

## Installation instructions for R2 Series

**WARNING:** These products may represent a possible shock or fire hazard if improperly installed or attached in any way. Products should be installed in accordance with these instructions, current electrical codes and/or the current National Electric Code (NEC).

**WARNING:** To avoid electrical shock, disconnect or disable power at the source prior to installation or maintenance.

**WARNING:** To avoid electrical shock, use only with 24V DC plug-in power supply or with 24V DC hardwire power supply. Factory warranty will be void if used with a non-recommended power supply, transformer, or driver.

### IMPORTANT SAFETY INSTRUCTIONS

1. This fixture is intended for indoor use in dry locations only. Do not use in the vicinity of standing water or liquids. Do not submerge in water or liquids.
2. Do not use if there is any damage to the unit or power cord's insulation. Inspect periodically.
3. Do not route cords or units through walls, doors, windows or any similar part of a building structure.
4. Secure units using clips and/or 3M® Tape Strips designed for this product. Do not secure unit or its power cord with staples, nails, or any other sharp objects that may damage fixture.
5. To maintain product integrity: do not bend, step on, or subject to pressure or flexing. Do not mount on uneven surfaces.

### IMPORTANT

**Risk of shock or fire hazard:** This fixture utilizes a constant voltage design and has a maximum run length of 135 watts in any connection series. Do not exceed maximum run length in any connection series. Do not exceed capacity of power driver used.

**Risk of shock or fire hazard:** Be sure to select a driver with a wattage capacity that can handle the total load, noting the following wattage for each size: R2-6 = 2.5 watts, R2-12 = 5 watts, R2-24 = 9 watts and R2-40 = 15 watts. Ideally, only load drivers up to 80% of the total capacity to maximize driver life. If loaded above 80%, allow 12" clearance above and around it.

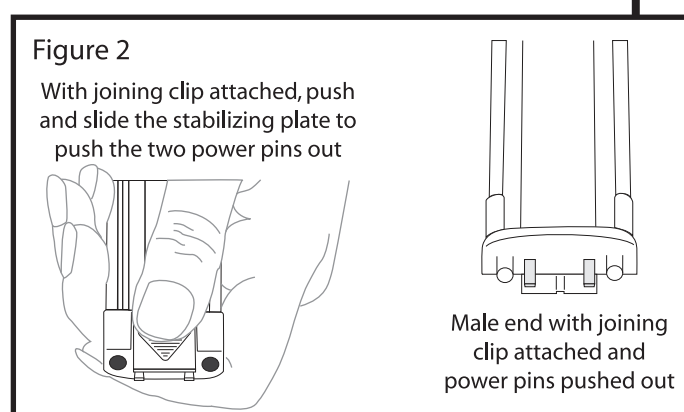
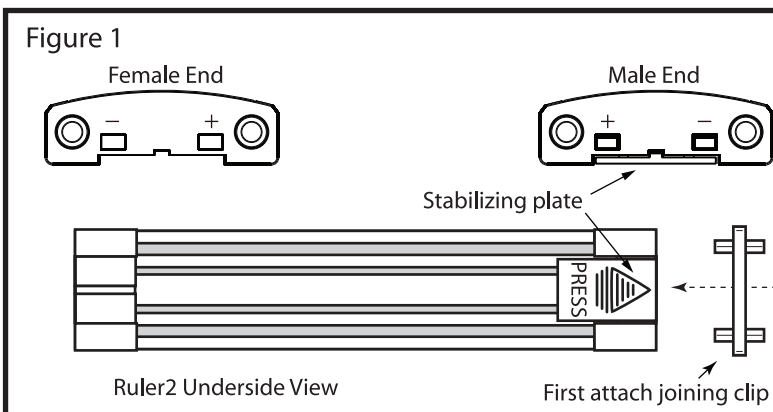
### PRIOR TO INSTALLATION:

Determine the location of installation and lengths of Ruler2 that will be needed. Determine what power and connection accessories you will be utilizing. If an intersection is involved, plan ahead by starting the layout there. Do not exceed the max run length of 135 watts in a single series run. See also Connecting Power to Ruler2 on reverse. Remove the clear plastic wrap from each fixture prior to installation.

### Basic Installation of Ruler2

1. Mark locations of mounting clips, being sure to position them in a straight line so that the fixture can snap into each. Using screws, install mounting clips in line, taking into account the lengths of each fixture being used.
2. If using multiple sections of Ruler2, prior to clipping/snapping Ruler2 onto mounting clips, connect a joining clip to the male end of each section of Ruler2. DO NOT connect joining clip to female end. See Figure 1. When using the "L" connector, a joining clip is not needed to make the connection.
3. Press and slide the stabilizing plate on the male end, which pushes the two power pins out through the joining clip. See Figure 2.
4. Clip/snap Ruler2 onto mounting clips. Note: do not attempt to secure fixtures with adhesive strips!
5. Connect male end of a Ruler2 section (with joining clip attached) to the female end of another Ruler2 section.
6. Follow directions for Connecting Power to Ruler2 on reverse.

Note: Plug-in power supplies (PS-40-24VPI, PS-60-24VPI and PS-90-24VPI) are c/UL/us Listed. Most hardwire power supplies carry CE and/or c/UR/us Recognized safety rating. See "Power Supplies and Drivers" at [www.americanlighting.com](http://www.americanlighting.com) for details.



