369616q 1 02.09.18

Nova T☆ Controls

This series of classic thin-profile linear-slide dimmers and switches offers the following standard features:

- Square Law Dimming
- Voltage compensation (not applicable to NTCL-250)
- Power-failure memory
- Superior RFI suppression
- Captive linear slider
- Accessible air-gap switch
- Electrostatic discharge tested
- Precise color matching
- Heavy-duty components for surge protection and long product life
- 100% factory tested

Product Family Features

- Available for 120–277 V∼ line voltage switching (sink- only control) 0-10 V== LED drivers and ballasts (power pack not required for loads up to 8 A)
- Excellent for residential or commercial applications
- Intuitive operation; easy to use
- Slide-to-off and preset models available
- Enclosed heat sink for aesthetically pleasing appearance
- Multi-gang alignment for quick and easy installation
- Full family of products for most lighting sources, plus matching accessories and wallplates
- Rated at 120 V ∼ 60 Hz, unless noted otherwise
- Custom products (CPN) are available to meet specific customer needs. Please contact Lutron Customer Assistance at 1.844.LUTRON1 (588.7661) for availability.

Regulatory Approvals

- UL_® Listed
- CSA certified
- NOM

Colors and Finishes

When ordering product for use with metal wallplates. the product and wallplate must be ordered separately. See the "Architectural Wallplates and Accessories" section of Volume 1: Basic Devices and Single-Space Systems Catalog (P/N 367-1746) for ordering procedure. See table to the right for complete list of metal finishes.

Custom color matching is available for all Nova T☆ products. A swatch or sample is all that is required. Call customer service to arrange for a color-matched control.



Slide-to-Off Controls Select light level with slider; slide down to OFF



Preset Controls Select light level with slider; press ON/OFF

Engraving is available for all Nova T[↑] products. Engraving schedules are available at www.lutron.com/engraving or through Customer Assistance at 1.844.LUTRON1 (588.7661).

Available Colors and Finishes

Matte Finishes

To order, add color/finish suffix code to model number. Example: NT-600-WH

Code	Color	
WH	White	
TP	Taupe	
AL	Almond	
BL	Black	

Color
Gray
Ivory
Light Almond

Code	Color	
BE	Beige	
SI	Sienna	
BR	Brown	

Special Order

To order, add color/finish suffix code to model number. Example: NT-600-BB

Metal Finishes

Code	Color	
SB	Satin Brass	
ВС	Bright Chrome	

Code	Color
BB	Bright Brass

Special Metal Finishes

Code	Color	
QB	Antique Brass	
SC	Satin Chrome	
BN	Bright Nickel	

Code	Color	
QZ	Antique Bronze	
SN	Satin Nickel	

Anodized Aluminum Finishes

Code	Color
CLA	Clear

Code	Color	
BLA	Black	

Code	Color	
BRA	Brass	

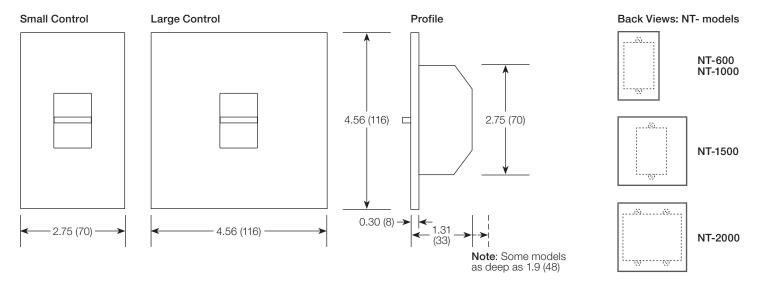
LUTRON SPECIFICATION SUBMITTAL

Page Job Name: Model Numbers: Job Number:

369616q 2 02.09.18

Dimensions

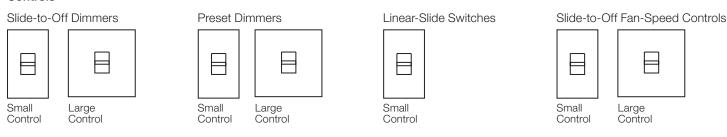
Measurements shown as: in (mm)



Available Controls and Accessories (Summary)

For specific uses, capacities, and model numbers, see the following pages.

