



With its streamlined 1" wide x 5/8" deep profile, THE ONE LV™ from USAI® offers seamless linear configurations for even and efficient lighting in the tightest and most complex installations.

THE ONE LV™

THE ONE LV Linear LED

High Output

ENERGY EFFICIENT

The One LV modular linear LED Lighting System is a powerful architectural lighting tool — available in High Output LED technology to create the desired lighting effects. The small contoured aluminum body is available in numerous lengths ranging from 6 inches up to 4 feet — with the option of a clear or frosted lens.

POWERFUL AND MAINTENANCE FREE

The One LV High Output linear LED features 51 lumens per watt and 323 lumens per foot (3000K). The expected 50,000 hour (L70) life provides years of maintenance free operation.

SMALL AND FLEXIBLE

Measuring only 5/8" high x 1" wide, this miniature design blends neatly into coves, casework, display cases and architectural details. The One LV LED linear system delivers uniform, shadow free illumination with tight binning for uniform color consistency.

APPLICATIONS

- Cove lighting
- Display cases
- Shelf lighting
- Inaccessible areas
- Heat or UV sensitive installations

FEATURES

- Seamless connection between modules provides smooth and uniform light output
- Precise color temperature binning for uniform color
- Available in 6 inch to 4 foot lengths for flexible installations
- Small fixture footprint allows architectural design freedom and retrofit capability in tight spaces
- Plug-in connectors allow for easy end-to-end connection and minimize voltage drops over long runs.

LEDs

Available in a High Output, with a 85+ typical CRI and tight BIN control ensuring consistent color uniformity.

Thermal Management

Achieving a 50,000 hour life is dependent upon proper management of heat. The One LV's robust thermal design utilizes an aluminum circuit board and switching regulator along with an extruded aluminum housing, ensuring that the optimal thermal operating temperature is maintained.

Electrical Circuitry

High efficiency on board switching regulator provides flicker free, consistent brightness and operates on 24V. This technology provides smooth dimming capability with multiple dimming systems.

Lens

Choice of clear or frosted for various effects.

LUMINAIRE INFORMATION

Lumens:

Total lumens per foot shown (approx.)

	Clear Lens	Frosted Lens
• 2700K	240 lm/ft	209 lm/ft
• 3000K	323 lm/ft	289 lm/ft
• 3500K	327 lm/ft	300 lm/ft

Power Consumption:

- Varies.
- See Power supply information.

Color Rendering Index:

- 85+ Typical CRI

Dimming:

- Dimmable 24VDC driver available.
- See dimmer compatibility chart on back.

Color Temperature:

- 2700K = 2700 ±100K
- 3000K = 3030 ±100K
- 3500K = 3455 ±125K

Lens:

- High strength Acrylic available in clear or frosted.

Housing:

- Anodized aluminum extrusion w/ injection molded end caps.

Light Engine:

- High power white LEDs, tightly binned for fixture to fixture color consistency.

Rated Life:

- Based on IESNA LM80-2008 50,000 HRS@70% lumen maintenance (L70)

Listing:

- Dry/damp location
- ETL Listed
- IBEW Union made



HOW TO SPECIFY

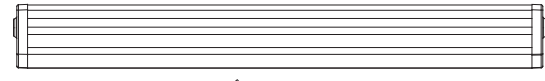
Series	Length	Color Temperature	Lens	Mounting	Connector Options	Power Supplies (See back)
TOLVW1						
TOLVW1 Low Voltage High Output Linear LED	H06 - 513/16" H12 - 115/16" H24 - 235/16" H48 - 473/16"	27S - 2700K 30S - 3000K 35S - 3500K	CL - Clear FL - Frosted	FM - Fixed RM - Rotating	LV SJ - Straight Connector 11/16" LV SJR - Straight Joiner Rotating Mounts LV FJ6 - Flexible Corner Connector 6" LV FJ12 - Flexible Corner Connector 12" LV FJ24 - Flexible Corner Connector 24" LV JW-480 - Mini spool 480" 18 AWG Wire LV CA - Conduit Adapter LV DT - Dovetail Connector	LP SDC1-100-J1D* - 100W 120/24V DC Dimming LP SDC1-50-J1D* - 50W 120/24V DC Dimming LP SDC1-300-J1D* - 300W 120/24V DC Dimming LP SDC3-100-E1D - 100W 100-277/24V DC Dimming LP SDC3-100-L1N - 100W 100-277/24V DC LP SDC3-60-L1N - 60W 100-277/24V DC *Also available in 277V (LP SDC2)

