12V Softstep II[™] Titanium



CAT:		FEET:
TYPE:	PROJECT:	



• Designed Pre-c

Technical Information

Watts/ft Top Row Indicator	0.0048			
*Lumens/ft Bottom Row Illuminator	4.4			
*Watts/ft	0.22			
*Lumen/watt	20			
CRI	>80/TYP83			
Kelvin Temp	1900K, 2700K, 3000K, 3500K, 4000K (+/-80K) 3SDCM, Red, Blue, Amber			
Rated Life	75,000 hrs.			
Max Ordering Length	12'			
**Order Increments	6"			
Operating Voltage	12V DC			
Power Supply	Class 2			
Dimmable	Yes			

^{* 3000}K Sample

A patented, ADA compliant, co-extruded bullnose step light with contrasting stripe or 100% black (consult factory) and single or double row of LEDs.

Feature

- Titanium series LED PCB provides a choice of color for both bottom and top rows.
- Designed for secure foot placement in 3' to 12' lengths with a reflective edge for delineation and patron's safety.
- Pre-cut and assembled according to specification.
- Optional illuminated row indicator is available (see Page 2).
- Matching field-cuttable wireway with contrasting grey stripe is available in 8'lengths.
- Soft-molded end caps complete the integrated system. Individually replaceable LED PCBs easily snap into Titanium modules for easy and economical maintenance.

Mounting

Easy glue and screw down installation with recommended construction adhesives.

Applications

Required for 90° indoor steps.

Available in custom lengths up to 12 feet (consult factory).

Warranty

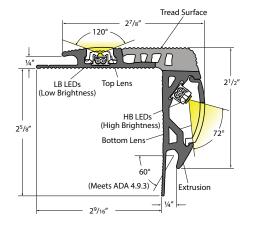
5 years

Profile Dimensions

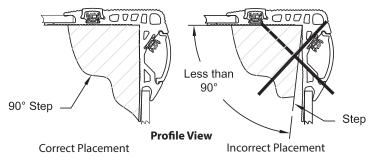








Required Field Conditions



Note: If step riser is not 90°, consult factory.

^{**}Available in 6" increments up to 12'. Specify when ordering.



Recommended Power Supplies

ADUL - NON DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
	ADUL-80-1-5-12-D				1	60W	5A
ADUL Series	ADUL-150-2-5-12-D Indoor / 100-277V AC	100-277V AC	10/ 00	2	2x60W	2x5A	
Class 2 Transformer	ADUL-240-3-5-12-D	Damp 50/60 HZ		12V DC	3	3x60W	3x5A
	ADUL-320-4-5-12-D				4	4x60W	4x5A

ADUL - 0-10V DIMMING

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
	ADUL-80-1-5-12-DOT				1	60W	5A
ADUL Series	ADUL-150-2-5-12-DOT Indoor / 100-277V AC	12V DC	2	2x60W	2x5A		
Class 2 Transformer	ADUL-240-3-5-12-DOT	Damp	,		3	3x60W	3x5A
	ADUL-320-4-5-12-DOT				4	4x60W	4x5A

ADUL - DMX SINGLE ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
	ADUL-80-1-5-12-DIN				1	60W	5A
ADUL Series Class 2 Transformer	ADUL-150-2-5-12-DIN		100-277V AC 50/60 HZ	12V DC	2	2x60W	2x5A
	ADUL-240-3-5-12-DIN				3	3x60W	3x5A

ADUL - DMX MULTI ADDRESS

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	CIRCUIT CAPACITY
	ADUL-150-2-5-12-DIN-2				2	2x60W	2x5A
ADUL Series Class 2 Transformer	ADUL-240-3-5-12-DIN-3	Indoor / Damp	100-277V AC 50/60 HZ	12V DC	3	3x60W	3x5A
	ADUL-320-4-5-12-DIN-4			-	4	4x60W	4x5A

INFINITY - MLV / ELV / 0-10V / PWM / TRIAC

DESCRIPTION	CAT NO	APPLICATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	CIRCUIT BREAKERS	MAX LOAD	MIN LOAD	CIRCUIT CAPACITY	
	INF-J-30-1-2.5-12			12V DC	1	30W	3W	2.5A	
Infinity Series	INF-J-60-1-5-12	Indoor /	100 - 277V AC		1	60W	6W	5A	
Class 2 Transformer	INF-J-180-3-5-12	Outdoor	100 - 277V AC	100 - 277V AC	12V DC	3	3x60W	3x6W	3x5A
	INF-J-300-5-5-12				5	5x60W	5x6W	5x5A	



