PR100 Proximity Reader

The PR100 proximity reader unit is ideal for use indoor or outdoor. Housed in a weather proof / vandal resistant housing the reader allows you to manage access into selected areas of the building and at the same time offers a very simple method for arming and disarming selected Solution security systems.

Number	Colour	Name	Description
1	BLACK (BK)	GND	GND
2	RED (RD)	DC+12V	DC +12V Power
3	GREY (GY)	OK_SD	Start / End Signal For WIEGAND 26Bit
4	YELLOW (Y)	D0	WIEGAND 26 DATA 0
5	GREEN (GN)	D1	WIEGAND 26 DATA 1
6	WHITE (W)	LED	LED Control. Open Circuit = RED - 0V = GREEN (not used unless external LED control is required)
7	BLUE (BL)	Buzzer	Buzzer Control - 0V = Buzzer On (not used unless external BUZZER control is required)
8	BROWN (BR)	RS232	RS232 Data Line

Table 1: PR100 Prox Reader Wiring

Programming

Selected panels in the Solution range can be programmed for access control functions. The CM110 Relay Output Expander includes two separate reader inputs allowing control for up to two doors per expander module.

Once connected the following parameters need to be set in the control panel for correct operation. Consult the Reference Guide or Installation Manual for the specific programming location numbers for your panel.

Do not short OK_SD , D0 or D1 to RS232 or DC+12V when the power is on. Reader damage may occur.

PR100 Reader - PR200 Token -PR250 ISO Card

Programming Flow

1) Pick an Access Group Number 1 to 8. Assume Access Group1 for this example.
2) Assign the Reader to Access Group 1
3) Assign the Users to Access Group 1
4) Assign the Output to Access Group 1
5) Set the Output Event Type to 60 = Access Group
6) Set the Output Time to 5 Seconds
7) Set the Output Polarity to One Shot Low
8) Assign each reader to an area or partition if you want to Arm / Disarm. You must be a member of the group.

For more information please see the Installation Manual.

Note You must power cycle the Solution panel after connecting the CM110 for the system to initialise the output expander.

CM110 Address Switches and Reader Numbering

Each CM110 fitted to the panel must be set to a unique address using the on board address switches. Prox Reader and Output numbering correlates directly to the module address setting. See Table 2: below for more details.

Solution 64 Panel					
CM110 Address Number	SW1	SW2	SW3	Output Number	Reader Number
Address 1 =	OFF	OFF	OFF	5 to 8	9 and 10
Address 2 =	ON	OFF	OFF	9 to 12	11 and 12
Address 3 =	OFF	ON	OFF	13 to 16	13 and 14
Up to 3 x CM110 modules can be fitted to the Solution 64 panels running Version 1.10 firmware or higher. Firmware upgrades are available.					

