DV Scanner

Quick Start Guide

A-DVS

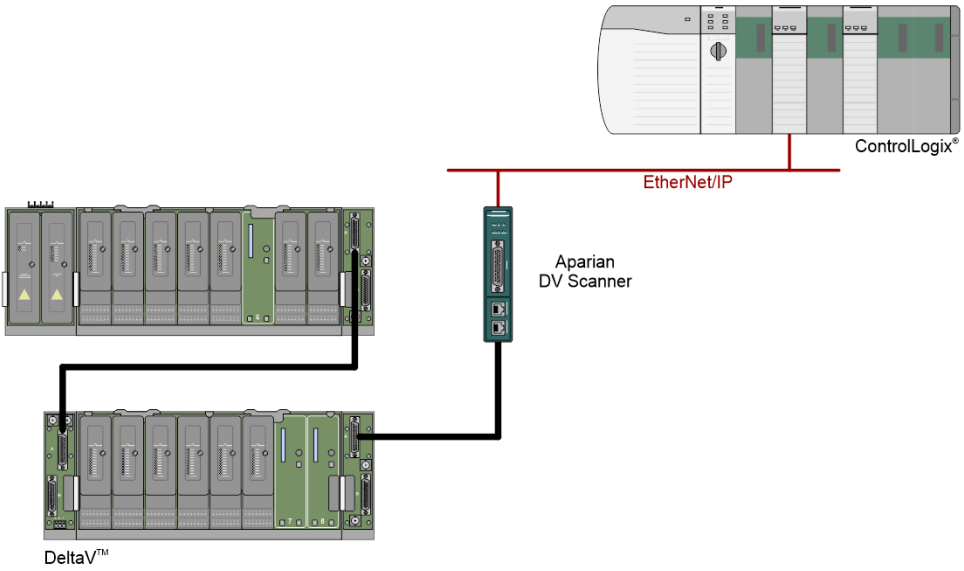
NOTE: Before installing, configuring, operating, or maintaining Aparian products, please review this information and the information located on www.aparian.com for the latest software, documentation, and installation files specific to your Aparian product.

INTRODUCTION

This quick start guide provides an basic overview of the installation, operation, and diagnostics of the Aparian DV Scanner module. The DV Scanner allows interfacing between a Rockwell Automation Logix system and the DeltaV™ M-series IO. (DeltaV™ is a mark of one of the Emerson Process Management family of companies.)

The DV Scanner connects to a Rockwell Automation Logix Controller (e.g. ControlLogix or CompactLogix) via EtherNet/IP and connects to the DeltaV™ M-series LocalBus via a Right Carrier Extender (KJ4001X1-NA1) using a standard D-shell cable (KJ4002X1-BF2).

This allows the DV Scanner to connect to, and control, the IO in an M-series system. A typical DV Scanner (as a Standalone Master) connecting to the DeltaV™ M-series IO is shown below.



