connect with IntelliLink Setup Software

NOTICE

The following procedure is used with IntelliRupter fault interrupter installer versions 3.5.x and later. For earlier installer versions, see the previous section, starting on page 13.

Follow these steps to connect with IntelliLink Setup Software:

- **STEP** 1. IntelliLink software is installed in the C:\Program Files (x86)\S&C Electric\IntelliLink6 folder. Double-click the ILink6.exe application to launch the IntelliLink software. The location of the file is shown in Figure 15.

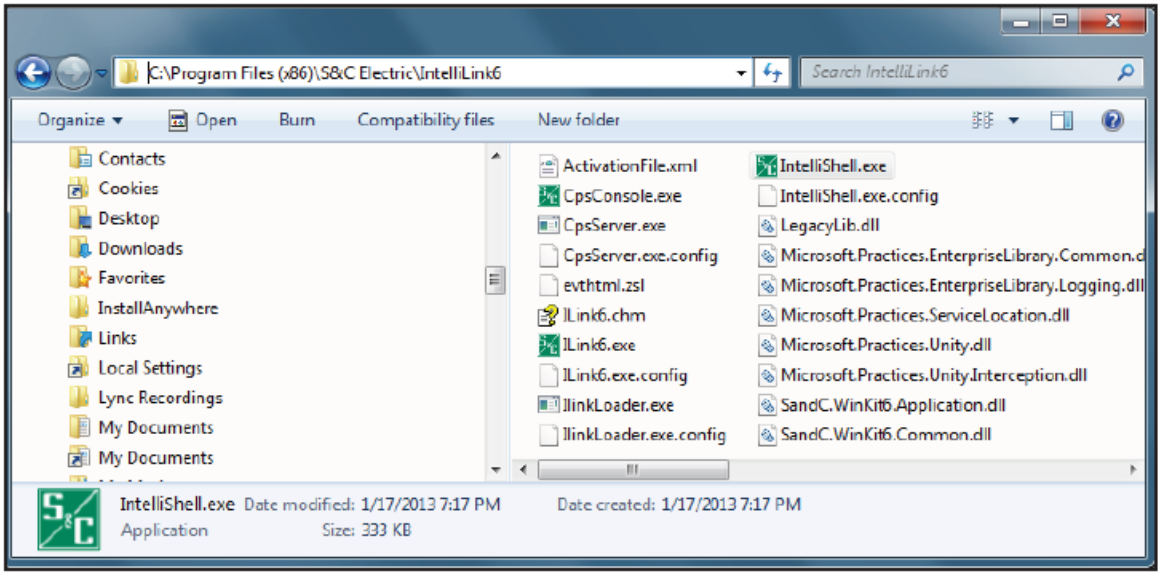

Figure 15. The location of the IntelliLink Setup Software application file.

- **STEP** 2. When the IntelliLink software is launched, it is configured by default to connect to the control over a wireless link. It automatically attempts to establish this connection. Wait for the connection attempt to time-out. Messages in the IntelliLink Connect dialog box should be approximately the same as shown in Figure 16.

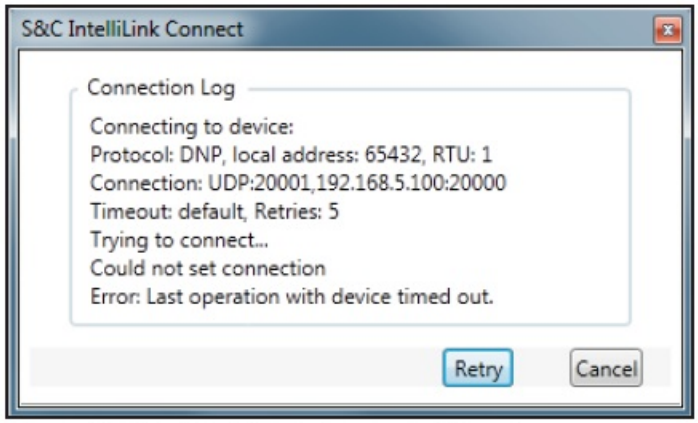

Figure 16. The IntelliLink Connect dialog box.

