

LED Sign Tube Specifications

- Quick and easy replacement of T12 HO Fluorescent lamps
- Built-in Class 1 High Power Factor driver
- Direct 120-347V power source (no external driver required)
- Double-sided and available in all popular T12 lengths
- 50,000+ hour lifetime rating, L70
- Rotatable R17d sealed end caps
- IP65 rated
- 5 year warranty
- Operating temperature: -40°C* to +60°C
*(lamps must be used in an enclosed fixture or sign box built for signage applications)



Double Sided SPEEDLamp 6500K Specifications

Part Number	T12-HO	Total Lumens	Watts	Lumens/watt	Lumens/Ft per side	Input Amps at 120V/347V
TAD012X10D-347XD-XX	18"	1069	10	107	356	0.09/0.05
TCD020X12D-347XD-XX	24"	1409	12	118	352	0.10/0.06
TDD020X15D-347XD-XX	30"	1739	15	116	348	0.13/0.06
TFD024X18D-347XD-XX	36"	2082	18	116	347	0.15/0.07
TGD024X21D-347XD-XX	42"	2391	21	114	342	0.18/0.08
THD040X24D-347XD-XX	48"	2768	24	118	346	0.21/0.08
TID048X28D-347XD-XX	60"	3374	28	120	337	0.25/0.09
TJD048X32D-347XD-XX	64"	3616	32	113	339	0.27/0.13
TKD060X36D-347XD-XX	72"	4211	36	117	351	0.32/0.14
TLD060X44D-347XD-XX	84"	4842	44	110	346	0.39/0.16
TMD080X48D-347XD-XX	96"	5652	48	118	353	0.42/0.16
TND080X48D-347XD-XX	108"	5652	48	117	314	0.42/0.16
TODA98X52D-347XD-XX	117"	6404	52	123	328	0.46/0.18
TPD098X52D-347XD-XX	120"	6404	52	123	320	0.46/0.18

Spacing and Depth:

Spacing of lamps in T12 HO fluorescent replacement retrofit applications will remain the same (one-for-one retrofitting of lamps using pre-existing T12 sockets). In new build applications, the first and last SpeedLamps should be positioned maximum 6" from the center of the lamp to the inside side wall of the cabinet, and space between lamps should be 12". Recommended minimum distance from SPEEDLamp to sign face is 6". Results may vary based on sign face material, graphics, and sign depth.

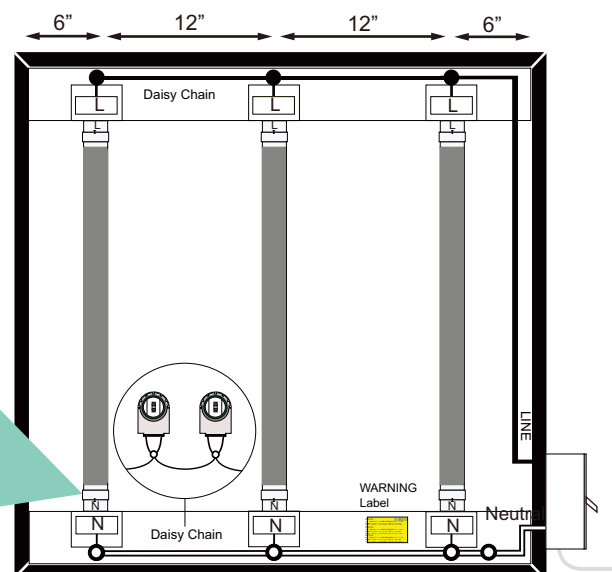
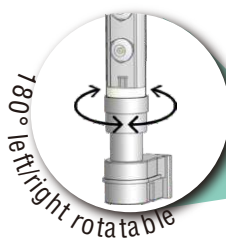
Packaging:

SPEEDLamp is are packaged individually. One lamp per tube.



