

SORAA

Electrical compatibility – Vivid AR111 12.5W 12V lamps – International

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Scope

This document provides the basic guidelines regards electrical compatibility of SORAA 12V AR111 12.5W lamps and compatibility tables for transformers and dimmers.

Transformer Compatibility

SORAA 12V AR111 lamps are made to work with 12V AC magnetic (MLV) and electronic (ELV) transformers and 12V DC transformers. Transformer compatibility tables are on pages 3-6. If multiple lamps are installed on one transformer, they need to be connected in parallel. They cannot be installed in series.

- 12V AC Magnetic transformers and 12V DC transformers are in general compatible.
- 12V AC Electronic transformers generally have a minimum load, and SORAA recommends using only transformers that have been tested and found compatible. In general we recommend to use transformers with very little or no minimum load (0W). If your transformer is not in the compatibility tables below, it does not mean it is incompatible, but it means that we have not tested it to date, please contact techsupport@soraa.com for guidance.

Dimmer Compatibility

SORAA 12V AR111 lamps are made to work with trailing edge (reverse phase) and leading edge (forward phase) phase cut dimmers.

Electronic dimmable transformers need trailing edge dimmers, while Magnetic transformers need leading edge dimmers. Dimmer compatibility tables are on pages 7-16.

Along the top of the dimmer compatibility tables you will see the different dimmers that we have tested, and along the left side of the chart you will see the different transformers we tested. The percentages for each transformer/dimmer combination are the percentage of light output that we were able to dim down to without seeing any problems like flicker/shimmer. Anything 30% or above is considered not compatible and you will see a "NC" in a grey cell. There might be a minimum wattage load on the transformer/dimmer. If this minimum load is not met, there might be compatibility issues.

Maximum number of lamps on a dimmer/transformer

The following need to be considered when determining the amount of lamps on a dimmer/transformer.

1. SORAA tests have been carried out with 1 lamp unless stated otherwise.
2. There is a repetitive, very brief current spike the LED lamp will see twice per cycle. This current spike has to be provided by the transformer and/or dimmer, and will affect the recommended lamp load on each transformer or dimmer.
3. Ultimately the transformer/dimmer manufacturer is the only one with authority to rate their product, but SORAA can give an Engineering estimate.
4. For transformers, we recommend to use a 1.4 de-rating factor:
For example for a 50W transformer it would mean $50/1.4=35W$ of LED, so an estimated maximum of 2 lamps 12.5W.
5. For dimmers, we recommend to use a 2.0 de-rating factor for leading edge dimmers with magnetic transformers; and a 4.0 de-rating factor for trailing edge dimmers driving Low Voltage lamps on electronic transformers.
For example for a 500W leading edge dimmer it would mean $500/2=250W$ of LED, so an estimated maximum of 20 lamps 12.5W.
For example for a 400W trailing edge dimmer it would mean $400/4=100W$ of LED, so an estimated maximum of 8 lamps 12.5W.

Distance between transformer and lamp(s)

- 12V AC Magnetic transformers and 12V DC transformers do not have a limitation regards the maximum length of the wires between transformer and lamp. Only the voltage drop has to be taken into account (losses because of the inner resistance of the conductors).
- 12V AC Electronic transformers have a limitation in the length of the wires between transformer and lamp(s). This length is usually stated by the transformer manufacturer on its specs or on the transformer itself, and generally it is limited to 2 meters (6 feet).

Disclaimer

Compatibility tests are conducted by Soraa only as guidance for the user. All tests are conducted under bench conditions; results may differ from test results depending on conditions at the application site. Results may vary due to variability in component choices and manufacturing processes by the transformer and dimmer manufacturers. For more information on the dimmers/transformers, please find specs on the manufacturer's website.

