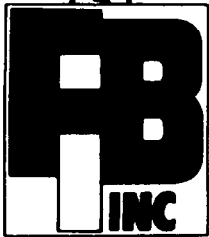


Model

XL-1234

**INSTALLATION
INSTRUCTIONS**



FIRE BURGLARY INSTRUMENTSTM INC.

50 Engineers Road, Hauppauge, N.Y. 11788

516-582-6161

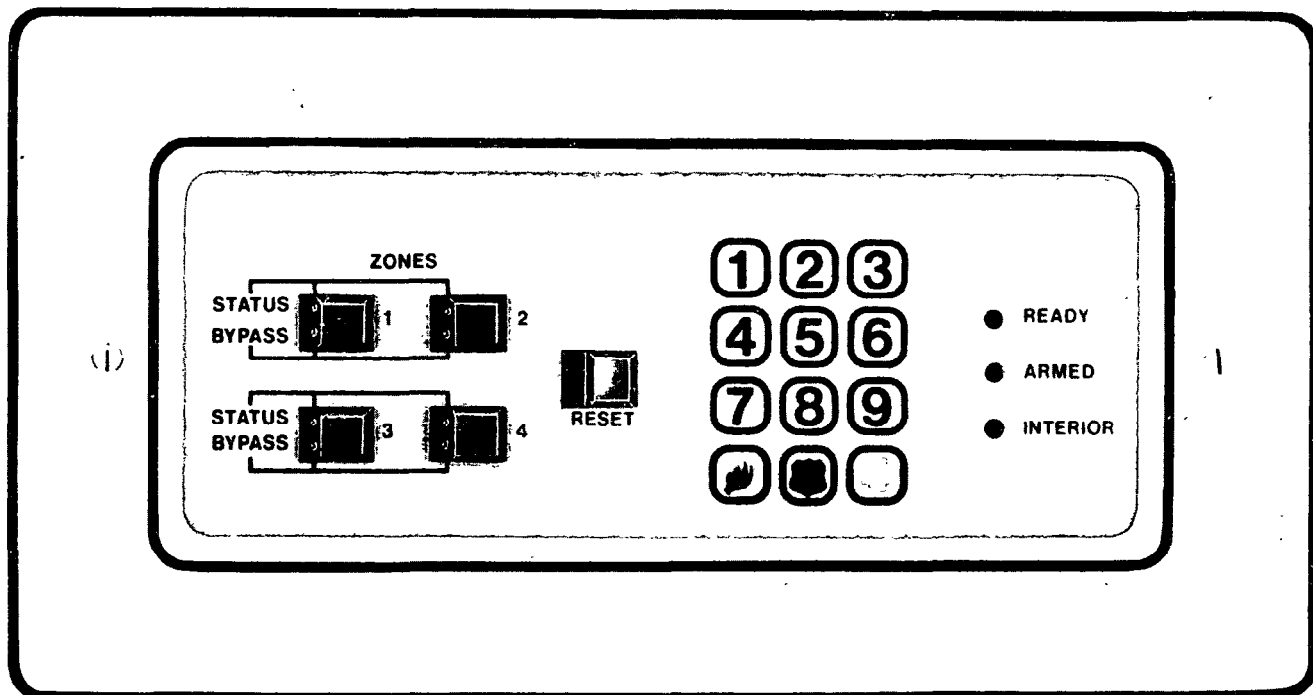
800-645-5430

“WE DO WHAT THEY DON’T”

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FIG.1






The Model XL1234 is a combination digital keypad and four zone expander designed explicitly to work in conjunction with the XL1215. The numerals and emergency symbols of the keypad as well as the three functional LEDs for ready, armed, and interior are mounted on the front plate of the XL1234. The four bypass switches and their respective LEDs for loop status and bypass indication are also mounted on the front of the XL1234 as well as the reset button. The connections of the XL1234 digital keypad to the XL1215 will be discussed first, followed by the connections of the XL1234 four zone expander to the XL1215.

The Digital Key is designed to arm/disarm and bypass the Model XL1215 Control Panel, utilizing two separate four digit field programmable codes. The code must be entered in sequence. If a wrong digit or digit out of sequence is pressed, the code must be re-entered from the first digit. Any digits entered will be kept in memory, as long as power is not interrupted.

Three LED's, RED for System Status, GREEN for Loop Condition, and YELLOW for Bypass are provided along with a buzzer that sounds when digits of Keypad are pressed and can be used for pre-alarm warning of Delay Loop.

