

BALLAST GUIDE

Rapid Start Electronic Fluorescent Dimming Ballasts

Ballast Product Line

Lutron ballasts for T5, T8 and T12 lamps are available through distribution and for OEM fixture installation. Ballasts that dim T4 lamps are intended only for OEM fixture installation.

1% Architectural Performance Dimming

For critical applications, such as for executive, computer intensive, and presentation spaces.



Hi-lume®

- Dims T8 and T12 linear and U-bent fluorescent lamps to 1%
- 3-wire line voltage control



Hi-lume®

- Dims T5 HO (high output) linear lamps to 1%
- Slim profile design—just 1" (254mm) high by 1.18" (300mm) wide
- Push-in connectors (shipped without leads)
- 3-wire line voltage control

5% High Performance Dimming

For demanding applications, including energy efficient compact and linear lamps.



Hi-lume Compact™

- Dims T4 and T5 twin tube compact fluorescent lamps to 5%
- 3-wire line voltage control



Tu-Wire™

- Dims T8 linear and T4 compact fluorescent lamps to 5%
- Slim profile design – just 1" (254mm) high
- Push-in connectors (shipped without leads)
- 2-wire line voltage power and control

10% Lighting Management Dimming

For lighting management and wide-area applications in commercial and institutional spaces, including daylight harvesting.



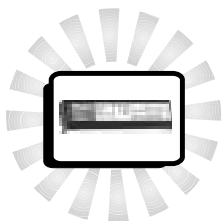
Eco-10™ (ECO-series)

- Dims T8 linear and T5 twin tube compact fluorescent lamps to 10%
- 3-wire line voltage control



Eco-10™ (TVE-series)

- Dims T8 linear, T4 compact and T5 twin tube fluorescent lamps to 10%
- 0-10VDC control
- For retrofits or new construction—ideal where control and power wiring are to be separated



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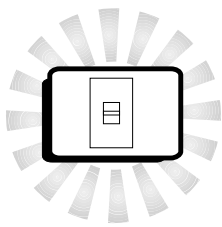


Ballast Specifications

Power	120/277V	120/277V	120/277V	120V
Lamp Type	T5 HO Linear*, T8 and T12 Linear and U-Bent	T5 Twin Tube, T8 Linear and U-Bent	T4 Compact, T5 Twin Tube	T4 Compact, T8 Linear and U-Bent
Ballast Model	Hi-lume	Eco-10 (ECO and TVE)	Hi-lume Compact	Tu-Wire
Dimming Range	100% to 1%	100% to 10%	100% to 5%	100% to 5%
Power Factor	> .95	> .95	> .95	>.95
Ballast Factor	> .85	> .85	> .85	>.85
Total Harmonic Distortion (THD)	< 10%	< 10%	< 20%	<20%
Sound Rating (audible noise)	Inaudible in 27 dB ambient	Inaudible in 27 dB ambient	Inaudible in 27 dB ambient	Inaudible in 37 dB ambient
Lamp Flicker	None visible	None visible	None visible	None visible
Min Ballast Starting Temperature	10° C	10° C	10° C	10°C
Frequency of Operation	> 25 KHz (> 45KHz, T5 HO)	> 25 KHz	> 25 KHz	> 42 KHz
Max Wire Length Ballast to Socket	7ft. (2m)	7ft. (2m) (3ft. [1m] for T5)	3 ft. (1m)	3 ft. (1m)
Inrush Current	< 10 X Operating current	< 10 X Operating current	< 10 X Operating current	< 10 X Operating current
Fusing	Internal	Internal	Internal	Internal
Max. Ballast Case Temperature	Not to exceed 75° C	Not to exceed 75° C	Not to exceed 75° C	Not to exceed 75° C

*277 V only

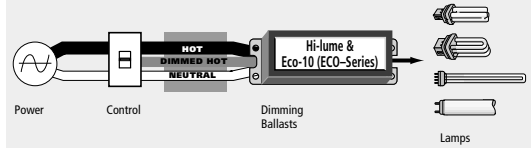
Power	100/200V	100/200V	220/240V	347V
Lamp Type	T8 (HF 32 EX), T10½ (FLR 40S) Linear	T8 (HF 32 EX), T10½ (FLR 40S) Linear	T4 Compact, T5 Twin Tube and T8 (26mm) Linear	T8 Linear and U-Bent
Ballast Model	Hi-lume	Eco-10 (ECO and TVE)	Hi-lume	Eco-10 (TVE)
Dimming Range	100% to 1%	100% to 10%	100% to 5% (1% for T8)	100% to 10%
Power Factor	> .95	> .95	> .95	> .95
Ballast Factor	> .85	> .95	> .85	> .85
Total Harmonic Distortion (THD)	<10%	<10%	<10%	<10%
Sound Rating (audible noise)	Inaudible in 27 dB ambient	Inaudible in 27 dB ambient	Inaudible in 27 dB ambient	Inaudible in 27 dB ambient
Lamp Flicker	None visible	None visible	None visible	None visible
Min Ballast Starting Temperature	10° C	10° C	10° C	10° C
Frequency of Operation	> 25 KHz, < 33 KHz	> 25 KHz, < 33 KHz	> 25 KHz, < 33 KHz	> 28 KHz
Max Wire Length, Ballast to Socket	2 meters	2 meters	2 meters (1 meter for T4 and T5)	2 meters
Inrush Current	< 10 X Operating current	< 10 X Operating current	< 10 X Operating current	< 10 X Operating current
Fusing	Internal	Internal	Internal	Internal
Max. Ballast Case Temperature	Not to exceed 75° C	Not to exceed 75° C	Not to exceed 75° C	Not to exceed 75° C













