INSTALLATION INSTRUCTIONS

General Information

The Door Control Module (DCM) is used to control access points, or doors. When connected between door hardware and the Main Logic Board, the DCM accepts data from card readers and/or keypads, and operates the electromagnetic devices used to lock and unlock the door. The DCM mounts in a standard cabinet and communicates with the system's MLB via a twisted pair network connection.

Each DCM provides all the inputs and outputs necessary to manage two single-reader access points or one two-reader access point.

Power Requirements

When mounted in a cabinet with a dedicated power supply, the DCM obtains its power from the LOCAL (J1) power output connection of its associated power supply. When added to a cabinet along with an MLB or other module, the DCM obtains power from the power supply's REMOTE (J5) power output.

The DCM board requires 10.5-14VDC @ 170mA, but its actual current requirement will be determined by the addition of the current requirements of two card readers (or keypads), which are typically 90mA each. The DCM also provides two power supply monitoring inputs: Low Battery and AC Loss. These two inputs are compatible with the corresponding monitoring outputs of the PassPoint PTDPSU power supply only. (Do not enable AC or Low Battery monitoring without first wiring the power supply.)

DCM Relay Outputs

In addition to card reader inputs, each DCM has two Form C, voltage-supervised output relays. These relays are used to operate electromagnetic door locks or doorjamb mounted lock strikes. Use appropriate transient suppression for the installed locking devices.

All DCM relays may be used as committed resources to control access points. For instance, one of the operating parameters that can be configured for DCM relays is the length of time that the relay output is energized when allowing entry or exit through an access point. DCM relays cannot be commanded ON or OFF when used as a committed resource. Instead, the access point these relays are assigned to must be *bypassed* or *locked*.

The relay output circuitry provides for a supervision input (30VRMS or 30VDC max.) which, when connected to the common contact of the relay, indicates that a voltage of more than approximately 4VDC or 4VAC is present at the relay contacts. The supervision input is rectified and filtered before going to the comparator, therefore DC & AC voltages can be supervised. The module's firmware doesn't know or care if the voltage is DC or AC. This supervision can be useful to determine if the power supply that is used to power a connected load is fully operational. Each relay can be programmed to monitor the relay contact voltage or to ignore it.

If you choose to connect the supervision inputs, make sure that you enable the corresponding relay's voltage supervision.

DCM Trigger Outputs

The DCM provides two trigger outputs (15mA, 15VDC, open collector, sink to ground). Each trigger contains a 680 ohm series resistor. A trigger is considered "ON" when its output transistor is turned on, allowing current (up to 15mA) to flow into the trigger output pin from a higher potential.

Normally, triggers are configured as part of an access point, as pre-alarm triggers. Pre-alarm triggers can operate a sounder or LED to indicate to a user that a door is being held open too long and, unless the door is closed, the access point will go into alarm. The pre-alarm trigger is also turned on when an access point is in an alarm state. If it is desired that the trigger control a loud sounder that requires more than 15 mA to operate, the trigger can be used to energize a separate relay that in turn will control the sounder.

Triggers can be configured in three different ways:

- Controlled - The system or a user can command the trigger on or off.
- One-Shot - When commanded by the system or a user, the trigger turns on or off for a specified number of seconds, then de-energizes.
- Repeating - When commanded by the system or a user, the trigger turns on for a specified number of seconds, then turns off for a specified number of seconds. This cycle is then repeated, also for a specified period of time or repeated indefinitely until commanded to stop.
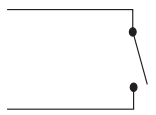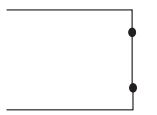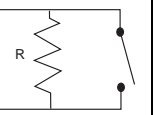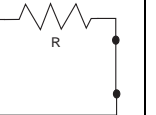
DCM Zone Inputs

The DCM provides four zone inputs. Each zone is capable of a supervised (3-state) or unsupervised (2-state) configuration. Normally, zones are configured as part of an access point to provide Door Status Monitoring or Request-To-Exit inputs.

DCM zone inputs can be configured in one of four ways:

- Normally Open
- Normally Closed
- EOLR (End of Line Resistor) Normally Open
- EOLR (End of Line Resistor) Normally Closed
  (EOLR zones require Ademco's standard 2K ohm end of line resistors)

The following table details the various configuration options for DCM zone inputs:

Zone States	TWO STATE ZONE (unsupervised)		THREE STATE ZONE (EOLR supervised)	
Normal Sensor State	Normally Open (N.O.)	Normally Closed (N.C.)	Normally Open (N.O.)	Normally Closed (N.C.)
0 (short)	FAULT	NORMAL	FAULT	TROUBLE
R	NA	NA	NORMAL	NORMAL
2R	NA	NA	NA	NA
infinite (open)	NORMAL	FAULT	TROUBLE	FAULT
Sensor Connections				

Installing the DCM in a Cabinet

There are two basic ways in which DCMs can be mounted in system cabinets. The first way is to mount the DCM in a cabinet along with a power supply and another module (MLB, QRM, etc.). In this case, the DCM mounts on top of the other modules on standoffs, as shown in Figure 1.

If there is an MLB or other module in the cabinet, the DCM gets its power from the power supply's REMOTE power output, J5. The MLB will get power from J1.