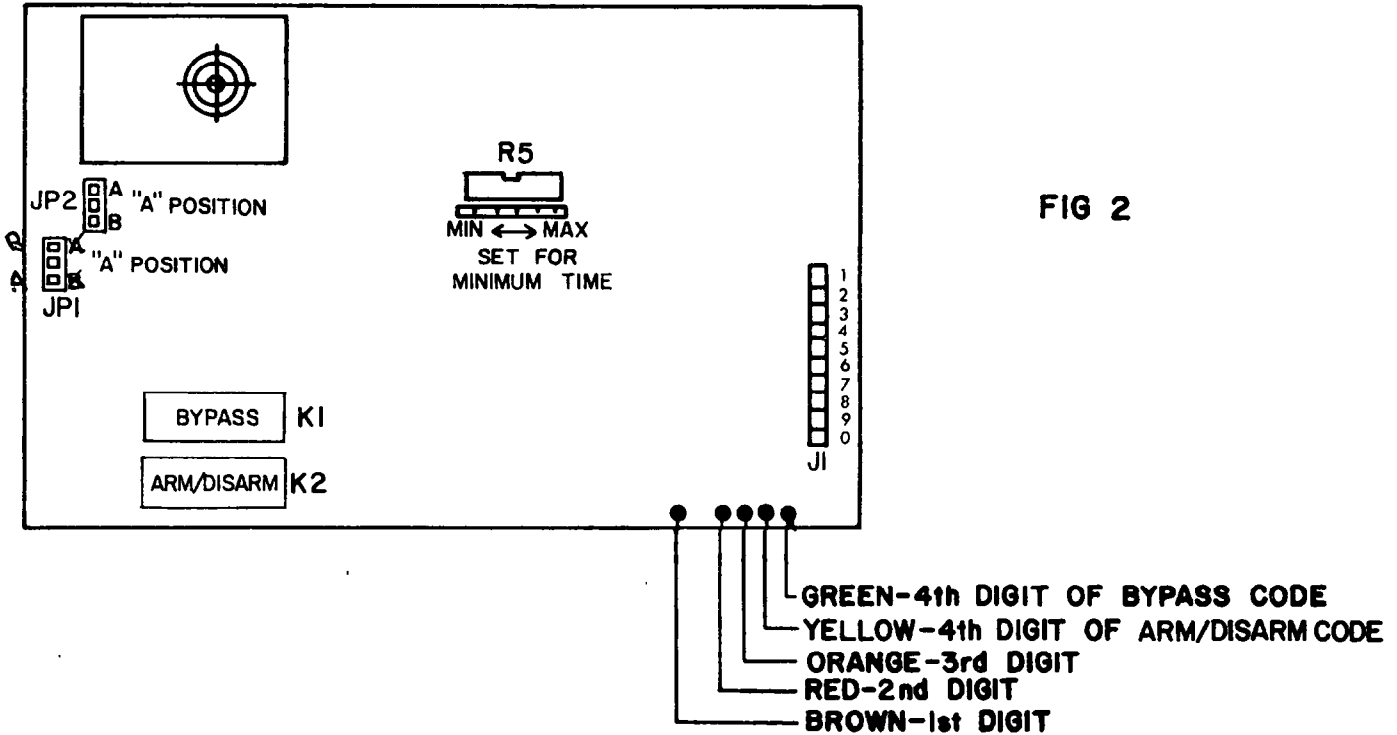
An exclusive feature of the keypad, is the pre-set two button emergency outputs for POLICE, and FIRE. MEDICAL is activated by pushing one button. The Police output can be used to activate the Silent and Audible Panic Circuits while the fire output will trip the fire circuit. Medical output will activate auxiliary channel.

XL 1215	DIGITAL KEYPAD	FUNCTION
21	Brown	Voltage to activate buzzer JP1 should be in "A" position.
8	Red	N.O. Relay contacts used for arm/disarm JP2 should be in "A" position and R5 trimpot turned counter clockwise for minimum time.
9	Orange	
No Connection	Yellow	Not used (N.C. Relay Contact).
9	Black (+)	Voltage to activate Red System on LED is applied to these wires.
23	White (-)	
9	White/Red (+)	Voltage to activate Green Loop Condition LED is applied to these wires.
22	White/Brown (-)	
9	White/Yellow (+)	Input voltage to power keypad is applied to these wires.
6	White/Orange (-)	
13	White/Green	Medical output - when  is pressed, auxiliary circuit can be activated.
* 4 - Audible	White/Black	Police output - when  and digit "7" are pressed simultaneously, silent or audible panic circuit can be activated.
* 10 - Silent	White/Black	
18	White/Blue	Fire output - when  and digit "7" are pressed simultaneously, Fire Circuit can be activated.