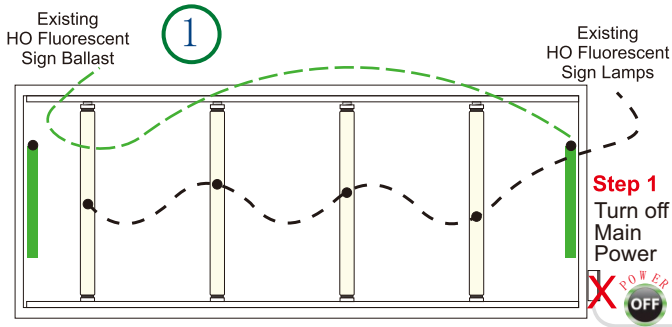
GENERAL PURPOSE
RETROFIT SIGN
CONVERSION
FOR USE ONLY IN
ACCORDANCE WITH
KIT INSTRUCTIONS

KIT IS COMPLETE ONLY WHEN ALL PARTS
REQUIRED BY THE INSTRUCTIONS ARE PRESENT



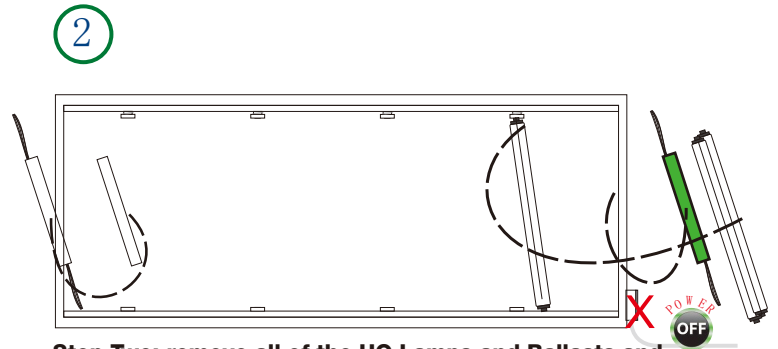
Note: for installation, please reference complete installation instructions (#21-322).

Installation Instructions

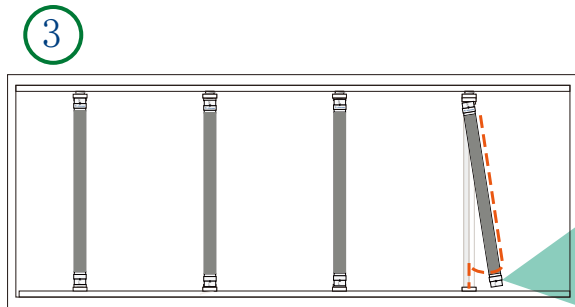


Step One: turn off main power to the sign or sign's branch circuit. In the event that there is no Disconnect Switch one should be added to meet code. Ensure proper grounding is bonded to the sign enclosure.

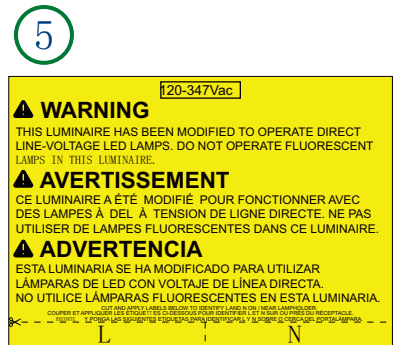
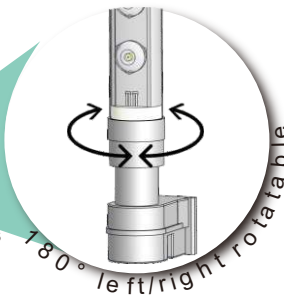
IMPORTANT: There should be **NO Power** ever to the lampholders for any reason during installation!



Step Two: remove all of the HO Lamps and Ballasts and dispose of them in accordance to local regulations. Do NOT disconnect existing wires from the lampholder terminals as you will need them again in step four.

