



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

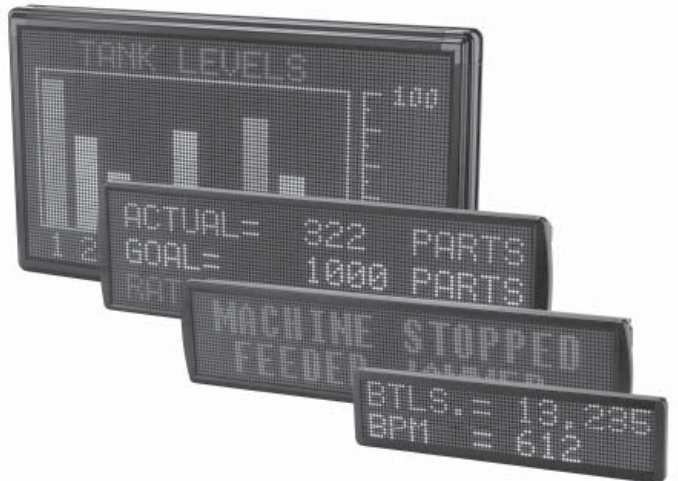
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## MODEL PFM - PLANT FLOOR MARQUEE



- TRI-COLOR DISPLAY PROVIDES INSTANT NOTICE OF IMPORTANT INFORMATION
- DISPLAYS INFORMATION FROM ANY G3 HMI, AND SX/GT MODELS OF THE DATA STATION AND MODULAR CONTROLLER
- GRAPHICAL DESIGN ALLOWS BARGRAPHS, CUSTOM SYMBOLS AND GRAPHICS
- FOUR SIZES FOR A WIDE RANGE OF APPLICATIONS
- RS-485 PORT SUPPORTS MULTIDROP
- AC POWERED (110 or 220 VAC, 50 / 60 HZ)

### GENERAL DESCRIPTION

The PFM - Plant Floor Marquee series are multi-color LED displays designed to provide vital process and production information to personnel at a glance. The PFM must be used in tandem with Red Lion's G3 series of HMIs, Data Station Plus or Modular Controller series. This affords the PFM the unique ability to display information gathered by its host. The aforementioned host devices can collect information from virtually any device equipped with a serial or Ethernet port.

Four different sizes are available - The smallest is suitable to provide data at the machine level, while the largest can be used to communicate information across an entire factory floor at distances up to 600 feet (182 meters) away.

The PFM displays are controlled via the RS-485 port of a G3 HMI, or Data Station Plus SX/GT models or Modular Controller Master modules. Acting as a slave to these products allows the PFM to display data from multiple industrial devices including PLCs, motor drives, barcode scanners, etc. The RS-485 connection allows the displays to be multi-dropped for applications requiring more than one display.

The PFMs are graphic-based (versus text-based), which allows the series to display items such as bargraphs and custom symbols and graphics. The 7.62 mm (0.3 inch) pitch LED design allows the use of a wide range of font styles and sizes to suit any application. The display is housed in an extruded aluminum and plastic housing designed for indoor use. Brackets are provided to allow the PFM to be mounted from an overhead support.

The PFM is powered by 110 or 220 VAC source. The RS-485 signal connects to the display via an RJ modular plug.

### SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in the manual or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

### CONTENTS OF PACKAGE

- PFM display.
- Hardware kit including mounting brackets
- IEC 320 C22 power cable.
- Hex key wrench (models that require it)

### ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PART NUMBER
PFM	Tricolor display 16x80, 110V	PFM1608A
	Tricolor display 16x80, 220V	PFM1608B
	Tricolor display 24x120, 110V	PFM2412A
	Tricolor display 24x120, 220V	PFM2412B
	Tricolor display 32x120, 110V	PFM3212A
	Tricolor display 32x120, 220V	PFM3212B
	Tricolor display 64x120, 110V	PFM6412A
	Tricolor display 64x120, 220V	PFM6412B
CBL	CBL G3/DSP/MC TO PFM	CBLPFM00



**CAUTION: Risk of Danger.**  
 Read complete instructions prior to installation and operation of the unit.



**CAUTION: Risk of electric shock.**

# SPECIFICATIONS

## 1. POWER:

PFM1608A: 105-115 VAC, 50/60 Hz @ 75 W max.  
 PFM2412A: 105-115 VAC, 50/60 Hz @ 155 W max.  
 PFM3212A: 105-115 VAC, 50/60 Hz @ 185 W max.  
 PFM6412A: 105-115 VAC, 50/60 Hz @ 267 W max.  
 PFM1608B: 210-230 VAC, 50/60 Hz @ 75 W max.  
 PFM2412B: 210-230 VAC, 50/60 Hz @ 155 W max.  
 PFM3212B: 210-230 VAC, 50/60 Hz @ 185 W max.  
 PFM6412B: 210-230 VAC, 50/60 Hz @ 267 W max.

