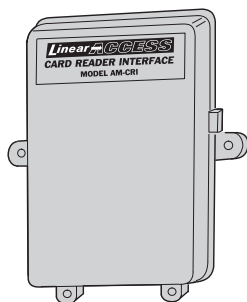# AM-CRI

Card Reader Interface

Installation Instructions

Linear®
Building On Innovation.

USA & Canada (800) 421-1587 & (800) 392-0123
(760) 438-7000 - Toll Free FAX (800) 468-1340
www.linearcorp.com

Linear ACCESS
CARD READER INTERFACE
MODEL AM-CRI

INTRODUCTION

The AM-CRI card reader interface is designed for use with Linear's AE1000Plus, AE2000Plus, and AM3Plus access control systems. The interface will support one or two 26-bit Weigand input devices.
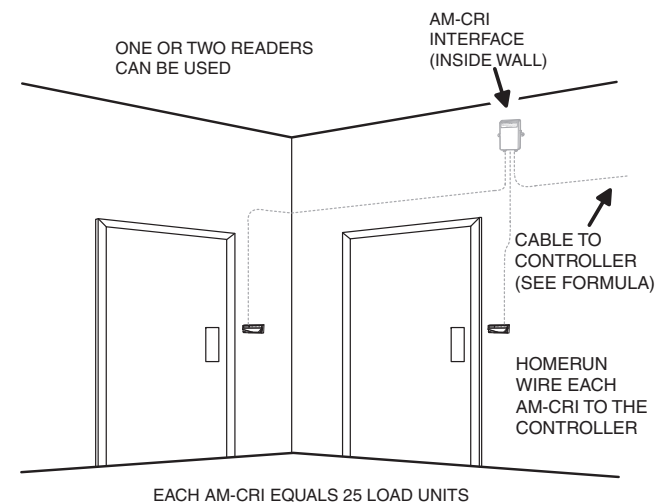
If the readers used have a "hold" or "buffer" connection, two readers may be used to the AM-CRI. If the readers do not have a "hold" or "buffer" connection, one reader may be used with the AM-CRI.

Usually mounted near the readers, the AM-CRI interface connects to the controller through a six-wire cable. Each reader connects to the AM-CRI through a six-wire (one LED in reader) or seven wire (two LEDs in reader) cable.

Two rotary switches in the AM-CRI select the PBUS device address for each reader connected. Each remote PBUS device connected to the controller must be set to a different device address. The address switches in the AM-CRI must be set to different addresses if two readers are used.

Power is supplied to the interface and reader(s) from the controller. A power selection jumper is provided for each reader. Five or eight volt power or external power for locally powered readers can be selected.
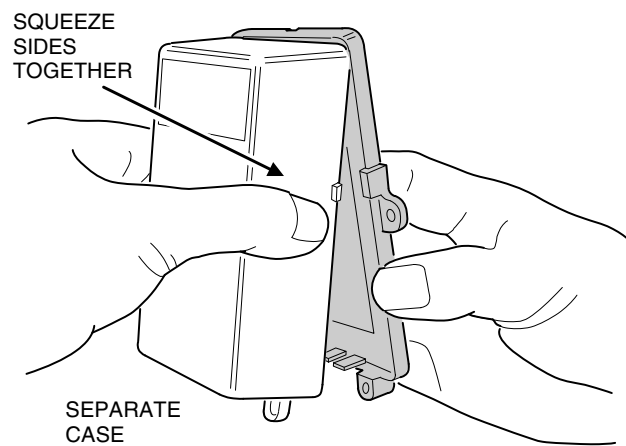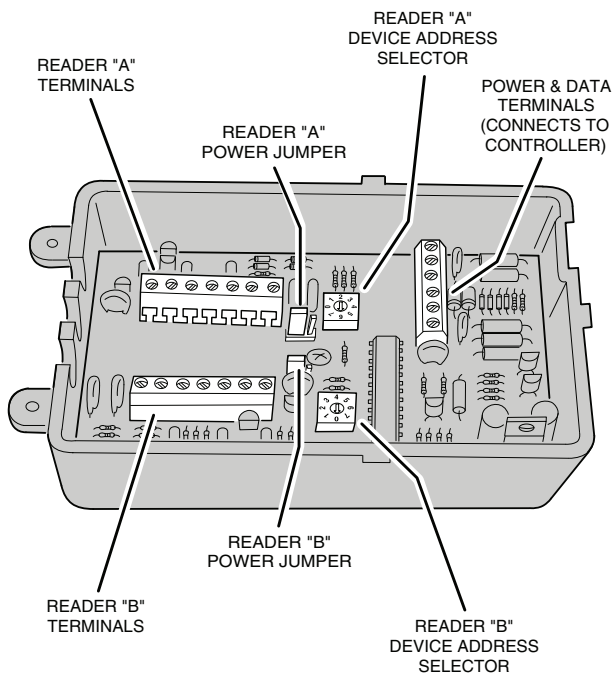
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1. TYPICAL INSTALLATION

