







# MODERNIZATION ADAPTER PFM-10

Fireye® Modernization Adapter Kit is a plug-in assembly which assists with the Replacement of Fireye 26RJ8 Model 6080 using infrared flame detection or 25RU8 Model 6580 using ultraviolet flame detection with new solid state modular Fireye Flame-Monitor™ Series Burner Management Controls.

# **DESCRIPTION**

The Modernization Adapter kit is a plug-in assembly designed to assist with the replacement of Fireye 26RJ8 Model 6080 using infrared flame detection or 25RU8 Model 6580 using UV Flame detection with new solid state modular Fireye Flame-Monitor series Burner Management controls.

PFM10 R — PFM10 UV MODERNIZATION ADAPTER KIT						
	REPLACES	CONTROL Unit	DISPLAY Module	PROGRAMMER Module	AMPLIFIER Module	SCANNER
PFM10R	26RJ8 6080 CB3	E110	ED510	EP160* (10-15 SEC. TF1) OR EP161 (10-30 SEC. TFI) OR EP170 (10 SEC. TFI AND SPARK CUTOFF)	E1R1	REPLACE 48PT1 CELL WITH 4-263 OR USE 48PT2 SCANNER
PFM10UV	25RU8-4580	Consult Factory				
PFM	25RU8-6580					







 $<sup>^</sup>st$ Conversions involving Babcock and Wilcox equipment should be cleared with the local Babcock and Wilcox sales office.

## THE STANDARD PFM10R Modernization Kit contains the following:

E110 Control (120V 50/60 Hz) ED510 Display Module EP160 Programmer Module E1R1 Infrared Amplifier Module 4-263 Firetron Cell and Label 60-2060-10 Adapter

NOTE: The E110 consists of: EB700 Chassis, EC600 Dust Cover and Mounting Screw (48-1836).

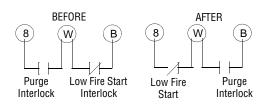
**NOTE:** The original enclosure wiring terminal board may have been exposed to oil, moisture, dirt, etc. which could be absorbed by the board and cause leakage current across signal terminals 14 and 15. Leakage current will cause a false signal to be generated. It may be advisable to re-wire using wiring base 60-1466-2 or 60-1386-2.

1. Loosen the two chassis retaining screws and remove the chassis from its enclosure. Note the chassis type and model number



- 3. Assure that there are no electric power consuming devices (lamps, annunciators, relays, timers) connected to the W or B terminals on the enclosure terminal board. If the need arises for an auxiliary function, refer to the recommendations in Bulletin EP-1601.
- **4.** PFM10-UV. If ignition transformer is wired to terminal 1 on the enclosure terminal board, reconnect it to terminal 5. If spark cutoff is desired, use EP170 Programmer Module.
- **5.** Refer to the typical circuit diagrams figure for complete information.
- Assemble the control and modules and install the unit into the Modernization Adapter. Tighten the chassis retainer.





2. Reconnect the low fire start interlock or any other starting interlock on the enclosure terminal board as shown above.

NOTE: Leave the burner motor contactor connected to terminal 8. Move purge interlock and low fire start interlock as shown. See complete wiring diagram on the next page.

**6.** Install the Modernization adapter and tighten the two retaining screws.



### **FOR PFM10R Infrared**

**8.** Replace the #4-128 Firetron cell in the scanner with the #4-263 Firetron cell. Attach the label supplied with the #4-263 Firetron cell, to the scanner body

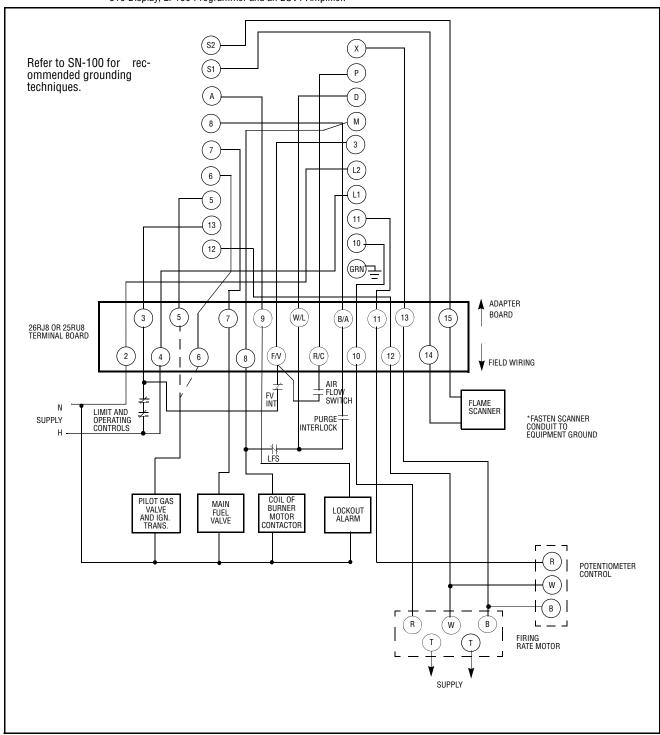




- **9.** Replace the 45UV2 scanner with UV1A6 and connect it to the existing wires. Scanner installation requires modification of the mounting pipe, 45UV2 1010 mounts on unthreaded 3/4" pipe. 45UV2 1020 mounts on 1" pipe. UV1A6 mounts on threaded 1/2" pipe.
- **10.** Referring to Fireye bulletin EP-1601, turn the power on. Initiate a normal burner start-up and operational test as described for the EP160 Programmer used.
- 11. For assistance with non-standard installations contact any Fireye Distributor (listed in the Yellow Pages under Controls).

FIGURE 1.

Typical circuit diagram for modernizing a Fireye 26RJ8-6080 Control installation using a 60-2060-10 Modernization Adapter with a Fireye Monitor Control, comprised of an E110 Control, EP160 Programmer, ED510 Display and a E1R1 Amplifier or a 25RU8-6580 Control installation using a 60-2060-10 Modernization Adapter with a Fireye Flame Monitor Control comprised of an E110 Control, ED 510 Display, EP160 Programmer and an EUV1 Amplifier.





# 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 in 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.

# 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 MERCHANT-ABILITY 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.



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