

POSITION INDICATOR

DM1M2

DATA SHEET

- ❖ Single Figure Dot Matrix display (31mm or 50mm).
- ❖ Field Programmable.
- ❖ Displays all numbers and letters.
- ❖ Binary, gray or one wire per floor, user programmable.
- ❖ Small size.
- ❖ Horizontal or vertical installation.

Description

The DM1M2 is a sophisticated single digit/character dot matrix position indicator. The DM1M2 is capable of displaying all alphanumeric characters (digits and letters) up to 16 floors. The DM1M2 can display direction arrows (separately or simultaneously). Direction arrows override regular display.

Programming DM1M2 is very easy and is done via three on-board key switches (S1, S2, S3). (Please refer to Fig. 2.)

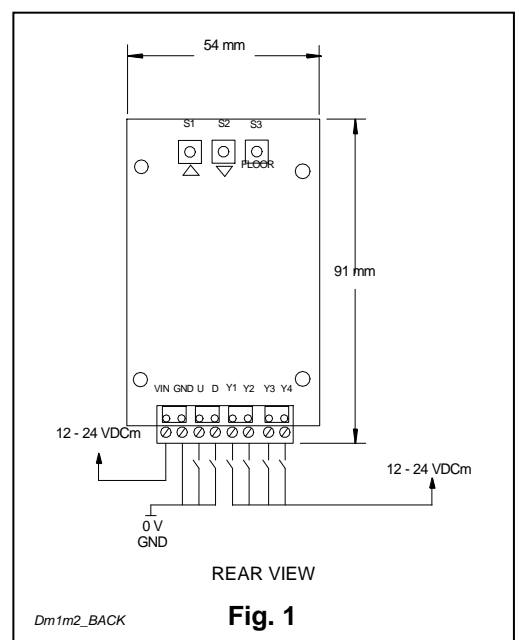
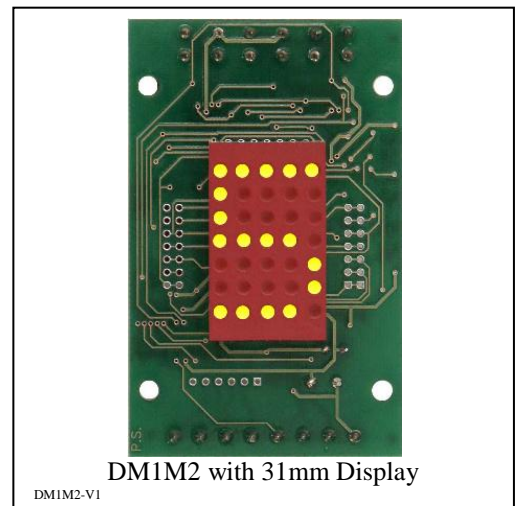
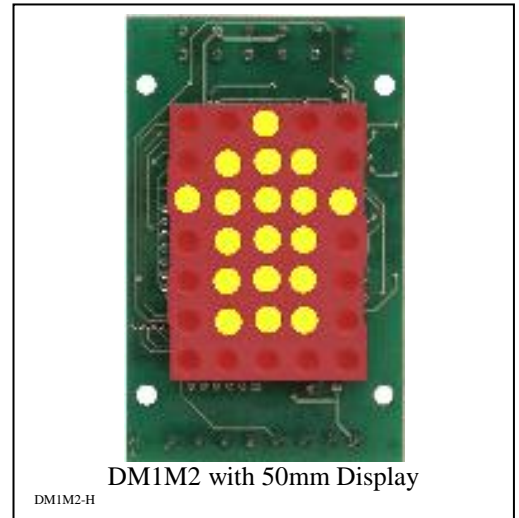
The following parameters can be programmed:

1. Display each floor.
2. Style of directional arrow: static; scrolling; arrow scrolling over digit.
3. Type of signalling: binary; inversed binary; gray; one wire per floor; stand-alone operation.