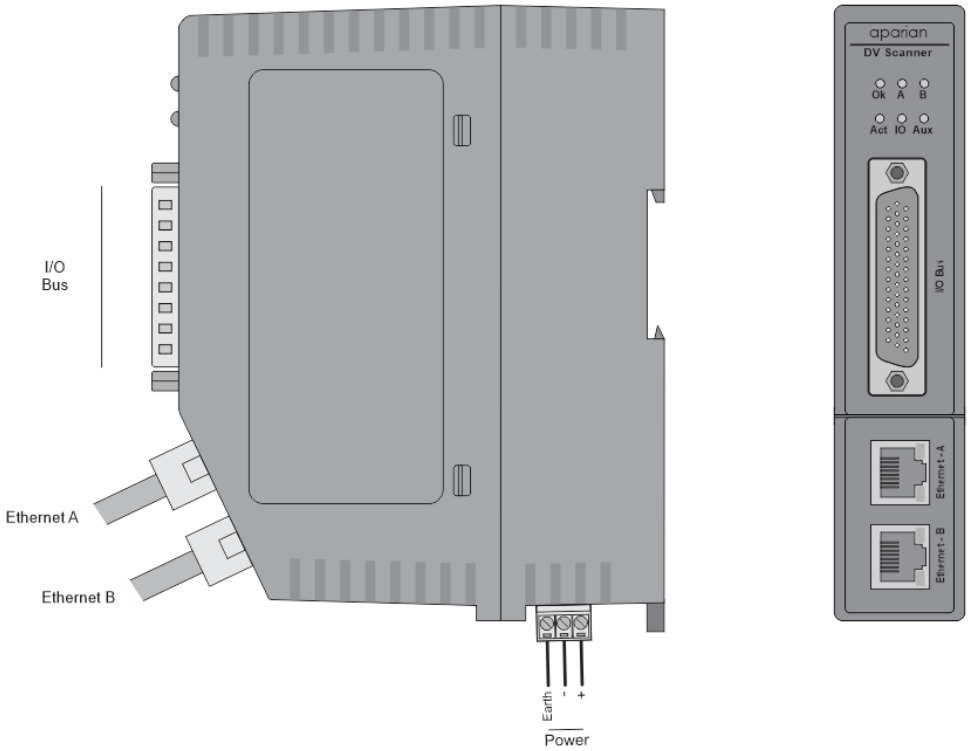
REQUIRED SOFTWARE

The DV Scanner requires Aparian Slate software to setup and configure. The software installation can be found at www.aparian.com/software/slate.

MODULE INSTALLATION

The module has one port at the bottom of the enclosure, two Ethernet ports on the angled front, and one port at the front as shown in the figure below. The port at the bottom is used for power. The power port uses a three-way connector which is used for the DC power supply positive and negative (ground) voltage as well as the earth connection.

The I/O Bus port on the front of the module is a DB44 connector that connects to the DeltaV™ M-series system via a Right Carrier Extender (KJ4001X1-NA1) and standard D-shell cables (KJ4002X1-BF2 / -BF3 / -BF4).



LED	Description
Ok	The module LED will provide information regarding the system-level operation of the module.

	If the LED is **red**, then the module is not operating correctly. For example, if the module application firmware has been corrupted or there is a hardware fault the module will have a red Module LED. If the LED is **green (flashing)**, then the module has booted and is running correctly **without** any application configuration loaded. If the LED is **green (solid)**, then the module has booted and is running correctly **with** application configuration loaded.
A / B	The Ethernet LED will light up when an Ethernet link has been detected (by plugging in a connected Ethernet cable). The LED will flash every time traffic is detected. This module has two Ethernet ports A and B. Each LEDs represents each specific port.
Act	The LED indicates the Active Master status. **Green (solid)** – The DV Scanner is the ***Active*** Master on the LocalBus. **Green (flashing)** – The DV Scanner is the ***Standby*** Master on the LocalBus. **Off** – The DV Scanner is not sending TX packets but just listening.
IO	Each time a packet is received from a DeltaV IO card, this LED will flash either green or red. If the packet was successful it will flash green, if there was a error (e.g., checksum error), then the LED will flash red.
Aux	Each time a packet is received from the auxiliary interface (i.e., EtherNet/IP), then this LED will flash green.

ELECTRICAL AND ENVIRONMENTAL

Specification	Rating
Power requirements	Input: 10 – 32V DC,
Power consumption	1.5 W (Max.) Current: 140 mA @ 10 V Current: 60 mA @ 24 V
Temperature	-20 – 70 °C

STUDIO 5000 CONFIGURATION

The module must be added to the Logix IO tree using a EDS AOP (Logix v21+).

NORTH AMERICAN HAZARDOUS LOCATION APPROVAL

SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.

WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOW TO BE FREE OF IGNITABLE CONCENTRATIONS.

WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENT MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.



For professional users in the European Union

If you wish to discard electrical and electronic equipment (EEE), please contact your dealer or supplier for further information.



WARNING – Cancer and reproductive harm – www.p65warnings.ca.gov

ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

Resource	Link
Slate Installation	www.aparian.com/software/slate
DV Scanner User Manual DV Scanner Datasheet Example Code & UDTs	http://www.aparian.com/products/dvs
Ethernet wiring standard	www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205_220_420/installation/guide/cde205_220_420_hig/Connectors.html
Slate Installation	www.aparian.com/software/slate

SUPPORT

Technical support will be provided via the Web (in the form of user manuals, FAQ, datasheets etc.) to assist with installation, operation, and diagnostics.

For additional support the user can use either of the following:

Contact Us web link	www.aparian.com/contact-us
Support email	support@aparian.com