

# INSTALLATION INSTRUCTIONS OMNI-TW-R1 & OMNI-TW-S1 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).

## A 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 power supplies.

### SAFETY INFORMATION

- Read all instructions before beginning. Save these instructions for future use.
- To reduce the risk of fire, electric shock, or injury to persons, pay close attention to this manual and stay within its guidelines when using this product.
- The Omni Puck 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.
- Do not use if there is any damage to the unit or to the insulation on any cords. Inspect periodically.
- Do not route cords or units through walls, doors, windows, or any similar part of a building structure. Only route cords so they will not be pinched or damaged.
- Do not secure unit or its power cord with staples, nails, or any other sharp objects that may damage fixture.
- Not intended for recessed installation inside enclosed cabinetry (cabinets that are not open at the top). Not intended for recessed installation in ceilings or soffets.
- Do not alter plugs or connectors.
- Keep away from curtains, draperies, and other similar flammable materials.
- LEDs are bright! Do not look directly at lighted fixture.
  - LEDs are not serviceable. Do not attempt to open or service LEDs or LED housing.
- For cleaning, use a soft, dry or damp cloth. Do not use harsh chemicals or abrasives.

# ADDITIONAL SAFETY INFORMATION:

Omni Pucks utilize a constant voltage design and have a maximum number of pucks that can be connected to a power supply (depending upon the capacity of the driver). For all drivers, a maximum load less than or equal to 90% of capacity will result in maximum driver life. Do not exceed capacity of power driver used. See chart below.

# PRIOR TO INSTALLATION:

Omni Tunable individual pucks require the use of a Trulux radio frequency controller and receiver to achieve tunable CCT effects (sold separately). Omni Tunable individual pucks require the use of a 24V DC driver (LED-DR Series recommended, sold separately).

Individual/bulk OMNI-TW pucks have a 3-conductor 6ft 24AWG lead wire with each conductor stripped back by 3/8" for attaching to a Trulux receiver. An LED-DR series driver is needed to power the puck lights and receiver. Each receiver will designate a 'zone' allowing for a series of pucks to operate in sync. For multiple sets of pucks that operate independent of each other, use multiple zones (multiple receivers). Depending on the proximity of zones to each other and the number of pucks connected, they may share a driver. When building a LumeIFX system (where multiple types of fixtures - i.e. Tunable Omni Pucks, Tunable EdgeLink Flat Panel, and/or Tunable Trulux Tape Light - are used in the same setting) consider using one driver that can accommodate the full load of all lighting products. Add receivers as needed for each zone.

Determine the quantities and locations of the Omni pucks to be installed. Consider whether pucks will be surface or recessed mounted. For most Omni Tunable installations, an LED-DR30-24 will be appropriate since this driver can power up to nine OMNI-TW puck lights:

Maximum Number of OMNI-TW Pucks with LED-DR30-24 - 90% Maximum Load					
Type of OMNI-TW	Watts per Puck	Max Load	Max. Number of Pucks		
OMNI-TW-R1	2.8W	27W	9 pucks (27 ÷ 2.8 = 9.6)		
OMNI-TW-S1	3.0W	27W	9 pucks (27 ÷ 3.0 = 9)		

For a single zone radio frequency Omni Tunable installation, the Trulux system set-up will look like Figure 1 below:



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### SURFACE MOUNTING:

- 1. Separate the surface ring from the Omni puck housing. With the puck lens facing away from you, hold the surface ring with fingers and press on the center of the back of the puck with thumbs to separate housing from surface ring. See Figure 2.
- 2. Determine desired locations for each puck and mark the locations of the mounting holes on the mounting surface using the surface ring as a template. Note: Each puck has a 72" lead wire which needs to be routed to the receiver. Be sure to locate the driver so that each puck's lead can reach it.
- 3. Before attaching the surface ring to the mounting surface, route the lead wire through the installation notch or through a 1/4" hole if there is access above to route the leads. See Figure 2.
- 4. Secure surface ring using appropriate mounting hardware.
- 5. Gently push the puck light into the surface ring until it is fully seated, making sure the lead wire is not pinched or crimped in any way.
- 6. Repeat for each additional puck.

#### **RECESSED MOUNTING:**

- 1. Separate the surface ring from the Omni puck housing (refer to Step 1 under SURFACE MOUNTING). Discard the surface ring.
- 2. Determine desired locations for each puck and mark the locations of their centers on the mounting surface.
- 3. Drill a 2-1/4" diameter hole at each marked location for either round or square OMIN-TW pucks. See Figure 3.
- 4. Route the puck's lead wire through the hole and press the Omni puck in until it is fully seated, making sure the lead wire is not pinched or crimped in any way. The side spring clips will hold the puck light in place. Repeat for each additional puck.





#### CONNECTING POWER:

For sets of up to 9 puck lights, American Lighting's LED-DR30-24 driver (sold separately) is recommended.

- 1. Determine the best location for the power connection hub or driver, considering the 72" lead wire length on each puck.
- 2. Route each of the lead wires from the puck lights to the receiver.
- 3. Connect lead wires to the receiver, matching polarity: Red = positive (+), Black = WW (-), and Black Striped = CW (-). See Figure 1 on reverse.
- 4. Connect receiver to 24V DC power supply, matching polarity: Red = positive (+), Black = negative (-).
- 5. Making sure power is turned off at the source, connect source power to the primary side of the driver, matching polarity: Black/hot to "L" / Line and White/neutral to "N" / Neutral. After all connections are made, turn power back on at the source.

#### CONTROLLING THE TUNABLE PUCK LIGHT SYSTEM:

NOTE: The following controllers are compatible with the Tunable Omni Pucks. Alternatively, use one WIFI receiver (REC-5A-4Z-WIFI) if you have one zone, and you want to control the single zone with the Trulux application. Visit the App Store or Google Play marketplace to download the Trulux application. You can add a RF controller additionally, but this is optional. For multiple zones, one REC-5A-4Z receiver is needed for each zone in conjunction with the Trulux Hub (WIFI-RF-8).

- Determine which controller is best suited for the application. See list below. 1.
- Select a receiver for each zone. For RF controllers, use one REC-5A-4Z for each zone. For the Trulux app, use one REC-5A-4Z-WIFI for each 2. zone. For WIFI setups with 2-8 zones, you will need a WIFI hub (WIFI-RF-8, sold separately). You can use a REC-5A-4Z-WIFI in conjunction with wall mount and/or handheld controllers; in addition to using the App.

CONTROLLER	POWER TO CONTROL	<b>RECEIVER ITEM #</b>	CAPACITY	POWER TO RECEIVER
「WRF-BATT (White, dial)	3V Battery (CR2032, included)	REC-5A-4Z	1 zone, 5A max	24V DC input
「WRF-BATT-TT (Black, dial)	3V Battery (CR2032, included)	REC-5A-4Z	1-4 zones, 5A max ea.	24V DC input
「WRF-3AA (Black, remote)	3V Battery (CR2032, included)	REC-5A-4Z	1-4 zones, 5A max ea.	24V DC input
TWRF-4Z (White, touch)	24V DC input (not 120V)	REC-5A-4Z	4 zones, 5A max	24V DC input

To syncronize the receiver and controller, touch the power icon on the controller to turn it on, then press the "Learning Key" on the receiver, then select a zone and touch the dimmer slide/button or turn the dimmer dial to "pair" the receiver to the controller. These steps can be repeated to sync multiple receivers to a multi-zone controller. See also the receiver's and controller's specific installation instructions for more information.

