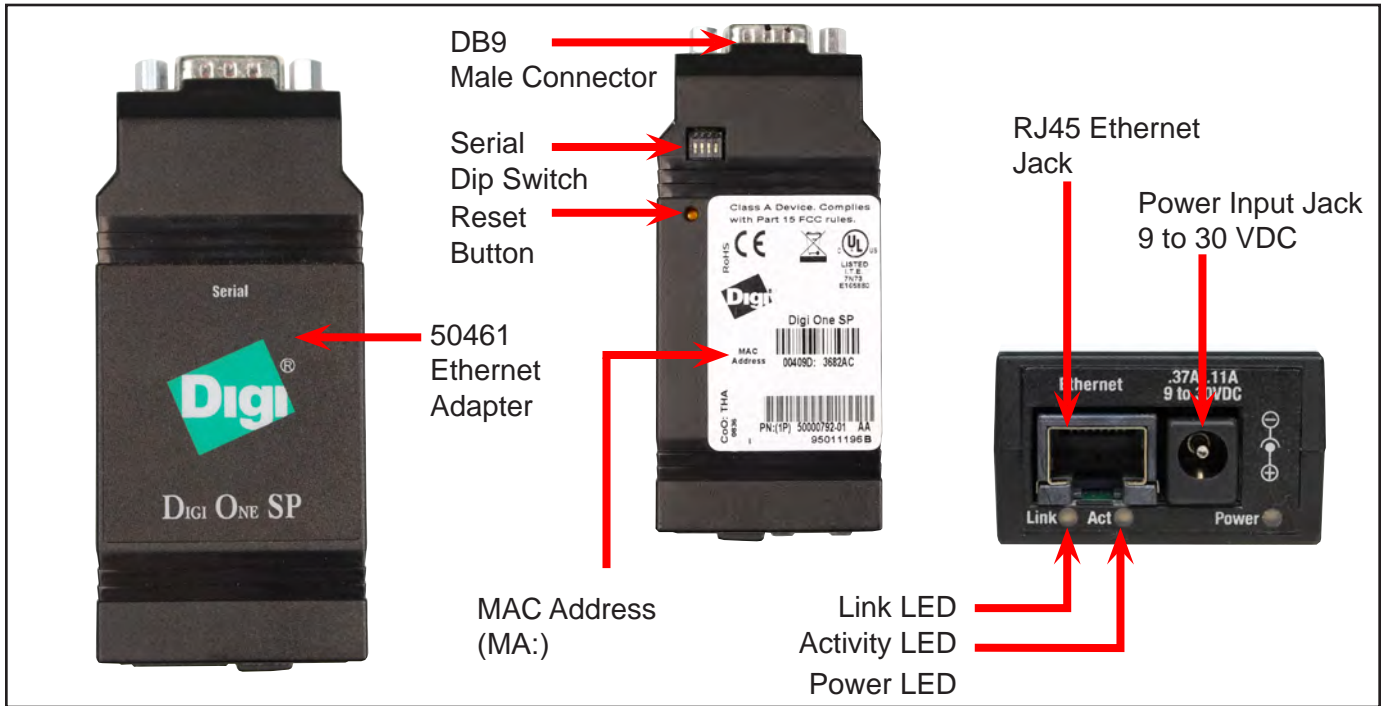


# Ethernet Adapter, 10/100 Installation, Operation and Maintenance



Made in the United States of America



EMIT 50461 Ethernet Adapter.

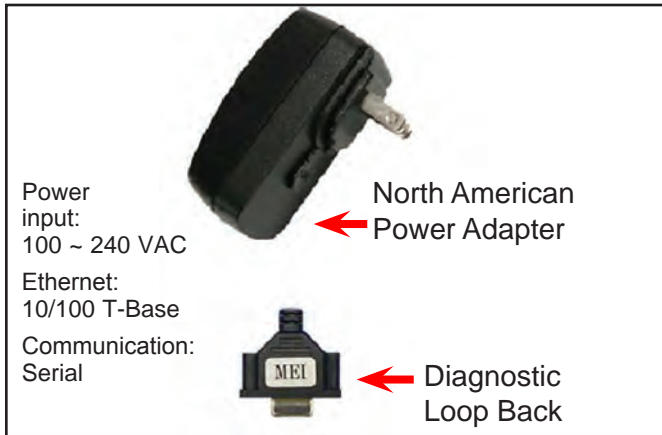


Figure 1. Power Adapter and Diagnostic Loop Back Key.

