



Kentec Electronics Ltd XT+ Releasing Control Unit Instruction Manual

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Kentec Electronics Ltd XT+ Releasing Control Unit



Product Information

The XT+ Releasing Control Unit is a product manufactured by Kentec Electronics Ltd. It is designed to provide control and monitoring capabilities for fire suppression systems. The unit features various terminals and wiring connections to facilitate the integration of different components.

Key Features

- Addressable modules with DIP switches for easy configuration
- Power supply connections for AC input and field terminations
- Standby batteries for backup power
- Alarm terminals for connecting audible loads
- Extinguishing circuits for controlling releasing agents
- Top and bottom terminals for various control and monitoring functions
- CIE serial communication for data transfer

Product Usage Instructions

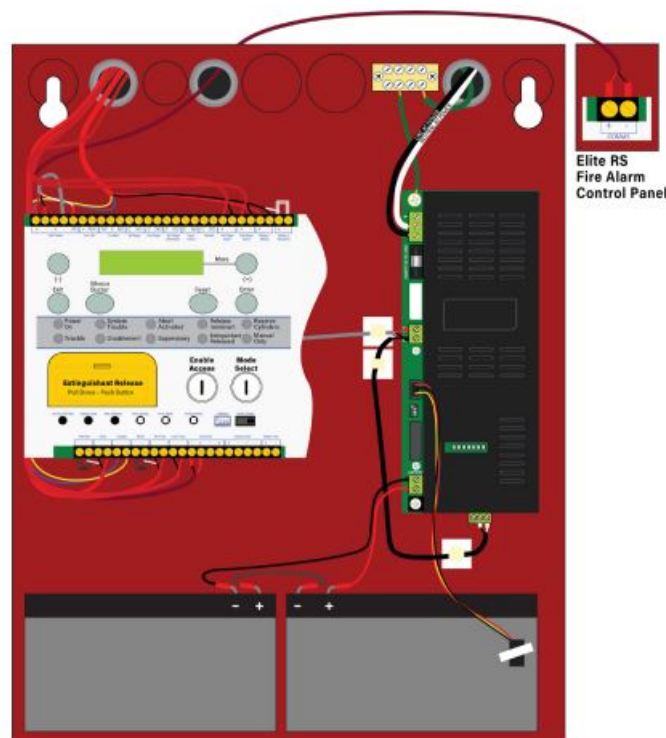
1. **Setting the Module Address:** Set the address DIP switches on each module to a unique address between 1 and 15.
2. **Power Supply:** Connect 18 to 14 AWG wiring for all field terminations except the AC input. Connect 14 AWG wiring for line, neutral, and ground terminations of the AC input.
3. **Standby Batteries:** Use two standby batteries wired in series. The batteries should be 12 VDC, valve-regulated lead acid type with a maximum amp hour capacity of 60 AH. Connect the batteries to the unit for standby operation. The battery charge voltage should be 27.6 VDC.
4. **Alarm Terminals:** Use the provided terminals for connecting nonpulsing audible loads. Each terminal provides a regulated 24V DC, with a maximum output of 850 mA. Ensure to use a 10k Ohm resistor for the required

end-of-line (EOL) connection.

5. **Extinguishing Circuits:** Connect the Exting. 1 (Main) and Exting. 2 (Reserve) circuits to releasing agent control valves. Each circuit provides regulated 24V DC at a maximum output of 1A. Use an EOL diode for the required end-of-line connection.
6. **Top Terminals:** The top terminals provide various power and control outputs. Refer to the product manual for detailed specifications of each terminal.
7. **Bottom Terminals:** Remove the jumper LK1 from each module, unless it is the last device on the CIE serial bus. The bottom terminals are designed for different control and monitoring functions. Refer to the product manual for detailed specifications of each terminal.
8. **CIE Serial:** Use a two-wire RS485 connection for CIE serial communication. Ensure that the data voltage is 3.3V and current-limited. The communication is supervised and operates in a Class B mode.