The DM1M2 has the following inputs:

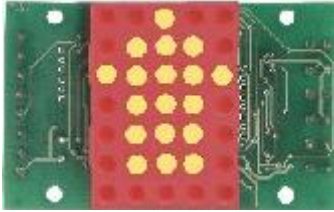
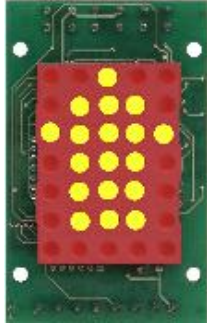
1. Vin - Power input 12VDC...32VDC (VDCm)
2. GND - Return of Vin
3. UP - Activates up arrow display.
4. DN - Activates DN arrow display
5. Y1...Y4 - Inputs for signalling of each floor display (active high)

* VDCm: Rectified unfiltered

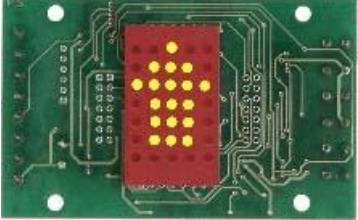
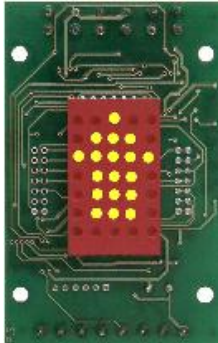


The DM1M2 comes in the following versions:

2" Display

DM1M2-H	2" Dot Matrix, Horizontal	
DM1M2-V	2" Dot matrix, Vertical	

1" Display

DM1M2-H1	1" Dot Matrix, Horizontal	
DM1M2-V1	1" Dot Matrix, Vertical	

Programming Key Switches



DM1M2-BUTTON

Fig. 2



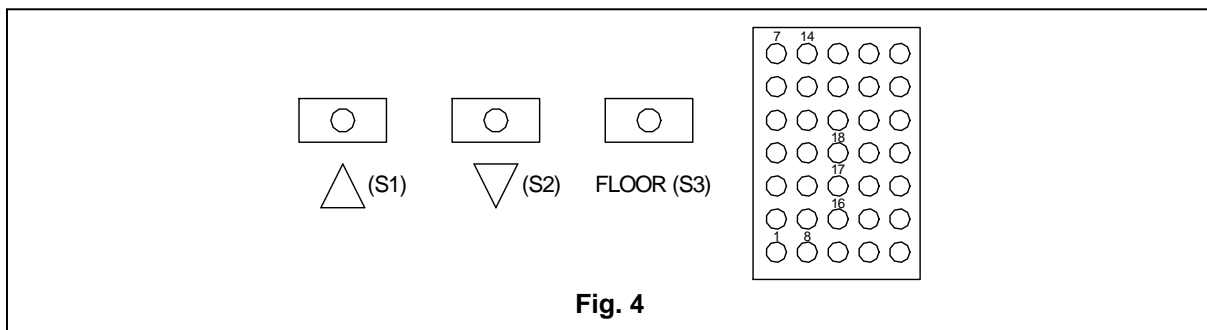
DM1M2-BACK

Fig. 3



Specifications

Power Supply	12VDC...32VDC (or VDCm, rectified unfiltered) 80 ma @ 24VDCm.
Y1, Y2, Y3, Y4 inputs Y1 = LSB Y4 = MSB	N.O. Active High 0 - 32 VDCm. Input Impedance: 70 K Ω (Resistive) "0" = 4.5 VDCm Max. "1" = 7 V DCm Min.
UP or DN inputs	N.O. Active Low 0 - 32 VDCm. Input Impedance: 70 K Ω (Resistive) "0" = 4.5 VDCm Max. "1" = 7 V DCm Min.
Display	Red, 5X7 dot matrix 2" or 1"
Programming	Field programming by 3 on-board tact switches Program: Sequence, type of arrow, type of signalling
Terminals	Pluggable
Weight	70gr

**Programming****Choosing Display at Each Floor:**

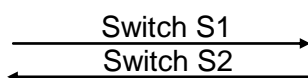
Press switch S3 to enter DM1M2 programming mode, LED no 1 (Fig. 4) starts flashing to indicate first floor, pressing S3 again causes LED 2 to flash and indicate second floor. This process is repeated up to LED 16 (the maximum number of floors).

Select number of floor by pressing S3 repeatedly until desired floor LED is flashing. Select the desired floor display by scrolling through the character selection with S1 and S2. The current indication is registered in memory if:

1. Within 4 seconds of selection no switch is pressed.
2. Another floor is chosen (pressing switch S3).

The following characters can be chosen by S1 and S2.