**Packaging:**

- 1 - Digi SP One Ethernet Adapter
- 1 - Diagnostic Loop Back Key
- 1 - Quick Start Guide
- 1 - Release Note
- 1 - Installation and Drivers CD-ROM
- 1 - 100 ~ 240 V to 12VDC Power Adapter
- 1 - 24" Inverted Communication Cable
- 1 - North American Plug

**Note:** Ethernet cable is not supplied with unit. The end user must supply his/her own Ethernet cable.

**System and Hardware Requirements:**

The EMIT 50461 Ethernet Adapter is designed to be used with the SmartLog V4 Data Acquisition System. You must have the SmartLog V4 hardware and TEAM5 Software.

**Mounting and Installation:**

This technical bulletin is intended for personnel familiar with networking concepts and the SmartLog V4 system. Before mounting the Ethernet Adapter to a wall, or back-plate of SmartLog V4, the Ethernet Adapter must be configured with the correct communication parameters and must be assigned an IP address.

## 1. Powering unit and Locating unit on the LAN

Make sure there is a nearby Ethernet cable, LAN jack, and power outlet for the Ethernet Adapter to connect to.

Before powering or connecting an Ethernet Adapter the DIP switches must be set with DIP 1 to the ON position (up) and the rest to the OFF position (switches 2 to 4 down). The diagnostic loop back key must be securely connected to the DB9 make serial port (See Figure 2).

Be sure to use the power adapter included with the 50461 Ethernet Adapter. The AC power adapter is a 100 ~ 240VAC auto switching power adapter and can be plugged into any power outlet known. Item 50461 includes a Universal Adapter with a 120V plug. EMIT has optional replacement blades available separately for both UK / Asia (Item 50586) and Europe (Item 50587).

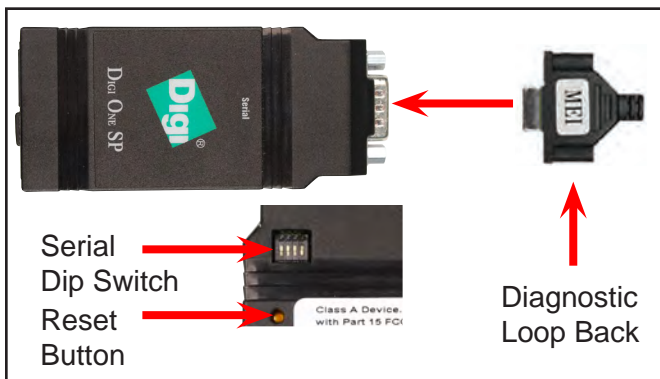


Figure 2. Locating the DIP switch.

Once the unit is powered, the Link and Act LEDs will illuminate for approximately 2 seconds. Plug the Ethernet cable into the jack labeled "Ethernet." The Link LED should illuminate and the Act LED should blink repeatedly. If the Link LED or Act LED do not illuminate, you will need to reset the Ethernet adapter. First you need to power down and re-power up the unit. Then use a small screw driver, or small probe; push and hold the reset button for approximately 10-12 seconds. The Power LED will blink 4 times and then reset itself.

To install the software use the CD-ROM included with the unit. Make sure you are inserting the CD-ROM into the computer that is running the TEAM5 Software. The installation software should run automatically, but if it does not, go to "My Computer" and open the CD-ROM drive labeled "Digi".

Once the set-up program opens follow the directions on the screen. The program should automatically find the unit on the LAN. If the unit cannot be located check to ensure the diagnostic loop back is securely connected to DB9 connector. Also, check to make sure the unit is powered on, and the Link and Act LED's are blinking periodically.

## 2. Assigning IP Address via Installation CD

Click next after each bullet.

- Obtain IP setting automatically using DHCP.
- Select the scenario list to "REALPORT (Com Port Redirection)".
- Check, check box "Install Digi RealPort on this computer".
- Click next to configure and save setting. This will take a few minutes while the software communicates with the Ethernet adapter.

