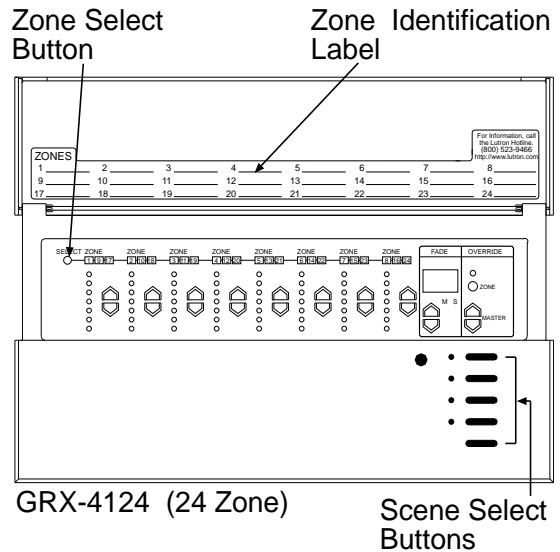




GRX-4116 and GRX-4124 Instructions and Wiring

Description

The 16 and 24 zone GRAFIK Eye® 4000 Series Control Units offer an expanded number of zones that can be controlled from a single wall station. The zone intensity LED's on the GRX-4116 or GRX-4124 will display the light level of eight zones at a time. Other sets of zones may be displayed and controlled by pressing the Zone Select Button. Both Control Units have optional Zone Lock features described on a separate sheet entitled Zone Lock Capability and Power Options. The following instructions on Addressing and Assigning Zones are critical for the correct setup of a GRAFIK Eye system.



Please Review Pages 2-3 for proper installation and wiring of your 4000 Series Control Units. For more information see GP Installation Guide packaged with panel.

Addressing

The GRX-4116 and the GRX-4124 Control Units take multiple, consecutive addresses. The GRX-4116 Control Unit takes up two consecutive addresses, and the GRX-4124 requires three. To ensure there are sufficient addresses available, any GRX-4116 and/or GRX-4124 Control Units in the system should be addressed first. Address the Control Unit as follows:

- Push and hold the top and bottom scene buttons until the scene LED's begin to cycle.
- With scene LED's still cycling, push **FADE** button until 'A-' is displayed in the **FADE** window. If multiple addresses flash in succession, proceed to step D because the Control Unit is already addressed.
- Push **MASTER** button once. The control will automatically choose the next set of available addresses. Use **MASTER** and to scroll through the listing of available addresses. If there are not enough addresses remaining on the link, the address window will remain 'A-'. *The Control Unit is not properly addressed if 'A-' is displayed.*
- Push and hold the top and bottom buttons until the LED's stop cycling.
- Repeat Steps A-D for all GRX-4116 and GRX-4124 Control Units, then address any other GRAFIK Eye Control Units on the system.

Assigning Zones

When assigning zones with the GP Panel's Circuit Selector (see GP Installation Guide), use the following chart, which shows how zones are displayed on the Circuit Selector:

If Control Unit's Addresses are...	Zones on the Control Unit...	Will appear on the Circuit Selector
A1, A2, A3	1-8	A11 - A18
	9-16	A21 - A28
	17-24	A31 - A38
A2, A3, A4	1-8	A21 - A28
	9-16	A31 - A38
	17-24	A41 - A48
↓ A6, A7, A8	1-8	A61 - A68
	9-16	A71 - A78
	17-24	A81 - A88

Note: The above chart is for a GRX-4124, which uses three addresses. A GRX-4116 will have two addresses.



For additional information on addressing and programming of the GRAFIK Eye 4000 Series system, see the chart entitled "Set Address and Function Switches" on page 4.