Controls



Job Name:	Model Numbers:
Job Number:	

369616q 3 02.09.18

Control Specifications

☐ Incandescent Dimmers: Slide-to-Off				
		Description	Maximum Capacity	Model Number
	Small Control	Single-pole 120 V∼ 60 Hz	600 W	NT-600-XX
		Single-pole 120 V∼ 60 Hz	1000 W	NT-1000-XX
∏ La	Large Control	Single-pole 120 V∼ 60 Hz	1500 W	NT-1500-XX
La	irge Control	Single-pole 120 V∼ 60 Hz	1950 W	NT-2000-XX
The NT-2The NT-2	2000-XX doe: 2000-XX requ	s not have removable side sections; it can b iires a 2-gang wallbox.	e ganged but must be kept intact.	
☐ Incande	escent Dimn	ners: Preset		
		Description	Maximum Capacity	Model Number
│	l Control	Single-pole/3-way/4-way 120 V∼ 60 Hz	600 W	NT-603P-XX
		Single-pole/3-way/4-way 120 V∼ 60 Hz	1000 W	NT-1003P-XX
La	arge Control	Single-pole/3-way/4-way 120 V∼ 60 Hz	1500 W	NT-1503P-XX
• For 3-way	y or 4-way sv	witching, use NT-3PS-XX (3-way), NT-4PS-X	X (4-way), or other mechanical switc	ches.
C•L Dimm	ers: Slide-to	o-Off		
		Description	Maximum Capacity	Model Number
	l Control	Dimmable LED/CFL Single-pole 120 V∼ 60 Hz	250 W	NTCL-250-XX
		Incandescent/Halogen Single-pole 120 V∼ 60 Hz	1000 W	
		Hi-lume 1% 2-Wire LTE LED driver Single-pole 120 V∼ 60 Hz	400 W (maximum of 10 drivers)	
		Mixed bulb type Single-pole 120 V∼ 60 Hz	See Derating: Maximum Capacities in Multigang Installations	
 Application requirements: When dimming LEDs or CFLs, only bulbs marked or rated as dimmable and on the recommended list may be used. For a complete list of recommended dimmable LEDs and CFLs please visit www.lutron.com/dimcflled. For questions call 1.844.LUTRON1. Some dimmable LEDs and CFLs require a minimum number of bulbs for proper operation. For details and the bulb list, visit www.lutron.com/dimcflled For LED product selection tool, visit www.lutron.com/ledtool Features: Low-end adjustment to accommodate a wide range of bulbs. HEDT Technology: Advanced Lutron dimming circuitry designed for compatibility with most high efficacy light bulbs. NEMA SSL-7A Type 2 compliant. 				

ا 🔻 ا	Flectronic Low-Voltage (ELV) Dimmers: Slide-to-Off				
]	Description	Maximum Capacity	Model Number	
=	Small Control	Single-pole 120 V∼ 60 Hz	300 W	NTELV-300-XX	
		Single-pole 120 V∼ 60 Hz	600 W	NTELV-600-XX	

- Maximum capacity is permitted lamp wattage.
- Requires neutral wire connection.
 For larger capacity ELV loads (up to 1000 W), use Nova T☆ fluorescent dimmers (NTF-10-XX or NTF-103P-XX) with a PHPM-WBX
- Minimum Load: 5 W Incandescent/Halogen or 1 ELV transformer. ELV transformer must be loaded per manufacturer's recommendations.

(continued on next page...)