## 2. DISPLAY: 7.62 mm (0.3 inch) pitch LED (red/amber/green)

Resolutions:

PFM1608x: 16H x 80W

PFM2412x: 24H x 120W

PFM3212x: 32H x 120W

PFM6412x: 64H x 120W

Maximum Viewing Distance:

PFM1608x: 150 ft (45.72 m)

PFM2412x: 200 ft (60.96 m)

PFM3212x: 450 ft (137.16 m)

PFM6412x: 600 ft (182.88 m)

## 3. COMMUNICATIONS: Connects to the host G3, Data Station or Modular Controller (SX or GT models only) via RS-485.

## 4. ENVIRONMENTAL CONDITIONS:

Operating Temperature: 0 to 70 °C.

Storage Temperature: -10 to 70 °C.

Operating and Storage Humidity: 80% maximum relative humidity (non condensing) from 0 to 70 °C.

## 5. CERTIFICATIONS AND COMPLIANCES:

Contact your Red Lion Controls distributor for more information.

## 6. CONNECTOR: IEC 320 C22 style; 5 ft. power cord included (US connector)

## 7. CONSTRUCTION: Extruded aluminum enclosure with ABS endcaps.

## 8. MOUNTING REQUIREMENTS: Suspend from overhead truss or other suitable structure. See "Mounting Instructions" for more info. Refer to local safety codes for additional requirements.

## 9. DIMENSIONS:

PFM1608x: 26" x 6.6" x 2.4" (660 x 168 x 61 mm)

PFM2412x: 38.5" x 8.8" x 3.4" (978 x 224 x 86 mm)

PFM3212x: 38.8" x 10.9" x 3.4" (986 x 277 x 86 mm)

PFM6412x: 39.3" x 22.6" x 3.4" (998 x 572 x 86 mm)

## 10. WEIGHT:

PFM1608x: 6.8 lbs. (3.1 Kg)

PFM2412x: 14.1 lbs. (6.4 Kg)

PFM3212x: 17.0 lbs. (7.7 Kg)

PFM6412x: 28.7 lbs. (13.0 Kg)

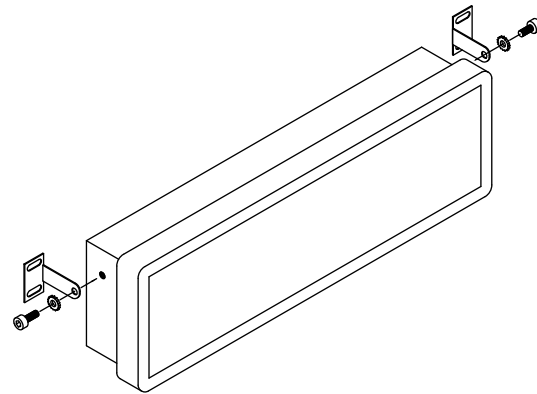
# INSTALLING THE PFM

## MOUNTING INSTRUCTIONS

### PFM1608x, PFM2412x, & PFM3212x

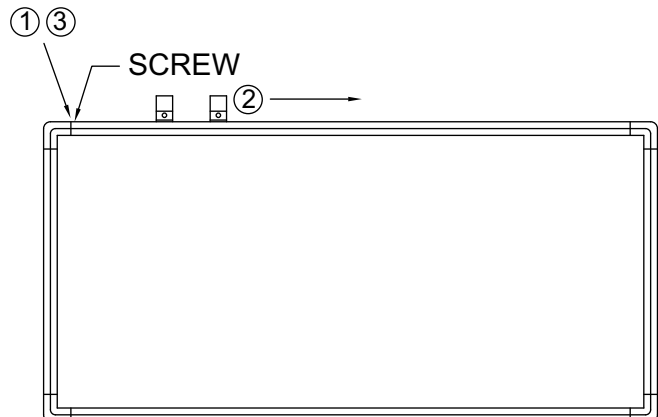
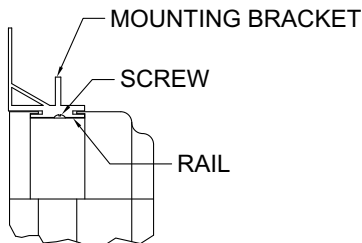
The PFM16, PFM24, & PFM32 displays are designed to be mounted directly to a wall, the ceiling or other suitable structure capable of supporting the PFM. Extreme caution should be exercised when hanging the PFM6412x display to provide for the safety of personnel.

The hardware kit includes mounting brackets, washers, & screws. These are installed into the threaded inserts that are on the sides of the PFM.



