

Instructions

Color Changer Card for Proximity Readers

Change History

Version	Date	Author	Comments
1.0	30 April 2009	L. Hickcox	First release.

The LED in AWID's proximity readers indicates the status of the reader – reset (awaiting initialization), standby, successful card or tag reading, card or tag present in reader's field, and access granted. If the LED on AWID's proximity reader has a color sequence that is not the user's standard colors, AWID's Color Change Card will change the color sequence. The color change remains in effect until the Color Changer Card is used again on that reader.

1. Test for Need of a Color Change Card

An error in the LED's color sequence is often caused by the wiring -- for example, if the reader's brown wire for single-wire control of LED color is attached to the "Red-LED" terminal on the controller panel, or if the wires for two-wire LED control are attached to the wrong terminals.

To test the reader: (Note: Disconnect the reader's power before all wiring changes.)

- Disconnect the reader's brown and yellow and blue wires (the three wires that might be used for external control of the reader's functions), and let them float.
- Apply DC voltage to the reader's black and red wires, between +12 volts and +5 volts. It is OK to use the normal power source for the reader – the external power supply for MR-1824, and the panel's power terminals for smaller proximity readers. It is OK to leave the Wiegand or RS-232 data lines connected, as normal for the system.
- For most AWID proximity readers, the LED is amber when power is restored to the reader. When the LED is amber, initialize the reader by presenting any AWID proximity card briefly to the reader.
- Look at the LED's color. If it is steady red, this is normal. Then touch the reader's brown wire to the black wire. If the LED changes to green while the brown and black wires are touching, this is the normal LED color sequence.
- Now connect the reader's brown wire to the panel's LED terminal for that reader port – or to the *Green* LED terminal if there is more than one LED control terminal for that reader port. When the system is programmed for Door Locked, the reader's LED should be red. When the system is programmed for Door Unlocked, the LED should be green.
- If these conditions are present, the LED is normal, and the Color Changer Card is not needed.

2. Procedure for Using Color Changer Card

A possible cause of LED color sequence reversal in a new reader is application of the DC power repeatedly without the recommended 10 second pause before restoring power.

If the tests above indicate the need to use the Color Changer Card:

- Remove power from the reader. Disconnect the brown wire from the panel. Temporarily disconnect the reader's yellow and blue wires also, if they are used. Then restore power.
- While the LED is amber, present the Color Changer Card to the reader for about one second. The LED color will change to the opposite color from its former standby color – green to red, or red to green. Reconnect the brown wire.
- Test the LED color sequence by presenting to the reader an AWID proximity card or tag that has been programmed into the system. The LED will change to the opposite color during the door-unlock time. (This is equivalent to touching the reader's brown wire to the black wire in the testing, step 1(d), above.)
- The color sequence may be changed back to the other color sequence at any time. Always start the color-change procedure by removing and (after 10 seconds) restoring power. Present the Color Changer Card when the LED is amber.