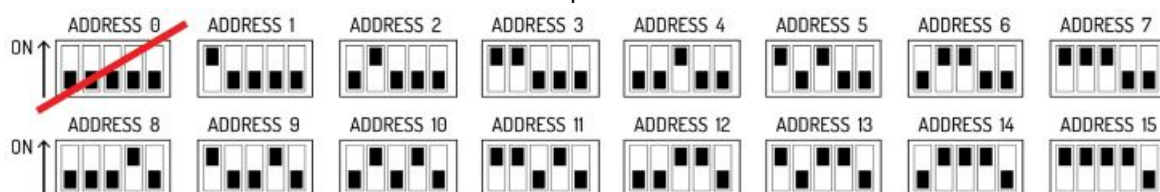
WIRE ROUTING

Because the fascia is hinged, route all wiring to the left as shown, so that the fascia can be opened without disconnecting the wiring. Power-limited conductors must be installed using Types FPL, FPLR, FPLP, or equivalent cables. When connecting field wiring, separate high and low voltage wiring in the enclosure with a minimum gap of 0.25". Do not route low voltage cabling through the same conduit as AC lines. AC power lines should be threaded through a dedicated conduit. Refer to this illustration when connecting any wiring.



SETTING THE MODULE ADDRESS

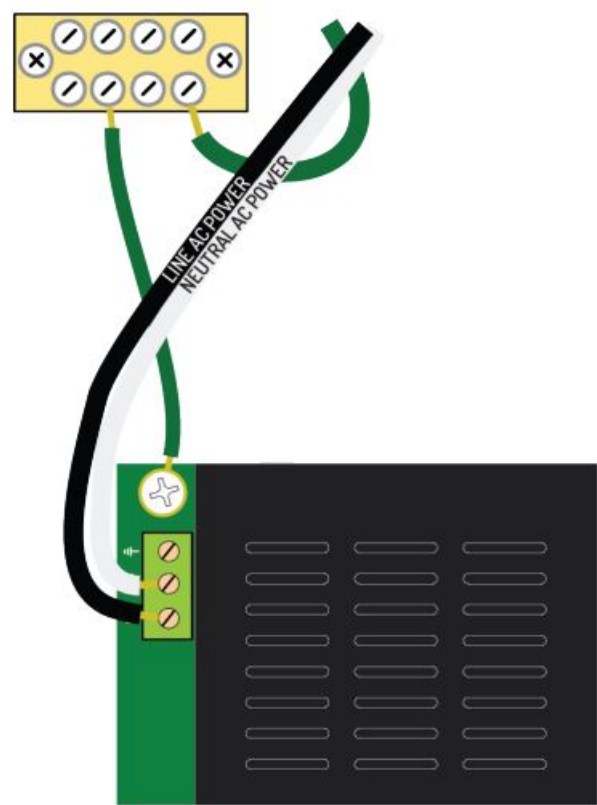
Set the address DIP switches on each module to a unique address between 1 and 15.



POWER SUPPLY

Connect 18 to 14 AWG wiring for all field terminations except the AC input. Connect 14 AWG wiring for line, neutral, and ground terminations of the AC input.

AC SUPPLY CIRCUIT SPECIFICATIONS	
L	AC Power 1.83 Amps Max @ 120 V, 50/60 Hz 0.915 Amps Max @ 240 V, 50/60 Hz
N	Neutral
G	Earth Ground



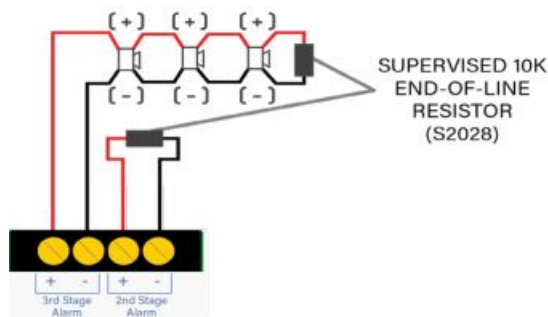
STANDBY BATTERIES

RECHARGABLE BATTERY SPECIFICATIONS	
Standby Battery Type	12 VDC, valve-regulated lead acid
Standby Battery Charging	Two standby batteries wired in series
Maximum Amp Hour Capacity	60 AH maximum
Charge Current	1.25 A Max
_Output Current	4 A Max
Standby Operating Time	24 Hours
Battery Charge Voltage	27.6 VDC

3RD STAGE ALARM / 2ND STAGE ALARM

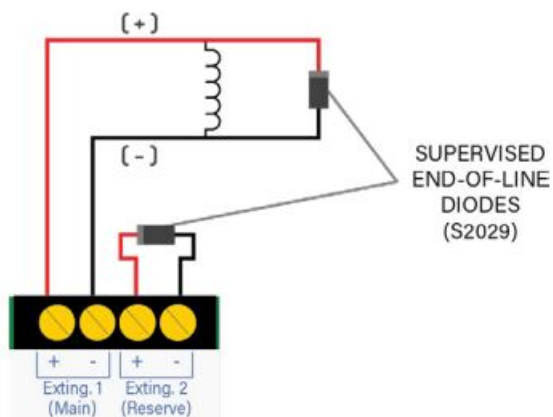
- Each terminal provides a regulated 24V DC, 850 mA maximum output for non-pulsing audible loads.