ONE OR TWO READERS CAN BE USED

AM-CRI INTERFACE (INSIDE WALL)

CABLE TO CONTROLLER (SEE FORMULA)

HOMERUN WIRE EACH AM-CRI TO THE CONTROLLER

EACH AM-CRI EQUALS 25 LOAD UNITS

CABLE LENGTH FORMULA FOR EACH AM-CRI USED IN SYSTEM

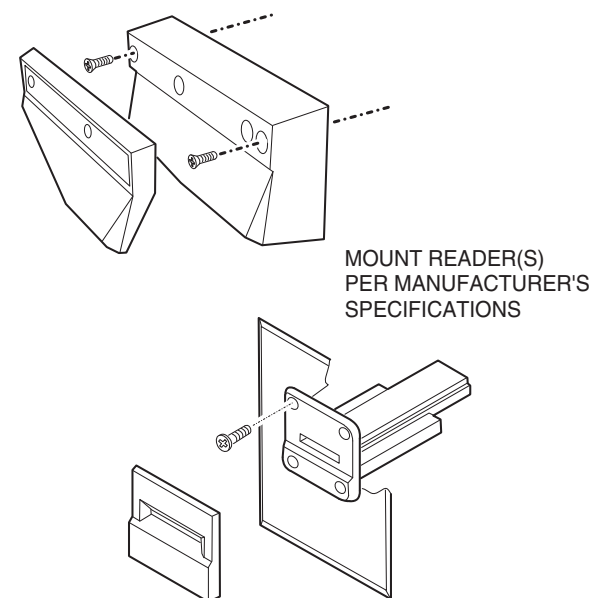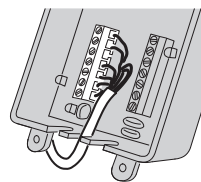| CABLE RUN	CABLE TYPE	FORMULA
120 FEET MAXIMUM	BELDEN 9931 (24 AWG)	FEET x LOAD UNITS < 3,000 MAXIMUM
400 FEET MAXIMUM	WEICO 9405 (20 AWG)	FEET x LOAD UNITS < 10,000 MAXIMUM

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2. OPEN CASE

SQUEEZE SIDES TOGETHER

SEPARATE CASE

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3. LOCATE COMPONENTS

READER "A" TERMINALS

READER "A" POWER JUMPER

READER "A" DEVICE ADDRESS SELECTOR

POWER & DATA TERMINALS (CONNECTS TO CONTROLLER)

READER "B" TERMINALS

READER "B" POWER JUMPER

READER "B" DEVICE ADDRESS SELECTOR

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4. MOUNT READERS

MOUNT READER(S) PER MANUFACTURER'S SPECIFICATIONS

5. CONNECT READERS TO AM-CRI

SINGLE READER HOOKUP W/O HOLD

READER "B" TERMINALS
- PWR
- GND
- HOLD
- LED1
- LED2
- DAT0
- DAT1

READER "B"

LED1- ON DURING STANDBY

LED2- ON DURING ACCESS

TWO READER HOOKUP WITH HOLD

READER "A"

READER "A" TERMINALS
- DAT1
- DAT0
- LED2
- LED1
- HOLD
- GND
- PWR

READER "B" TERMINALS
- PWR
- GND
- HOLD
- LED1
- LED2
- DAT0
- DAT1
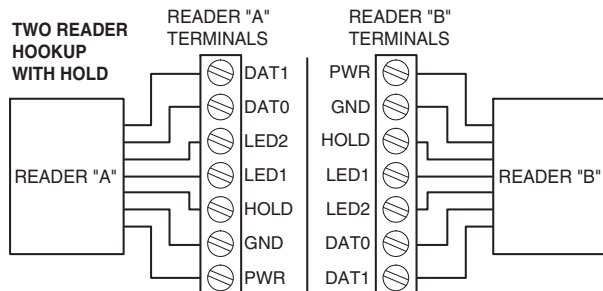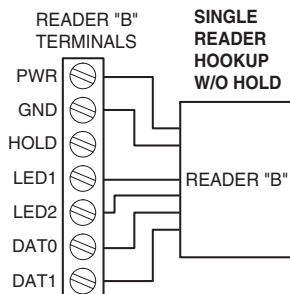
READER "B"

