

# TEST UNIT for BurnerLogix™ Y Controls

## DESCRIPTION

Fireye® Test Unit type 57YB4 provides a simple convenient means for field testing the Fireye BurnerLogix with components, and “Y” controls. When a Fireeye control chassis is plugged into the tester, a complete burner firing operation can be simulated and checked through the use of switches and indicating lights on the panel.

## SPECIFICATIONS

**Supply Voltage:** 120 volts, 50/60 Hz

**Power Consumption:** 20VA

**Ambient Temperature Limit:** 140°F (60°C)

**Fuse:** Type 3 AG, 1 amp, 250 volts

**Shipping Weight:** 10 lbs.

## OPERATION CHART —Test Unit 57YB4

CONTROL TYPE	SCANNER SWITCH	SIGNAL SWITCH	REFERENCE BULLETIN NUMBER
YB110 with			
YP100 YP102 YP138 YP118 YP113	SEE NOTE 1 BELOW	AUTO	BL-1001
YP200* YP202*		AUTO	BL-1001
YP300* YP302*		AUTO	BL-1001
NOTE 1: FOR YB110FR, USE “ROD.” FOR YB110UV, USE “UV.” FOR YB110IR, USE “Pbs.” Pbs = Infrared.			



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## INSTALLATION

1. For best results, the 57YB4 Test Unit should be mounted on a vertical surface with screws or bolts at the mounting holes provided. It need not be mounted if it is desired to use it as a portable tester.
2. The type 57YB4 frame is grounded through the third pin on line cord for use with grounding type 3-wire receptacle.
3. For portable use where only 2 wire receptacles are available, use 3 wire to 2 wire adapter and ground the pigtail. When the adapter is inserted in a non-polarized receptacle, insure that the wider blade is at ground potential.