- Required EOL: 10k Ohm Resistor (S2028)
- Maximum Line Loss: 4V
- Maximum RMS Current for any Single Appliance: 300 mA

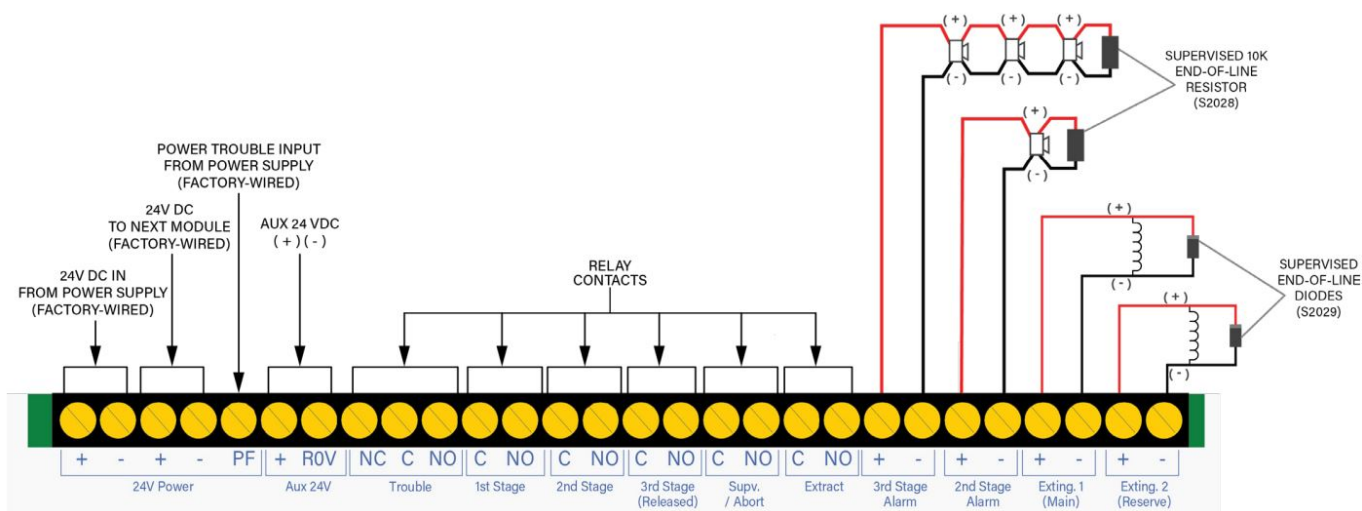


EXTING. 1 (MAIN) AND EXTING. 2 (RESERVE)

- The Exting. 1 and Exting. 2 are class B circuits, each providing regulated 24V DC at 1A maximum. They can be connected to a releasing agent control valves as shown.
- Required EOL: EOL Diode (S2029)



