

System requirements

The following system features are required at a minimum to run SourcePoint™:

- Intel® Pentium®-based or better computer or equivalent
- Microsoft® Windows® 2000/XP/Vista
- 128 MB RAM
- 60 MB disk space
- CD-ROM drive
- 10/100Base-T LAN connection port, or
- USB connection port

Installation and configuration overview

- Step 1: Unpack the equipment
 Step 2: Install the Arium software
 Step 3: Connect the emulator to the host computer
 Step 4: Connect the emulator to the target
 Step 5: Power up the emulator
 Step 6: Power up your target
 Step 7: Install the USB driver (if you are using a USB connection)
 Step 8: Launch and Configure SourcePoint

Step 1: Unpack the equipment

The following equipment should be in your box. If it is not, contact American Arium immediately.

ECM-700 – probe, including the PBD-700E (supports Intel laptop, desktop, and server processors, excluding Intel® Itanium® processors)

SourcePoint CD – Interface software

License file CD - CD containing the license file
Direct crossover cable (orange) – for direct TCP/IP connection

Ethernet patch cable (blue) – for network TCP/IP connection

USB cable (beige) – for USB connection

Reset adapter cable (black and yellow) - for target system reset.

Documentation – manuals, etc.

Step 2: Install the Arium software

Note: Power down your target if it is on.

1. Insert the SourcePoint CD into the CD drive of your host computer. The **SourcePointShield Wizard** displays. Complete the wizard.

Note: You may need to contact your systems administrator to gain administrator privileges.

Note: If the setup program does not run automatically, you can start it manually. Choose **Run** from the **Start** menu, type the following command, and click **OK**.

<CD-ROM drive>:\disk1\setup.exe

The setup program installs the SourcePoint software onto your host computer. If necessary, you can rerun the setup program to install additional features.

2. During setup, you will be asked for the SourcePoint license file. This file resides on a separate CD that shipped with your unit. Insert the file CD when prompted. Install the license file to your root SourcePoint directory.

Step 3: Connect the emulator to the host computer

Determine the type of connection you want.

A direct TCP/IP or USB connection is the simplest way to connect the host computer and the base unit. Only a single host PC can use the American Arium debugger with this type of connection. A network TCP/IP connection may be your best choice if you already have a network in place. It will allow users from different locations to make use of the debugger if your network security allows such access.

For a USB connection, use the *beige* USB cable. Connect one end to the base unit at the connector port labeled USB. Connect the other end to the host computer's USB port.

For a direct TCP/IP connection, use the *orange* direct crossover cable. Connect one end to the emulator at the connector port labeled NETWORK. Connect the other end to the host computer at the 10/100Base-T network connector (also known as the RJ-45 connector).

For a network TCP/IP connection, use the *blue* Ethernet patch cable. Connect one end to the emulator at the connector port labeled NETWORK. Connect the other end to your network hub.

Step 4: Connect the emulator to the target

The purpose of the PBD-700E is to act as a buffer and provide voltage level shifting between the target debug/ITP port and the emulator. Connect the JTAG cable connector to the front of the emulator. Connect the end with the PBD-700E board to your target debug port.

Note: For information on how to set the jumpers on the PBD-700E, see the PBD-700E *Getting Started* guide that shipped with your unit.

Step 5: Power up the emulator

1. Connect the power supply to the coaxial power connector on the back of the emulator.
2. Connect the other end to your power source.
3. Flip the On/Off switch on the front of the unit to the On position.

Step 6: Power up your target

Turn on your target.

Step 7: Install the USB driver (if you are using a USB connection)

Note: If you have not set up a USB connection, skip this step.

If you have set up the hardware for a USB connection, you are first asked to load the USB driver via a standard Microsoft Windows dialog box.

The driver file you need to load is "AriumUsb.inf", located in the root directory of the CD-ROM or the "USB_Drivers" subdirectory of your SourcePoint installation.