SORAA Vivid AR111 12V 12.5W - TRANSFORMER COMPATIBILITY - International

PASS - The transformer supports at least one lamp

NC - SORAA does not recommend this transformer for use with this lamp;

Transformer Manufacturer	Transformer Model	Wattage	Voltage	Class / Frequency	Country	Transformer Type	1 Lamp
International							
ABB	ETR-DALI 105 230-12KF	105	230	50	EU	Electronic	NC
ABB	Speedy 105	105W	230	50	EU	Electronic	Pass
AcTEC	Micro60	20-60W	220-240V	50/60	EU	Electronic	NC
AcTEC	Mini60 SeriesIII	20-60W	220-240V	50/60	EU	Electronic	Pass
AcTEC	DIM12-25	25W	220-240V	50/60	EU, CN	Electronic/DC	NC
Architectural Lighting	AG0927		230	50	EU	Electronic	Pass
BERKER	TRONIC TRAF0	20-105W	230/240	50/60	EU	Electronic	Pass
BLV	45600101	0-60	230V	50	EU	Electronic	Pass
BLV	45600201	0-105W	230	50	EU	Electronic	Pass
Bright Star Lighting (MSD)	MSD-DALI-DIM-CV-30W	30W	230	50/60	EU, CN	Electronic	NC
Eaglerise	EET105LT	35-105W	230	50	EU	Electronic	Pass
EldoLED	LINEARdrive 100	100	120-250	50/60	EU	Electronic/DC	NC
ELR	DA12VPWM AR111	36	230	50	EU	Electronic	NC
Eutrac	99.778.1U	20-50W	220-240V	50/60	EU	Electronic	Pass
EVN	Pd.2150		230	50	EU	Electronic	Pass
Fullham	Pony PET		230	50	EU	Electronic	Pass
GIRA	TRONIC TRAF0	20-150W	230/240	50/60	EU	Electronic	Pass
Gitronica	GET 60 FI VOX	20-60W	230/240	50/60	EU	Electronic	NC
Gluhen (*)	12V 30W	30W	240	50	APAC	DC	Pass
Gluhen (*)	12V 60W	60W	240	50	APAC	DC	Pass
Gluhen (*)	12V 100W	100W	240	50	APAC	DC	Pass
Govena	TE40W-DIMM-LED-IP64	40	230	50	EU	Electronic	Pass
Govena	YT50	0-50	230V	50	EU	Electronic	Pass
Hytronik	HE4030-A		230	50	EU	Electronic	Pass
IBL	4670	0-70	230	50	EU	Electronic	Pass
iGuzzini	1.193.908.00	100	230	50	EU	Electronic	Pass
iGuzzini	Le Perroquet 100W B0077.01 P16772/00	100	230	50	EU	Electronic	NC
JCC	JC4013	105W	230	50	EU	Electronic	Pass
Kanlux	Treto LED 30W	30	170~230	50/60	EU	Electronic/DC	Pass
LCI	ET 3-60C	10-60	230	50	EU	Electronic	NC
LCI	DC DIM 1-10V 35W Code 1750129	35W	230	50/60	EU	Electronic/DC	Pass
Lightech	LET75/240	20-75	240	50/60	EU/Asia	Electronic	Pass
Lightech	LET105/240	35-105	240	50/60	EU/Asia	Electronic	Pass
LTF	TU75WA		230	50	EU	Electronic	Pass
Lumitron (*)	KVP-12075-TD	75W	240	50	APAC	DC	Pass
Meanwell	PWM-90-12 (300Hz version)	90	100-305	50/60	World	Electronic/DC	Pass
Meanwell	PWM-120-12 (300Hz version)	120	100-305	50/60	World	Electronic/DC	Pass
Mode Lighting	ET-040-PL-230-RD (Puma LED)	40	240	50/60	EU	Electronic	Pass
Mode Lighting	MOE-050-D-240	50	230	50	EU	Electronic	Pass
Mode Lighting	MOE-075-C-240	75	240	50/60	EU	Electronic	NC

SORAA Vivid AR111 12V 12.5W - TRANSFORMER COMPATIBILITY - International

PASS - The transformer supports at least one lamp

NC - SORAA does not recommend this transformer for use with this lamp;