Recommended Dimmers

DIMMING - 0-10V

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
0-10V Dimmer	DIM-LD-010	Indoor	12V/24V DC	12V/24V DC	30 mA max. output (sink only)

DIMMING - MLV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
	N-600				450W
	N-1000			800W	
MLV Dimmer	N-1500	Indoor	120V AC	1001/ 40	1200W
MLV Dimmer	D-600	Indoor	12UV AC	120V AC	450W
	M-600				450W
	M-1000				800W

DIMMING - ELV

DESCRIPTION	CAT NO	APPLICATION	INPUT VOLTAGE	OUTPUT VOLTAGE	MAX LOAD
FIV Dimmer	ME-600	Indoor	120V AC	120V AC	450W
ELV Dimmer	ELV Dimmer Indoor		120 V AC	120V AC	300W

In-Wall Controls





TVOQ-1-WH WH (White only)



TVOQ-10-XX-7 XX = BK (Black), WH (White)

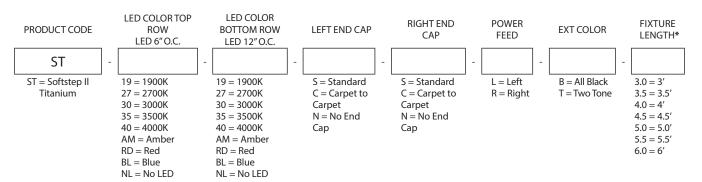




TVOQ-2-BK Black



Ordering Information

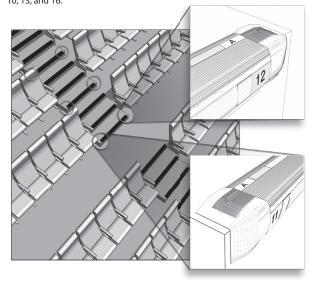


*Available in .5ft. increments up to 12'

Optional Row Indicator Information

*For ordering details see sample organizing chart below.

Figure (A) Example figure shows Row Indicators on middle staircase, steps 10, 13, and 16.



Character Designation

When selecting Row Indicators for your SoftStep II™ Titanium installation, here are some examples and guides to make your ordering process easier.

Within the figure (A) illustration we have offered an example spreadsheet to help organize your needs when designing row indicators into your venue. Your spreadsheet should reflect the call out and placement of each step by row and it's number that requires an indicator as shown in figure (A).

When looking at a seating layout from the stage or screen perspective, usually the first chair on the left side of the first row would be A1. In our illustration we have an orchestra pit section, so our Row A and seat 1 to 11 start on the isle. Seats A11 and A12 are separated by the middle staircase and reflect that design in the Row Indicators as shown.

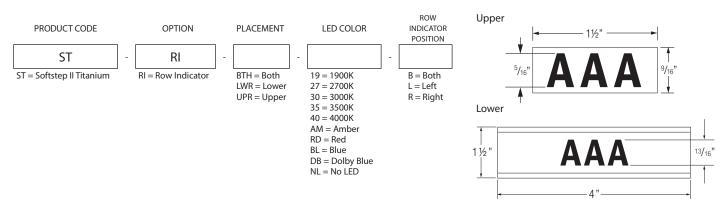
With every venue, each auditorium has it own unique design parameters. To assist you, the SoftStep II™ Titanium row indicators offer THREE CHARACTER placements of any letter or number combination you desire. Defining those character call outs is as easy as listing them in a spreadsheet as shown in figure (B)

To help organize and clarify your need for row indicators, it is important to create a spread sheet that reflects the placement of row indicators in your working drawings or blueprints. Our figure (A) example shows the placement of row indicators on steps 10, 13 and 16 in the middle staircase.

Figure (B)

			SAMPLE	ORGANIZING C	HART			
PROJECT:			CUSTOMER:			INSTALLER:		
AUDITORIUM	STAIRCASE	STEP NUMBER	COLOR	UPPER LEFT	LOWER LEFT	UPPER RIGHT	LOWER RIGHT	
3	MIDDLE	10	A	A	11	A	12	
3	MIDDLE	13	A	В	11	В	12	
3	MIDDLE	16	A	С	11	С	12	

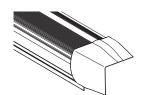
Row Indicator Ordering Information



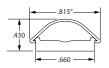
Tivoli, LLC, reserves the right to modify this specification without prior notice.