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## OPERATION AND TESTS

### Identification

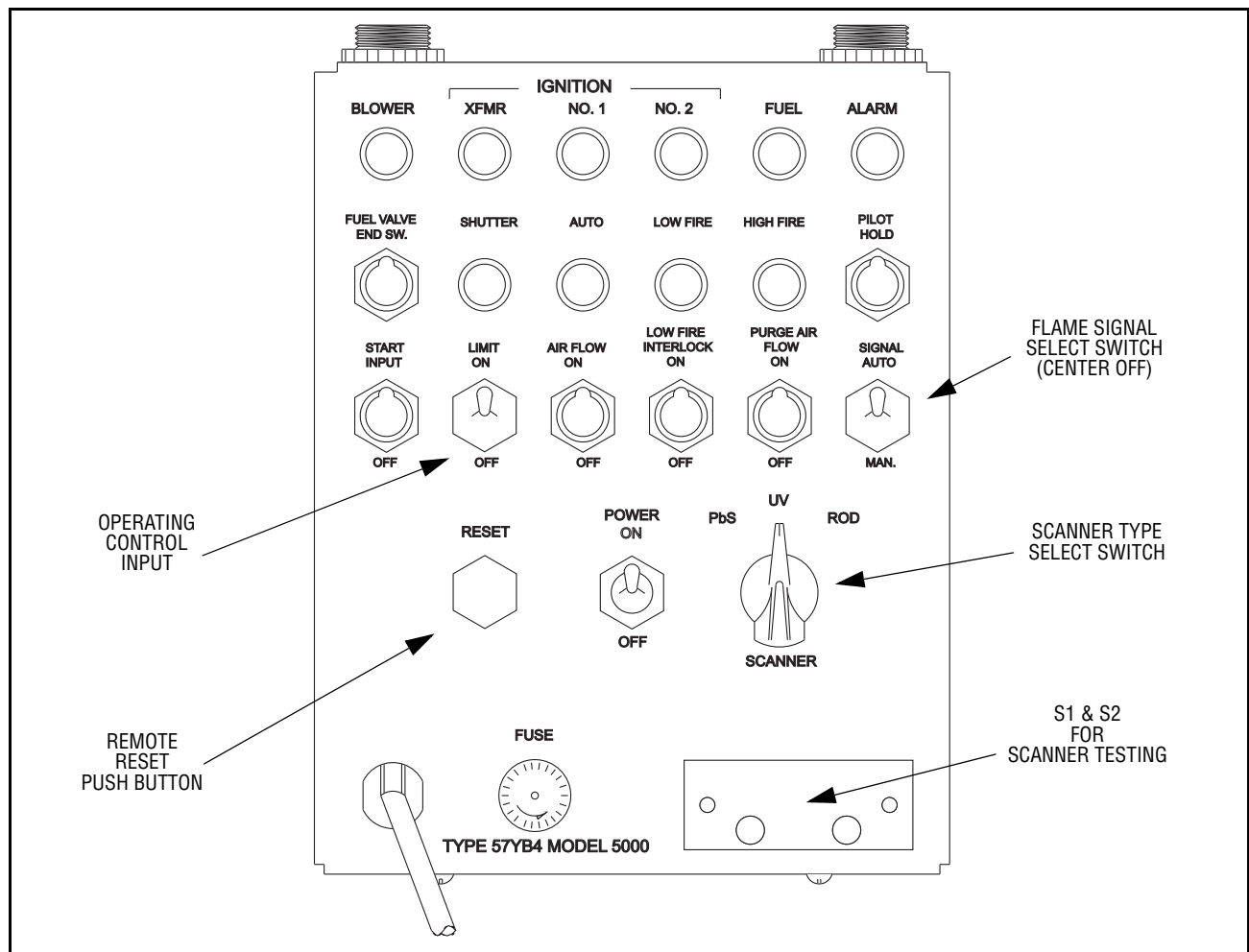
1. POWER Switch—Simulates the main disconnect switch. Connected between the hot line and terminal L1.
2. LIMIT Switch—Simulates any limit or operating control, connected between terminals L1 and 3.
3. AIR FLOW Switch—Simulates burner air flow interlock. Connected between terminals 3 and P.
4. FUEL VALVE END Switch—Simulates proof of closure switch on main fuel valve. Connected between terminals L1 and 13.
5. LOW FIRE INTERLOCK—Simulates burner low fire position interlock. Connected between M and D.
6. PURGE AIR FLOW—Simulates damper purge interlock. Connected between M and 8 (YP100, YP102, YP138, YP118, YP113, YP200 and YP202 programmers).
7. START Switch—This switch must be used to start manually operated controls.
8. SIGNAL Switch—Permits the flame simulator circuits to be controlled manually or automatically. The switch has a center-off position.
9. SCANNER SIGNAL Selector Knob—Selects type of flame simulating signal for use with appropriate unit. Pbs = Infrared, UV = Ultra-Violet, Rod = Flame Rod.
10. BLOWER Light—Indicates that the burner motor circuit has been energized. Powered by terminal M.
11. START INPUT SWITCH—Stops burner sequence at end of low fire start (prior to PTFI) and forces firing rate motor to low fire position while in AUTO, YP138 programmer only.
12. PILOT HOLD SWITCH—On burner startup, stops burner sequence in pilot hold position (terminal 6 on) or while in AUTO initiates revert to pilot sequences, YP138 programmer only.
13. XFMR Light—For programmer types YP1XX and YP2XX, indicates 5 second spark at the beginning of PTFI. For programmer types YP3XX, indicates delayed main valve energized while in AUTO. Powered by terminal W.
14. IGNITION No.1 Light—Indicates that the pilot ignition circuit has been energized. Powered by terminal 5.
15. IGNITION No. 2 Light—Indicates that the pilot ignition circuit has been energized. Powered by terminal 6.
16. FUEL Light—Indicates that the main fuel valve circuit has been energized. Powered by terminal 7.
17. ALARM Light—Indicates that the alarm circuit has been energized. Powered by terminal A.
18. AUTO, LOW FIRE, HIGH FIRE Lights—Indicates position of modulator, on programmer types YP100, YP102, YP138, YP118, YP113, YP200 or YP202. For YP300 and YP302, the HIGH FIRE light indicates spark ignition circuit is energized at start of PTFI.