Transformer Manufacturer	Transformer Model	Wattage	Voltage	Class / Frequency	Country	Transformer Type	1 Lamp
International							
Mode Lighting	MOE-105-D-240	105	230	50	EU	Electronic	Pass
Nobile	EN-60D		230	50	EU	Electronic	Pass
NOBILE	EN-150	150W	220/240	50/60	EU	Electronic	Pass
OSRAM	ET-LED 30/220-240	2-30	220-240	50/60	Asia	Electronic	Pass
OSRAM	ET-Parrot 70	70	220-240	50	EU	Electronic	Pass
OSRAM	Halotronic HTB 105/230-240	35-105W	230-240	105	EU	Electronic	Pass
OSRAM	HTI DALI 105 DIM	35-105	230-240	50	EU	Electronic	1,4 lamps: NC 2,3 lamps: Pass
OSRAM	HTI DALIC 105/230...240DIM (Not a DALI dimmable transformer)	105	230	50/60	EU	Electronic	Pass
OSRAM	HTM 70	70	230/240	50	EU	Electronic	Pass
OSRAM	HTM 105	105W	230/240	50/60	EU,CN	Electronic	Pass
OSRAM	HTM 150	150W	230/240	50/60	EU	Electronic	Pass
OSRAM	HTN 75 230/240 I	20-75	230/240	50/60	EU Australia	Electronic	Pass
PHILIPS	CERTALINE 60W	60	230	50	EU	Electronic	Pass
PHILIPS	PRIMALINE 105	35-105W	230	50/60	EU,CN	Electronic	Pass
PHILIPS	PRIMALINE 70	35-70W	220/240	50/60	EU,CN	Electronic	Pass
Quanzhou Smarts Electronic & Technology Co	SMT-012-030VM	30W	100-265V	50/60	EU,CN	Electronic	Pass
Servodan	74-212	10-105W	230	50	EU	Electronic	Pass
Soraa	Optima TCVW-P-12-600-70-01-S3	70	230	50/60	EU, Asia, Australia	Electronic	Pass
TCI	MW70LED	70	230	50	EU	Electronic	Pass
TCI	WU 105	105	230/240	50	EU	Electronic	Pass
Transtec	HP-300	300	230	50/60	EU	Magetic	Pass
Tridonic	TE-NE 1105	105	230-240	50/60	EU	Electronic	NC
Truelux	AN12VPWM	0-20W	100-277V	50/60	EU	Electronic/DC	Pass
Truelux	DA12VPWM	0-20W	100-277V	50/60	EU	Electronic/DC	Pass
Truelux	PH12VLN	0-50	230V	50	EU	Electronic	Pass
Varilight	YT50	0-50	230V	50	EU	Electronic	Pass
Varilight	YT50LZ	0-50	230	50	EU	Electronic	Pass
Vossloh Schwabe	60.8159 (with built in potentiometer)		230	50	EU	Electronic	Pass
Vossloh Schwabe	EST105	105	230	50	EU	Electronic	Pass
Vossloh Schwabe	Liteline EST70/12.380	20-70W	230	50	EU	Electronic	Pass
Voltmaster	VMD30012EU	35~300	230	50	EU	Magetic	NC
V-TAC	VT-22045 (SKU 3090)	45	90-264Vac	50/60	EU	Electronic	Pass

SORAA VIVID AR111 12V 12.5W - TRANSFORMER COMPATIBILITY - International

Transformer compatibility Notes:

- Compatibility tests are conducted by Soraa only as guidance for the user
- All tests are conducted under bench conditions; results may differ from test results depending on conditions at the application site
- Results may vary due to variability in component choices and manufacturing processes by the transformer manufacturer
- if the transformer's minimum wattage is not met, the lamp may only operate under nominal conditions (nominal line voltage and thermal conditions where the lamp is at full power).
- if the fixture/transformer is not listed as tested, please consult with Soraa first before making any recommendations to end customer.
- Above table is for applications where no dimmer is used. If a dimmer is used, the user should consult the Dimmer/Transformer table, or contact Soraa if their desired combination is not listed.
- Transformer maximum load should not be exceeded. Please follow transformer/dimmer manufacturer's guidelines regarding maximum load with LED lamps. To calculate the estimated maximum number of lamps, please download our calculator from the following link: <https://res.cloudinary.com/soraa/raw/upload/v1452276139/content/max-lamp-load-calculator.xlsx>
Or following the guidelines stated on page 2 of this document.
- (*) This transformer added to the compatibility list as of this Revision

SORAA Optima 230V Electronic 12V transformer with 12V Soraa Vivid AR111 12.5W lamps - DIMMER COMPATIBILITY LIST

Dimmer Manufacturer	Dimmer family	Dimmer model number	Dimming mode	Number of transformers per dimmer	Number of lamps per transformer	Dim (%)	Comments
Aurora		DSP400X	Leading	2	1	NC	
Clipsal		32ELEDM	Trailing	2	1	12%	Limited by dimmer travel
Clipsal		L5504D2U	Adaptive-TE	5	1	9%	
DIGINET		DGLCDM400 (MEDM)	Trailing	2	1	2%	
ETC	DRd	EELV6	Trailing	6	1	19%	Tested by dimmer manufacturer
Feller		3314.12 FMI.61	Trailing	2	1	14%	
Feller		40200.LED.FMI.61	Trailing	2	1	18%	Limited by dimmer travel
Gira		238500 / I01	Adaptive-TE	2	1	13%	Limited by dimmer travel
Helvar	Digidim	452	Trailing	5	1	7%	
Helvar	Digidim	454	Trailing	5	1	9%	
Honeywell	Inncom	H454	Trailing	5	1	8%	
Jung		1224 LED UDE	Trailing	2	1	12%	Limited by dimmer travel
LCI	MTV 400	#1770104	Trailing	1, 10	1	1%	Limited by dimmer travel
Lutron	Energy Savr Node QS (for Quantum and QS systems)	QSNE-4A-D	Trailing	5	1	29%	
Lutron	Grafik Eye QS	Grafik Eye QS	Leading	5	1	NC	
Lutron	Grafik Eye QS + Interface	Grafik Eye QS + ELVI interface	Adaptive-TE	5	1	9%	Limited by dimmer travel
Lutron	LCP Panel	RPM-4A-230	Adaptive-TE	5	1	8%	Limited by dimmer travel
Osram		HTI DALI 315 DIM	Trailing	2	1	18%	Limited by dimmer travel
Philips Dynalite		DGLEDM401	Trailing	5	1	19%	Limited by dimmer travel
Philips Dynalite		DGTM402	Trailing	5	1	NC	Limited by dimmer travel
RVE		RV-LED 250	Trailing	5	1	5%	Limited by dimmer travel
Varilight	V-PRO	JQP401W	Trailing	2	1	9%	Limited by dimmer travel
Vossloh-Schwabe		554591 (5-250W)	Trailing	2	1	6%	Limited by dimmer travel
Vossloh-Schwabe		OneDim	Trailing	2	1	3%	Limited by dimmer travel

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Rotary phase cut dimmers International (1/2)

Transformer	Dimmer -->		Berker 2830	Berker 2867 10	Busch 2247	Busch 2250	CABAC HNS630DT	CLIPSAL 32ELEDM	DIGINET DGLCDM400 (MEDM)	Feller 40300.RC Schneider SBD315RC Merten MEG5136-0000 ELKO 315GLE	Feller 40420.RLC	Gira 0307 00	Hamilton 7WC1x100LEDWH	Jung 225 TDE	Legrand Arteor AR400A3PM
Europe															
ABB	Speedy ETR 105	ELV	NC		NC	NC									
AcTEC (*)	Mini60 Series III	ELV					17%	9%	11%						8%
Aurora	AU-RD60E	ELV								NC	NC				
BLV	45600101	ELV	17%	21%	5%	7%				22%	NC	23%	21%	23%	
GE	ET10	ELV								NC	NC	NC			
GIRA	Tronic Trafo	ELV	19%		28%	NC									
Gitronica	GET 60 FI V1U	ELV								NC	NC	NC			
IBL	4670	ELV		22%									30%	24%	
ItaLED	Avanti Uno	ELV								29%	NC	31%			
Nobile	Konverter EN-150	ELV	NC		4%	NC									
Omnitronix	OMN60LT	ELV								NC	NC				
Osram	ET-P 60/220-240	ELV	23%		2%	1%									
Osram	HTM70	ELV	NC		NC	NC									
Osram	HTM105	ELV	7%		3%	9%									
Osram	HTM150	ELV	NC		NC	NC									
Philips	Certaline 60W	ELV	NC		2%	12%									
Philips	Primaline 105	ELV	NC		NC	NC									
Philips	Primaline 70	ELV	NC		NC	NC									
TCI	MW 70 LED	ELV		24%						12%	14%	24%		25%	
Varilight	YT50	ELV	20%		2%	10%									
Varilight	YT50LZ	ELV		24%						16%	31%	19%	17%	23%	

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Rotary phase cut dimmers International (2/2)

