



MP-5201  
APRIL 2000



# MEP100, MEP100P, MEP101, MEP102, MEP103, MEP104, MEP105, MEP230, MEP230H, MEP235, MEP236, MEP290, MEP560, MEP561 and MEP562

PROGRAMMER MODULES FOR USE WITH THE  
FIREYE® MODULAR MicroM™ CONTROL

Year 2000 Compliant in accordance with BSI document DISC PD2000-I:1998

## DESCRIPTION

The Fireeye MEP100, MEP100P, MEP101, MEP102, MEP103, MEP104, MEP230, MEP230H, MEP560, MEP561 and MEP562 Programmer Modules are used with the Fireeye Modular MicroM control. The operational characteristics of the control are determined by the selection of the programmer module (e.g. re-light, 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, Air Flow Proven, Open at Start, and Recycle or Non-Recycle operation. LED indicator lights are on all programmer modules, indicating the operating status of the control as well as providing diagnostic codes during lockout. A “check-run” switch is provided on the MEP560, MEP561 and MEP562 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 MC-5000 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

MicroM Programmer Models:	
MEP100	Relight operation, 10 sec. PTFI.
MEP101	Relight operation, allow flame signal during “off cycle”.
MEP102	Non-recycle on flame fail, 5 second PTFI.
MEP103	Fixed 10 second PTFI, 10 second MTFI, re-try once on pilot failure, post purge.
MEP104	Non-recycle on flame fail, 10 second PTFI.
MEP105	Non-recycle on flame fail, lockout on air-flow open with flame present, 10 second PTFI.
MEP100P	Relight operation, 10 sec PTFI, 15 second post purge.
MEP230	Selectable purge timing, PTFI timing, recycle/non-recycle, post purge, prove air open at start.
MEP230H	Same as MEP230 with 8 second pilot stabilization.
MEP234	Selectable air flow proven open at start, selectable purge timing, selectable PTFI, 10 second pilot proving, selectable MTFI, selectable post purge, non-recycle flame fail.
MEP235	Same as MEP230, with lockout on air-flow open 10 seconds after the start of a cycle, selectable recycle/nonrecycle lockout on air-flow open after flame is proven lockout after loss of flame.
MEP236	Same as MEP230, with additional 3 second igniter on time with main fuel. To be used with intermittent pilot only.
MEP290	Same as MEP230H, with 90 second selectable post purge.
MEP560	Same as MEP230H, 10 second main trial for ignition, run-check switch.
MEP561	Same as MEP560 without pilot stabilization.
MEP562	Same as MEP560, lockout on loss of air flow, non-recycle operation only.

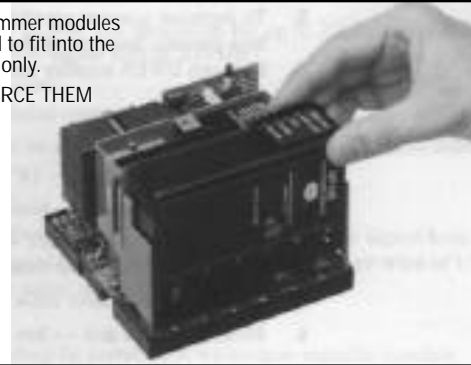


**WARNING: Remove power from the control and remove the control from its wiring base before proceeding.**

## INSTALLATION

The Programmer Modules are used with the Fireeye modular MicroM Chassis (P/N MEC120, MEC120RC, MEC120R, MEC120D and MEC120C for 120VAC and MEC230 for 230 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 into the proper slot only.  
DO NOT FORCE THEM



## PROGRAMMER DISPSWITCH SETTINGS

**NOTE: The dipswitch settings become permanently stored within the programmer's eeprom memory after 8 hours of continuous electrical operation. This allows sufficient opportunity to make the appropriate selection, test and checkout the system. Once stored, the settings cannot be altered.**

The MEP200 and MEP500 series programmers have a series of 6 dipswitches which allow the user to program the purge timing, trial for ignition timing, enable post purge, enable proof of air flow open proven and start and select recycle/non-recycle operation.

### MicroM Programmer Dip Switch Configuration

SWITCH						FUNCTION		
6	5	4	3	2	1			
				C	C	7	PURGE TIME SECONDS	
				C	O	30		
				O	C	60		
				O	O	90		
			C			DISABLED	POST PURGE	
			O			15 SECONDS		
		C					5	PTFI TIME
		O					10	
	C					DISABLE	PROVE AIR FLOW	
	O					ENABLE		
C						RECYCLE		
O						NON-RECYCLE		

**Note: C refers to switch closed position, and closed position is when the switch is toward the printed circuit board. O refers to open switch position or when the switch is moved away from the printed circuit board.**