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616q 4 02.09.18

Control Specifications (continued)					
▼ Magnetic Low-Voltage (MLV) Dimmers: Slide-to-Off					
	Description	Maximum Capacity	Model Number		
	Single-pole 120 V∼ 60 Hz	600 VA / 450 W	NTLV-600-XX		
	Single-pole 277 V∼ 60 Hz	600 VA / 450 W	NTLV-600-277-XX		
	Single-pole 120 V∼ 60 Hz	1000 VA / 800 W	NTLV-1000-XX		
	Single-pole 277 V∼ 60 Hz	1000 VA / 800 W	NTLV-1000-277-XX		
☐ Large Control	Single-pole 120 V∼ 60 Hz	1500 VA / 1200 W	NTLV-1500-XX		
Maximum capacity is277 V∼ models requ	permitted lamp wattage. ire neutral wire connection.				
Magnetic Low-Volt	age (MLV) Dimmers: Preset				
	Description	Maximum Capacity	Model Number		
☐ Small Control	Single-pole/3-way/4-way 120 V∼ 60 Hz	600 VA / 450 W	NTLV-603P-XX		
	Single-pole/3-way/4-way 120 V∼ 60 Hz	1000 VA / 800 W	NTLV-1003P-XX		
Large Control	Single-pole/3-way/4-way 120 V∼ 60 Hz	1500 VA / 1200 W	NTLV-1503P-XX		
• For 3-way or 4-way s	witching, use NT-3PS-XX (3-way), NT-4PS-X	X (4-way), or other mechanical switch	ches.		
- □□□ Fluorescent Dimn	ners for Lutron 3-wire fluorescent ballasts	or LED drivers: Slide-to-Off			
	Description	Maximum Capacity	Model Number		
☐ Small Control	Single-pole 120 V∼ 60 Hz	16 A	NTF-10-XX		
	Single-pole 277 V∼ 60 Hz	8 A	NTF-10-277-XX		
 Use with Lutron 3-wire fluorescent ballasts or LED drivers only. For LED loads, please see the "Report Cards" at www.lutron.com/ledtool for proper loading of the dimmer. No derating required. To determine the number of ballasts that can be controlled by Nova T☆ fluorescent dimmer, divide the control capacity by the ballast current. 					

DID Fluorescent Dimmers for Lutron 3-wire fluorescent ballasts or LED Drivers: Preset

		Description	Maximum Capacity	Model Number
S	Small Control	Single-pole/3-way 120 V∼ 60 Hz	8 A	NTF-103P-XX
		Single-pole/3-way 277 V∼ 60 Hz	6 A	NTF-103P-277-XX

- Use with Lutron 3-wire fluorescent ballasts or LED drivers only.

- For LED loads, please see the "Report Cards" at www.lutron.com/ledtool for proper loading of the dimmer.

 For 3-way or 4-way switching, use NT-3PS-XX (3-way), NT-4PS-XX (4-way), or other mechanical switches. No derating required.

 To determine the number of ballasts that can be controlled by Nova Ta fluorescent dimmer, divide the control capacity by the ballast current.

(continued on next page...)

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616a 5 02.09.18

Control Specifications (continued)

Reverse-Phase Electronic Low-Voltage (ELV) Dimmer: Slide-to-Off				
	Description	Maximum Capacity	Model Number	
Small Control	Dimmable LED/CFL; Single-pole 120 V∼ 60 Hz	250 W		
	Incandescent/Halogen Single-pole 120 V∼ 60 Hz	600 W	NTRP-250-XX	
	ELV with Halogen Single-pole 120 V∼ 60 Hz	600 W		

- For the best performance, use a bulb that is on the Lutron LED Report Card Tool at www.lutron.com/ledtool For questions call 1.877.DIM.LED8.
- •When dimming LEDs or CFLs, only bulbs marked or rated as DIMMABLE WITH REVERSE-PHASE OR UNIVERSAL DIMMERS may be used.
- •For recommended ELV transformers and compatible MR16 LED bulbs, please see Lutron Application Note #559 at www.lutron.com/TechnicalDocumentLibrary/048559.pdf. Always follow the transformer and bulb manufacturer instructions for allowable loading.
- Not compatible with magentic low-voltage (MLV) transformers or magnetic LED transformers/drivers
- Dimmer is not compatible with bulbs rated only for forward-phase type dimmers.
- •Minimum Load: 1 compatible CFL / LED bulb or 5 W Incandescent / Halogen or 1 ELV transformer. ELV transformer must be loaded per the manufacturer's recommendation.

8 A

30 mA

- Power pack not required for loads up to 8 A. May use Lutron power pack (model PP-DV or PP347H; see Lutron P/N 369544) for higher load current applications or for Class 2 installations.
- Works with all ballasts and drivers that provide a current source compliant to IEC 60629 Annex E.2, and whose inrush current does
 not exceed NEMA410 standards for electronic ballast/driver loads of 8 A steady-state current. Refer to LED driver and ballast
 manufacturer's specification for 0–10 V== sink currents.
- Control has a high and low end trim to adjust the 0-10 V--- output for optimal dimming performance.
- Limited by whichever rating is achieved first.

⇒ Fluorescent Dimmers for Tu-Wire Electronic Ballasts: Slide-to-Off

		Description	Maximum Capacity	Model Number
	🗎 Small Control	Single-pole 120 V∼ 60 Hz	5 A	NTFTU-5A-XX
		Single-pole 277 V∼ 60 Hz	5 A	NTFTU-5A-277-XX

- Use with Lutron Tu-Wire line voltage control electronic dimming ballasts only.
- To determine the number of ballasts that can be controlled by Nova T
 † fluorescent dimmer, divide the control capacity by the ballast current.
- Compatible with Advance® Mark X® and Sylvania Powersense® ballasts.

= Fluorescent Dimmers for Advance $_{\odot}$ Mark X $_{\odot}$ VEZ series 277 V \sim Ballasts: Preset

	Description	Maximum Capacity	Model Number
Small Control	3-way 277 V∼ 60 Hz	3 A	NTFTU-103P-277-XX-CPW0196

- For control of permanently installed Advance® Mark X® VEZ series 277 V
 ballasts only.
- Install on load side only.
- No derating required.
- To determine the number of ballasts that can be controlled by Nova T
 † fluorescent dimmer, divide the control capacity by the ballast current.

Linear-Slide Switches for General Purpose: All Sources and Motor Loads

	Description	Maximum Capacity	Model Number	
	Single-pole 120/277 V∼ 60 Hz	20 A	NT-1PS-XX	
	3-way 120/277 V∼ 60 Hz	20 A	NT-3PS-XX	
	4-way 120/277 V∼ 60 Hz	20 A	NT-4PS-XX	
No deveting required				

No derating required.

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LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616q 6 02.09.18

Control Specifications (continued)

Low-voltage Momentary Switch				
	0 "0	Description	Maximum Capacity	Model Number
	Small Control	Up to 10 switches per power pack, 24 V==-/24 V∼ 60 Hz	1 A	NTRCS-1-XX
• No c	use with Lutron de lerating required. available in AL, L	evices (power pack and wired occupancy ser A, or SI.	nsors) only.	
≫ Fa	an-Speed Contr	ols: Quiet		
		Description	Maximum Capacity	Model Number
	Small Control	Single-pole, 3-speed 120 V∼ 60 Hz	1.5 A	NTFSQ-XX
	use with one ceilir Ierating required.	ng paddle fan.		
∰ Fa	n-Speed Contro	ls: Fully Variable		
		Description	Maximum Capacity	Model Number
S	Small Control	Single-pole, Adjustable minimum speed 120 V∼ 60 Hz	6 A	NTFS-6E-XX
	Large Control	Single-pole, Adjustable minimum speed 120 V∼ 60 Hz	12 A	NTFS-12E-XX
For use with one or more ceiling, ventilation, or exhaust fans. Do not mix fan types on same control.				