- **STEP** 3. Click on the Cancel button. Then, select Tools>Options… on the main menu. See Figure 17.

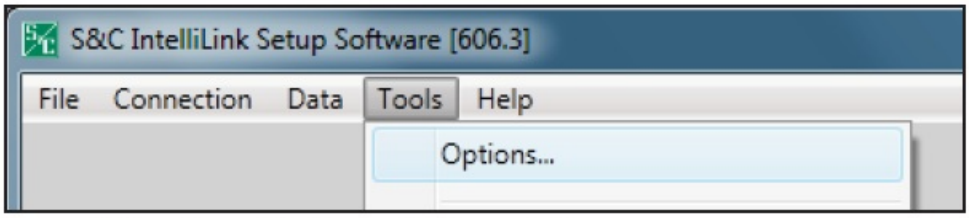

Figure 17. Location of the Tools>Options... button.

- **STEP** 4. This will launch the IntelliLink software Options dialog box. Click on the Connection tab, shown in Figure 18. Make sure the Protocol setting is “DNP;” change if needed. Change the RTU setting to “self” or “65532.” Change the Connection Type setting from “UDP/IP” to “Serial” and select the correct COM port. In this case the port is COM5. The Baud Rate setting should be “Auto.” Verify the Timeout ms: setting is “1000” and the Retries setting is “5.” Click on the OK button. See Figure 18.