THE ONE[™] LV Linear LED

High Output

TOLVW1 High Output

Series	H06	H12	H24	H48
Length	5 ¹³ / ₁₆ "	11 ⁵ / ₁₆ "	23 ⁵ / ₁₆ "	47 ³ / ₁₆ "
Height	5/8"	5/8"	5/8"	5/8"
Width	1 ³ / ₁₆ "	1 ³ / ₁₆ "	1 ³ / ₁₆ "	1 ³ / ₁₆ "



Available in lengths ranging from 5¹³/₁₆" to 47³/₁₆"

Mounting Feet Per Length:

Mounting feet can be positioned at any position along the length of the fixture.

H06 - 2 Mounting Feet

H12 - 2 Mounting Feet

H24 - 2 Mounting Feet

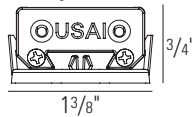
H48 - 3 Mounting Feet

MOUNTING OPTIONS

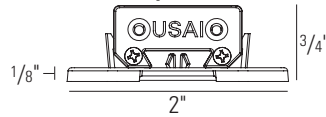
FM - Fixed Mounting

Injection molded fixed MTG feet w/rotating base for multiple mounting options.

Option 1

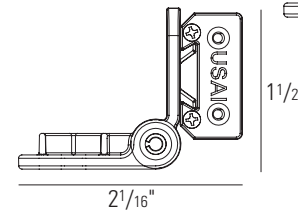
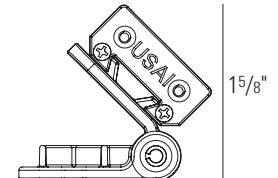
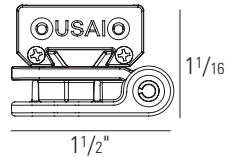


Option 2



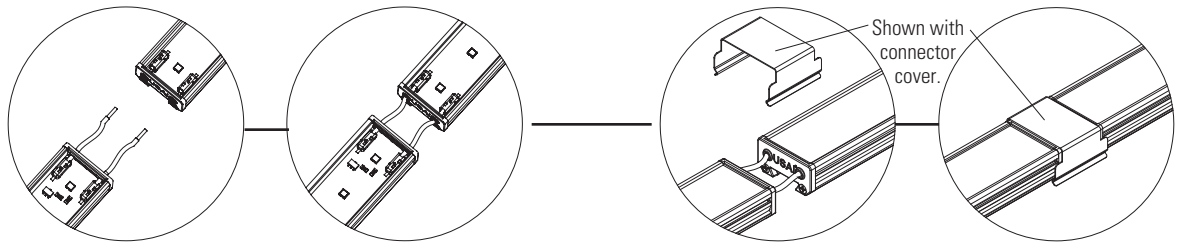
RM - Rotating Mounting

Injection molded self-locking rotating mounts 0-90 degree tilt.

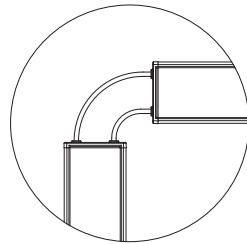


MULTIPLE CONNECTOR OPTIONS

LVSJ - Straight Connector

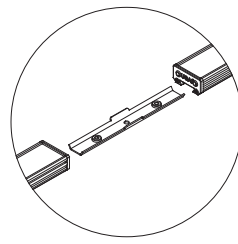


LVFJ - Flexible Connector



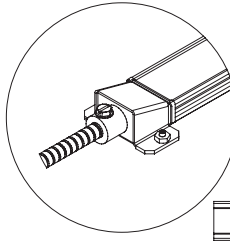
Allows connection of fixtures around corners at any angle.

LVDT - Dovetail Connector

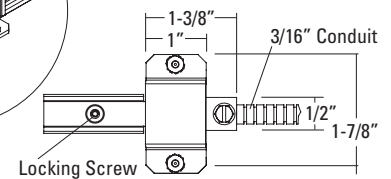


Unique dovetail connector allows the ability to mechanically connect multiple lengths on the floor & lift as one coupled unit to mounting location. Also, works with RM to rotate multiple lengths as one unit.