0,1,2,3,4,5,6,7,8,9,A,B,C.....X,Y,Z, BLANK.



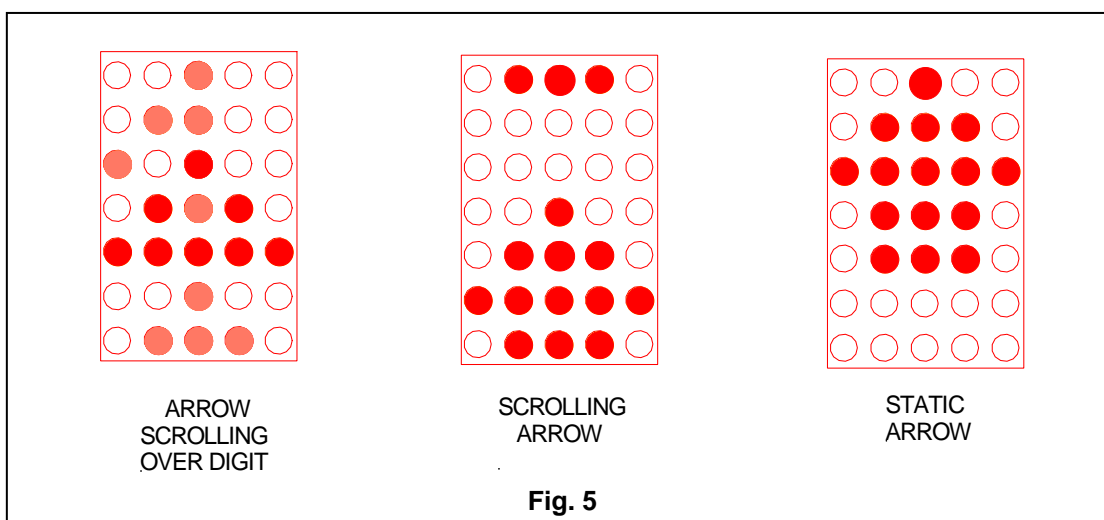
S1 is used to scroll through the characters forwards, S2 is used to scroll through in reverse.



Choosing Type of Arrow:

LED 17 indicates the “level” of direction arrows. When S3 is pressed until LED A flashes then it is possible to choose type of arrow by pressing S1.

The following arrows can be chosen:



The last arrow type chosen will be recorded in memory if:

1. Within 5 seconds of selection no switch is pressed.
2. Another floor is chosen (pressing switch S3).

Choosing Type of Signalling:

LED 18 indicates the “level” of signaling. When S3 is pressed until LED 18 flashes it is possible to choose signalling mode by pressing S1.

b - Binary signalling code, via inputs Y1...Y4.

b' - Inversed binary signalling, via inputs Y1...Y4.

w - One wire per floor, one wire at a time is activated out of 4 wires. (Y1, Y2, Y3, Y4) to choose four different displays.

g - Gray code, by use of inputs Y1...Y4.

m – Stand-alone operation, via of inputs Y2 and Y3 and magnetic sensors.

Example: The DM1M2 should be programmed to the following sequence:

Floor	1	2	3	4	5	Arrow Type (At Floor 17)	Signalling Type (At Floor 18)
Character	P	L	1	2	3	Scrolling	Binary

Press S3, the DM1M2 is transferred to programming mode: LED 1 is flashing; via S1 choose the character “P”, press S3, LED 2 (floor 2) starts flashing; via S1 choose the character “L”, press S3, LED 3 (floor 3) starts flashing; via S1 choose the character “1”, press S3, LED 4 (floor 4) starts flashing; via S1 choose the character “2”, press S3, LED 5 starts flashing; via S1 choose character “3”, press S3 repeatedly until LED 17 starts flashing; via S1 choose scrolling arrow, press S3, LED 18 starts flashing; via S1 choose binary signalling. Do not touch any button for 4 seconds. The DM1M2 will automatically return to normal mode and will display 0 floor 1. (Binary Code: Y1 = 0, Y2 = 0, Y3 = 0, Y4 = 0)