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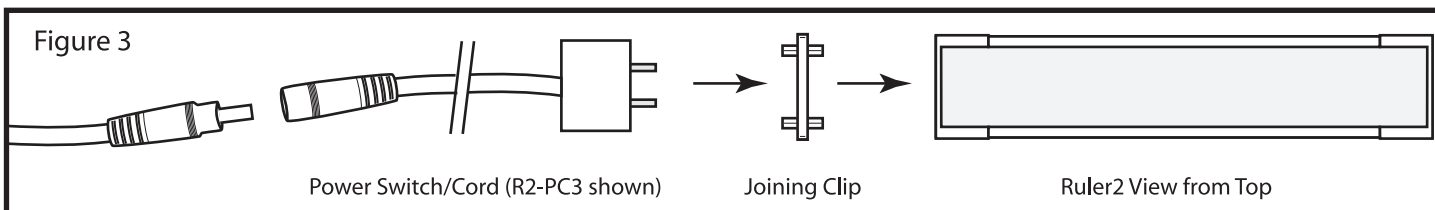
### IMPORTANT NOTE:

Determine the location of installation and lengths of Ruler2 that will be utilized. Determine what power and connection accessories you will be utilizing. If an intersection is involved, plan ahead by starting the layout there. Do not exceed the maximum run length of 135 watts in a single series run. See Connecting Power to Ruler2 below.

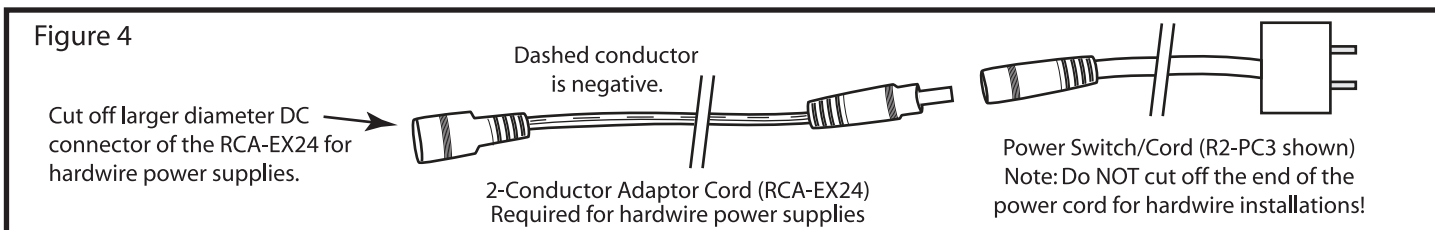
## Connecting Power to Ruler2

This LED product is designed to be used with a regulated 24V DC power supply only. Do not use a 24V AC transformer because that will result in an "AC flicker" and overdriving of the LEDs due to the alternating current and non-regulated output. Be sure to select a driver with a wattage capacity that can handle the total load, noting the following wattage for each size: R2-6 = 2.5 watts, R2-12 = 5 watts, R2-24 = 9 watts and R2-40 = 15 watts. Ideally, only load drivers up to 80% of the total capacity to maximize driver life. If loaded above 80%, allow 12" clearance above and around it. Note: The maximum single run distance for Ruler2 is 135 watts in any single run.

1. Connect a joining clip to a power cord/switch. Power cord/switches include: R2-PC3, R2-PC3-SW, R2-PC3-TS, R2-PC3-IS and R2-PC3-FADE. See Figure 3. Adhesive strips (3M-TAPE-10) may be used to further secure switches to mounting surface. Make sure surface is clean and dry before attaching adhesive strips.
2. The 4-way splitter cord (R2-4Y) can be used to run multiple series from the same power source, which will require four power cord switches, and the combined connected power cannot exceed 135 watts, and not one of the four leads can carry more than 67.5 watts. The power extension cord (R2-EX36) can be utilized to extend the power cord by 36 inches.
2. Connect the power cord/switch (with joining clip attached) to the female end of Ruler2. See Figure 3.
3. For plug-in drivers, connect power cord/switch to 24V DC power supply by connecting DC connectors.



4. For hardwire drivers, a 2-conductor adaptor cord is required (RCA-EX24). Follow steps 1-3 above, connect power cord/switch to the RCA-EX24 adaptor cable by connecting DC connectors, then cut off the larger diameter connector. See Figure 4.
5. Separate conductors on the cut end and strip back 3/8". Connect to driver, matching polarity. The RCA-EX24 conductor with the dashes is the negative (-), and the unmarked conductor is positive (+). Attach to driver following its instructions.



## Dimming Ruler2 Fixtures

To dim Ruler2 fixtures with plug-in power supplies, use R2-PC3-FADE. Hold for continuous 5-100% light output. Tap for 25%-50%-75%-100%-75%-50%-25% light control. Double tap for Off (0% light).

To dim Ruler2 fixtures with hardwire power supplies, use the non-switched power cord R2-PC3 and a wall dimmer. Results vary depending on load and wall dimmer choices (approximately 15-100% light control). See [www.americanlighting.com](http://www.americanlighting.com) for details.

**Important Note:** The National Electrical Code (NEC) does not permit cords to be concealed where damage to insulation may go unnoticed. To prevent fire danger, do not run cord behind walls, ceilings, soffits, or cabinets where it may be inaccessible for examination. Cords should be visually examined periodically and immediately replaced when any damage is noted.