LVCA - Conduit Adapter



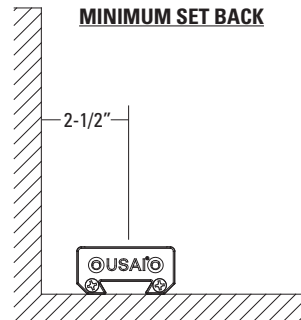
Conduit adapter used couples 3/16" metal conduit to the end of the first fixture in the run. Used only where required by code.



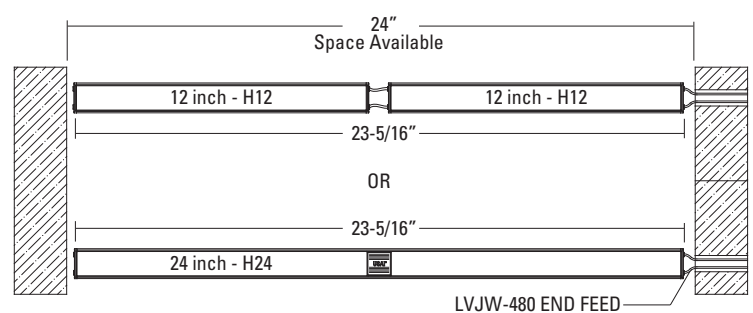
LAYOUT INFORMATION

- Recommended as primary usage for indirect cove and under cabinet installations in accordance with recommended minimum setback.
- Applications that require less than recommended minimum setback, edge lighting or back lighting may experience marginal color shift color shift due to individual LED pixel variation within ANSI sub-bin.
- This potential variation would be most noticeable to the human eye @ 2700K, less pronounced @ 3000K and barely noticeable @ 3500K.

RECOMMENDED MINIMUM SET BACK



TYPICAL CONFIGURATION



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THE ONE LV Drivers

APPLICATION:

- For use with The One LV series TOLVW1.

DIMMING OPTION:

- Dimmable 24VDC driver.

See chart below for compatible supply and dimmers.

MATERIAL:

- Transformer housing is made of metal construction.

OPERATING TEMPERATURE:

- Maximum ambient operating temperature is 50°C.

LISTING:

- Dry/damp location. All drivers are UL Class 2 listed.
- All drivers are ETL listed for use with The One product family.
- IBEW Union made.

NOTES:

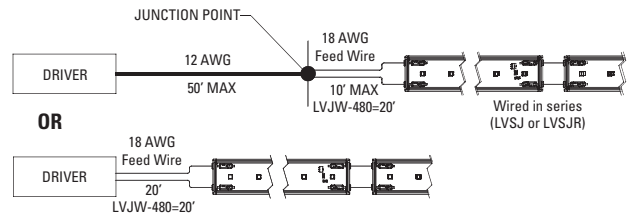
- Must use USAI drivers.
- Do not install in wet locations.
- See table for maximum run length of drivers.
- Drivers must be installed in accordance to national and local electrical codes.
- Equipped with secondary overload protection.

DRIVER SELECTION CHART

	DRIVER	PRIMARY VOLTAGE	WATTS	MAX RUN LENGTH ²	POWER ³ (W/FT)	DIMMER TYPE	DRIVER PER DIMMER SWITCH ⁴		FIGURE
							600VA	1000VA	
DIMMING	LPSDC3-100-E1D	100-277VAC	100	18'	6.3	0-10V	N/A	N/A	Fig. 3
	LPSDC1-100-J1D	120VAC	100	18'	7.37	MLV	1	1	Fig. 1
	LPSDC1-300-J1D	120VAC	3X 100 ¹	3X 18'	7.37		1	1	Fig. 4
	LPSDC1-50-J1D	120VAC	50	9'	7.37		1	1	Fig. 1
	LPSDC2-100-J1D	277VAC	100	18'	7.37		1	1	Fig. 1
	LPSDC2-300-J1D	277VAC	3X 100 ¹	3X 18'	7.37		1	1	Fig. 4
LPSDC2-50-J1D	277VAC	50	9'	7.37	1		1	Fig. 1	
NON-DIM	LPSDC3-100-L1N	100-277VAC	100	18'	6.3	N/A	N/A		Fig. 2
	LPSDC3-60-L1N	100-277VAC	60	11'	6.3				Fig. 2

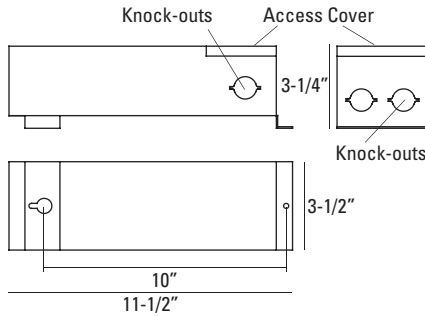
- All 3 runs must dim as one.
- Assumes no excessive jumper lengths and driver is wired as shown in remote driver wiring diagram.
- Power consumption values are given for a fully loaded power supply.
- For 0-10V dimming, driver limitation is dependent on AC power switch.