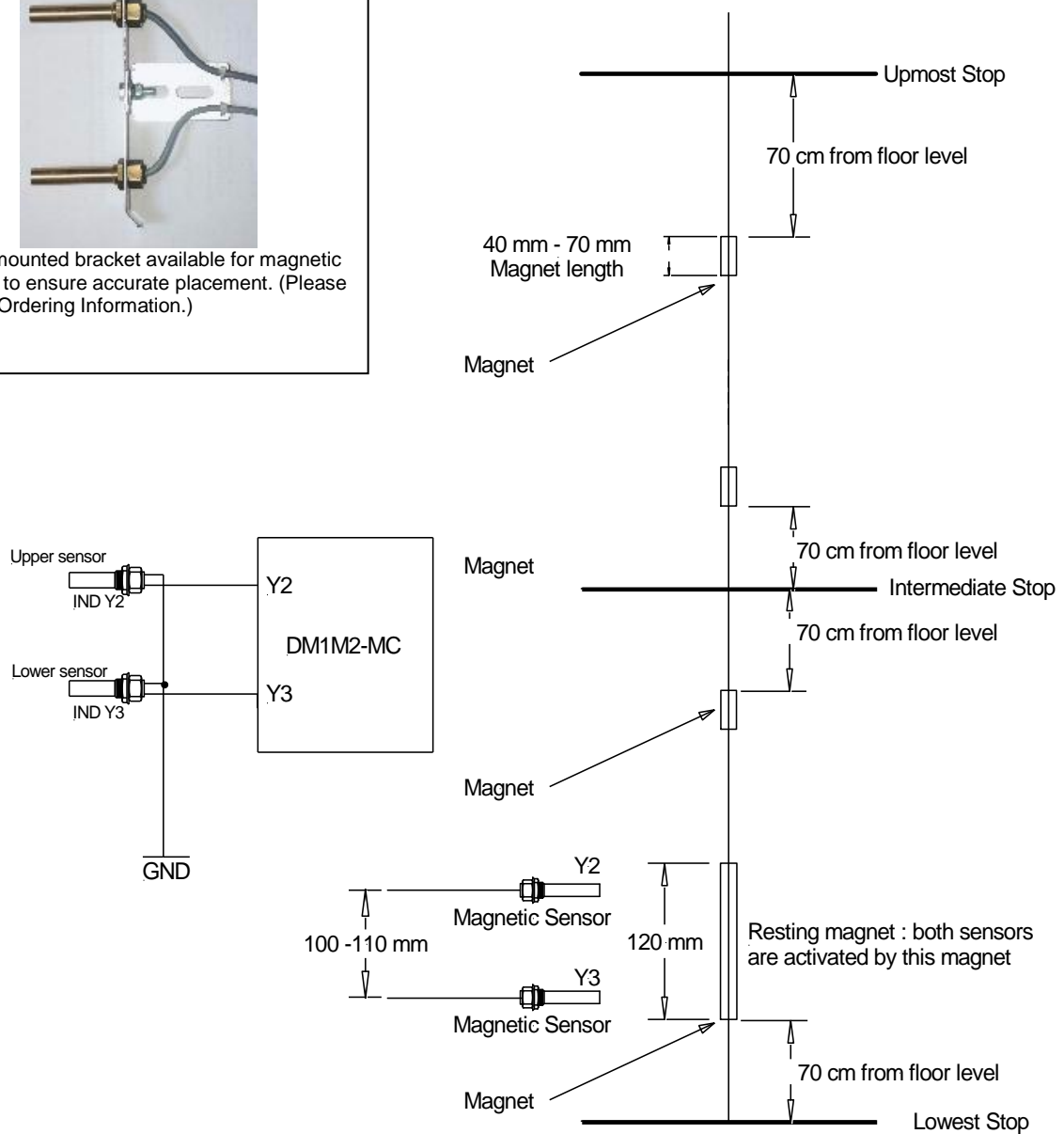
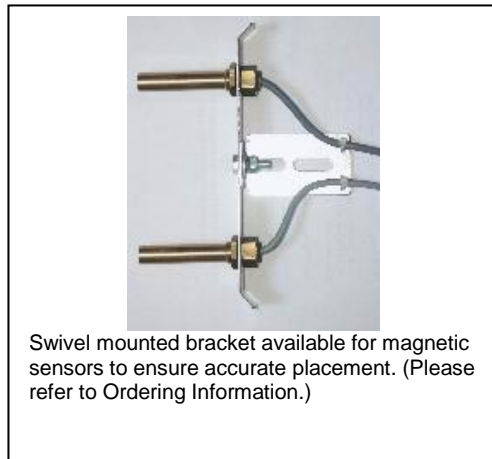