REFER TO READER MANUFACTURER'S SPECIFICATIONS FOR READER WIRE COLOR AND HOOK UP DETAILS

6. SET DEVICE ADDRESS AND POWER JUMPERS

NOTE: REFER TO STEP 3 ILLUSTRATION FOR COMPONENT LOCATIONS
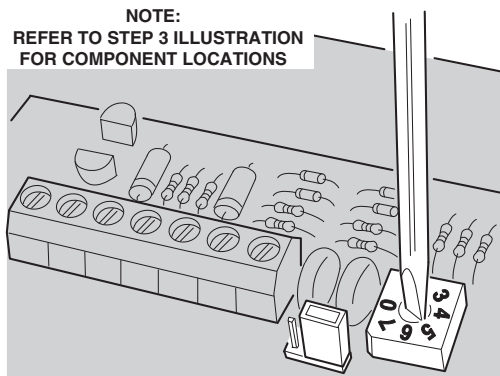
SET READER POWER JUMPER
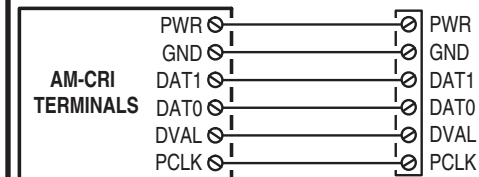
8 VOLT POWER TO READER

5 VOLT POWER TO READER

REMOVE JUMPER WHEN USING EXTERNAL POWER

SET DEVICE ADDRESS SELECTOR

SET TO POSITION 1-6 (MUST BE DIFFERENT FROM OTHER READER)
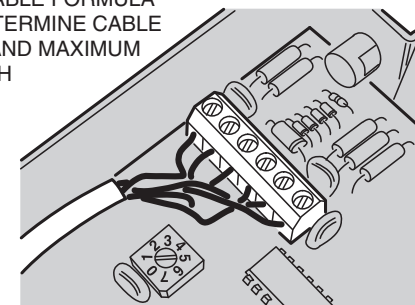
SET UNUSED READER ADDRESS TO "0"

NOTE: WHEN USING ONE READER WITHOUT A "HOLD" LINE, CONNECT IT TO READER "B" TERMINALS AND SET READER "A" DEVICE ADDRESS SELECTOR TO "0"
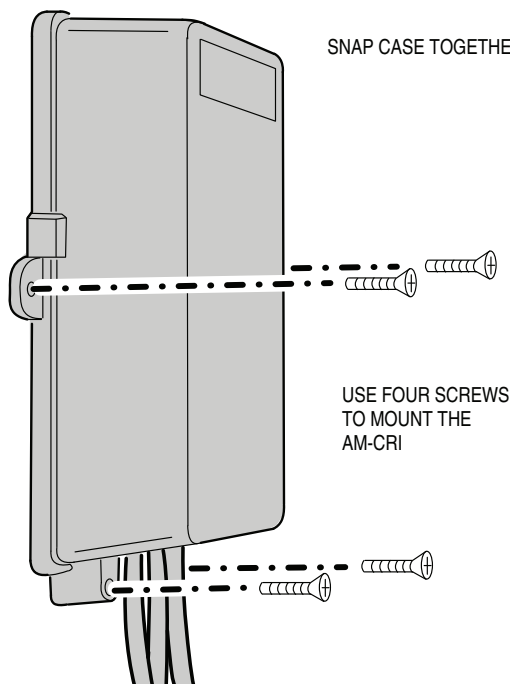
7. CONNECT AM-CRI TO CONTROLLER

AM-CRI TERMINALS
- PWR
- GND
- DAT1
- DAT0
- DVAL
- PCLK

ACCESS CONTROL SYSTEM PBUS TERMINALS
- PWR
- GND
- DAT1
- DAT0
- DVAL
- PCLK

USE CABLE FORMULA TO DETERMINE CABLE TYPE AND MAXIMUM LENGTH

AM-CRI

NOTE: CONTROLLER MUST BE TURNED OFF BEFORE MAKING ANY WIRING CONNECTIONS

8. CLOSE CASE AND MOUNT UNIT

SNAP CASE TOGETHER

USE FOUR SCREWS TO MOUNT THE AM-CRI

9. PROGRAM AND TEST
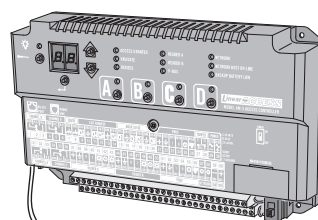
PROGRAM THE CONTROLLER TO CONFIGURE THE PBUS DEVICE

REFER TO THE CONTROLLER PROGRAMMING INSTRUCTIONS FOR DETAILS

LINEAR LIMITED WARRANTY