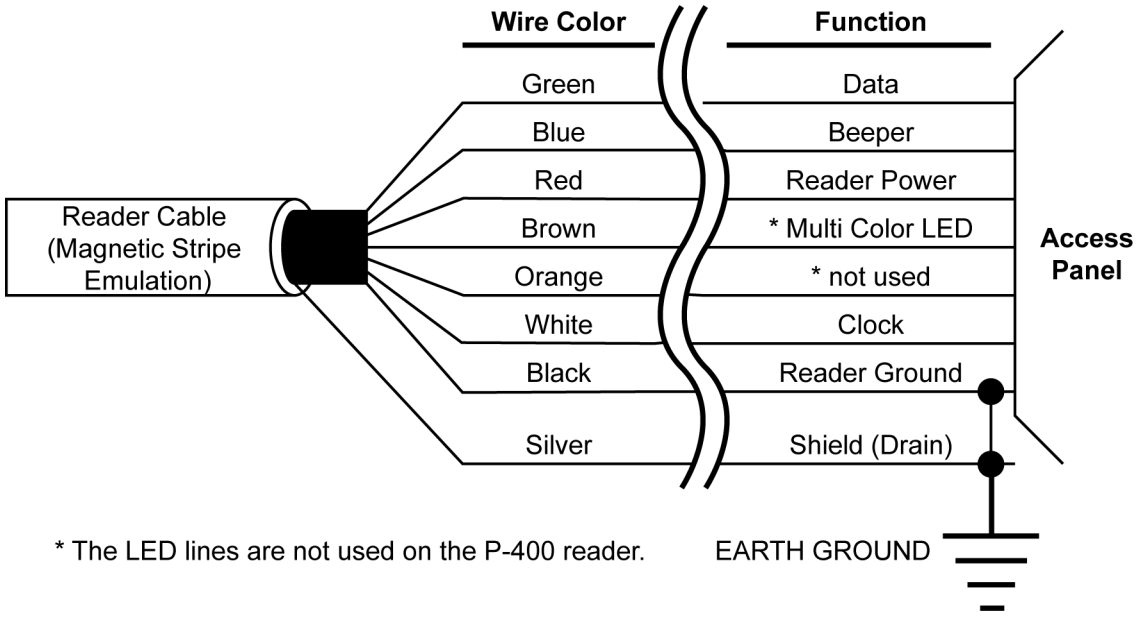

Figure 7: Magnetic Stripe Format Wiring Connections

Some ABA Track-II Magnetic Stripe (clock and data) compatible control panels require a card present signal. An additional circuit can be added external to the Pyramid Series Proximity readers to emulate this signal. Figure 8 provides an example of a circuit diagram using a 47 µF capacitor and two 1N4148 diodes, illustrating how a card present signal can be emulated.