GRX-4000 System Wiring

GRX Wiring

2 #12AWG (2.5mm²) FROM TERMINALS 1 TO 1, AND 2 TO 2

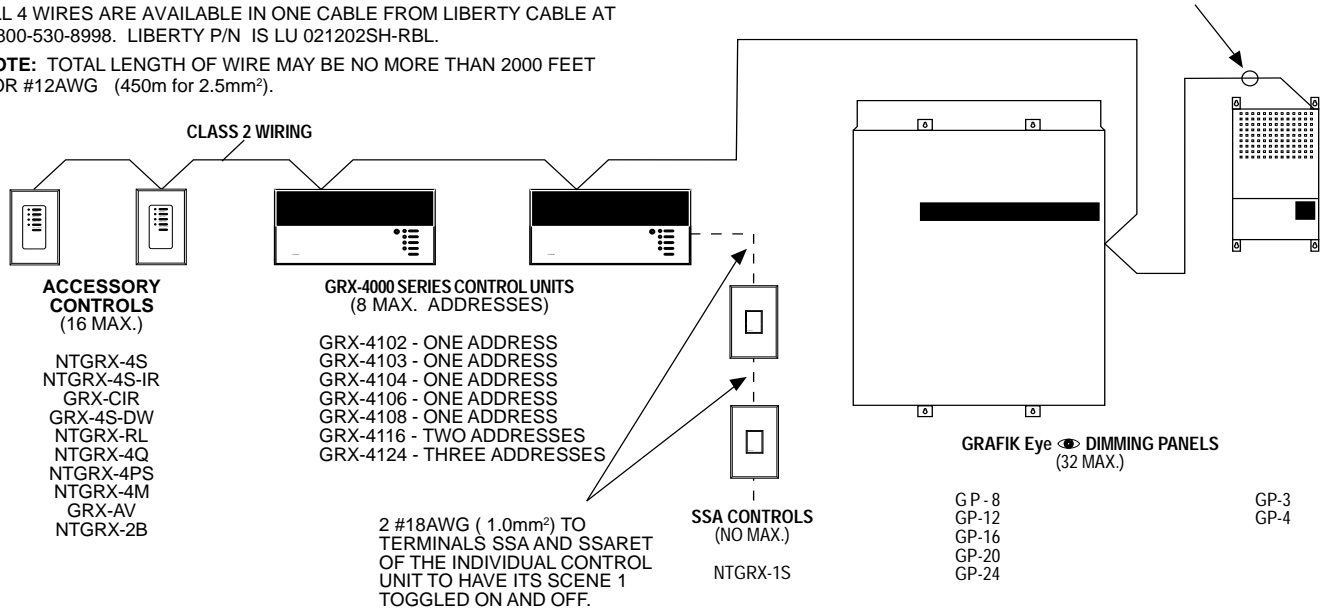
2 #18AWG (1.0mm²) TWISTED SHIELDED PAIR FROM TERMINALS 3 TO 3, AND 4 TO 4 - BELDEN #9461 OR ALPHA #221 ARE RECOMMENDED.

ALL 4 WIRES ARE AVAILABLE IN ONE CABLE FROM LIBERTY CABLE AT 1-800-530-8998. LIBERTY P/N IS LU 021202SH-RBL.

NOTE: TOTAL LENGTH OF WIRE MAY BE NO MORE THAN 2000 FEET FOR #12AWG (450m for 2.5mm²).

FOR PANEL TO PANEL WIRING, INCLUDE AN ADDITIONAL 1 #18AWG (1.0mm²) BETWEEN PANELS FROM TERMINALS 5 TO 5.

NOTE: WIRING LIMITATIONS INCLUDE PANEL TO PANEL WIRING.



Caution - Wire in a daisy-chain arrangement as shown - no variations. Do not substitute cables!

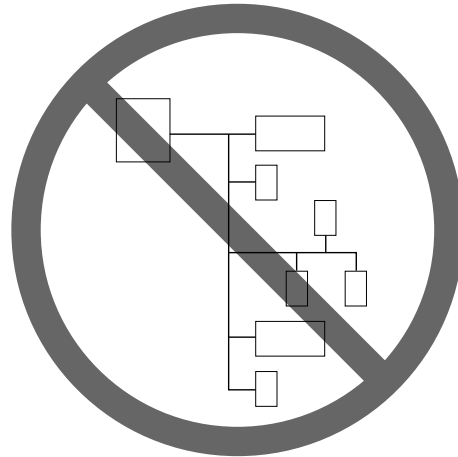
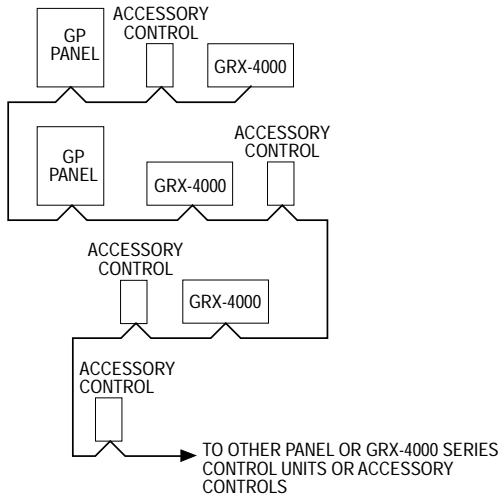
Notes:

- All control wiring is Class 2 / SELV. Do not place any of these wires in with line voltage (mains voltage) wiring.
- Panel can be in the middle of the wiring as opposed to the end as shown.
- Shielding must not be connected to Ground (Earth). It is easiest to connect the bare drain wires and cut off the outside shield.
- Make wire connections inside the wallbox and GP panel or in a junction box (provided by others) within 8ft. (2.4m) from the terminals.



