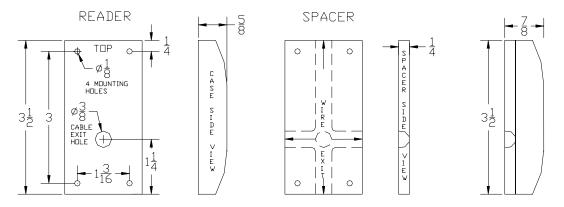
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# 8965 Secure Reader Instruction Manual

The Secure Reader consists of three parts: a potted unit containing the electronics, a front cover, and an optional spacer plate. A fixed 3-way color-coded cable protrudes from the back of the potted unit.

# **Physical Dimensions and Mounting Details:**



If the spacer plate is used the reader cable may be brought out of one of four exit points on the spacer: top, bottom, left or right. This enables the cable to be run on the surface of the wall. If no spacer plate is used a minimum hole size of  $\frac{1}{4}$ " must be drilled in the wall at the cable exit position as shown above to allow the cable to exit perpendicular to the reader.

The optional spacer plate may also be used when mounting the reader on a metal surface to reduce the negative effects of metal on the read range.

#### **Secure Reader Position:**

The readers work on the principle of radiating a magnetic field from a coil and this field will be affected by the close proximity of metal.

Ideally readers should be mounted on non metallic materials. If the unit is mounted on a metal surface the included reader spacer should be used so as to limit the reduction in reading distance.

#### **Multiple Readers:**

The radiated field of the reader coil extends in all directions including through brick walls. The coil of one reader may interfere with another if they are mounted within 16 inches of each other.

### SECURE READER: +12V, DATA0 & 0V

The reader is potted and has 3 wires exiting from the rear.

The wires are: Red +12VDC

Yellow DATA

Black 0V

These connections are wired to the corresponding connections of either READER-1 or READER-2 on the controller ( see connection diagrams for details).

Cable length between a reader and the controller must not exceed 150 feet.

Shielded cable is not required provided the cabling is not used in an electrically noisy environment. If shielded cable is used, the shield must be connected to 0V at the Controller connector.

The cable should be multi-strand 3-conductor with a minimum of 22 awg.

Solid core wire is NOT recommended

#### Power-up:

On first time power-up of the unit the RED and GREEN LEDs flash alternately with an even pattern to show that the unit's memory is clear.

A master tag/PIN can now be added to the system

# **Specifications:**

- \_ Power requirements: 12Vdc. Current consumption is 75 mA typical
- \_ RF Frequency: 125 kHz.
- \_ 40 bit read only transponders supported: EM4001 family, TEMIC e5550 and equivalent devices.
- \_ Output formats supported:
  - It has 3 wires: V+, Gnd and Data. The latter is bi-directional and has a proprietary protocol which is unique to the controller.
- \_ Typical reading range with supply voltage in range 12Vdc: keyring tag with 20mm coil -85mm, ISO card with 50mm coil - 165mm.
- \_ 3 LEDs (RED, YELLOW, GREEN), controlled by network host.
- \_ Sounder emits at 4 kHz, controlled by network host.
- \_ Operating temperature range: -20°C +60°C.
- \_ 3 conductor cable: 3 Feet long
- \_ Weight: 90 grams.
- Dimensions: reader 3-1/2" x 1-3/4" x 5/8", optional spacer plate 3-1/2" x 1-3/4" x 1/4"

## Conditions:

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.

Any changes or modifications not expressly approved by Dortronics Systems, Inc. could void the user's authority to operate the equipment.