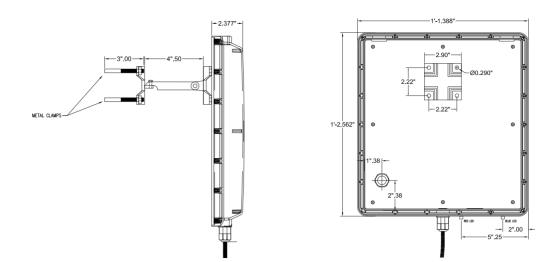
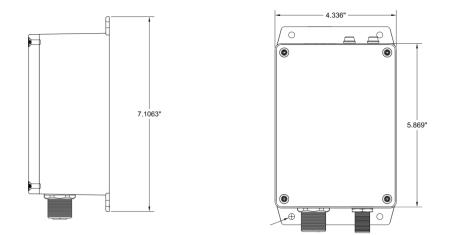
DOVEN LLC User Manual DV11-AC, DV21-AC, DV21-DC, DV31-DC

DOVEN DV Series products are intended for indoor distance measurement used for Material and Mobile Objects tracking.

Montage for DV11-AC, DV21-AC and DV21-DC needs to be done from metal clamps as noted on drawings:

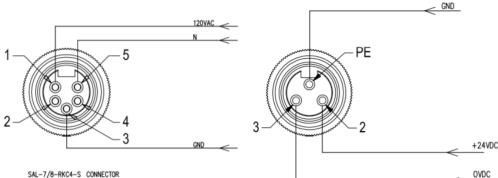


Montage for DV31-DC needs to be done from montage holes on both sides of the box:



WARNING: THIS DEVICE MUST BE INSTALLED BY DOVEN LLC PERSONNEL OR ANY OTHER DOVEN APPROVED INSTALLATION PROFESSIONAL PERSONNEL

POWER SUPPLY



120VAC POWER SUPPLY CONNECTOR FRONT VIEW

DEVICE	INPUT
DV11-AC	120 VAC
DV21-AC	120 VAC
DV21-DC	8 - 48VDC
DV31-DC	8 - 48VDC

NOTE: DV31-DC uses an external antenna that needs to be plugged in for proper operation.

USAGE

To start the system, plug every device to its corresponding power supply, taking special care on the pinout configuration shown before.

Once the complete system is configured and powered on, LEDs on the side of the device will start blinking. The LED lights have the following meaning:

- **<u>Red Light:</u>** This light blinks when the unit is powered.
- <u>Blue Light:</u> This light blinks when both units are connected and the distance between them is being calculated.

The following conditions must be fulfilled for FCC compliance:

- All units are to be used exclusively indoors.
- No antennas must be installed at any outdoor locations.
- ALL indoor antennas must be pointed towards the interior of the area to be covered.
- No antennas must be installed indoors pointing outdoors. The emissions from equipment shall not be intentionally directed outside of the building in which the equipment is located, such as through a window or a doorway, to perform an outside function, such as the detection of persons about to enter a building.
- All ground indoors antennas must be connected to 120VAC (DV11-AC/DV21-AC only).

INSTALLATION

This device is only intended for Commercial and Industrial use and Requires an accurate and professional installation. The location and exact coordinates of this device should be carefully controlled. Doven must prepare engineering drawings with accurate measurements for the location and installation of this device. Based on those drawings Doven or any other Doven approved professional installation personnel should carefully install the devices following the indications on the drawings. Use of laser measurement instruments is strongly advised to correctly position and install this device.

Installation by personnel other than Doven or Doven approved professional installation is strictly forbidden and it will void the device warranty and the FCC authorization.

Antenna Use

- This device is sold with its own antenna.
- This device must only BE sold by Doven LLC or any authorized representative.
- In all cases, sales are done to industrial/commercial companies.
- Sales to end the general public are forbidden and not applicable for this type of device.
- All installation, repair and servicing work must be carried out by qualified and trained professionals.
- Only Doven can replace any malfunctioning antenna.
- This device has been designed to operate with the supplied antenna. Utilization of any other antenna is strictly prohibited for use with this device and may void the FCC authorization to operate this equipment. The use of any other antenna other than the one supplied by Doven LLC is explicitly forbidden.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device also complies with part 15.517 of the FCC Rules. *This equipment may only be operated indoors. Operation outdoors is in violation of 47 U.S.C. 301 and could subject the operator to serious legal penalties.*

This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Changes or modifications not expressly approved by the Doven LLC could void the user's authority to operate the equipment

WARNING: IT IS SCRICTLY FORBIDDEN TO USE ANY ALTERNATIVE ANTENNA OTHER THAN THE ONE SUPPLIED WITH THE DEVICE. USE OF ANY ALTERNATIVE ANTENNA VOIDS THE FCC AUTHORIZATION TO USE AND OPERATE THIS DEVICE.