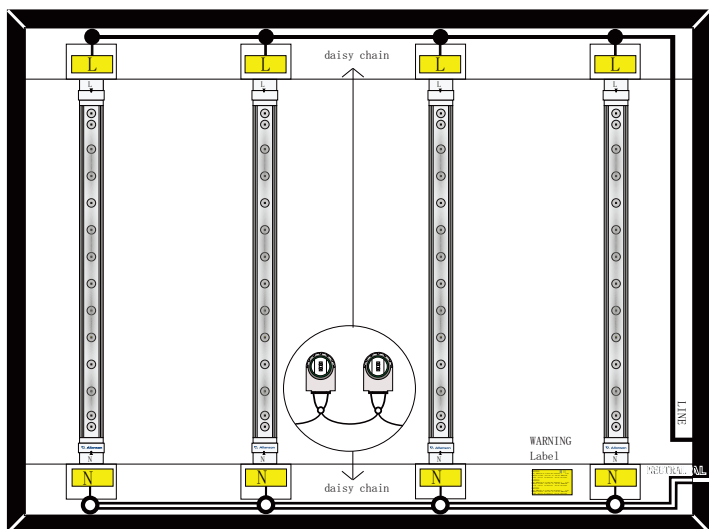


Step Three: install each SPEEDLamp into the lampholders by inserting one end into the "spring lampholder" then compressing the spring enough to swing the lamp to the opposite end and into the fixed lampholder.



Step Five: Apply the yellow safety sticker, provided in the package, where directly visible (i.e. near the switch or on the raceway).

