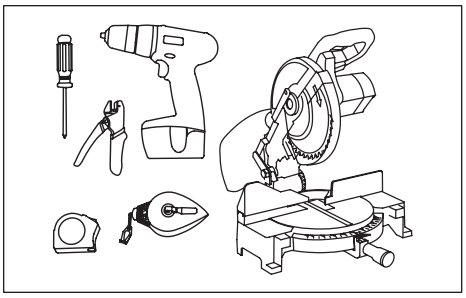
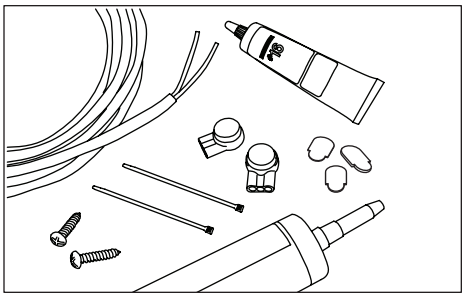
COLORLINE

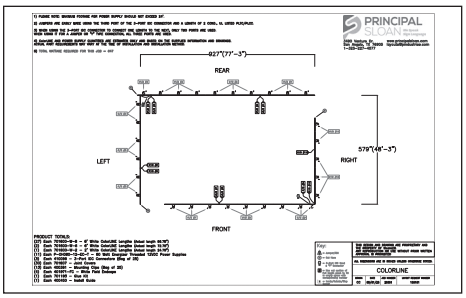
Installation Guide for 701800(X)-(YY)-(Z)



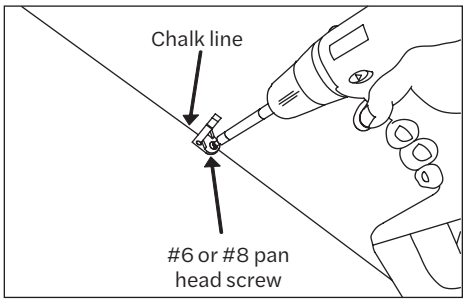
1. **Tools required:** Measuring tape, wire cutters, drill, screwdriver, chalk line, miter saw (for custom cut lengths), and 3M IDC Crimp Tool (part number E-9J).



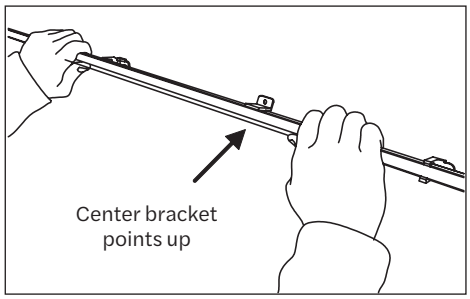
2. **Supplies required:** PLTC cable, weather proof 3M™ Scotchlok™ UR2 IDC connectors, cable ties, #6 or #8 pan head screws with suitable threads for mounting surface, silicone (outdoor rated caulk), IPS Weld-On #16, and field cut end caps.



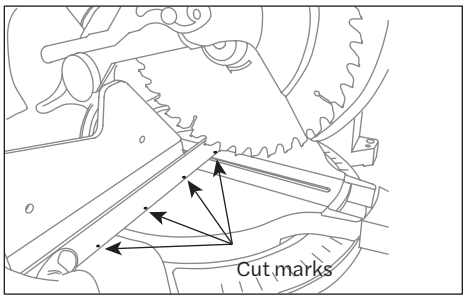
3. **Layout:** Use an architectural drawing in combination with **Power Supply Capacity Chart** (below) or layout provided by Principal Sloan (sample above) to determine number and length of ColorLINE sections and power supplies required for your installation.



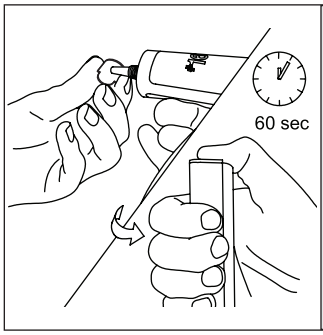
4. **Install mounting clips:** Snap a chalk line on surface for mounting. Space mounting clips every 12" along chalk line and 1.5" from end of each ColorLINE section. Orient clips with screws towards center of each ColorLINE section.