REMOTE DRIVER WIRING



DRIVER DIMENSIONS

FIGURE 1



DIMMER COMPATIBILITY

J1D - DRIVERS	
Model	Measured Light Output
Lutron: RRD-6NA	2-100%
Lutron: GP (Harrier) Card	8-100%
Lutron: Grafik Eye QS Main Unit	1-100%
Lutron: HW/LP-RPM-4U-120	1-100%
Lutron: HW/LP-RPM-4A-120	1-100%
Lutron: PHPM-WBX W/DVF 103P	8-100%
Lutron: N2V-600	7-100%
E1D - DRIVERS	
Crestron: CLS-EXP-DIMFLV	1-100%
Crestron: DIN-4DIMFLV4	1-100%
Crestron: GLX-DIMFLV8	1-100%
Crestron: GLXP-DIMFLV8	1-100%
Crestron: DIN-A08	1-100%
Lutron: QSN-4T16-S	2-100%
Lutron: GRX-TVI with QSG-BULK-6E120	3-99%
Lutron: DVTV/NFTV/NTFTV with PP-20	1-100%
TVM2 Module	5-100%

FIGURE 3

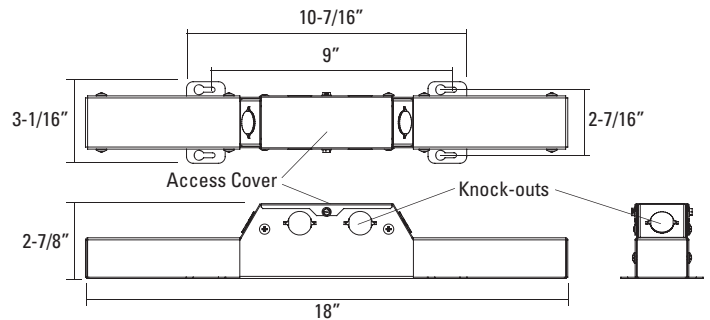


FIGURE 2

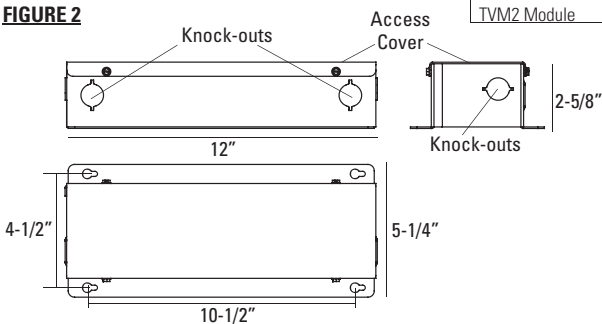
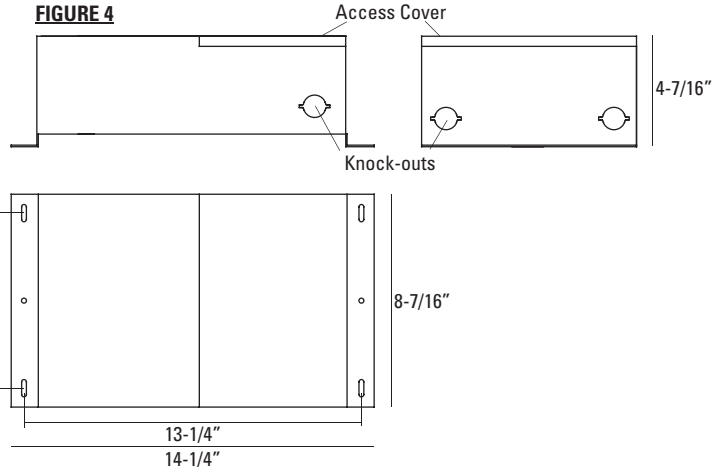


FIGURE 4



USAI®