Mounting Accessories



ST-LENS-CL-12 Clear top lens, 12' ST-LENS-BZ-12 Bronze top lens, 12' ST-LL-CL-12 Clear lower lens, 12' ST-BS-TT-12 Base Extrusion 12', Two Tone ST-BS-BK-12 Base Extrusion 12', Black



BS-CC-8 Wall wireway, 8' Black Base & Conduit Cover



STP-EXTNDR-12 SoftStep Landing Tread Extender, 12'



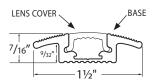
CARPET TO EDGE END CAP ST-EC-L Left End Cap ST-EC-R Right End Cap



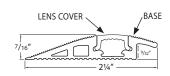
CARPET TO CARPET END CAP ST-CC-EC-L Left End Cap, Carpet-To-Carpet ST-CC-EC-R Right End Cap, Carpet-To-Carpet



ST-R-12 Step Reducer, 12' (shown) TM-3/16 Concrete Screw 3/16" x 11/4" RONDB-5/32 Concrete Drill Bit 5/32" Dia



WW-CC-BK-8 Carpet to Carpet Base and Cover 8' - Black WW-CC-GY-8 Carpet to Carpet Base and Cover 8' - Grey WW-CW-BK-8 Carpet to Wall Base and Cover 8' - Black WW-CW-GY-8 Carpet to Wall Base and Cover 8' - Grey WW-CW-BS-8 Base Only, Carpet to Wall, Black, 8' WW-CC-BS-8 Base Only, Carpet to Carpet, Black, 8' WW-TC-CL-8 Lens Cover Only, Clear, 8' WW-TC-BK-8 Lens Cover Only, Black, 8' WW-TC-BZ-8 Lens Cover Only, Bronze, 8' WW-TC-GY-8



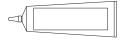
WW-CE-BK-8 Carpet to Edge Base and Cover 8' - Black WW-CE-GY-8 Carpet to Edge Base and Cover 8' - Gray WW-CE-BS-8 Base Only, Carpet To Edge, Black, 8' WW-TC-CL-8 Lens Cover Only, Clear, 8' WW-TC-BK-8 Lens Cover Only, Black, 8' WW-TC-BZ-8 Lens Cover Only, Bronze, 8' WW-TC-GY-8 Lens Cover Only, Gray, 8'



Lens Cover Only, Gray, 8'

EXTRUSION ADHESIVE ADH-MB-75AM-10 Extrusion adhesive, 10.1 oz tubes, sold individually. 30 per case. ADH-MB-75AM-29 Extrusion adhesive, 29 oz tubes,

sold individually. 12 per case.



ADH-5-CA Clear liquid adhesive for end caps. 5 oz tube.

END CAP ADHESIVE

Replacement Parts



REPLACEMENT LED PCB
(TOP ROW)
TT-LED-19
1900K
TT-LED-27
2700K
TT-LED-30
3000K
TT-LED-35
3500K
TT-LED-40
4000K
TT-LED-AM
Amber
TT-LED-BL
Blue
TT-LED-DB
Dolby Blue
TT-LED-RD
Dod



REPLACEMENT LED PCB (BOTTOM ROW) TT-LED-19-B 1900K
TT-LED-27-B
2700K
TT-LED-30-B
3000K
TT-LED-35-B
3500K
TT-LED-40-B
4000K
TT-LED-AM-B
Amber
TT-LED-BL-B
BLUE
TT-LED-DB
Dolby Blue
TT-LED-RD-B
Red



OPTIONAL ROW INDICATOR
REPLACEMENT LAMP
RI-LED-19
1900K
RI-LED-27
2700K
RI-LED-30
3000K
RI-LED-35
3500K
RI-LED-40
4000K
RI-LED-AM
Amber
RI-LED-BL
Blue
TT-LED-DB



INDOOR REPLACEMENT STRAND WITH LEDs (Top Row) Ordered in 1' increments

TT-STP-06-STRD-XX Replacement Strand - 6" O.C., Available in XX = 19/27/30/35/40/ RD/BL/DB/AM

TT-PH Power harness with lead wire & crimp connector



INDOOR REPLACEMENT STRAND WITH LEDs (Bottom Row) Ordered in 1' increments

TT-STP-12-STRD-XX-B Replacement Strand -12" O.C., Available in XX = 19/27/30/35/40/RD/BL/DB/AM

Dolby Blue RI-LÉD-RD