BALLAST GUIDE ■ Fluorescent Dimming Controls

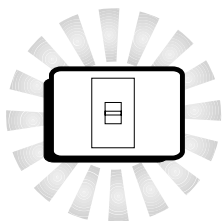
Control Specifications

Hi-lume and Eco-10 (ECO-Series) Ballasts 3-Wire Line Voltage Control

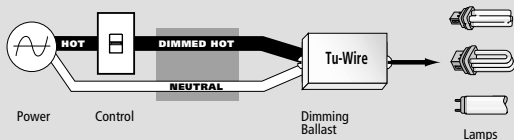


LUTRON FLUORESCENT LIGHTING CONTROLS

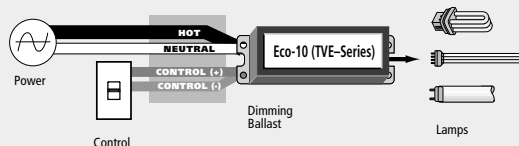
		BALLAST VOLTAGE	CONTROL MODEL NO. □	CAPACITY □
Nova T ☆	 Thin Profile, Slide-to-off Dimmer single pole single pole	120V	NTF-10-	16A
		277V	NTF-10-277-	8A
	Thin Profile, Preset/Slide-to-off Dimmer single pole, 3-way □ single pole, 3-way □	120V	NTF-103P-	16A
		277V	NTF-103P-277-	8A
Nova	 Standard Profile, Slide-to-off Dimmer single pole single pole	120V	NF-10-	16A
		277V	NF-10-277-	8A
	Standard Profile, Preset/Slide-to-off Dimmer single pole, 3-way □ single pole, 3-way □	120V	NF-103P-	16A
		277V	NF-103P-277-	8A
Vareo	 Tapswitch/Presetslide Dimmer single pole, 3-way	120V	VF-10-	8A
Diva	 Paddle Switch/Presetslide Dimmer single pole, 3-way □ single pole, 3-way □	120V	DVF-103P-	8A
		277V	DVF-103P-277-	6A
Skylark	 Rocker Switch/Presetslide Dimmer single pole single pole 3-way 3-way single pole, 3-way □	120V	SF-10P-	8A
		277V	SF-12P-277-	6A
		120V	SF-103P-	8A
		277V	SF-12P-277-3-	6A
Ariadni	 Toggle Switch/Presetslide Dimmer single pole, 3-way □ single pole, 3-way □	120V	AYF-103P-	8A
		277V	AYF-103P-277-	6A
PerSONNA	 Wireless Remote Control for Open Offices • Easy to install • Upgrades lighting performance	120-277V	PN-IR PN-HT-GR □	20 ballasts
Spacer System	 Wireless Preset Scene Control for Enclosed Spaces single pole multi-location	277V	SPSF-10-277-	6A
		277V	SPSF-10M-277-	6A
			SPS-4IT-RP □	
RadioTouch™	 Wireless Multi-Zone Control • Controls single or multiple zones • Occupant sensing and switch closure functions (optional)	120V-277V	RTA-RX-F RTA-TX-L □	16A
GRAFIK Eye	 Multi-Scene Preset Control • Pushbutton preset and recall • 4-16 scenes, 2-6 zones • Wireless remote control (optional)	120V	GRX-310 □	16A / zone
			Requires GRX-FDBI- interface	



Tu-Wire Ballasts 2-Wire Power and Control



Eco-10 (TVE-Series) Ballasts 0-10VDC Control



BALLAST VOLTAGE **CONTROL MODEL No. [1]** **CAPACITY [2]**

120V NTFTU-5A- 5A

120V NFTU-5A- 5A

120V DVFTU-5A3P- 5A

120V SFTU-5A3P- 5A

120V SPSFTU-5A- 5A
120V SPSFTU-5AM- [3] 5A
SPS-4IT-RP [3]

120V RTA-RX-F 16A
Requires FDI-FTU-16A-120 Interface
RTA-TX-L- [3]

120V GRX-310_ [4] 6.7A / zone
No interface required

BALLAST VOLTAGE **CONTROL MODEL No. [1]** **CAPACITY [2]**

0-10 VDC NTFTV-[3] 60 ballasts

0-10 VDC NFTV-[3] 60 ballasts

0-10 VDC PN-IR-TV [3] 20 ballasts
PN-HT-GR [3]

120-277V RTA-RX-F 16A
RTA-TX-L- [3]

0-10 VDC GRX-310_ [4] 16A / zone
Requires GRX-TVI interface

[1] Add color suffix for complete model number (see publication 360-178). Example **NTF-10-WH**.

[2] For maximum number of ballasts per control, divide control capacity by the sum total of all ballast currents. Certain controls have stated ballast maximums.

[3] Cap off unused lead for single pole application. Use the following Lutron products with listed controls for 3-way and 4-way switching:

Control	3-way switching	4-way switching
Nova T ☆	NT-3PS	NT-4PS
Nova	N-3PS	N-4PS
Vareo	VETS-R	VETS-R
Diva	CA-3PSH	CA-4PSH
Ariadni	std, 3-way switch	—

[4] Requires Lutron Power Pack PP-20 to switch ballast power on/off.

[5] Model No. for companion handheld remote control.

[6] Use SPS-AD for multi-location dimming (10 max).

[7] Insert 2, 3, 4 or 6 (no. of zones).