## 3. Adding Hardware (Multi-port Serial Adapter) in Windows

Go to START menu (bottom left of Windows). Once the Start Menu pops up go to the Control Panel. Find and open the Add Hardware icon. If the Add Hardware icon does not appear on the left of the Control Panel select the option "Switch to Classic View". Once the menu is changed to "Classic View" locate and open the Add Hardware icon. "Welcome to Add Hardware Wizard" should appear. Click on next and follow the following steps for each menu as they appear.

- **Is the Hardware Connected?** - Click on "Yes, I have already Connected the hardware," and next.
- **The following hardware is already installed on your computer** - Scroll down and select "Add a new hardware device," and next.
- **The wizard can help you install other hardware device** - Check "Install hardware that I manually select for a list (Advance)," and next.
- **From the list below, select the hardware you will be installing** - Scroll down to "Multi-port serial adapters,"  Multi-port serial adapters and next.
- **Select the device driver you want to install for this hardware** - Select "Standard RealPort Device," and next. If it doesn't give you an option to select "Standard RealPort Device," click on "Have Disk..." The path of the driver is your CD-ROM Drive ":\drivers\windows\win2k\realport\digirp.inf".
- **The wizard is ready to install your hardware** - It should show, "Standard RealPort Device," click next.
- **Discover Device** - The unit should be located in the menu under model Digi One SP with an IP Address already assigned to the unit. Depending on how your network is setup you might need to manually enter an IP Address. If you are entering the IP Address manually the port number is 771.