Step 8: Launch and Configure SourcePoint

To launch SourcePoint, double-click on the "sp.exe" file in the SourcePoint directory.

Step 8A: Configuring a USB Connection

You do not have to configure a USB connection from the SourcePoint interface. It is a "plug and play" connection. SourcePoint will open with the **New Project Wizard** displayed. Complete the wizard to begin working in SourcePoint.

If you want to determine the IP address that was used in configuring the connection or if you want to change that address, select **Options|Emulator Configuration** from the menu bar and click on the **Network** tab.

Note: Changes made in this tab do not affect the entries in the **Emulator Connections** dialog box.

Step 8B: Configuring a TCP/IP Connection

You may need to know the serial number of your emulator. It can be found on the bottom of the unit. You may need some or all of the values listed below in order to configure the emulator with the debugger connection, depending on your connection type. In some instances you can use the default values. In others, you may need to contact your network administrator for this information.

Direct TCP/IP Connection

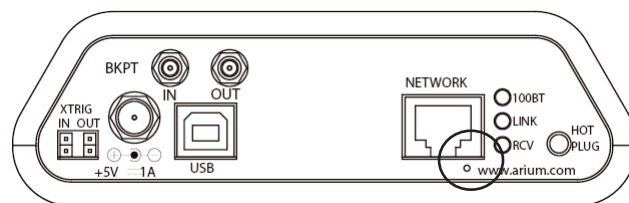
Host PC TCP/IP Address*: 192.168.000.002
Emulator Base Unit TCP/IP Address: 192.168.000.001
Emulator Base Unit Network Mask: 255.255.255.000
Emulator Base Unit Network Gateway: 192.168.000.002

Network TCP/IP Connection

Host PC TCP/IP Address*: N/A
Emulator Base Unit TCP/IP Address: Determined by wizard
Emulator Base Unit Network Mask: Determined by wizard
Emulator Base Unit Network Gateway: Determined by wizard

*This value is set on the network card of your host computer.

At this point, it is a good idea to locate the internal switch access hole on the emulator back panel. You will be asked to access it when you are in the setup wizard.



ECM-700 back panel showing the location of the internal switch

1. In SourcePoint, select **Options|Emulator Connection** from the menu bar if this dialog box is not open already.
2. Click on the **TCP/IP Setup** button. Follow the on-screen instructions to properly configure the emulator TCP/IP settings.

Caution: Arium recommends you do not configure a dynamic IP address at initial configuration. Once you have made an initial connection, you may be able to establish a dynamic IP address, depending on your server. Details are provided in the manual/online help files.

Hints and Tips

Reset Out: If the debug port cannot cause a complete system reset, a reset output is provided. Connect the reset adapter (yellow and black twisted pair cable) to **Reset Out** on the front of the ECM. Connect the other end to the target wherever a reset switch normally would be connected. The reset adapter is not polarized and does not need to be connected in any particular orientation since it is effectively just a switch closure.

Flash firmware: When SourcePoint is first installed, it may prompt you to update the ECM-700 flash firmware. You should proceed with the flash update using the latest version of the flash firmware that SourcePoint presents to you during this process. The version number is embedded in the name of the flash file. You can also initiate a flash update in SourcePoint by clicking on **Files|Update Emulator Flash**.

Target debug/ITP port problems: Some target systems have signal quality problems when TCK is set at the rate of 16 MHz. You can verify that the ECM-700 is reliably communicating with the JTAG scan chain by running 1,000 trials of the JTAG pattern tests located under **Options|Confidence Tests** in SourcePoint. If problems occur at the 16 MHz TCK rate, try lowering the rate under via the **JTAG Config** button in the **Confidence Tests** window.

American Arium support: If you need assistance, please contact American Arium Technical Support at 877-508-3970 toll free in the US; 714-731-1661 in North America or send an email to support@arium.com. If you bought your unit outside North America, please contact your distributor.