5. **Install ColorLINE sections into clips:** Snap ColorLINE sections into mounting clips. Use #6 or #8 pan head screws to secure center bracket once all sections are located on mounting surface.



6. **Cutting custom lengths:** ColorLINE may be cut on any of black marks (2.4" apart). Use a miter saw to make a clean, straight cut. **NOTE:** Perpendicular cuts ONLY. Set miter saw to 0°. No angled cuts.



CAUTION: Field end caps must not have any gaps which would allow water penetration. Ensure end cap completely seals end of ColorLINE section.
ATTENTION: Les capuchons d'extrémité de champ ne doivent avoir aucun espace qui permettrait la pénétration de l'eau. Assurez-vous que le capuchon d'extrémité est complètement scellé fin de la section ColorLINE.

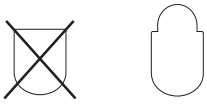
12 VDC Power Supply Capacity Chart

Capacities based on 90% of power supply output.

Power output	Maximum feet
60 W	24
2 × 60 W	2 × 24
Power used per ft in watts	2.28 W

7. **Cap custom cut lengths:** Clean any burrs and debris from cut end and ensure that any exposed wires are not in contact with each other (trim wires if necessary). Apply IPS Weld-On #16 to entire surface of a ColorLINE field cut end cap and bond to cut end of ColorLINE segment. Apply pressure to end cap for one minute to ensure a strong bond.

NOTE: Field cut end cap has new shape. If cutting ColorLINE in the field, only use new end cap.



NOTE: After cutting a custom length, any piece with black and red wires protruding from original end cap will still light. Follow all of manufacturer's recommendations when using Weld-On #16 adhesive. MSDS available at www.ipscorp.com.

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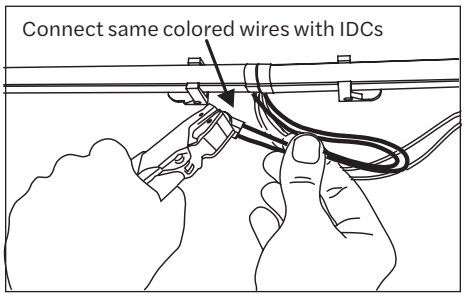
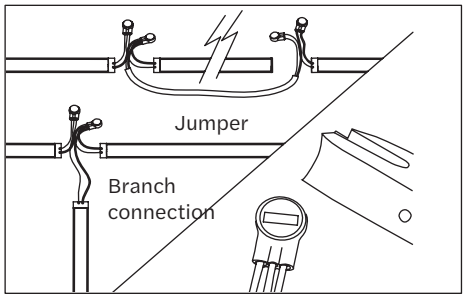
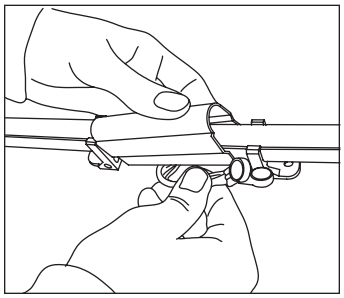