Yellow/Brown	Normally Closed Contact	To be used to shunt out certain areas of protection. Activated with bypass code. Yellow LED will follow contacts.
Yellow/Orange	Common	
Yellow/Red	Normally Open Contact	

*** CONNECT WHITE/BLACK WIRE
TO EITHER TERM. 4 or TERM. 10,
NOT BOTH**

**WHEN AUDIBLE PANIC IS USED,
SEE XL-1215 AUDIBLE PANIC SECTION.**



SETTING THE CODE:

The two codes consist of four digits which are set by inserting the properly colored wires into the appropriate holes in the J1 connector as follows:

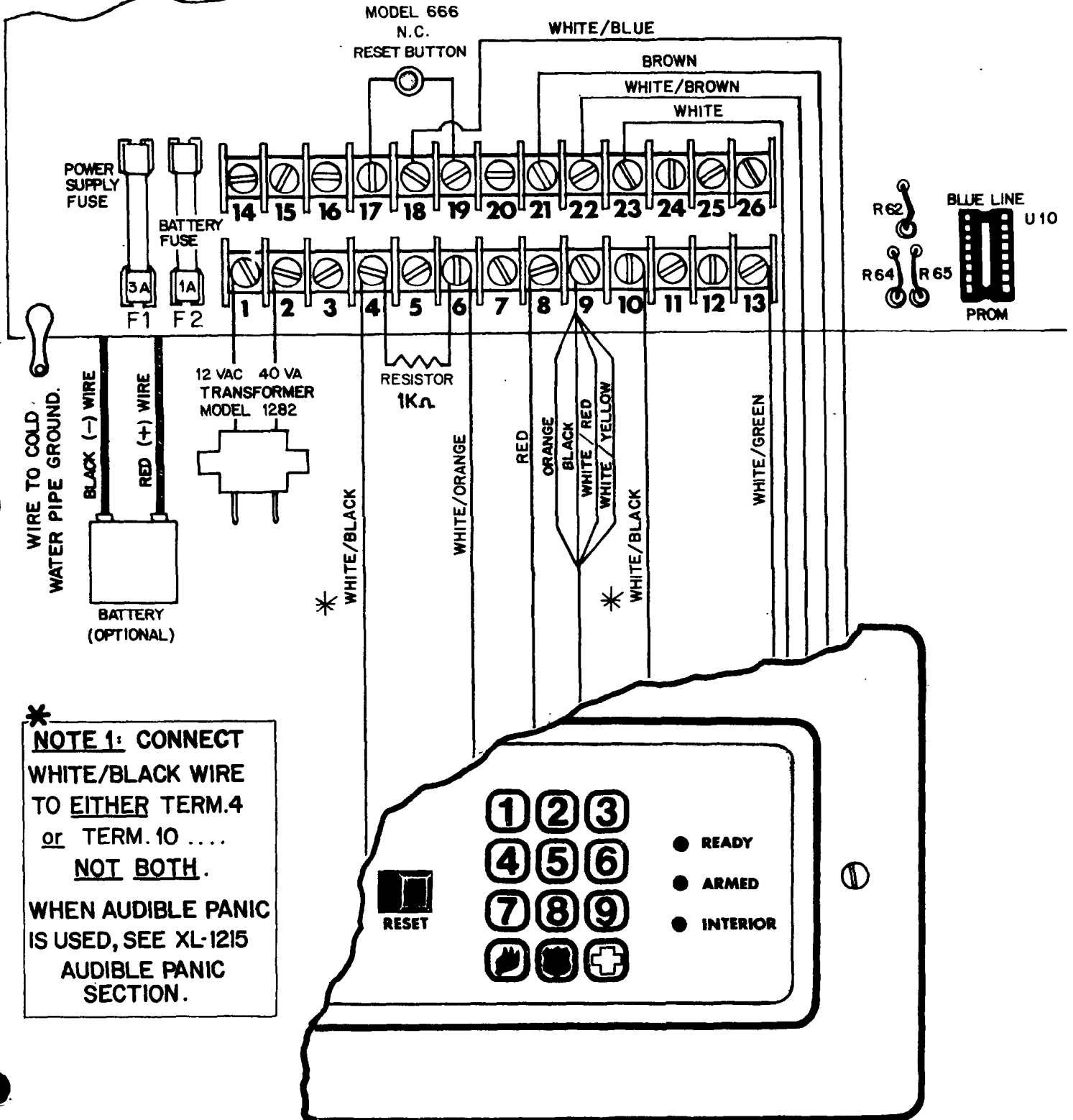
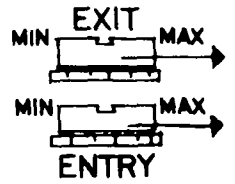
- Brown Wire - 1st Digit
- Red Wire - 2nd Digit
- Orange Wire - 3rd Digit
- Yellow Wire - 4th Digit of Relay Arm/Disarm Code
- Green Wire - 4th Digit of Bypass Code