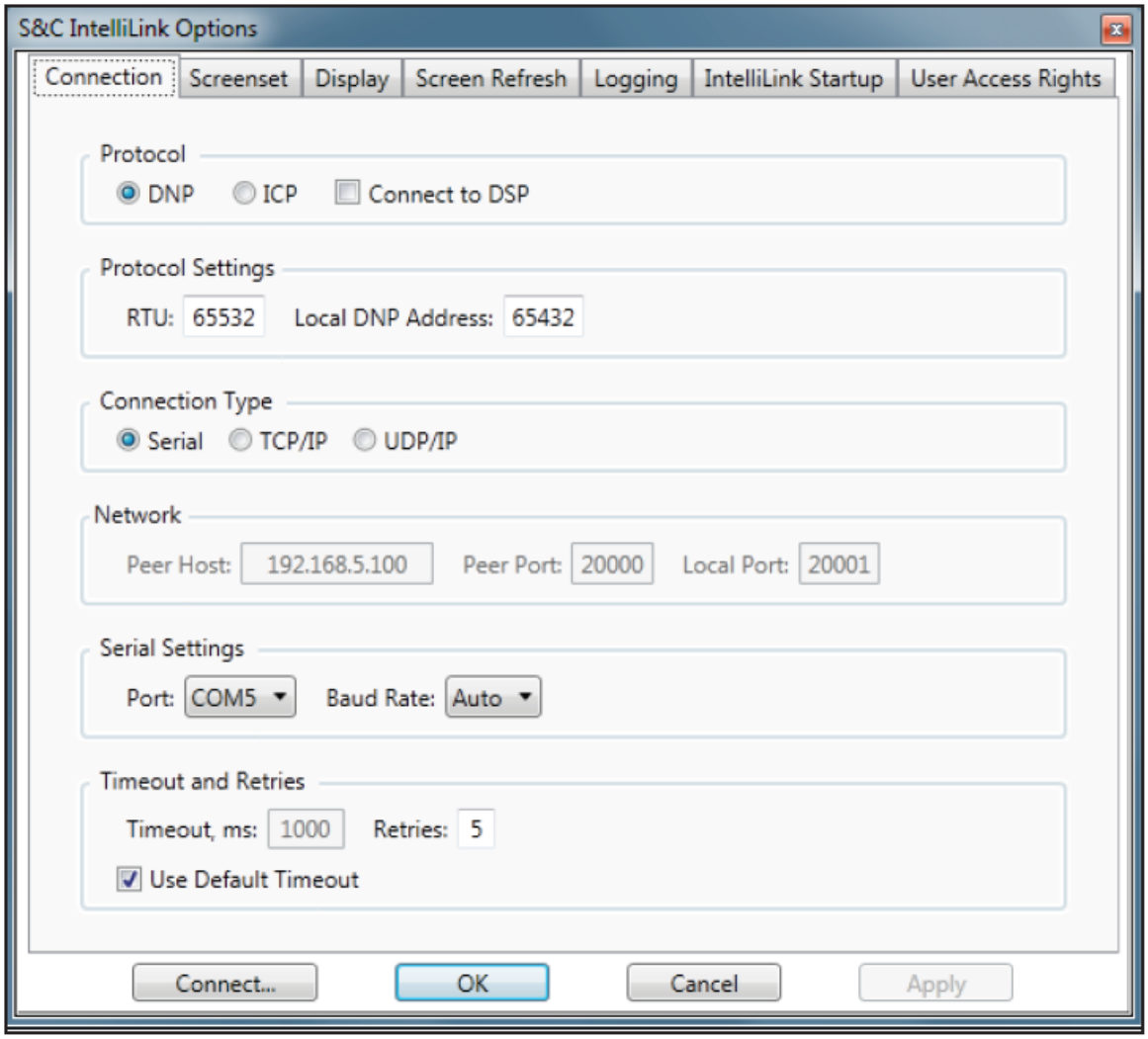

Figure 18. The S&C IntelliLink Options Connection tab.

- **STEP** 5. Select Connection>Connect to Device… from the main menu. See Figure 19.

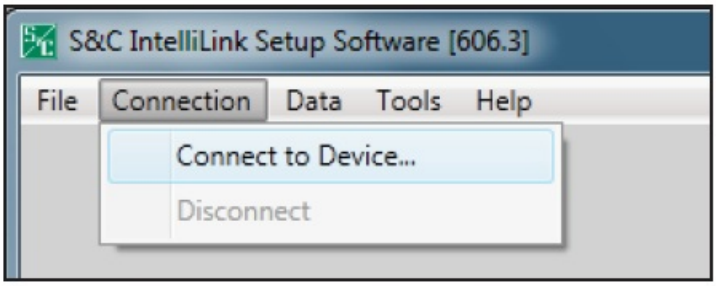

Figure 19. The menu selection Connect to Device....

- **STEP** 6. Log in with a username and password. To obtain the default values, contact the S&C Global Support and Monitoring Center at 1-888-762-1100.

Reloading Firmware with the Download Utility

Reloading control firmware should only be started after an attempt to connect to the control with the IntelliLink software has generated errors or warning messages that indicate incorrect versions or a Maintenance Mode condition.

Follow these steps to reload firmware with the download utility:

- **STEP** 1. Connect with IntelliLink software. Select Tools>Firmware Update… menu item from the main menu. See Figure 20.