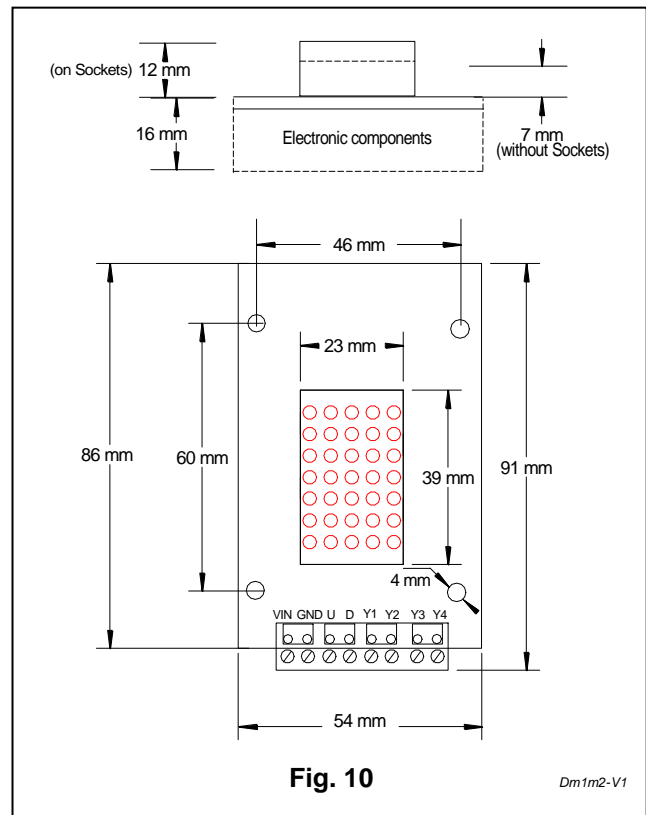
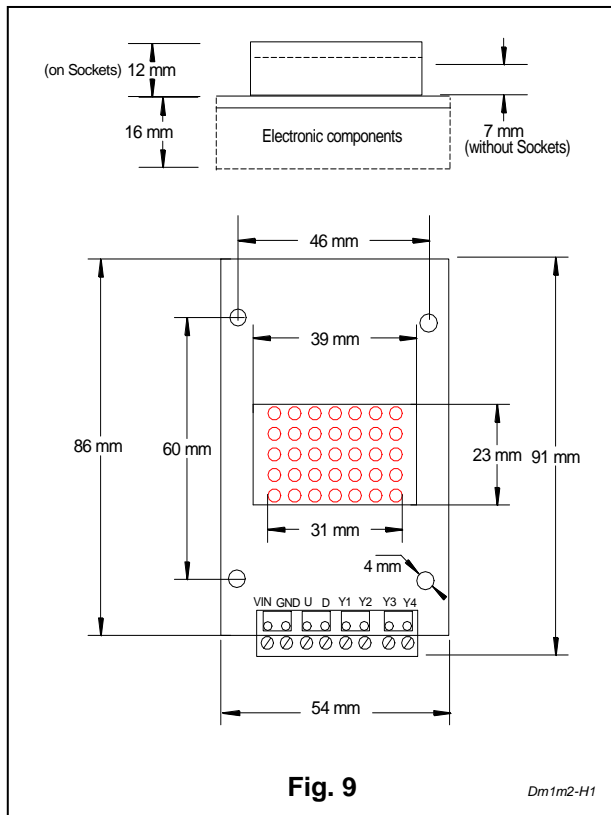
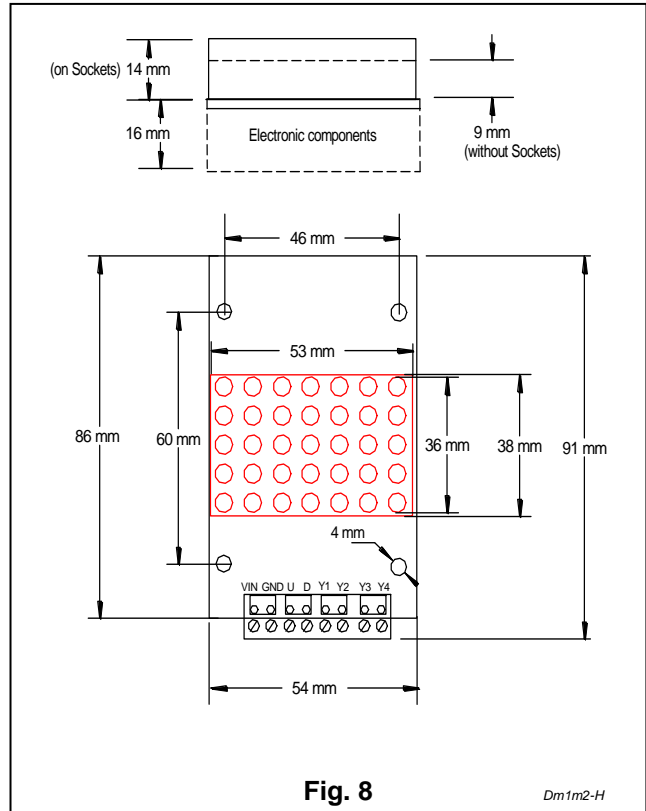
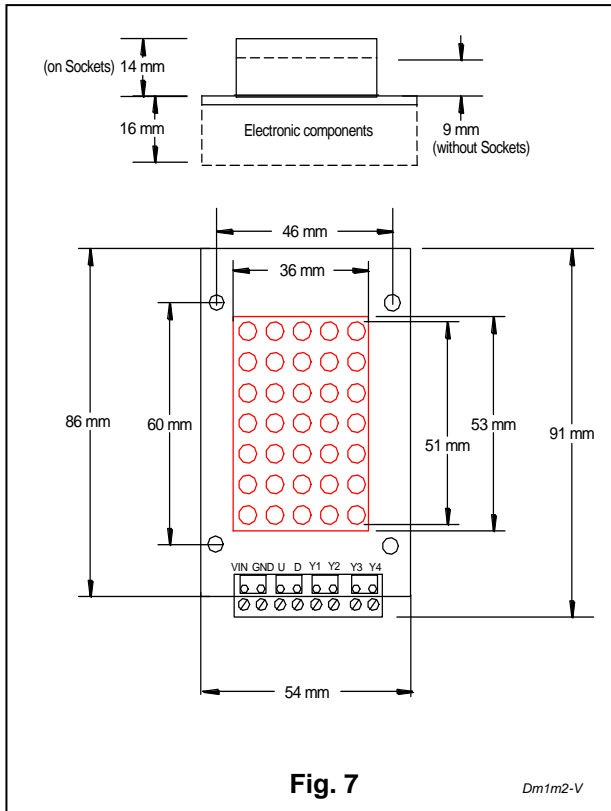
MODEL: DM1M2-MC

For operation of DM1M2 together with our DBR4-M stand-alone speech unit (working with magnetic sensors) model DM1M2-MCT (or DM1M2-MC) should be used. Magnet arrangement in the shaft is as shown in the following diagram:

Magnet placement in the shaft

Magnetic Sensor Type : Normally Open. (Nonlatching)





Ordering Information

DM1M2-H	2" Single dot matrix 53 x 38 Horizontal Dot-Matrix
DM1M2-V	2" Single dot matrix 53 x 38 Vertical
DM1M2-H1	1" Single dot matrix 39 x 23 Horizontal
DM1M2-V1	1" Single dot matrix 39 x 23 Vertical
DM1M2-MV1	1" Single dot matrix 39 x 23 Vertical. Stand-alone operation.
DM1M2-MH1	1" Single dot matrix 39 x 23 Horizontal. Stand-alone operation.
DM1M2-MV	2" Single dot matrix 53 x 38 Vertical. Stand-alone operation.
DM1M2-MH	2" Single dot matrix 53 x 38 Horizontal. Stand-alone operation.
BRM	Bracket for magnetic sensor.

NB: DM1M2-MC differs from DM1M2 only by hardware, RN1=22K is added in DM1M2-MC, software and programming remain identical.