The first three digits of both codes are the same. The fourth digit of each code differs. Only the digits 1 thru 9 excluding 7 can be used. As digits are pressed, the buzzer will sound verifying the digit has been entered.

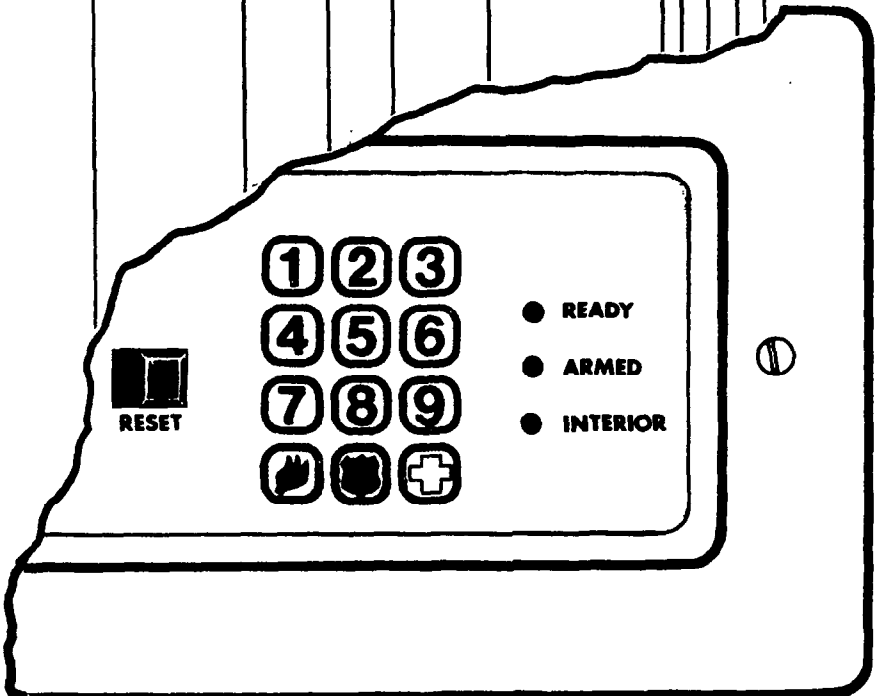
- Set JP1 in A
- JP2 in A
- R5 to minimum