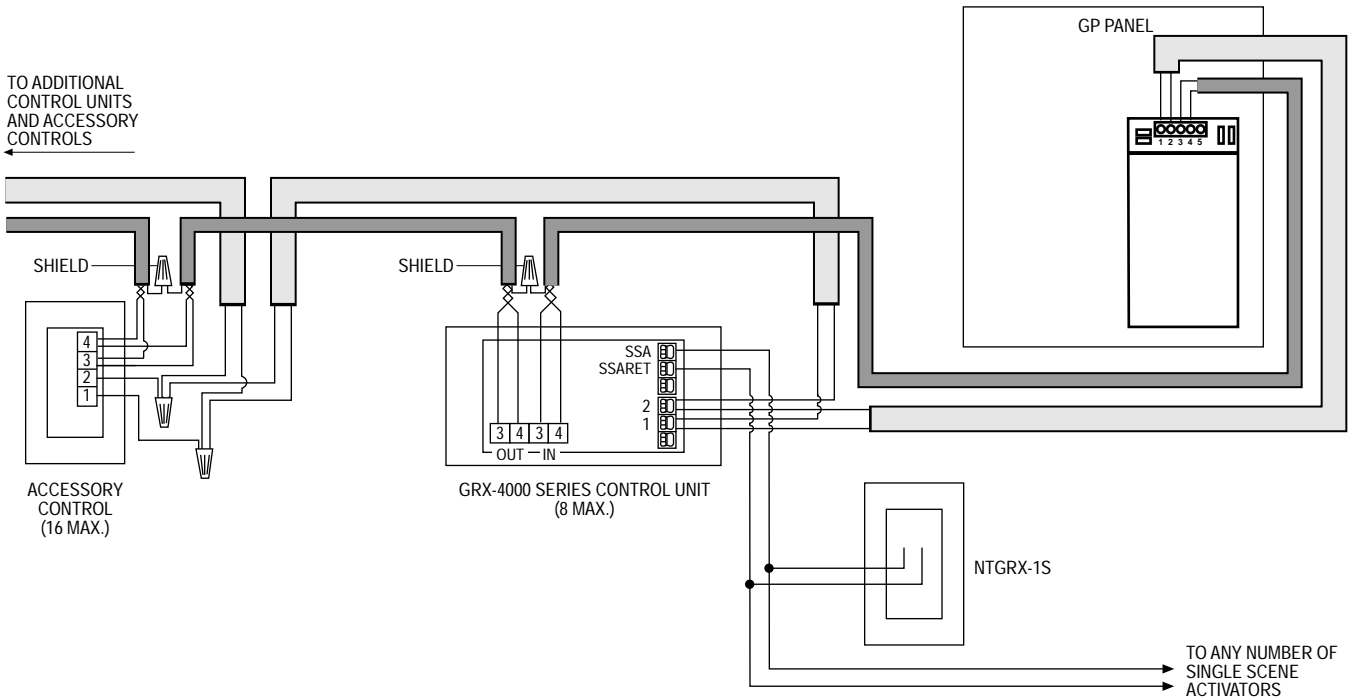
Accessory to Control Unit to Panel Wiring

Correct Wiring Technique



WIRING MUST BE DAISY-CHAINED, NOT BRANCHED OR HOME RUN.

1 to 1 Wiring



Notes:

- Connections are made inside the Accessory Control's backbox or in a junction box (provided by others) located no more than 8 ft. (2.4m) from the Accessory Control.
- Wiring shown must not be run in the same raceway as line (mains) voltage wiring.
- Total Control wiring length is not to exceed 2000 ft. (450m).
- Panels can be in the middle of a control link. It does not need to be at an end.
- Shielding must be connected at each junction, but not earth grounded.



Set Address and Function Switches



Caution - Do not install controls in wallbox without setting the Address and Function Switches.

Accessory Control	Address Set by Switches on Back of Control	Function Set by Switches on Back of Control			
		 5 6 Factory Set			
NTGRX-4S, GRX-4S-DW NTGRX-4S-IR w/GRX-IT, GRX-CIR w/GRX-IT	Control 1	Activate Scenes 1-4 and Off	Activate Scenes 5-8 and Off	Activate Scenes 9-12 and Off	Activate Scenes 13-16 and Off
	Control 2				
	Control 3				
	Control 4				
	Control 5				
NTGRX-RL	Control 6	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Control 7				
NTGRX-4Q	Control 8	Sequence Scenes 1-4	Not Applicable	Not Applicable	Sequence Scenes 5-16
NTGRX-4PS	Control 9	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Control 10				
NTGRX-4M	Control 11	Fifth button turns Control Units On only.	Not Applicable	Not Applicable	Fifth button turns Control Units Off only.
	Control 12				
GRX-AV 	Control 13	Activate Scenes 1-4 and Off	Activate Scenes 9-12 and Off	Activate Scenes 5-8 and Off	Activate Scenes 13-16 and Off
	Control 14	Momentary Input Sequence Scenes 1-4	Momentary Input Sequence Scenes 5-16	Maintained Input Sequence Scenes 1-4	Maintained Input Sequence Scenes 5-16
	Control 15	Momentary Input 4PS functions	Momentary Input 4PS functions	Maintained Input 4PS functions	Maintained Input 4PS functions
NTGRX-2B	Control 16	1 Channel fine tuning	NTGRX-4M Function	Occupant Sensor Scene 1 and Off	Occupant Sensor Off Only
	Control 16	Activate Scene 1 and Off	Activate Scenes 13 and 14	Single Partition Function	Activate Scene 16 w/ lockout or previous Scene w/o lockout
GRX-IT GRX-8IT	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
NTGRX-1S	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable