



# Thomas Research Products

SSL Solutions Faster Than The Speed Of Light®

## LED Driver Dimming

TRP's dimmable Constant-Current LED Drivers for 0-10V Dimming offer a variety of options and configurations. This list details the specific wiring required to assure full light output. In many cases, a dimmable model can also substitute for a non-dimming model which may not be available.

Note: Minimum dimming does not turn off these devices; they still consume power. Switch the power off to fully power down.

Watts	Model	Dimming Min.	Full Output	Light Output (all leads open)	Resistance Dimming	Passive Dimmer	Active Dimming	Dimming leads
25	LED25W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-025Sxxx-DT	20-30%	Short Yellow & Purple; cap off Green	90%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Green; cap off Yellow	Yellow/Purple/Green
	VLED25W-xx-Cxxxx-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Gray; cap off Yellow	Yellow/Purple/Gray
30	LED30W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
35	TRC-035Sxxx-DT	20-30%	Short Yellow & Purple; cap off Green	90%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Green; cap off Yellow	Yellow/Purple/Green
	LED35W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
40	LED40W-xx-Cxxxx-D (LED40W-xx-Cxxxx-D3)	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray (Yellow/Purple/Gray)
	LED40W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
	TRC-040SxxxDS	20-30%	Short Yellow & Purple; cap off Green	90%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Green; cap off Yellow	Yellow/Purple/Green
	VLED40W-xx-Cxxxx-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Gray; cap off Yellow	Yellow/Purple/Gray
50	LED50W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-050Sxxx-DT	20-30%	Short Yellow & Purple; cap off Green	90%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Green; cap off Yellow	Yellow/Purple/Green
	VLED50W-xx-Cxxxx-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray; cap off Yellow	Connect 0-10V source to Purple & Gray; cap off Yellow	Yellow/Purple/Gray
60	LED60W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	LED60W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
75	LED75W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	LED75W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
	LEG75W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	PLED75W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-075SxxxDT-NL	10%	Short Yellow & Purple; cap off Green	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Purple & Gray; cap off Green	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
	TRC-075SxxxDT	10%	Cap off all three dimming leads	100%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
	TSC75W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray

TRP LED Dimming Guide,  
Page 2

Watts	Model	Dimming Min.	Full Output	Light Output <i>(all leads open)</i>	Resistance Dimming	Passive Dimmer	Active Dimming	Dimming leads
90	LED90W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	LED96W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
	PLED96W-xx-Cxxxx-D (PLED96W-xx-Cxxxx-D3)	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray (Yellow/Purple/Gray)
100	TRC-096SxxxDT	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	LED100W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	LED100W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
	LEG100W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-100SxxxDT	10%	Cap off all three dimming leads	100%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
TRC-100SxxxDT-NL	10%	Short Yellow & Purple; cap off Green	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Purple & Gray; cap off Green	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green	
120	LEG120W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	PLED120W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-120SxxxDT	10%	Cap off all three dimming leads	100%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
	TRC-120SxxxDT-NL	10%	Short Yellow & Purple; cap off Green	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Purple & Gray; cap off Green	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
150	LED150W-xx-Cxxxx-M-D	10%	Short Yellow & Purple; cap off Gray	100%	Connect resistor to Yellow & Purple	Connect Driver Yellow & Purple to Dimmer Yellow & Purple	Connect a 0-10V source to the Yellow & Purple	Yellow/Purple/Gray
	LEG150W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	PLED150W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-150SxxxDT	10%	Cap off all three dimming leads	100%	Connect resistor to Purple & Green	Connect Driver Purple & Green to Dimmer Purple & Gray; cap off Yellow	Connect a 0-10V source to the Purple & Green; cap off Yellow	Yellow/Purple/Green
	TSC150W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	VLED150W-xxx-Cxxxx-D	10%	Cap off all three dimming leads	100%	Connect resistor to Purple & Gray	Connect Driver Purple & Gray to Dimmer Purple & Gray; cap off White-Black	Connect 0-10V source to Purple & Gray; cap off White-Black	White-Black/Purple/Gray
200	PLED200W-xx-Cxxxx-D	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Purple & Gray to Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray
	TRC-200Sxxx-DT	10%	Cap off both Purple & Gray individually	100%	Connect resistor to Purple & Gray	Connect Purple & Gray to Purple & Gray	Connect a 0-10V source to the Purple & Gray	Purple/Gray