## OPERATING PROCEDURE FOR AUTOMATIC UNITS

YB110 with all programmers:

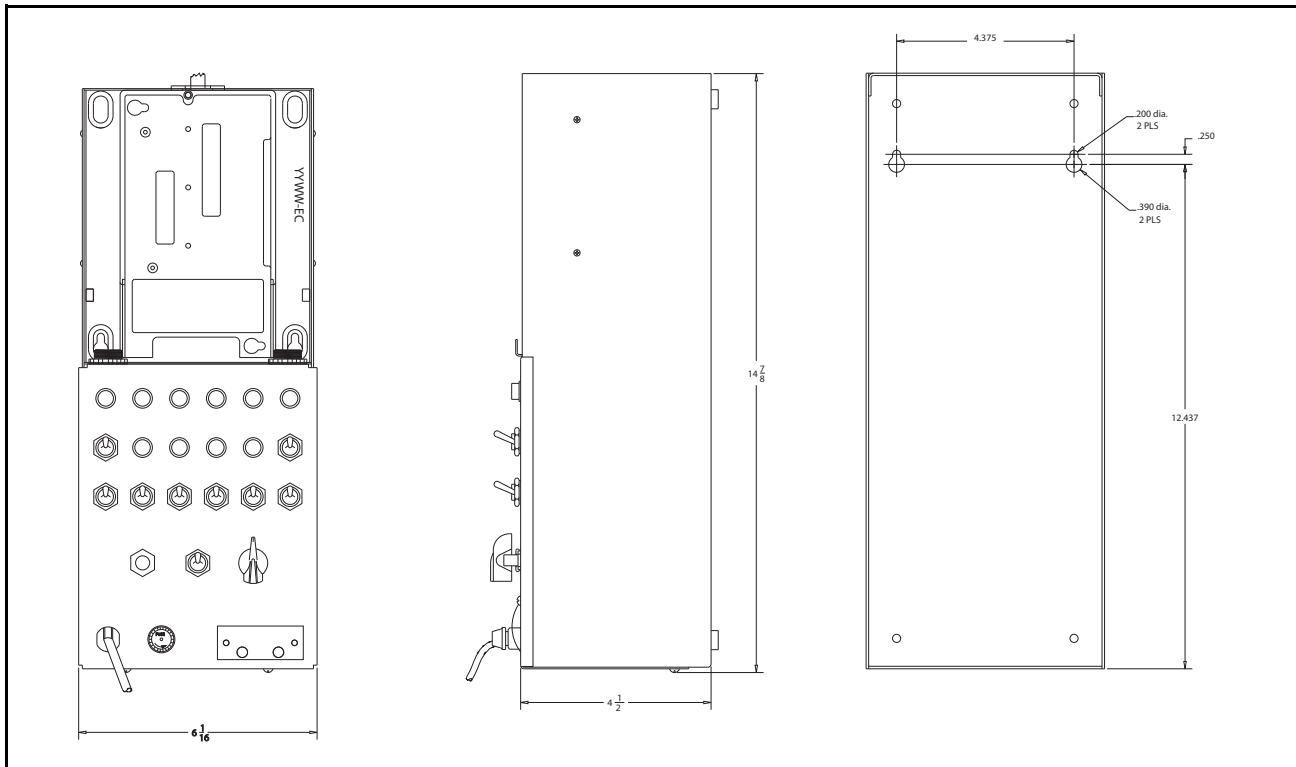
1. Turn "Power" switch off.
2. Install a control and secure it in the tester with the chassis retainer
3. Refer to the description of operation and the programming sequence chart in the Fireye bulletin for the control being tested.
4. Turn on the "Power" switch and program the complete operation of the unit.
5. Installation and operating instructions provided in each Fireye Control bulletin will assist with testing and troubleshooting.
6. Ignition failure test can be simulated by turning the "signal switch" off (center position) and initiating a normal start up cycle. At the appropriate time the ignition circuits will be energized for the duration of the trial for ignition period, and then de-energized. The main fuel valve circuit will not be energized and the control will lockout.
7. Main flame failure test can be simulated by turning the "signal switch" off, during a normal firing period. The main fuel valve circuit will be de-energized within 4 seconds and the control will lockout.

## PANEL LAYOUT





## DIMENSIONS



## NOTICE

When Fireeye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireeye warranty, as stated in its General Terms and Conditions of Sale, pertains only to the Fireeye 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 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 MERCHANTABILITY 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 Fireeye shall be limited exclusively to the right to replacement or repair as above provided. In no event shall Fireeye be liable for consequential or special damages of any nature that may arise in connection with such product or part.



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