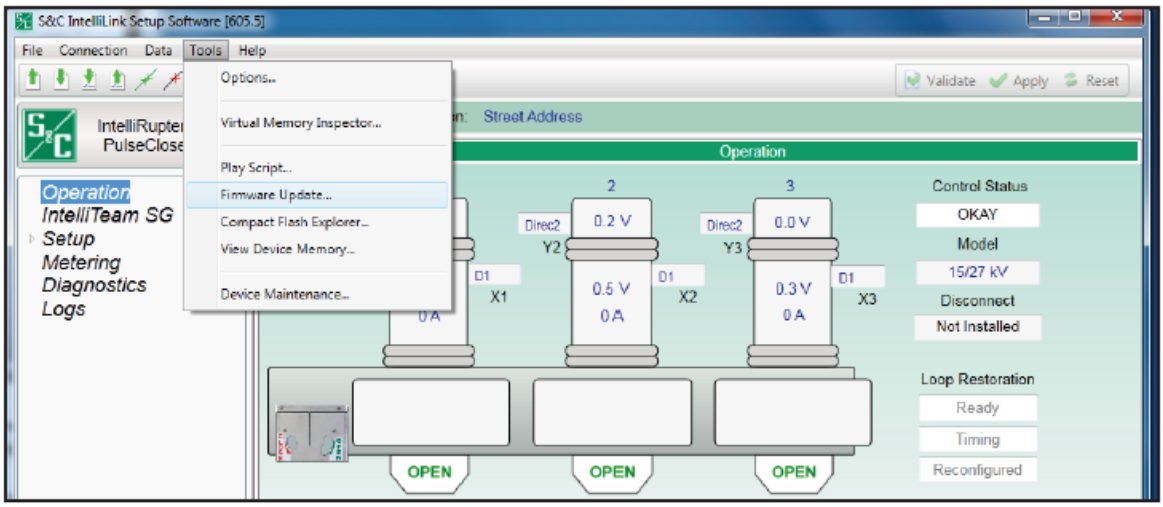

Figure 20. The menu selection Fimrware Update... menu item.

- **STEP** 2. Click on the Yes button in the Confirmation dialog box. See Figure 21.

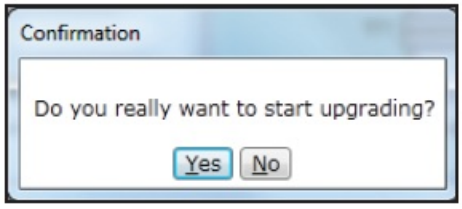

Figure 21. The Confirmation dialog box.

- **STEP** 3. The Firmware Update dialog box opens. See Figure 22.

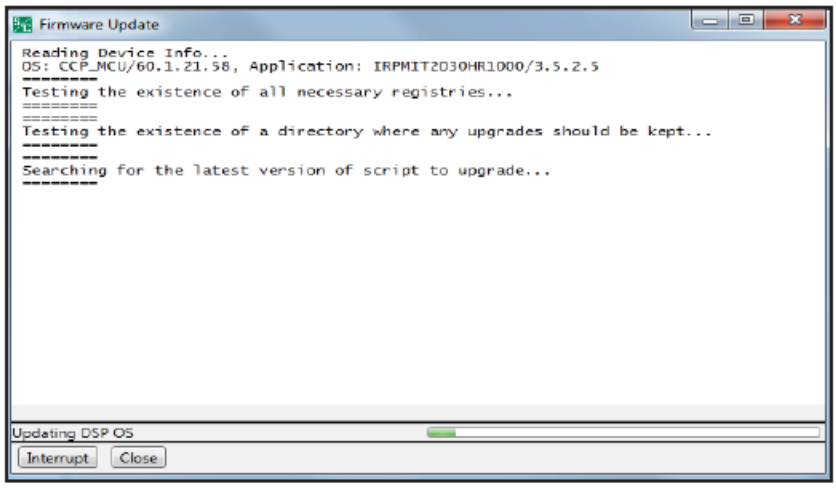

Figure 22. The Firmware Update dialog box.

- **STEP** 4. If any of the software components installed in the control have the same or later version number as the version being downloaded, a message similar to that shown in Figure 23 will appear. Click on the Yes button unless instructed otherwise by an S&C representative.

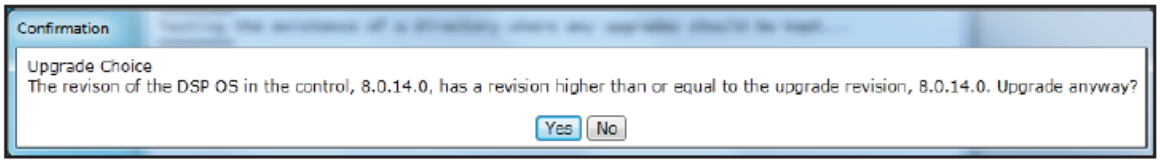

Figure 23. The Confirmation dialog box.

- **STEP** 5. After the software components have been installed, the control will automatically restart, and the Enter your credentials dialog box will open. See Figure 24.