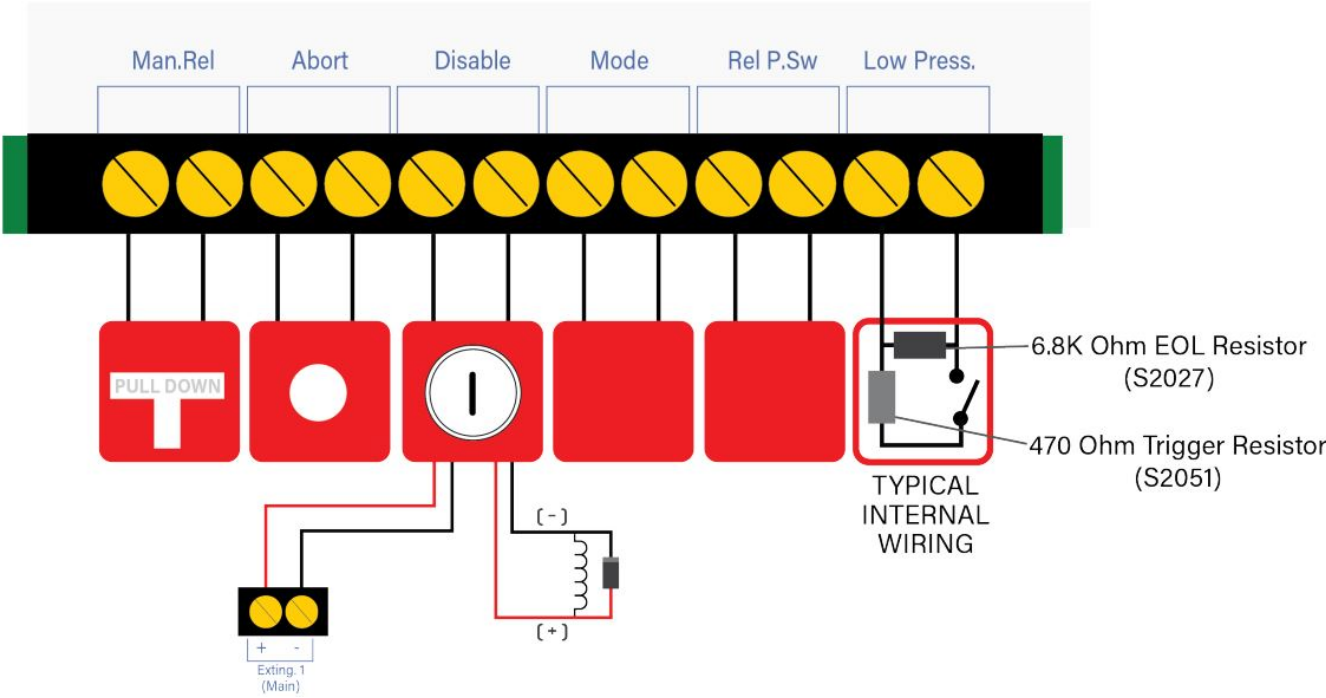
TOP TERMINALS

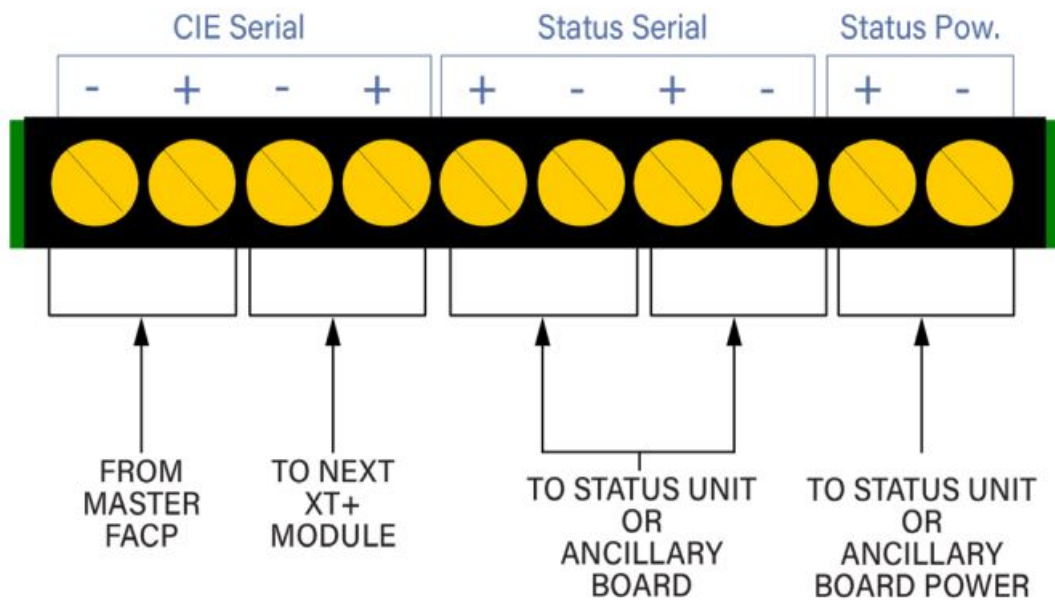


TOP TERMINAL SPECIFICATIONS

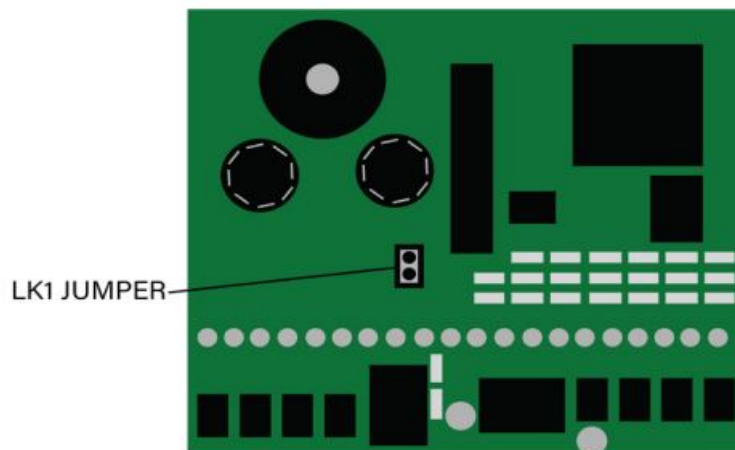
TOP TERMINAL SPECIFICATIONS	
24V Power	24V Regulated, continuous (power input)
Aux 24V	24V Regulated @ 850mA Max, Power-limited
Trouble	Volt-free contact rated at 30V DC, 1A, Resistive
1st Stage	Volt-free contact rated at 30V DC, 1A, Resistive
2nd Stage	Volt-free contact rated at 30V DC, 1A, Resistive
3rd Stage (Released)	Volt-free contact rated at 30V DC, 1A, Resistive
Supv. / Abort	Volt-free contact rated at 30V DC, 1A, Resistive
Extract	Volt-free contact rated at 30V DC, 1A, Resistive
3rd Stage Alarm	24V Regulated @ 850mA Max, Power-limited
2nd Stage Alarm	24V Regulated @ 850mA Max, Power-limited
Exting. 1 (Main)	24V Regulated @ 1A Max, Power-limited
Exting. 2 (Reserve)	24V Regulated @ 1A Max, Power-limited

BOTTOM TERMINALS





IMPORTANT! Remove the jumper LK1 from each module unless the module is the last device on the CIE serial bus.



BOTTOM TERMINAL SPECIFICATIONS	
Man. Rel Abort Disa ble Mode Rel P. Sw Low Press.	Class B Supervised for opens, shorts, and grounds End-of-Line device: 6.8K Ohm resistor (S202 7) Activation device: 470 Ohm resistor (S2051) Maximum Voltage / Current: 24V DC / 50 mA Maximum Wiring Impedance for Each Circuit: 50 Ohms Power-limited
CIE Serial	Two wire, RS485 connection, Data 3.3 V, current-limited, Class B, supervised
Status Serial	Two wire, RS485 connection, Data 3.3 V, current-limited, Class B, supervised