LUTRON SPECIFICATION SUBMITTAL

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Job Name:	Model Numbers:
Job Number:	

369616q 7 02.09.18

Derating: Maximum Capacities in Multigang Installations*

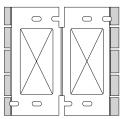
When installing more than one dimmer in the same wallbox, it may be necessary to remove some side sections prior to wiring (see diagram below). Removal of side sections may reduce maximum wattage, as shown in the charts below.

Mixing bulb types (using a combination of LED/CFL and incandescent/halogen bulbs) will also affect the maximum ratings, as shown in the charts below.

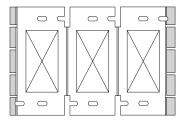
Example: If one set of side sections is removed and you have eight 9 W LED bulbs installed (Total LED Wattage = 72 W), you may add up to 500 W of incandescent or halogen lighting with the C•L control or 300 W with the Reverse-Phase control.



Do not remove outside sections (shaded areas below)







Middle control has two side sections removed

Single Units Full capacity. No side sections removed	End Units One side section removed	Middle Units Two side sections removed
Incandescent Controls		
600 W	500 W	300 W
1000 W	900 W	700 W
1500 W	1250 W	1000 W
1950 W		_
AIT 2000 VV controls (for 1050 W consoits) must be consoit		

 NT-2000-XX controls (for 1950 W capacity) must be ganged without removing side sections.

C•L Controls	<u> </u>			
		+	Total LED/CFL Wattage Installed (Wattage per bulb × number of bulbs)	
1000 W	800 W	600 W	+	0 W
800 W	600 W	500 W	+	1 W – 40 W
600 W	500 W	400 W	+	41 W – 80 W
500 W	400 W	300 W	+	81 W – 120 W
400 W	300 W	200 W	+	121 W – 160 W
300 W	200 W	100 W	+	161 W – 200 W
0 W	0 W	0 W	+	201 W – 250 W
 No derating is 	required for multigar	ng installations if only LED	bulbs ar	re used or if no fins are broken.
Reverse-Phase	Electronic Low-Vo	Itage (ELV) Controls	·	
			+	Total LED/CFL Wattage Installed (Wattage per bulb × number of bulbs)
600 W	500 W	400 W	+	0 W
500 W	400 W	300 W	+	1 W – 40 W
400 W	300 W	200 W	+	41 W – 80 W
300 W	200 W	100 W	+	81 W – 120 W
200 W	100 W	50 W	+	121 W – 160 W
100 W	50 W	0 W	+	161 W – 200 W
0 W	0 W	0 W	+	201 W – 250 W
No doroting is	required for multigar	ng installations if only LED	hulhe ar	e used or if no fins are broken.

^{*} For more information on multigang installations, visit www.lutron.com/en-US/Service-Support/Pages/Technical/InstallationInstructions/Ganging-Derating/GangingDerating.aspx

(continued on next page...)

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616q 8 02.09.18

Derating: Maximum Capacities in Multigang Installations* (continued)

Single Units Full capacity. No side sections removed	End Units One side section removed	Middle Units Two side sections removed	
Electronic Low-Voltage		Terrioved	
300 W	300 W	250 W	
600 W	500 W	400 W	
Permitted lamp watt	age for ELV controls	3.	
Magnetic Low-Voltag	je (MLV) Controls		
600 VA/450 W	500 VA/400 W	300 VA / 250 W	
1000 VA/800 W	900 VA/750 W	700 VA / 500 W	
1500 VA/1200 W	1250 VA/1000 W	1000 VA / 800 W	
 Permitted lamp watt 	age for MLV control	s.	
Fluorescent 3-Wire B	Sallast or LED Drive	er Controls	
6 A	No derating required		
8 A	No derating required		
16 A	No derating required		
Fluorescent Tu-Wire	Controls		
3 A	No derating require	ed	
5 A	4 A	3.3 A	
0-10 V== Electronic E	Ballast or LED Driv	er Controls	
Load 0-10 V== Sink 8 A 30 mA	No derating required		
Quiet Fan-Speed Cor	ntrols		
1.5 A	1.5 A No derating required		
Fully Variable Fan-Sp	eed Controls		
6 A	4.2 A	2.5 A	
12 A	10 A	8.3 A	

