



AVI-40 Automatic Vehicle Identifier (AVI)

A Simple Solution to a Complex Problem

Overview

The Diablo Controls AVI system consists of a transmitter mounted to the underside of a fire engine, police car or other vehicle. The transmitter continuously transmits a coded signal when power is applied. When this vehicle approaches a gated area, the code is received by a loop buried in the ground ahead of the gate or barrier and passed on to the receiver.

The receiver unit is the “smarts” of the system. If the transmitted code matches any of the pre-programmed codes stored in the receiver, a relay contact is closed and a red LED is illuminated indicating a valid code is being received. This signal is then passed on to the gate controller, which automatically opens the gate or performs some other security function. This product is available with an AVI receiver and with an optional vehicle detector – both devices use the same street loop.

Learning

All Diablo Controls AVI receivers are shipped in the un-programmed mode. Before the receiver can be used for AVI, it must first learn the acceptable codes. To program a new code, the transmitter transmitting this code must first be energized and placed over the loop. Press and hold the “Learn” button until the red Valid LED starts blinking fast. Then simply release the button. This will store the new code in memory. Once this new code is received and learned, it will now activate each time this code is received.

The receiver has the capability of storing up to two codes. If the unit is asked to learn a third code, the oldest code is discarded.

To erase all the stored codes, disconnect the MS connector from the unit. With the pushbutton firmly pressed, reconnect the MS connector. Continue to press the button in until the red Valid LED begins to blink slowly. Release the pushbutton. There are now no codes stored in memory and the unit is ready to learn new codes

LED Indicators

The green Power LED will be on solid to indicate the unit is operating and powered. The red Valid LED will turn on when the unit is receiving a valid code. If the red Valid LED is blinking slowly then this unit is un-programmed and has no codes stored to validate.

Features

- Over 19,000 codes to choose from
- Can be programmed to accept up to 2 different codes
- Operates on 12 or 24 volts DC
- Can be field programmable with the “Learn” pushbutton
- No switches to set
- Small profile, perfect for many installations
- Responds to transmitters made by Detector Systems, IDC, US Traffic, and Reno A&E



Pros Who Know Trust Diablo

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Outputs

Solid-state (open transistor collectors) for both detect and fail outputs. 30 mA maximum current sink
- transient voltage protected.

Power

12 to 30 volts DC

Operating Temperature

-35 °F to 165 °F (-37 °C to 74 °C)

Size

Height: 2.4" (61 mm) Width: 0.8" (20 mm) Depth: 2.25" (57 mm)

Connector

10-position Molex Type 09-48-1104

Mates with many female PCB 0.156" pitch headers in use by some access control devices and gate operators.

Pin assignments are:

- 1 - Loop input
- 2 - Loop input
- 3 - Power in (+12 / 24 VDC)*
- 4 - Unused
- 5 - Unused
- 6 - Unused
- 7 - Unused
- 8 - AVI Output solid state
- 9 - Power in (+12 / 24 VDC)*
- 10 - Chassis Ground

*Either or both of these pins can be used to supply power to the detector.

Ordering Information

Only one model available: AVI-40



Proudly Made In USA
Veteran Owned & Operated

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visit our website at www.diablocontrols.com for the most current information on all products.

Specifications are subject to change.

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