Status Pow.	24V Regulated @ 850mA Max, Power-limited

ACCESSORIES	
K1822-10 K1822-40	Ancillary Board with Enclosure
K1823-10 K1823-40	Abort Switch, Suitable for Releasing

K1821-11 K1821-12 K1821-13 K1821-14 K1821-41 K1821-42 K1821-43 K1821-44	XT+ Status Unit Surface mount, Red Flush mount, Red Surface mount with Keyswitch, Red Flush mount with Keyswitch, Red Surface mount, Grey Flush mount, Grey Surface mount with Keyswitch, Grey Flush mount with Keyswitch, Grey
K1832-10 K1832-40	Manual Extinguishant Disablement Switch
K1824-10 K1824-11 K1824-40 K1824-41	Sequential Activator, Suitable for Releasing Standard cabinet, Red Large cabinet, Red Standard cabinet, Gray Large cabinet, Gray
COMPATIBLE RELEASING DEVICES	
ASCO	8210G207
ASCO	HV2185328
Fire Eater	305451 Ci IS8B Solenoid and Manual
Fire Eater	305450 Ci IS8B Solenoid
Firetrace, TLX Technologies	Linear Actuator-FTF500125 or 01-501462; TLX Technologies PA0128-5
Firetrace	FTF500024, Solenoid, 24VDC, 11W
Firetrace	FTF501224, Solenoid, 24VDC, 15W
Janus	18481
Kidde	B6793-859: The B6793-859 is equivalent to Kidde-Fenwall 81-100000-001
Kidde	K-45-8017: The K-45-8017 is equivalent to Kidde-Fenwall 486500-01
Safety Hi-Tech	SH21006404
Safety Hi-Tech	SH21006403
Sevo Systems. TLX Technologies	SOL EA45: The SOL EA45 is equivalent to Sevo Systems 510006 and TLX Technologies PA0036-3
Snap-Tite, Sevo Systems, Orient Chemori, Solenoid Solutions	2823A-2NB-A4F6
Victaulic	Series 753-E FireLock
Viking	11596
Viking	11595
Viking	11592
Viking	11602
Viking	11601