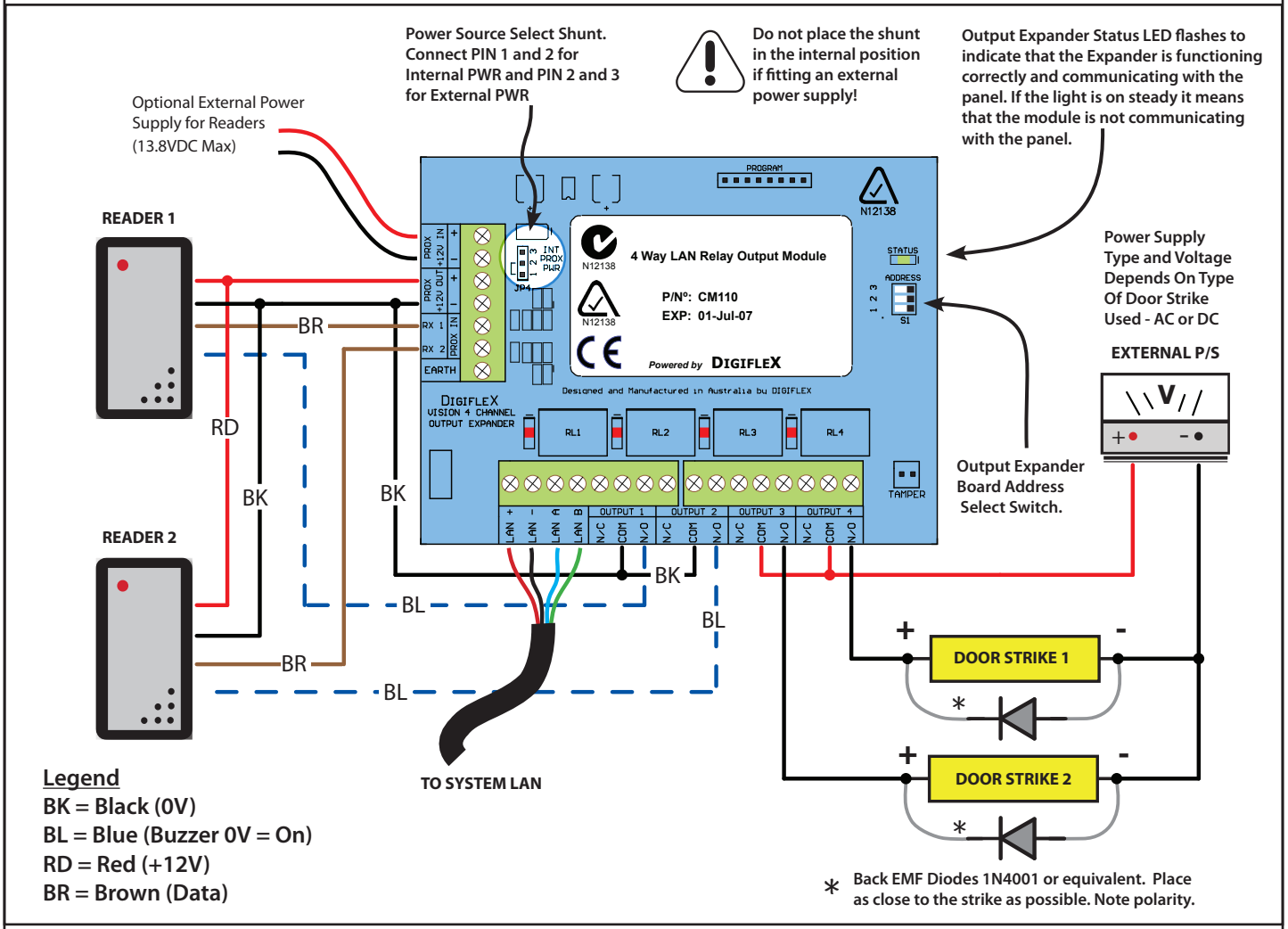
Table 2: CM110 Address Configuration Options

Connection Diagram

The CM110 Relay Output Module allows two separate PR100 Prox Readers to be connected to the Solution-64 Control Panel. The relay outputs provided are used to operate door strikes and to power the LED and buzzer in each of the readers if required. The CM110 can be configured to power the readers from the Output Expander LAN or from a separate power source with or without it's own standby battery. Do not exceed the total available system power when powering the readers from the output expander.

To use internal module power for the readers, connect the program shunt on JP4 between PIN 1 and PIN 2 of the header pins. The CM110 is supplied from the factory to use external power with the shunt connected between PIN 2 and PIN 3 of the header pins. Separate LED control is not required as the system is able to control the indicators. The indicator is normally red and will go green for ~3 seconds when a valid token has been presented.

When using an external reader power source it should be connected to the CM110 terminals marked - Prox +12V IN.
Note the polarity and ensure that the maximum reader voltage (13.8VDC) is not exceeded.



PR100 Reader Connection Diagram

PR100 Specifications

Part Number:	PR100 - Proximity Reader (125Khz) 26bit Wiegand or Digiflex 40 Bit Serial Format.
Operating Voltage:	10.5V D.C - 14.0V D.C. @ 200mA Max
Operating Environment:	0˚ to 45˚C RH 0 to 95% at 30˚C non-condensing.
Connection Method:	Via 0.5m Shielded Cable. 3 conductors minimum required for Serial format. Additional conductors required for Wiegand format and for buzzer and led control. Minimum cable size is 14/020 (22AWG).
Cable Distance:	Max distance from PR100 reader to CM110 input is 20m (unshielded) and 60m (shielded). Where high levels of electrical noise are present, shielded cable should be used for best results.
Warranty:	3 years from date of manufacture (return to base).

N12138 N12138 TELEPERMIT RoHS

In the interest of ongoing product development this document is subject to change without notice.

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