FIG 3

XL-1215 P.C. BOARD LAYOUT XL-1234 KEYPAD WIRING



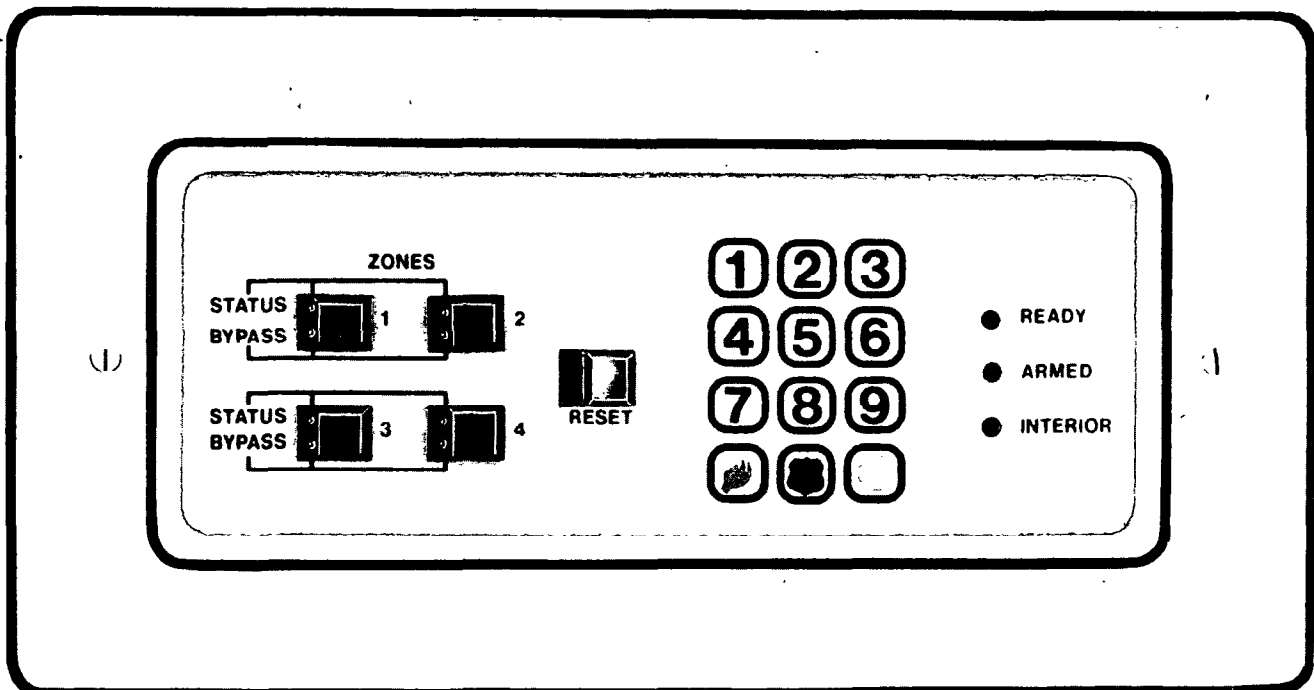
*** NOTE 1: CONNECT WHITE/BLACK WIRE TO EITHER TERM.4 or TERM.10 NOT BOTH.**
WHEN AUDIBLE PANIC IS USED, SEE XL-1215 AUDIBLE PANIC SECTION.



XL 1234 EXPANDER SECTION

The four zone expander incorporates red loop status LEDs by zone and green bypass LEDs per zone on each bypass switch respectively. The operation of these LEDs and switches is laid out below.

Circuit Indicator	Red Leds	In the unarmed condition the red circuit led will light while a zone is being violated. In the armed condition the red led will come on and lock on until the zone is restored and the system disarmed and reset.
Bypass Indicator	Green Led	Zone bypass led comes on when the bypass switch is activated.
Bypass Switch		Each zone has its own bypass switch that is supervised. The panel will go into alarm if a zone is bypassed while the panel is armed.
Reset Switch		When a loop is violated in the armed condition the red led will come on and lock on. After disarming the panel and restoring the loop the reset switch can be activated to shut off the red led.
Output Relay		The output relay in the normal condition is energized to provide supervised operation. The relay follows the loop in the armed and disarmed condition.