Viking	11591
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SPECIAL RELEASING ACCESSORIES

SPECIAL RELEASING ACCESSORIES	
Kentec Electronics Sequential Activator	<p>K1824-10 or -40 (Red or Gray) K1824-11 or -41 (Red or Gray) FP-SA/GEN3.0 (Gray)</p> <p>FP-SA/GEN3.0R (Red) FP-SA/GEN3M8 (Gray)</p> <p>FP-SA/GEN3M8R (Red)</p>
FirePro Fixed Condensed Aerosol Extinguishing System Units	<p>FP-20SE (FNX-20S) FP-20T (FNX-20T) FP-40S (FNX-40S) FP-40T (FNX-40T) FP-80S (FNX-80S) FP-80T (FNX-80T) FP-100S (FNX-100S) FP-200S (FNX-200S) FP-500S (FNX-500S) FP-1200 (FNX-1200)</p> <p>FP-1200S (FNX-1200S) FP-1200T (FNX-1200T) FP-1200TS (FNX-1200TS) FP-2000 (FNX-2000)</p> <p>FP-2000S (FNX-2000S) FP-2000T (FNX-2000T) FP-2000TS (FNX-2000TS) FP-3000 (FNX-3000)</p> <p>FP-3000S (FNX-3000S) FP-3000T (FNX-3000T) FP-3000TS (FNX-3000TS) FP-4200T (FNX-4200T) FP-4200TS (FNX-4200TS) FP-5700 (FNX-5700)</p> <p>FP-5700S (FNX-5700S) FP-5700T (FNX-5700T)</p> <p>FP-5700TS (FNX-5700TS)</p>
<i>Please refer to instructions included with Sequential Activator for proper wiring.</i>	

SPECIAL RELEASING ACCESSORIES (continued)		
Fireway Inc.	Stat-X, 30E	15100
STAT-X Aerosol Fire	Stat-X, 60E	15110
Suppression System	Stat-X, 60ME	15111
Stat-X, 100E		15120
Stat-X, 250E		15130
Stat-X, 500E		15140
Stat-X, 1000E		15150
Stat-X, 1500E		15160
Stat-X, 2500E		15170
Stat-X EX, 30E, CLI DIV2/Zone 2, Brass Elbow		11880
Stat-X EX, 30E, CLI DIV2/Zone 2, SS Elbow		11885

Stat-X EX, 60E, CLI DIV2/Zone 2, Brass Elbow	11890
Stat-X EX, 60E, CLI DIV2/Zone 2, SS Elbow	11895
Stat-X EX, 60ME, CLI DIV2/Zone 2, Brass Elbow	11900
Stat-X EX, 60ME, CLI DIV2/Zone 2, SS Elbow	11905
Stat-X EX, 100E, CLI DIV2/Zone 2, Brass Elbow	11910
Stat-X EX, 100E, CLI DIV2/Zone 2, SS Elbow	11915
Stat-X EX, 250E, CLI DIV2/Zone 2, Brass Elbow	11920
Stat-X EX, 250E, CLI DIV2/Zone 2, SS Elbow	11925
Stat-X EX, 500E, CLI DIV2/Zone 2, Brass Elbow	11930
Stat-X EX, 500E, CLI DIV2/Zone 2, SS Elbow	11935
Stat-X EX, 1000E, CLI DIV2/Zone 2, Brass Elbow	11940
Stat-X EX, 1000E, CLI DIV2/Zone 2, SS Elbow	11945
Stat-X EX, 1500E, CLI DIV2/Zone 2, Brass Elbow	11950
Stat-X EX, 1500E, CLI DIV2/Zone 2, SS Elbow	11955
Stat-X EX, 2500E, CLI DIV2/Zone 2, Brass Elbow	11960
Stat-X EX, 2500E, CLI DIV2/Zone 2, SS Elbow	11965

Please refer to instructions included with Sequential Activator for proper wiring.

REFERENCES

Reference the following documentation for installing, operating, and configuring this device with the XT+ Releasing Control Unit:

- *XT+ Releasing Control Unit Installation Manual*, MAN-1252KE
- *XT+ Releasing Control Unit Operating Instructions*, MAN-1253KE

For technical support, contact Kentec Electronics, Ltd at +44 (0)1322 222121 or techsupport@kentec.co.uk.

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Documents / Resources