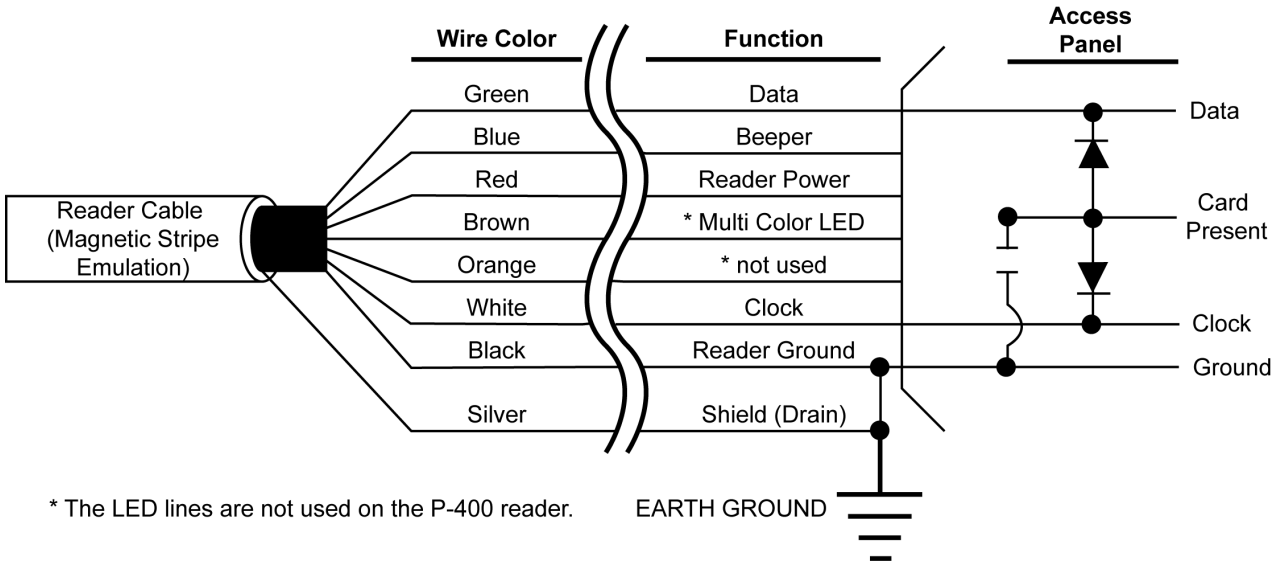

Figure 8: Magnetic Stripe Format Wiring Connections With Card Present Signal

Pyramid Series Proximity™ Readers

4.0 Installation Verification

The following information applies to an installation with an access panel. Refer to the Troubleshooting the Reader Installation section beginning on page 17 if the reader is not functioning properly.

4.1 Grounding

Shield (Drain) continuity must run from the reader to the access panel. Shield (Drain) and reader ground must be tied together at the access panel and connect to an earth ground in one place.

4.2 Power

A reader may be powered by the access panel, so the reader is powered on when the access panel is powered on. However the best case is to power the readers by a separate linear power supply. When powered, verify the voltage at the reader meets the reader's requirements (refer to Table 1 on page 3). When the reader is powered on, its beeper beeps in the following pattern: 3 short beeps, 1 long beep.

4.3 Controls

- Beeper (the blue wire): Pull the beeper line low to activate the beeper.
- Single LED[1] Control Line Mode (the brown wire)
  - The normal state is for this line to be high activating the Red LED.
  - Pull the Single LED line low to activate the Green LED.
  - Toggle the Single LED line to activate the Amber LED.
- Dual LED[1] Control Line Mode[2] (the brown and orange wires)
  - The normal state is to pull both LED lines high (brown and orange) to turn the LED Off.
  - Pull both lines low (brown and orange) to activate the Amber LED.
  - Pull the Brown wire high and pull the Orange wire low to activate the Green LED.
  - Pull the Brown wire low and the Orange wire high to activate the Red LED.

4.4 Read Range for P-300, P-500, and P-700 Readers

Perform the following steps to verify the read range[3] of P-300, P-500, and P-700 readers (see "Read Range" on page 4 for read range specifications).

1. Hold a Keri Systems Pyramid Series card or tag parallel to the reader, about 6 inches away from the reader.
   - For the P-300 and P-500, hold the card about 6 inches (152 mm) away from the reader.
   - For the P-700, hold the card about 20 inches (508 mm) away from the reader.

2. Slowly bring the Card/Tag in toward the reader and note the distance when the reader recognizes the card (the reader beeps and the LED flashes if it is in default mode).

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1. The P-400 Reader does not have an LED to maximize its vandal resistance.
2. Only Single LED Control Line mode is active when the reader is in Magnetic Stripe mode. The Dual LED Line is not used.
3. The Reader's read range can be affected by the installation conditions, the material on which the reader is mounted, and whether it is a card or a tag being read. Due to the physical size difference between the coils of various credentials, Multi Technology cards and Key Tags provide less read range than Standard Light Proximity Cards.