Programming Instructions

Keypad/Prox Reader

5355R

RUTHERFORD CONTROLS
A DORMA Group Company

Introduction

The 5355R is capable of supporting several card and fob technologies.

The model 5355R integrates a keypad with an RFID card reader into a single, integrated device. The keypad itself is alphanumeric and backlit. The keypad and RFID card reader share the same Wiegand data lines to the access control system on the same cable.
Keypad data is passed according to either the 8-bit Burst (default) or 26-bit Wiegand data format.

The 5355R is appropriate for use in applications requiring:
- keypad-only
- RFID card reader-only
- keypad plus RFID card reader applications (commonly known as card + PIN).

To authenticate the user to the system an alphanumeric password or PIN is required. Only when the number entered on the keypad matches the access card or fob number stored in the system, will the user be granted access through a controlled access point.

NOTES:
- The keypad is non-mechanical, solid-state technology optimized for use with a bare finger.
- Only one key can be pressed at a time.
- At each key press the reader will beep and flash its LED.
- The keypad's blue backlighting is activated for approximately 20 seconds upon key press or card presentation.
- For user orientation in low light environments, the keypad's 5-key is always backlit.
- The 5355R only supports Wiegand output formats.
- Ensure the appropriate keypad mode is used.

To Identify the Current Keypad Mode

Press the *-Key.
If the reader beeps once, the keypad mode is 8-bit Burst.
If the reader beeps 4-times, the keypad mode is 26-bit Wiegand.

8-bit Burst Keypad Mode

While in the 8-bit Burst mode each key press results in the reader transmitting 8-bits of data to the host.

To enable 8-bit Burst (Default) from 26-bit Wiegand Mode

1. Cycle power to the reader.
2. Present the Wiegand Keypad Data Mode control card to the reader (beeps four times).
3. Press the #-key (reader beeps four times to indicate success).
4. Press *-key (should beep once to indicate 8-bit Burst is enabled).

26-bit Wiegand Mode

While in the 26-bit Wiegand mode, the user's PIN is outputted as the ID Number portion of a 26-bit Wiegand message. PINs can range from 0 to 65534. A facility code ranging from 0 to 255 must be programmed into the reader when converting to 26-bit mode (parity is calculated by the reader). The #-key must be pressed to transmit the 26-bit message to the host.

PIN 65535 is an error code transmitted when:
- The #-key is pressed without any preceding digits.
- When a PIN value of 0 is entered (cannot use 0 as a PIN)
- Entering the PIN 65535, or any PIN greater than 65535.

NOTE:
- Pressing the *-key overwrites all previous key presses (beeps four times when pressed).
- There is a five second time-out between PIN entries, or entry attempts. If a time-out occurs all previous key presses are overwritten. The reader beeps four times to indicate a time-out has occurred.

To enable 26-bit Wiegand Mode from 8-bit Burst Mode

1. Cycle power to the reader.
2. Present the Wiegand Keypad Data Mode control card to the reader (beeps four times).
3. Enter the facility code to be applied to the keypad (FC = 0 to 255); default is usually set to 0. If an unacceptable facility code is entered the reader will give out one long beep.
4. Press the #-key (reader beeps four times to indicate success).
5. Press the *-key (should beep four times to indicate 26-bit mode is enabled).

© 2014 RUTHERFORD CONTROLS INT'L | A DORMA GROUP COMPANY
WWW.RUTHERFORDCONTROLS.COM • PHONE: 1.800.265.6630 • FAX: 1.800.482.9795 • E-MAIL: SALES@RUTHERFORDCONTROLS.COM