



PRODUCT SPECIFICATION

MODEL: V181RM-1 AND V181RM-1-230

PRODUCT CODES: 4820 AND 4820-01

DESCRIPTION: REMOTE LONG-DISTANCE RELAY BOX

- Allows increased distance between remote positioning device and control
- Indoor and outdoor use
- Use with 24 VAC pan-and-tilts, scanners or Omniscans
- Rugged steel construction

The V181RM-1 Relay Box is a rugged weatherproof unit designed for installations where long cable runs are required. It is activated by a 24 VAC output control, permitting the use of cost-saving low voltage wiring.

The relay box is designed for use with 24 VAC pan-and-tilt drives, scanners and Omniscans and can be used in conjunction with any Vicon 24 VAC-output hardwired control. A model is available with 120 VAC input voltage, V181RM-1, and 230 VAC input voltage, V181RM-1-230. The term V181RM-1 is used to refer to both models unless specifically stated otherwise. For maximum operating distances, refer to Table 1.

NOTES	SPEC NO.	REV.	SEC.
SUPERSEDES PRODUCT SPECIFICATION 133-790	133	198	16



V181RM-1 REMOTE RELAY BOX

**TABLE 1
MAXIMUM OPERATING DISTANCES
FROM CONTROL TO RELAY BOX**

Model Number	Wire Size (AWG)	Maximum Distance* ft (m)
V181RM-1	22	6000 (1800)
	20	10,000 (3000)

CONTRACTORS' SPECIFICATION

Control Relay Box

The relay box shall contain five relays with 24 VAC outputs to provide operating voltage to remote positioning devices. The relays shall have contacts rated at 10 amps, 120 V. Input voltage shall be 120 VAC. The relay box shall be constructed of steel and be for indoor or outdoor use. Dimensions shall not exceed: height, 3.5 in. (8.9 cm); width, 6.0 in. (15.2 cm); depth, 8.0 in. (20.3 cm). The 120 VAC input relay box shall be Vicon's model V181RM-1; the 230 VAC input relay box shall be Vicon's model V181RM-1-230.

Product specifications subject to change without notice.
Copyright © 1998 Vicon Industries Inc. All rights reserved.

Vicon part number 8006-7133-01-00
Vicon and its logo are registered trademarks of Vicon Industries Inc.

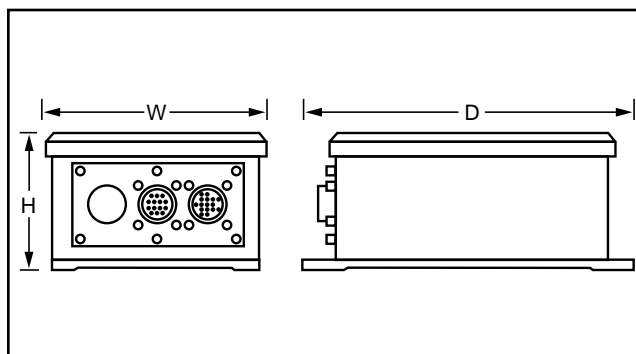
TECHNICAL INFORMATION

ELECTRICAL

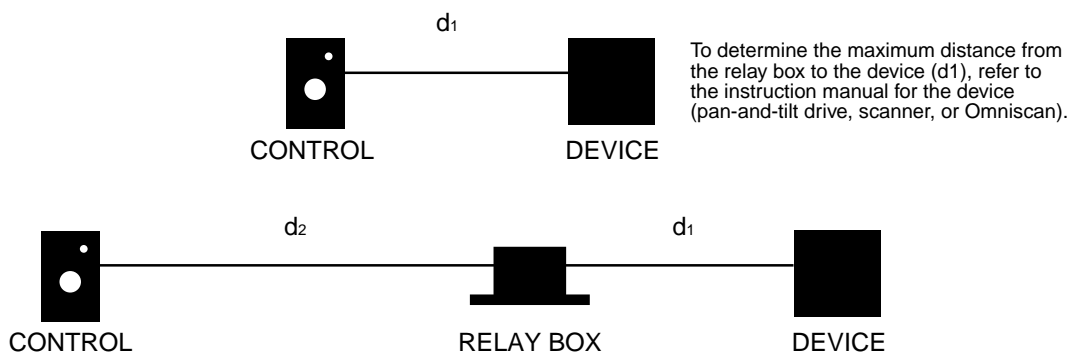
- Control Input Voltage: 24 VAC.
- Line Voltage: 4820: 120 V, 60 Hz.
4820-01: 230 V, 50 Hz.
- Line Connector: Compression fitting.
- Relay Contact Rating: 10 A at 120 VAC.
- Fuse: 120 VAC: 2 A, 3AG, slo-blo.
230 VAC: 1 A, 3AG, slo-blo.
- Input Connector: Vicon part no. 1701-3000-01 (mating connector 1701-3001-01 supplied).
- Output Connector: Vicon part no. 1701-3001-01 (mating connector 1701-3000-01 supplied).
- Power Consumption: Pan-and-tilt: 85 W.
- Heat Equivalent: 4.8 btu/min (1.2 cal/min).
These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of heat generated will be less and vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

MECHANICAL

- Maximum Operating Distance: Refer to Table 1.
- Size: Height (H): 3.5 in. (8.9 cm).
Width (W): 6.0 in. (15.2 cm).
Depth (D): 8.0 in. (20.3 cm).



- Weight: 9.5 lb (4.3 kg).
- Construction: 14-gauge steel. Continuously welded seams, oil-resistant gasket and adhesive, and stainless steel clamps on cover assure watertight seal.
- Finish: Gray polyester powder coating finish.
- Safety Ratings: Nema Type 4, Type 4X, Type 12 and Type 13; UL 50 Type 4 and Type 4X; CSA Enclosure 4; IEC 529, IP 66.
- Shipping Dimensions: Height: 6.4 in. (16 cm).
Width: 8.3 in. (21 cm).
Depth: 11.8 in. (30 cm).
- Shipping Weight: 10.3 lb (4.7 kg).
- Shipping Volume: 0.4 ft³ (0.01 m³).



To determine the maximum distance from the relay box to the device (d_1), refer to the instruction manual for the device (pan-and-tilt drive, scanner, or Omniscan).

Figure 1
Operating Distances With and Without Relay Box