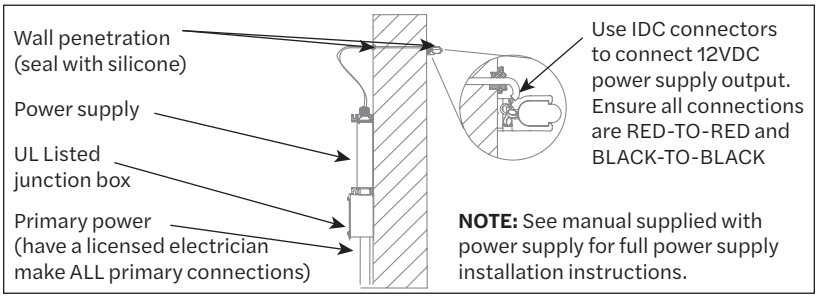
8. **Connect ColorLINE sections in a chain:** Cut wires to appropriate length and crimp same colored wires together using weather proof IDC Connectors. **Do not strip wires.** Connections must be RED-TO-RED and BLACK-TO-BLACK. Press connector with crimp tool until red button is fully depressed.
   CAUTION: To maintain integrity of end caps and prevent water penetration around wires, do not pull or tightly bend wires or allow tension between wire connections. **ATTENTION:** Pour maintenir l'intégrité des capuchons d'extrémité et empêcher la pénétration d'eau autour des fils, ne tirez pas ou ne pliez pas fermement les fils ou ne laissez pas la tension entre les connexions des fils.

9. **Creating jumpers or branch connections:** If jumper or branch connection is required, cut wire or PLTC cable to desired length and use third port on IDC connector as necessary to make connections.

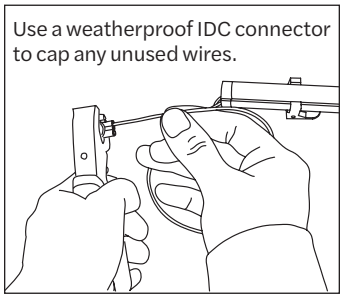
10. **Snap covers into place:** Tuck all loose wires at joints behind ColorLINE extrusion and cover with a joint cover.

NOTE: Leave a 0.25" gap between sections if temperature during installation is below 40°F.

CORNERS TIP: To ease installation, install any optional mitered corners prior to mounting straight sections or making field cuts. Use two mounting clips on each side of corner.



Extension of Power Supply Leads: If longer lead wire from power supply to ColorLINE is needed, an extension can be used. Extension should be kept as short as possible (under 15 feet for 18 AWG UL Listed PLTC or under 50 feet for 14 AWG UL Listed PLTC).



11. **Connect ColorLINE chain to power supply:** Connect wires from first section of ColorLINE chain to power supply wires using provided Insulation Displacement Connectors (IDC). Connections must be RED-TO-RED and BLACK-TO-BLACK.
    CAUTION: All primary power supply connections must be made by a licensed electrician.
    ATTENTION: Toutes les connexions d'alimentation principale doivent être effectuées par un électricien agréé.

12. **Cap wires:** Trim and cap all unused wires to prevent accidental shorting of wires. Do NOT connect RED wire to BLACK wire.

Troubleshooting:

Entire ColorLINE leg does not light after complete installation.	Check connection from power supply lead to first section of ColorLINE. Make sure polarity of connections made at power supply lead, any jumper wire, and at first section are correct. All connections must be RED-TO-RED and BLACK-TO-BLACK.
Still does not light.	Disconnect ColorLINE from power supply. Check output voltage of power supply using a voltmeter. The output voltage should be 12.0 VDC ± 0.5 VDC. If there is no output voltage, have a licensed electrician check input voltage. Make sure power supply is connected correctly and getting primary power. If power supply is connected properly and getting primary power and there is still no output voltage, replace power supply.
Still does not light.	If power supply is getting primary power, has correct output, and no sections light, there may be a short in the secondary wiring. Check all connections and cap all loose wires.
The beginning of a leg lights, but entire leg does not light or lights intermittently.	The primary cause of a portion of a ColorLINE leg not lighting or lighting intermittently is a bad connection or reverse polarity connection between sections that light and sections that don't light. Check this connection.
An entire power supply leg of ColorLINE is dim.	Ensure maximum number of feet has not been exceeded (see Power Supply Capacity Chart). Check secondary voltage. If voltage is below 11.5 VDC, power supply leg may be overloaded.
One segment does not light, but all others in the leg light.	ColorLINE is designed so if one segment fails, it will not cause the entire leg to go out. If one segment does not light, but all others in the leg do, replace entire section with a new one.

US patents 6776504, 6969179, 7192157 and US and foreign patents pending.

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