

Installation Sheet (Wiegand Interface) (Part No. 002-97MA-A)

Sentinel-Prox SR-2400-04 Module with Antenna



Reader Description

The Sentinel-Prox SR-2400-04 Module is a radio-frequency proximity reader for Access Control Systems. The module consists of reader electronics on a printed wiring board. The board and the associated antenna coil are identical to the components in the housing of an SR-2400 Proximity Reader. The SR-2400-04 module and antenna may be mounted inside a protective housing, and may be integrated with other electronic devices that do not use 125 kHz. Electrical connections are made at 10 plated-through holes near one end of the printed wiring board; the antenna is wired to two pads on the edge of the board.

Parts List

| | | |
|-----|---|-------|
| (a) | Installation sheet, P/N 002-97MA-A | Qty=1 |
| (b) | Sentinel-Prox SR-2400-04 Module, P/N 002-20MD-A | Qty=1 |
| (c) | Antenna coil from SR-2400 reader, P/N _ | Qty=1 |

Installation Procedure

Cable from Module to Host Controller: **Note:** Pin #1 is identified as the one *square* pad in the row of 10 plated-through holes for electrical connections. The other pins (#2 through #10) are round pads.

- Pin #1Shield (drain wire)
- Pin #2Data-0 (green wire)
- Pin #3Data-1 (white wire)
- Pin #4(no connection) (violet wire)
- Pin #5(no connection) (orange wire)
- Pin #6Beeper control (yellow wire)
- Pin #7LED control (brown wire)
- Pin #8(no connection) (blue wire)
- Pin #9Ground (black wire)
- Pin #10+12 volts DC (red wire)

Antenna Leads:

The 2 wires at the ends of the antenna coil are connected to the 2 pads (one square pad, one round pad) at the lower long edge of the board.

- Hold the board horizontally (landscape) so that the board's label "AWID READER" on the components side of the board is in the lower left corner.
- The antenna pads are at the upper edge of the board, just left of center of that edge.
- Polarity of the antenna does not matter. Connect either antenna wire to either pad.

Power:

Use a linear regulated DC power source, between 5 volts (40 mA peak) and 12 volts (70 mA peak).

Initialization:

Present a valid AWID proximity credential (card, keytag or wafer) briefly to the antenna. The beeper sounds a beep sequence indicating the firmware version. The LED is steady red to indicate standby mode. The module is now initialized and prepared to read credentials.

Note: All credentials must be AWID's own products.

LED Color Change:

The LED color in standby may be changed from red to green, or from green to red, using a *Color Changer* card, available from AWID. Remove power from the module for a few seconds, then restore power. While the LED is amber, present the Color Changer card to the antenna until the standby color changes.

Product Specifications

Cable to Controller

- 5 or 6 conductors (not twisted pairs), stranded, 22 AWG, color-coded insulation, overall 100% shielded (Number of conductors depends upon use of optional features – Beeper and LED.)
- Length for Wiegand interface..... Up to 500 feet

Maximum Read Distance with AWID Card

- At 5 volts DC.....Typically 4 inches (10 cm)
- At 12 volts DC.....Typically 5.5 inches (14 cm)

Characteristics

- Operating Temperature Range-35° C to 65° C (-31° F to 150° F)
- Operating Humidity.....0 to 95% non-condensing

Operating Parameters

- Excitation Frequency.....125 kHz
- Wiegand Output26 bits to 50 bits (determined by code in credentials)

Notes

1. When the yellow wire is not used, the beeper remains active and under the reader's internal control.
2. The Beeper and LED lines are logic levels. *Never* apply power to them. They may be pulled to a low level (0 to 1.2 VDC) to enable their function, and left floating at a high level (3.6 to 5.0 VDC) when not used.
3. SR-2400-04 Modules have Wiegand-protocol electrical interface only. There is no RS-232 interface.
4. For additional information, please visit AWID's Web site www.awid.com. For technical support questions visit www.awid.com/support or call **1-800-369-5533** (in the U.S.) or +**1-408-825-1100** from 8:00 a.m. to 5:00 p.m. PST.