

C-4002 APRIL 3, 2013

# MART1, MART3, MART1T, MAUV1, MAUV3 and MAUV1T

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



## DESCRIPTION

The Fireye MART1, MART3, MART1T, MAUV1, MAUV3 and MAUV1T are Amplifier Modules used with the Fireye Modular M-SERIES II control. These amplifier modules provide flame scanning capabilities using any of the Fireye standard ultraviolet scanners (self-check scanners not applicable) and flame rods. The Flame Failure Response Time (F.F.R.T.) of the control is determined by the selection of the amplifier module (see Ordering Information). Test jacks are provided on the amplifier modules to permit flame signal measurement during operation.

After scanner selection, the proper amplifier module **must** be used in the Modular M-SERIES II chassis (see Ordering Information). The amplifier module incorporates a plug-in design for ease of installation.

The programmer module determines the operational characteristics of the control (e.g. relight, purge timing, etc.).

For proper and safe application of this product, you must refer to bulletins C-4000 or C-4000E for a detailed description of the operation of the Modular M-SERIES II control, including installation instructions, operating sequences for the programmer modules, etc. Also follow the scanner installation and wiring instructions found in bulletins C-4000 or C-4000E for proper flame scanning operation.



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.

# **ORDERING INFORMATION**

## Flame Amplifier Selection:

P/N	DESCRIPTION	USE WITH SCANNER		
MAUV1	UV amplifier, 2-4 second F.F.R.T.	UV1A, UV2, UV8A, 45UV3-1050		
MAUV3	UV amplifier, 3 second F.F.R.T.	UV1A, UV2, UV8A, 45UV3-1050		
MAUV1T	UV amplifier, .8 second F.F.R.T.	UV1A, UV2, UV8A, 45UV3-1050		
MART1	Flame rectification amplifier 2-4 second F.F.R.T.	69ND1		
MART3	Flame rectification amplifier, 3 second F.F.R.T.	69ND1		
MART1T	Flame rectification amplifier .8 second F.F.R.T.	69ND1		

R

fireye

# **FLAME SCANNER SELECTION**



UV SCANNERS:				
UV1A3	1/2" NPT connector, 3 ft. (914 mm) TC-ER cable			
UV1A6	1/2" NPT connector, 6 ft. (1828 mm) TC-ER cable			
UV2	3/8" NPT connector, 3 ft. (914 mm) TC-ER cable			
UV8A	1/2" NPT 90 degree angle head, 6 ft. (1828 mm) unshielded leads			
UV90-3, 6, 9	90 degree lateral view, 3 ft. (914 mm), 6 ft. (1828 mm), 9 ft. (2742 mm) flex conduit			
45UV3-1050	3/4" sleeve/set screw mount			

FLAME DETECTORS:					
69ND1-1000K4	12 inch flame rod, 1/2" NPT connector				
69ND1-1000K6	18 inch flame rod, 1/2" NPT connector				
69ND1-1000K8	24 Inch flame rod, 1/2" NPT connector				

# **APPROVALS**

AGENCY APPROVALS								
	ULc	FM	AGA	EC230	EC298			
MAUV1	1	1	1					
MAUV3				1	1			
MAUV1T	1	1	1	1	1			
MART1	1	1	1					
MART3				1	1			
MART1T	<ul> <li>✓</li> </ul>	1	1	<ul> <li>✓</li> </ul>	1			

R

tirev

Underwriters Laboratories Inc.: Listed Guide MCCZ — File MP 1537

Underwriters Laboratories Inc.: Recognized Components Guide MCCZ2 File MP1537

American Gas Association

EN230

EN298

**Factory Mutual** 

ANS Z21.20 Automatic Ignition Systems.

 $\wedge$ 

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

## INSTALLATION

The amplifier modules are used with the Fireye Modular M-SERIES II Base Chassis (P/N MC120, MC120E, MC120P, MC120R, MC120RE for 120VAC, P/N MC230, MC230R for 240VAC). They are installed in the chassis by grabbing hold of the amplifier module by the edges of its printed circuit board, aligning the module with the guide slots on the opening in the middle of the chassis, and inserting the module into the pin connectors.

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



#### NOTICE

When Fireye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireye warranty, as stated it its General Terms and Conditions of Sale, pertains only to the Fireye products and not to any other equipment or to the combined system or its overall performance.

R

rev

## WARRANTIES

FIREYE guarantees for one year from the date of installation or 18 months from date of manufacture of its products to replace, or, at its option, to repair any product or part thereof (except lamps, electronic tubes and photocells) which is found defective in material or workmanship or which otherwise fails to conform to the description of the product on the face of its sales order. **THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES AND FIREYE MAKES NO WARRANTY OF MER-CHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.** Except as specifically stated in these general terms and conditions of sale, remedies with respect to any product or part number manufactured or sold by Fireye shall be limited exclusively to the right to replacement or repair as above provided. In no event shall Fireye be liable for consequential or special damages of any nature that may arise in connection with such product or part.



FIREYE® 3 Manchester Road Derry, New Hampshire 03038 USA www.fireye.com C-4002 APRIL 3, 2013 Supersedes May 4, 2011