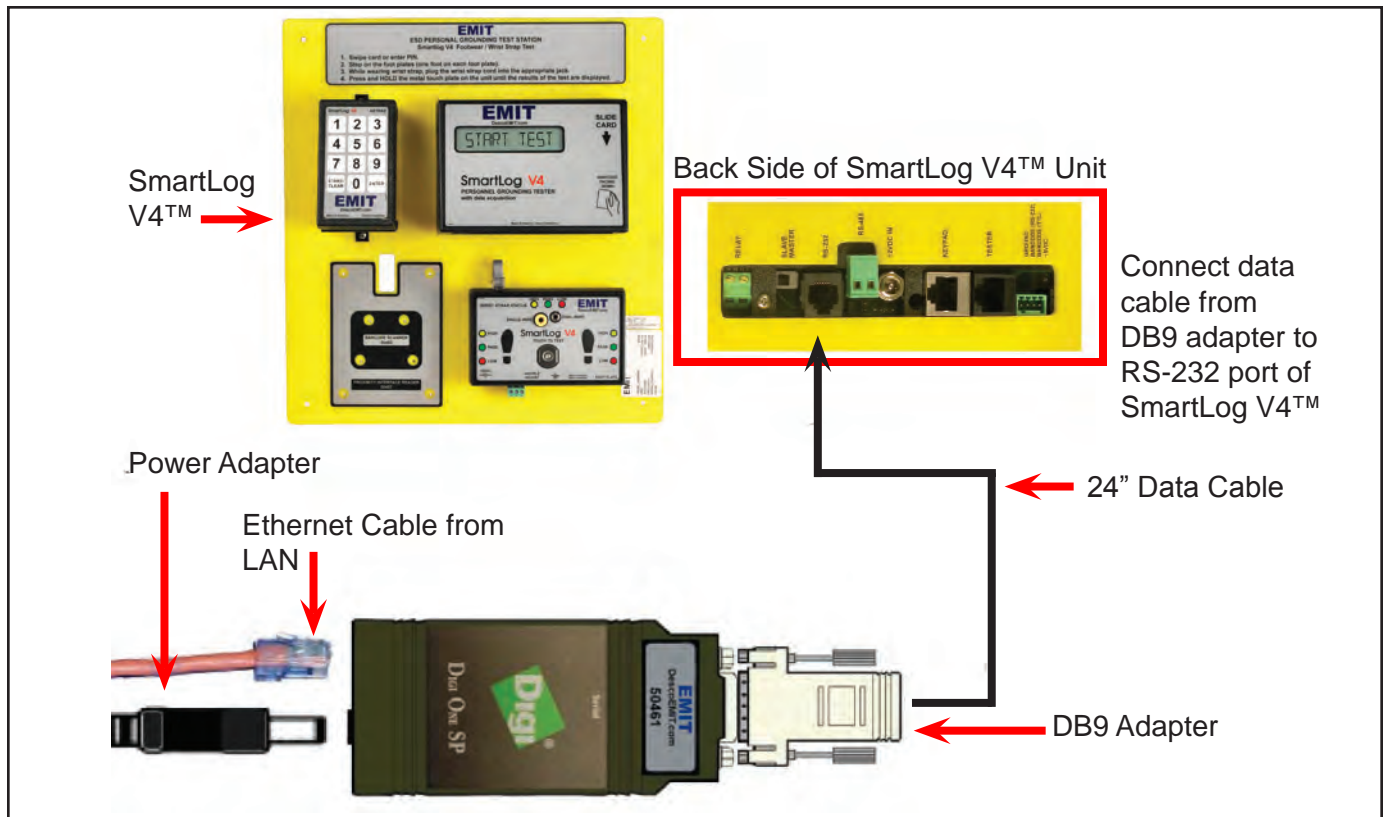


Figure 3. Installing the Ethernet Adapter to the SmartLog V4.

- **Select COM Names** - Windows should automatically give you a free comport. You can select from the list or select the default one highlighted by Windows. Take note of this COM port number. This will be used to complete the communication setup in the TEAM5 Software.
- **Completing the Add Hardware Wizard** - It should show, "Standard RealPort Device," click Finish.

#### 4. Connecting the Ethernet Adapter to the SmartLog V4

Disconnect and remove the Diagnostic Look Back from the Ethernet Adapter. Connect the DB9 Adapter supplied with the SmartLog V4 to the serial port of the Ethernet Adapter. Connect the 24" data cable from the DB9 to the RS-232 port on the back-side of the Smartlog V4 (See Figure 3). Ensure that the LED lights underneath the barcode reader of the Smartlog V4 do not illuminate. If they do, you have an incorrect data cable connected to the RS-232 port, or the RS-232 port is damaged.

#### Operation:

Refer to the instruction manual or technical bulletin for the software you are using to program and poll the SmartLog V4. Treat the unit as if it is connected directly to the comport. Perform a search or on the TEAM5 software. Make sure to adjust the "min" and "max" comport range so that the COM port for the Ethernet Adapter falls within the range.

## Specifications and Dimensions:



Figure 4. Ethernet Adapter dimensions.

### Dimensions:

Length: 3.882" (9.86cm)

Width: 1.679" (4.26cm)

Depth: 0.983" (2.50cm)

Weight: 2.29 oz (65 g)

### Operating Temperature:

Ambient temperature: 10°C to 45°C (50°F to 131°F)

Relative humidity: 5% to 90% (non-condensing)

### Power Requirement:

9-30VDC @ 0.5A max

### Troubleshooting:

- **Link LED or ACT not illuminating when the Ethernet is powered**
  - Power down unit, re-power unit, and push and hold the reset button for 10-12 seconds
- **Software cannot find or conflicts within comports**
  - Make sure you have the Diagnostic Loop Back securely connected to the serial port of the Ethernet Adapter.
  - Make sure Ethernet cable is not defective or incorrectly wired.
  - If you have a Lantronix COM port, you will need to uninstall the software.
- **The Ethernet Adapter is not communicating with the TEAM5 software**
  - Make sure the dip switches are factory default (Refer to page 2)
  - Verify the communication settings of the Ethernet are the following:
    - Baud Rate: 9600
    - Data Bits: 7
    - Parity: Odd
    - Stop Bits: 1

- Verify the Baud Rate of the SmartLog V4™ is set to 9600 (Refer to page 3 of [TB-6561](#))
- Make sure the DB9 Adapter is securely connected to the serial port of the model 50461
- Verify the 24" data cable from the Ethernet is connected to the RS-232 port of the SmartLog V4™
- Verify the LED's on the underneath the SmartLog V4 BC Reader do not come on. If they do, this means an incorrect or defective data cable is connected.
- **Why does the SmartLog V4 lose signal with the TEAM5 Software?**
  - Verify no heavy duty electrical equipment is running near by
  - Verify the network IP address used to communicate with the SmartLog V4 is valid. IP addresses are occasionally refreshed by the IT department in order to avoid unauthorized personnel from accessing the network.

For additional troubleshooting information please refer to the website:

<http://www.descoemit.com/SmartLogV4Troubleshooting.aspx>

### Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions

See EMIT's Warranty -

<http://emit.descoindustries.com/Warranty.aspx>