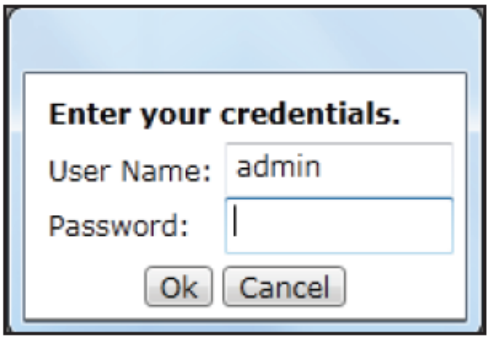

Figure 24. The Enter Your Credentials dialog box.

- **STEP** 6. Enter the user name and password or the factory defaults. When the process is complete, click on the Close button to proceed.

Verification of Correct Operation

After the control firmware has been successfully loaded, follow these steps to verify the control is operating correctly using the IntelliLink software:

- **STEP** 1. After closing the Update dialog box, the IntelliLink software will prompt for log-in. Enter the appropriate User Name and Password.
- **STEP** 2. On the IntelliRupter fault interrupter Operation screen, check the control status in the upper right corner. Verify the control is in the Okay state. If there are any alarms, warnings, or errors, contact S&C Electric Company.
- **STEP** 3. Check the Setup>General>Software Versions screen. See Figure 25. Determine whether the correct firmware has been installed. After completing verification, change the communication parameters of the IntelliLink software back to the default settings.