LUTRON SPECIFICATION SUBMITTAL

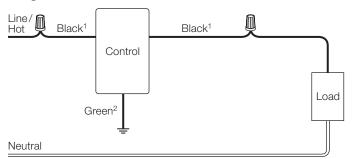
Job Name:	Model Numbers:
Job Number:	

For more information on multigang installations, visit www.lutron.com/en-US/Service-Support/Pages/Technical/InstallationInstructions/Ganging-Derating/GangingDerating.aspx

369616q 9 02.09.18

Wiring Diagrams: Single Location

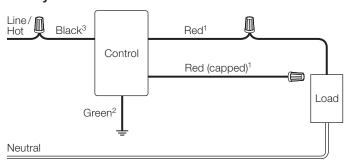
Single-Pole Control



Models:

- NT-600-XX
- NT-1000-XX • NT-1500-XX
- NTCL-250-XX NTLV-600-XX
- NTLV-1500-XX NT-1PS-XX
- NTLV-1000-XX
- NT-2000-XX
- NTFSQ-XX

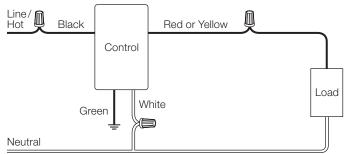
3-Way Control



Models:

- NT-603P-XX
- NT-1003P-XX
- NT-1503P-XX
- NTLV-1003P-XX
- NTLV-1503P-XX • NT-3PS-XX
- NTLV-603P-XX

Single-Pole Control with Neutral



Models:

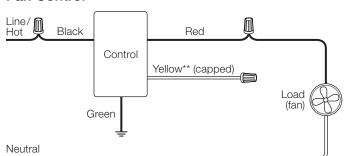
- NTELV-300-XX** • NTRP-250-XX
- NTELV-600-XX**
- NTLV-600-277-XX
- NTLV-1000-277-XX
- ** Use NTELV- models with 120 V~ only

Key



- Wire or brass/ gold screw terminal*
- ² Wire or green screw terminal*
- 3 Wire or copper/ black screw terminal*
- * Dimmers have wires; switches have screw terminals

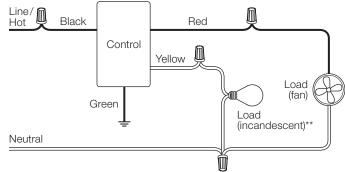
Fan Control



Models:

- NTFS-6E-XX
- NTFS-12E-XX
- ** Switched full-voltage only

Fan/Light Control



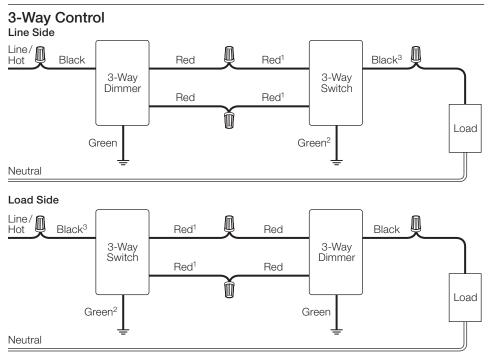
- Models:
 NTFS-6E-XX
- NTFS-12E-XX
- ** Switched full-voltage only

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616q 10 02.09.18

Wiring Diagrams: Multi-Location



• NT-3PS-XX

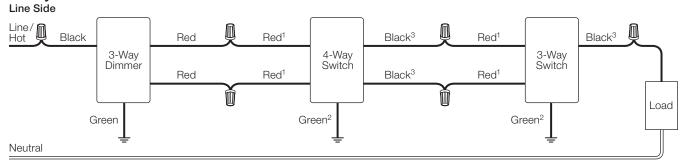
Key

- \perp Ground
- Wire connector
 - Wire or brass/ gold screw terminal*
 - Wire or green screw terminal*
 - Wire or copper/ black screw terminal*
 - * Dimmers have wires; switches have screw terminals