POWER SUPPLY

DCM

MLB
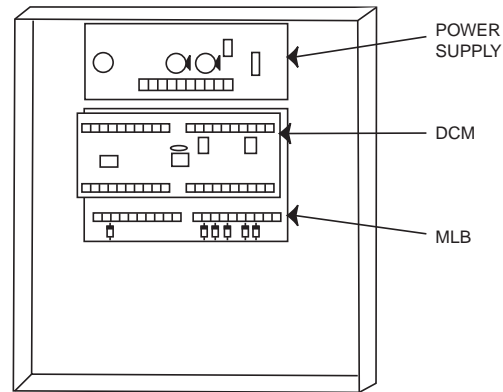
Figure 1 - Cabinet with MLB (or other module), DCM and power supply

Alternatively, a DCM can be mounted in a separate cabinet with a dedicated power supply. In this configuration, the dedicated power supply provides power to the DCM from its LOCAL power output, J1. But it can also provide power to another DCM through its REMOTE power output, J5. Therefore, another DCM can be mounted in the cabinet. The second DCM mounts on top of the first DCM on standoffs.

Mounting the DCM on another module

This procedure assumes you have already mounted a power supply and another module (e.g. a QRM) in a system cabinet. For this discussion, we will assume you are mounting the DCM to a QRM.

1. Secure six standoffs to the QRM using hardware provided.

   There are holes in each corner and center of each PassPoint module to accommodate standoffs. Standoffs are secured to the modules using screws and lock washers.

2. Position the DCM on top of the QRM standoffs and push down gently. Pushing down on the DCM will lock it onto the standoffs.

Mounting the DCM without another module

1. If you haven't done so already, mount a power supply in the cabinet.

   Each DCM you mount must have access to power from a PassPoint power supply.

2. Hang three black mounting clips (provided) on the three middle raised cabinet tabs.

3. Insert the top of the DCM into the slots at the bottom of the *power supply's* mounting tabs.

4. Swing the base of the DCM into the mounting clips and secure the board to the cabinet.

DCM

DETAIL A
SIDE VIEW OF BLACK
MOUNTING CLIPS
WITH DCM

– 3 –

DCM Connections

NOTE: USE APPROPRIATE TRANSIENT SUPPRESSION ON DOOR LOCK DEVICES.

RELAY CONTACT CONNECTIONS NOT TO EXCEED 28V @ 5A (RESISTIVE LOADS)

DOOR A MAG HOLD (N.C.) → TO MAG LOCK
DOOR A RELAY COMMON → TO PS TERM 7
DOOR A STRIKE (N.O.) → TO DOOR STRIKE
DOOR A RELAY SUPERVISION
GROUND (SEE NOTE)
DOOR B MAG HOLD (N.C.) → TO MAG LOCK
DOOR B RELAY COMMON → TO PS TERM 7
DOOR B DOOR STRIKE (N.O.) → TO DOOR STRIKE
DOOR B RELAY SUPERVISION
GROUND (SEE NOTE)

FROM PS CONNECTOR J5

OPTIONAL

+14VDC MAX.
GROUND
AC SUPERVISION
BATTERY SUPERVISION

LOGIC POWER IN
GROUND
AC SUPERVISION
BATTERY SUPERVISION
+12VDC
TRIGGER A
+5VDC
+12VDC
TRIGGER B
GROUND (SEE NOTE)

(40) (39) (38) (37) (36) (35) (34) (33) (32) (31)   (30) (29) (28) (27) (26) (25) (24) (23) (22) (21)

DCM

J1

(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)   (11) (12) (13) (14) (15) (16) (17) (18) (19) (20)

+5VDC
+12VDC

TO CARD READER B

GROUND (SE NOTE)
GROUND (SEE NOTE)
ZONE A
GROUND
ZONE B
ZONE C
GROUND
ZONE D

LEDRDRA (SEE NOTE)
DATA IN (WHITE)
DATA OUT (CLOCK) GRN
GROUND (BLK)

DATB 0 (Clock) (GRN)
DATB 1 (Data) (WHT)
LEDRDRB (See Note)
GROUND (BLK)

TO MLB TERM. 16
TO MLB TERM. 15
TWISTED PAIR, TERMINATED

2000 OHMS EOLR (DSM)
2000 OHMS EOLR (RTE)
2000 OHMS EOLR (DSM)
2000 OHMS EOLR (RTE)

TO CARD READER A

NOTE: Ground terminals are common and may be used if connecting to a module that requires a power or signal return line.

NOTE: Use orange lead for GREEN LED signal (LEDRDRA or LEDRDRB) on some HID readers. All other readers use brown lead. Check the label on your reader for proper GREEN LED connection. Connect reader(s) to 5V or 12V per manufacturer's voltage specification.

DCM LEDs

Red: On when associated relay is energized.

Yellow: Blinks for 1 second during enrollment process. If this LED blinks or is on at any other time, there is a hardware problem. However, expect this LED to blink briefly when power is applied.

Green: Three blinks = OK. Any other pattern indicates hardware problem.

Enrolling and Configuring the DCM

Once the DCM has been mounted and connected, it needs to be enrolled into the system and configured. Refer to the *PassPoint Express Installation and Setup Guide* (N8949) or the *PassPoint Plus Installation and Setup Guide* (K4879) for information on enrolling and configuring Door Control Modules.

Warranty Information

For complete warranty information, refer to the documentation accompanying your system.

NORTHERN COMPUTERS, INC.

5007 South Howell Avenue
Milwaukee, WI 53207
www.nciaccess.com
Copyright © 2000 PITTWAY CORPORATION

ADEMCO GROUP INTEGRATED SYSTEMS

N8724V1   5/00

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com