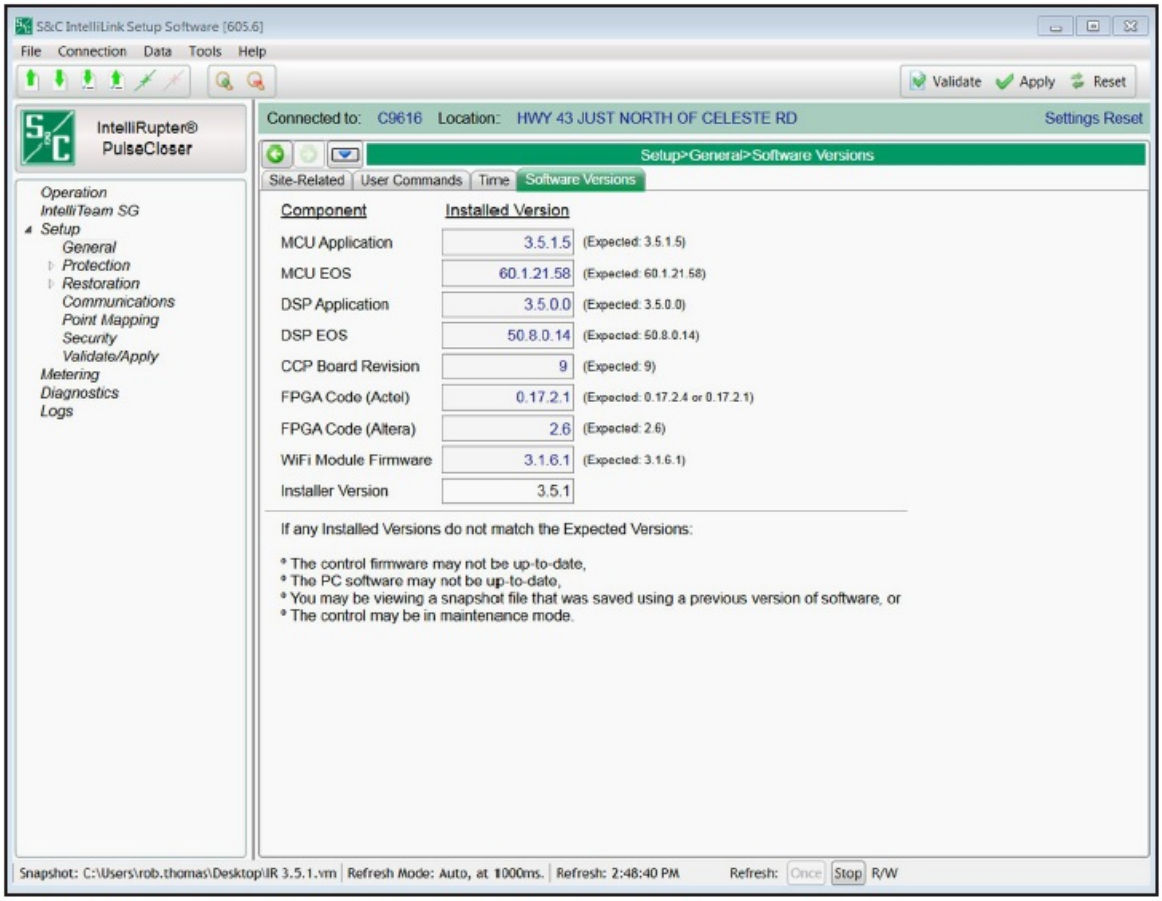

Figure 25. The IntelliRupter *Setup>General>Software Versions* screen.

- **STEP** 4. Locate the Tools menu option at the top of the screen. The communication parameters are on the Tools>Options menu. See Figure 18 on page 20. Change the Connection Type setting to “UDP/IP” and click on the Save & Exit button. Close the IntelliLink software.
- **STEP** 5. Disconnect the serial cable from the jumper, and reconnect the jumper to the Wi-Fi Serial to Comm connector on the docking station. The control and communication modules should now correctly respond to a LinkStart connection attempt.

Shutting Down

NOTICE Always turn off the docking station power switch before disconnecting the modules.

The docking station includes an inrush current limiter. It requires about 2 minutes to reset after the power switch is turned off, and power cannot be turned on during that time interval.

Follow these steps to shut down the docking station:

- **STEP** 1. Turn off the docking station power switch.
- **STEP** 2. Carefully disconnect the protection and control module and the communication module from the docking station.
- **STEP** 3. If applicable, disconnect the directly connected computer and/or DNP test set.
- **STEP** 4. Disconnect the power cord from the docking station. Then, unplug the power cord from the ac outlet.

BMM Revisions for the Docking Station

In 2010, a GROUND TRIP BLOCK lever was added to the IntelliRupter fault interrupter. Software revision 2.2.9 (and later versions) detects whether a GROUND TRIP BLOCK lever is installed. If a GROUND TRIP BLOCK lever is present, its configuration parameters are shown on the Setup>General>User Commands screen, and its On/Off state is shown on the Operation>Main screen. If software version 2.2.9 is used with an older IntelliRupter fault interrupter (that does not have a GROUND TRIP BLOCK lever), the GROUND TRIP BLOCK lever configuration commands are not displayed, and there is no GROUND TRIP BLOCK lever indication shown on the Operation>Main screen. The original docking station, catalog number SDA-4650R1, was shipped with base memory module (BMM) SDA-4781, which simulates the older IntelliRupter fault interrupter without a GROUND TRIP BLOCK lever. The latest docking station, catalog number SDA-4650R3 is the same device but is shipped with the new BMM SDA-4781R3 that simulates an IntelliRupter fault interrupter with a GROUND TRIP BLOCK lever. BMM SDA-4781R3 can also be used with the original docking station SDA-4650R1 to simulate the GROUND TRIP BLOCK lever. When the control module has software version 2.2.9 or later:

- Using BMM SDA-4781, the software will not show GROUND TRIP BLOCK lever configuration parameters or the lever position state.
- Using BMM SDA-4781R3, the software will display GROUND TRIP BLOCK lever configuration settings, and the GROUND TRIP BLOCK lever indication on the Operation>Main screen will always be “On.”

Documents / Resources

	**S and C 15.5 kV PulseCloser Fault Interrupter** [pdf] Instruction Manual 15.5 kV, 27 kV, 38 kV, 15.5 kV PulseCloser Fault Interrupter, 15.5 kV, PulseCloser Fault Interrupter, Fault Interrupter, Interrupter

References

- S&C Electric Company
- User Manual