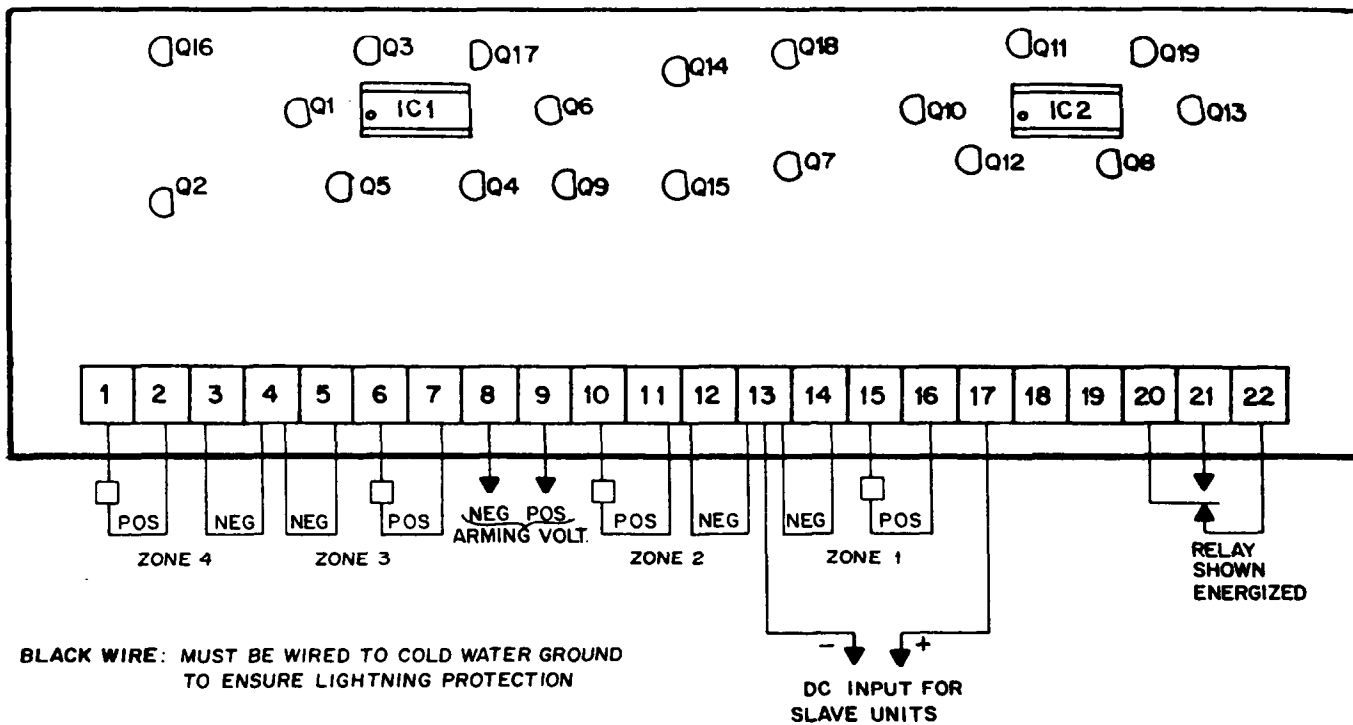


WIRING OF XL1234 FOUR ZONE EXPANDER

TER.	FUNCTION	DESCRIPTION
1-2	Zone 4 Positive closed protective loop	Wire closed circuit contacts in series with these terminals. Maximum loop resistance is 2k ohm.
2-4	Zone 4 Open protective loop	Wire open circuit contacts in parallel with these terminals.
3-4	Zone 4 Negative closed supervisory loop	Do not wire contacts in this loop. To be used only to supervise the protective loop or jump out at panel. Maximum resistance is 20 ohm.
6-7	Zone 3 Positive closed protective loop	Wire closed circuit contacts in series with these terminals. Maximum loop resistance is 2K ohm.
4-7	Zone 3 Open protective loop	Wire open circuit contacts in parallel with these terminals.
4-5	Zone 3 Negative closed supervisory loop	Do not wire contacts in this loop. To be used only to supervise the protective loop or jump out at panel. Maximum loop resistance is 20 ohm.
10-11	Zone 2 Positive closed protective loop	Wire closed circuit contacts in series with these terminals. Maximum loop resistance is 2k ohm.
11-13	Zone 2 Open protective loop	Wire open circuit contacts in parallel with these terminals.
12-13	Zone 2 Negative closed supervisory loop	Do not wire contacts in this loop. To be used only to supervise the protective loop or jump out at panel. Maximum loop resistance is 20 ohm.
15-16	Zone 1 Positive closed protective loop	Wire closed circuit contacts in series with these terminals. Maximum loop resistance is 2k ohm.
13-16	Zone 1 Open protective loop	Wire open circuit contacts in parallel with these terminals.
13-14	Zone 1 Negative closed supervisory loop	Do not wire contacts in this loop. To be used only to supervise the protective loop or jump out at panel. Maximum loop resistance is 20 ohm.
8	Negative arming voltage	Negative arming voltage from control panel.
9	No Connections
13-17	D.C. input voltage	Wire D.C. voltage from control panel to these terminals 17(+), 13 (-).
18-19	No Connections
20-21	N.O. relay output	N.O. relay output that closes when any loop is violated. Wire across N.O. loop terminals of control panel.
20-22	N.C. relay output	N.C. relay output that opens when any loop is violated. Wire in series with N.C. loop of control panel.

NOTE: Each XL1234 draws approximately 320ma.

XL-1234 EXPANDER



Connections of Four Zone Expander to XL1215

XL1215	4 Zone Expander	Function
9	17	Input voltage to power expander is here.
6	13	
23	8	Arming voltage for expander.
24	20	Output relay connection in series with XL1215 instant loop.
25	22	

NOTE: WHEN NEGATIVE ARMING IS USED AT TERMINAL 8 OF EXPANDER ... NO HOOK-UP SHOULD BE MADE AT POSITIVE ARMING TERMINAL 9