



# MP100, MP100E, MP101, MP102, MP102E, MP230, MP230H, MP560, MP561, and MP562

**PROGRAMMER MODULES FOR USE WITH THE  
FIREYE MODULAR M-SERIES II CONTROL**

## DESCRIPTION

The Fireeye MP100, MP100E, MP101, MP102, MP102E, MP230, MP230H, MP560, MP561 and MP562 Programmer Modules are used with the Fireeye Modular M-Series II control. The operational characteristics of the control are determined by the selection of the programmer module (e.g. re-ignition, 2-stage capability, pilot cutoff, etc.). The programmer module incorporates a plug-in design for easy installation.

Some programmer modules (MP230, MP230H, MP560, MP561, and MP562) are equipped with a series of dipswitches to select Purge Timing, Pilot Trial for Ignition (PTFI) Timing, and Recycle or Non-Recycle operation. LED indicator lights are on all programmer modules, indicating the operating status of the control. A “check-run” switch is provided on the MP560, MP561 and MP562 programmer modules to assist in testing size and stabilization of the pilot.

Flame Failure Response Time (FFRT) is determined by the selection of the amplifier module. Test jacks are also provided on the flame amplifier module to permit flame signal measurement during operation. For proper and safe application of this product, you must refer to Fireeye bulletin C-4000 or C-4000E for a detailed description of the various programmer modules, including installation instructions, amplifier selection, operating sequences for each programmer module, etc.



**WARNING: Selection of this control for a particular application should be made by a competent professional, licensed by a state or other government agency. Inappropriate application of this product could result in an unsafe condition hazardous to life and property. Installation should not be considered complete until pilot turndown and other appropriate performance tests have been successfully completed.**

## PROGRAMMER MODULE SELECTION

Part Number	DESCRIPTION
MP100/MP100E	Relight operation.
MP101	Same as MP100, except will ignore flame signal in off cycle.
MP102/MP102E	Operates like the MP100, except the standing pilot and relight features are eliminated. Ignition safety time is 5 seconds. Control will lockout on flame failure.
MP230	Selectable purge timing, trial-for-ignition timing, and recycle/non-recycle operation.
MP230H	Selectable purge timing, trial-for-ignition timing, pilot stabilizing period, and recycle/non-recycle operation. 10 second main flame trial-for-ignition. For use with two-stage burners.
MP560	Selectable purge timing, pilot-trial-for-ignition timing, pilot stabilizing period, and recycle/non-recycle operation. 10 second main flame trial-for-ignition, check-run switch.
MP561	Selectable purge timing, pilot-trial-for-ignition timing, and recycle/non-recycle operation. 10 second main flame trial-for-ignition, check-run switch.
MP562	Same as MP560, with lockout on loss of air flow. Non-recycle operation.

Programmers with the suffix “E” (e.g. MP100E) are for use with the MC230 and MC230R chassis only.



**WARNING: Remove power from the control and remove the control from its wiring base before proceeding.**

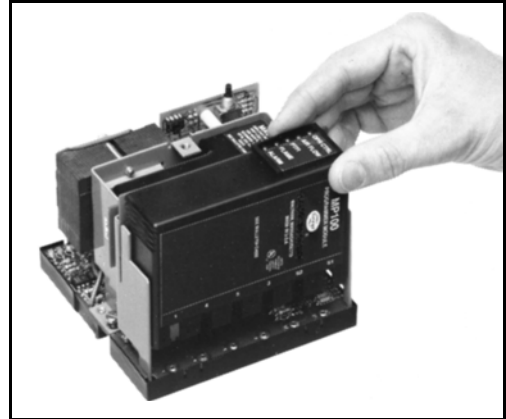
## INSTALLATION

The Programmer Modules are used with the Fireye modular M-Series II Chassis (P/N MC120, MC120E, MC120P, MC120R and MC120RE for 120VAC, MC230 and MC230R for 240 VAC). They are installed in the chassis by grabbing hold of the programmer module by the ridged finger grips on the side on the module, aligning the module with the guide slots on the opening farthest from the transformer, and inserting the module into the pin connectors.

The programmer modules are designed to fit in the proper slot only. **DO NOT FORCE THEM.**

**Replaceable Fuse:** The programmer modules are designed with a field-replaceable fuse.

The fuse is located on the printed circuit board near the connectors. The fuse will open as a result of an overload condition on terminals 3, 4, or 5. In the event the fuse opens, remove the fuse (using a small screwdriver) and install a Fireye replacement fuse (P/N 23-176) or equivalent 2AG, 8 amp fuse (e.g. Littlefuse #225008) In programmers used with the MC230 and MC230R, use replacement fuse P/N 23-183 or equivalent (3.5 amp, 2AG, SLO-BLO) Littlefuse #22903.5.



## APPROVALS

AGENCY APPROVALS				
	UL	CSA	FM	EN298
MP100	√	√	√	√
MP100E				√
MP101	√	√	√	
MP102				√
MP102E				√
MP230	√	√	√	
MP230H	√	√	√	
MP560	√	√	√	
MP561	√	√	√	
MP562	√	√	√	

**Underwriters Laboratories Inc.**

Listed MCCZ File MP1537

**Canadian Standards Association:**

Guide 300-1-0.2 Class 2642 Oil File LR 7989

Guide 140-A-2 Class 2632 Gas File LR7989

**Factory Mutual**

**EN298**

*Approvals do not apply to MC230 and MC230R Chassis and associated programmers.*



FIREYE®  
3 Manchester Road  
Derry, New Hampshire 03038 USA  
www.fireye.com

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