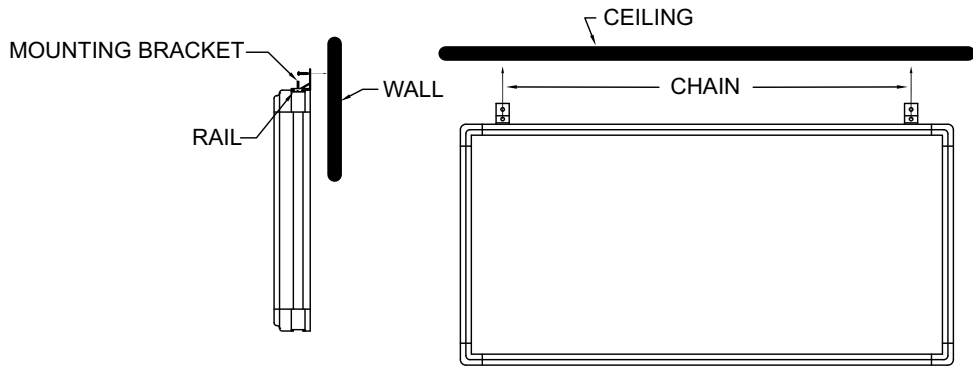
### PFM6412x

The PFM64 display is designed to be mounted directly to the wall, suspended from a ceiling truss or other suitable structure capable of supporting it. Extreme caution should be exercised when hanging the PFM6412x display to provide for the safety of personnel.



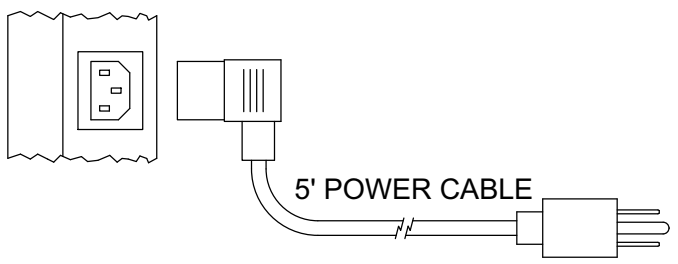
### Installing bracket:

1. Remove one of the screws in the top of the PFM.
2. Slide both of the mounting brackets into the rail.
3. Reinstall screw removed in step 1.



# POWERING THE PFM

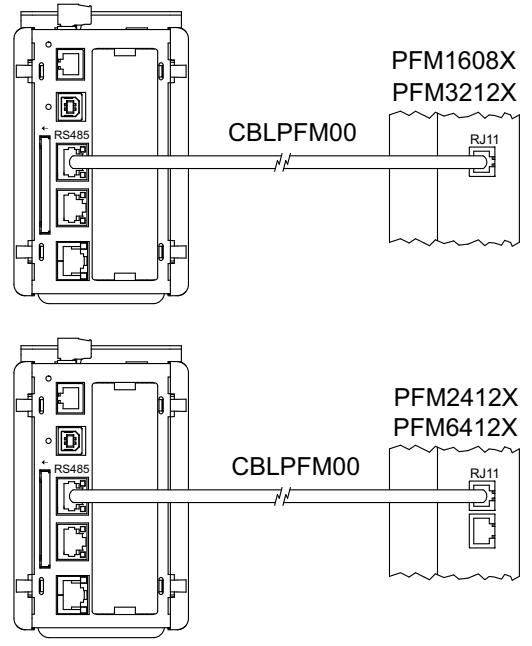
The PFM is fitted with an IEC 320 C22 connector. A five foot long, grounded three-prong connector cable is included with each unit. The PFM is powered by 110 VAC, 50/60 Hz or 220 VAC, 50/60 Hz depending on the model chosen.



# COMMUNICATING WITH THE PFM

The PFM requires a host product in the form of a G3, Data Station Plus or Modular Controller. Further, only models that have a User Interface may be used as a host. This excludes products such as the DSPLE and CSMSTRLE. See the relevant product bulletins for more information.

The CBLPFM00 may be used to connect the RS-485 port of the host product to the RS-485 port of the PFM.



### **LIMITED WARRANTY**

The Company warrants the products it manufactures against defects in materials and workmanship for a period limited to two years from the date of shipment, provided the products have been stored, handled, installed, and used under proper conditions. The Company's liability under this limited warranty shall extend only to the repair or replacement of a defective product, at The Company's option. The Company disclaims all liability for any affirmation, promise or representation with respect to the products.

The customer agrees to hold Red Lion Controls harmless from, defend, and indemnify RLC against damages, claims, and expenses arising out of subsequent sales of RLC products or products containing components manufactured by RLC and based upon personal injuries, deaths, property damage, lost profits, and other matters which Buyer, its employees, or sub-contractors are or may be to any extent liable, including without limitation penalties imposed by the Consumer Product Safety Act (P.L. 92-573) and liability imposed upon any person pursuant to the Magnuson-Moss Warranty Act (P.L. 93-637), as now in effect or as amended hereafter.

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