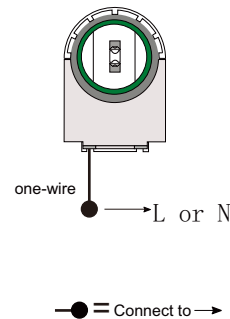
4 Parallel Connection Wiring Diagram



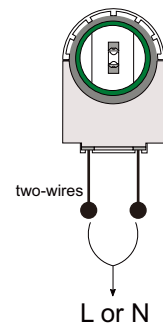
AC Primary Voltage: 120-347V

HOF Lampholder Re-Wiring

Electronic Ballast
Instant-Start



Electronic Ballast
Rapid-Start

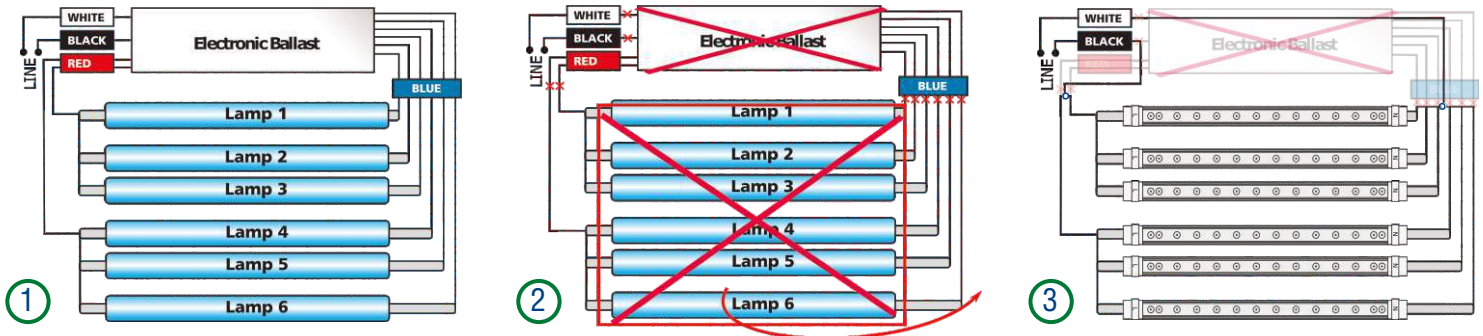


Step Four: re-wire the HOF lampholders. Ensure all lamps are oriented

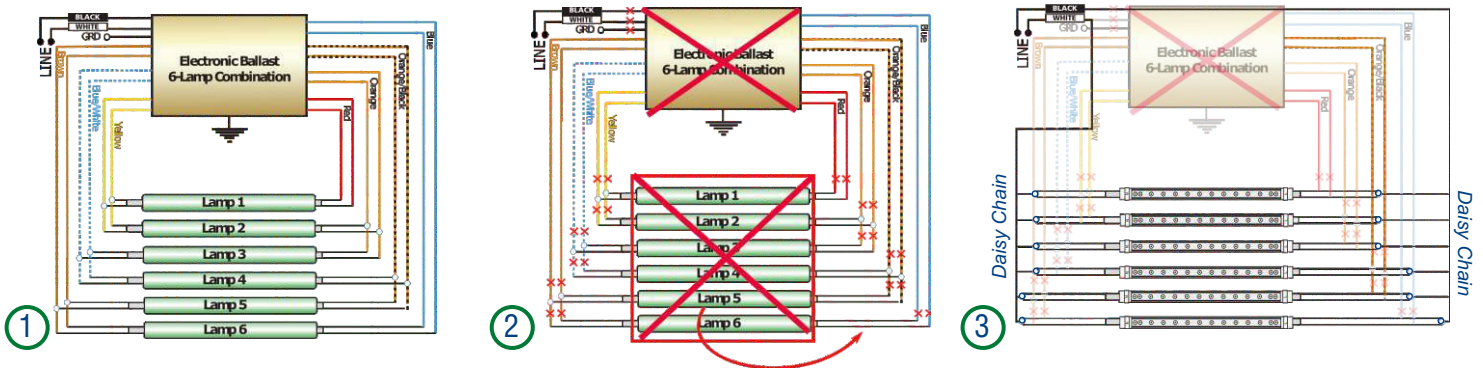
in a consistent manner, such that all sides of the lamp that are marked "LINE (L)" are connected into lampholders on the same side of the sign box and the "NEUTRAL (N)" sides are connected on the opposite side.

IMPORTANT: There should be NO Power ever to the lampholders for any reason during installation!

Parallel Connection Wiring Diagram (For retrofitting of signs with Instant-Start Ballast)



Series Connection Wiring Diagram (For retrofitting of signs with Rapid-Start Ballast)



⚠ WARNING

READ THE FOLLOWING SAFETY INSTRUCTIONS BEFORE INSTALLATION

1. This product must be installed by qualified personnel familiar with electrical and sign installation techniques
2. The kit is to be installed in Listed Signs only
3. Tools required to do the LED installation: wire nuts, wire stripper, and wire cutter
4. Disconnect power at fuse box or circuit breaker before installation
5. This lamp is not intended for use with dimmers
6. This lamp is not intended for emergency lighting
7. Suitable for dry and damp locations. Suitable for use in enclosed luminaries
8. Examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the kit
9. Do not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead, cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors
10. **WARNING** - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects
11. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation
12. Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of installation of the kit
13. Two or more adjacent LED lamps shall not be mounted closer than 1 in. end to end or 4 in. side to side
14. **WARNING** -To avoid potential fire or shock hazard, do not use this retrofit kit with existing shunted bi-pin lampholders in the host sign. Shunted lampholders are found only in fluorescent signs with Instant-Start ballasts. Instant-start ballasts can be identified by the words "Instant Start" or "I.S." marked on the ballast. This designation may be in the form of a statement pertaining to the ballast itself, or may be combined with the marking for the lamps with which the ballast is intended to be used, for example F40T12/IS. For more information, contact the LED lamp retrofit kit manufacturer

Remark:

Installation Instructions, Safety Instructions, and Wiring Diagram apply to the following part numbers: TAD012X10D-347XD-XX, TCD020X12D-347XD-XX, TDD020X15D-347XD-XX, TFD024X18D-347XD-XX, THD040X24D-347XD-XX, TID048X28D-347XD-XX, TJD048X32D-347XD-XX, TKD060X36D-347XD-XX, TLD060X44D-347XD-XX, TMD080X48D-347XD-XX, TND080X48D-347XD-XX, TODA98X52D-347XD-XX, TPD098X52D-347XD-XX, TGD024X21D-347XD-XX