Models:

- NT-603P-XX NTLV-603P-XX
- NT-1003P-XX NTLV-1003P-XX
- NT-1003P-XX
 NT-1503P-XX
 NTLV-1003P-XX
 NTLV-1503P-XX

4-Way Control



Load Side Line/ Black³ Red1 Black³ Red1 Black Red Hot 3-Way 4-Way 3-Way Switch Dimmer Switch Black³ Red¹ Red1 Red Ū Load Green² Green² Green Neutral

Models:

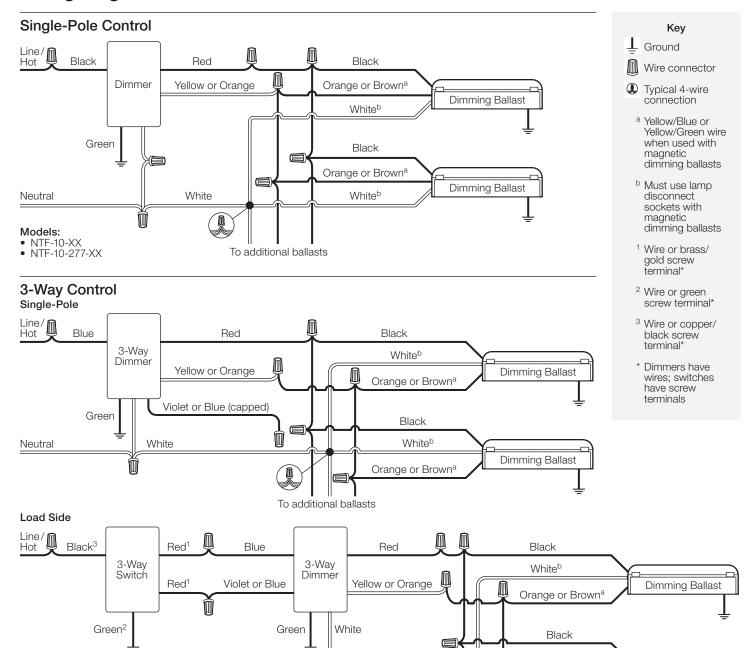
- NT-603P-XX NTLV-603P-XX NT-3PS-XX NT-1003P-XX NTLV-1003P-XX NT-4PS-XX
- NT-1503P-XX NTLV-1503P-XX

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

369616q 11 02.09.18

Wiring Diagrams: NTF- Controls



Models:

Neutral

- NTF-103P-XX
- NTF-103P-277-XX

LUTRON SPECIFICATION SUBMITTAL

Page

Dimming Ballast

White^b

Orange or Brown^a

To additional ballasts

Job Name:	Model Numbers:
Job Number:	

369616q 12 02.09.18

Wiring Diagrams: NTFTU- Controls

Single-Pole Control Line/ Hot Black Black Dimmer Dimming Ballast Green or Bare Neutral White Model: • NTFTU-5A-XX Line/ Hot Black Red Dimmer Dimming Ballast Green or Bare White Neutral



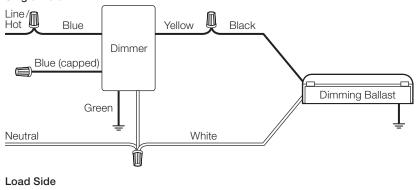
<u>I</u> Ground

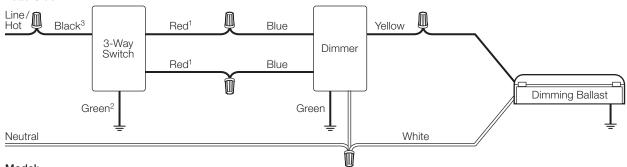


- 1 Wire or brass/
- gold screw terminal*
- ² Wire or green screw terminal*
- ³ Wire or copper/ black screw terminal*
- * Dimmers have wires; switches have screw terminals



Model:
• NTFTU-5A-277-XX





• NTFTU-103P-277-XX-CPW0196

LUTRON SPECIFICATION SUBMITTAL

Job Name:	Model Numbers:
Job Number:	

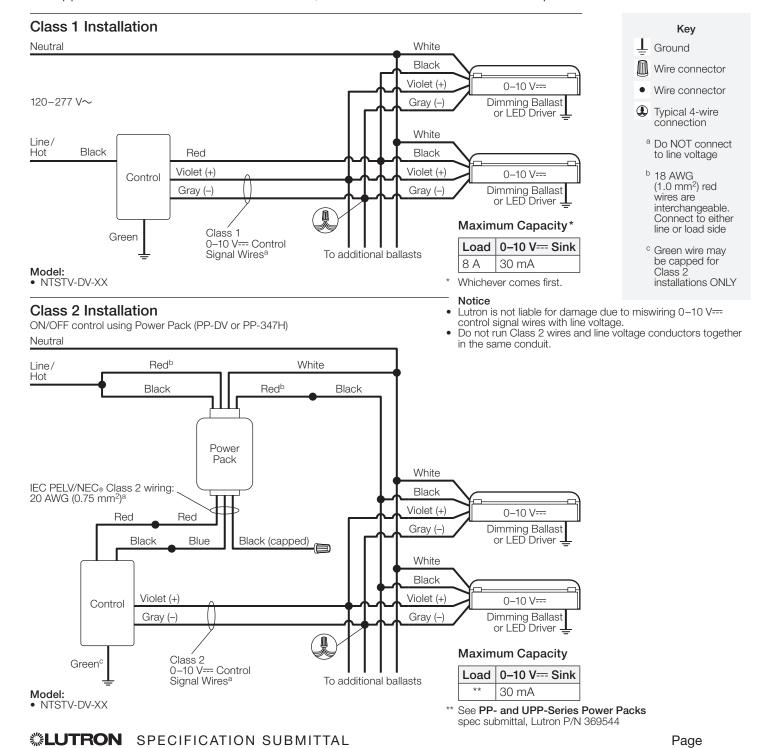
Job Name:

Job Number:

369616q 13 02.09.18

Wiring Diagrams: NTSTV- Controls

- The total 0–10 V== control signal wiring for this control should not exceed 500 ft (152.4 m).
- Do not use wire smaller than 20 AWG (0.75 mm²).
- For Class 1 installations, 0–10 V== wires must be run in conduit or approved cable per NEC® or local jurisdiction.
- For Class 2 installations, conduit is typically not required (local code may apply).
- For application with excessive electrical noise, 0–10 V== wires should be run in separate conduit from the mains.

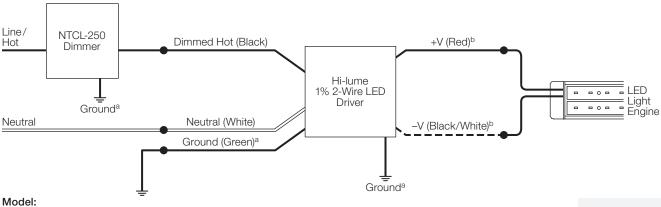


Model Numbers:

369616q 14 02.09.18

Wiring Diagrams: NTCL- Controls

Hi-lume 1% 2-Wire LTE LED Driver Installation



NTCL-250-XX

Key

<u>↓</u> Ground

- Wire connector
- a Enclosure and junction box must be grounded in accordance with local and national electrical codes. Ground provided by grounding of junction box or by using the green ground wire connection
- b For maximum driver-to-LED light engine wire length, see Hi-lume 1% 2-Wire LED Driver (P/N 369543)

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 $\label{eq:Advance} \mbox{Advance and Mark X are registered trademarks of Phillips Corporation.}$

Powersense is a registered trademark of Sylvania Corporation.

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Job Name:	Model Numbers:	
Job Number:		