Transformer	Dimmer -->		Merten MEG5136 (SBD315RC) (TE)	Panasonic WEG 57813	Rako RDT500 (TE)	Schneider GD1GZW4	Varilight JQP401W	Zano ZGRID500
International								
ABB	Speedy ETR 105	ELV				NC		NC
Berker	Tronic Trafo 150W 2976	ELV				NC		NC
BLV	45600101	ELV	1 lamp: 23% 2 lamps and more: 20%			NC	NC	NC
GE	ET10	ELV					NC	
GIRA	Tronic Trafo	ELV				NC		14%
ItaLED	Avanti Uno	ELV					NC	
Nobile	Konverter EN-150	ELV				NC		NC
Omnitronix	OMN60LT	ELV					NC	
Osram	ET-P 60/220-240	ELV				12%		7%
Osram	HTM70	ELV				NC		NC
Osram	HTM105	ELV				NC		NC
Osram	HTM150	ELV				NC		NC
Philips	Certaline 60W	ELV				NC		NC
Philips	Primaline 105	ELV				NC		NC
Philips	Primaline 70	ELV				NC		NC
Racer	RCT 50	Magnetic		NC				
Varilight	YT50	ELV				3%		NC
Varilight	YT50LZ	ELV	18%		NC		12%	NC

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Large dimmers International

Transformer	Dimmer -->			CLIPSAL L5504D2U	DeltaDore Tyxia 4840 (TE)	DeltaDore Tyxia 4940 (TE)	Dynalite DDMC802GI+ DGLEDM401 (TE-LED)	Dynalite DDMC802GL+ DGTM402 (TE)	Hager EVN002 (TE)	Helvar Digidim 452 (DALI) (TE)	Helvar Digidim 454 (TE)	iLight SCT 0405S	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (TE)	Lutron Grafik Eye QS QSGR-6PCE + NGRX-ELVI-CE (TE)	Lutron LP-RPM-4A-230 (TE)	Lutron Grafik Eye QS QSGRK-3PCE (LE)
International																
ABB	Speedy 105ETR	ELV					NC	NC		NC	NC	NC	NC	NC	NC	
AcTEC (*)	Mini60 Series III	ELV	NC				16%				9%		NC			
AcTEC	Ultra 70	ELV					24%	NC		17%	25%	NC	NC	14%	14%	
Atco	SPEEDY TED105	ELV					NC	NC		24%		NC	NC	NC	NC	
Aurora	AU-RD60E	ELV					1 lamp: N C 2 lamps: 16%	NC					1 lamp: N C 2 lamps: 18%			NC
Berker	Tronic Trafo 150W	ELV					NC	NC		NC	NC	NC	NC	NC	NC	
BLV	45600101. Luxia 60W	ELV		7%	12%		19%	22%	21%	16%	15%	24%	NC	12%	12%	NC
BLV	45600201. Luxia 105W	ELV					11%	23%		16%	17%	31%	NC	14%	1 lamp: N C 2 and more: 11%	
Eaglerise	EET105LT	ELV					1 lamp 20% 2 lamps NC						NC			
GE	ET10	ELV					22%	NC					NC			NC
Gira	Tronic Trafo	ELV					13%	NC		4%	2%	8%	2%	5%	7%	
Gitronica	GET 60 FI V1U	ELV					30%						25%			NC
Govena	YT50	ELV		17%	11%		22%	NC	28%	18%	15%	24%	NC	NC	10%	

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Large dimmers International

Transformer	Dimmer -->		DeltaDore Tyxia 4840 (TE)	DeltaDore Tyxia 4940 (TE)	Dynalite DDMC802GL+ DGLEDM401 (TE-LED)	Dynalite DDMC802GL+ DGTM402 (TE)	Hager EVN002 (TE)	Helvar Digidim 452 (DALI) (TE)	Helvar Dig'dim 454 (TE)	iLight SCT 0405S	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (TE)	Lutron Grafik Eye QS QSGR-6PCE + NGRX-ELVI-CE (TE)	Lutron LP-RPM-4A-230 (TE)	Lutron Grafik Eye QS QSGRK-3PCE (LE)	Mode Lighting Mirage MP-10-01 / Tiger / Evolution WITH LEADING EDGE CARD	Mode Lighting Mirage MP-10-01 / Tiger / Evolution WITH TRAILING EDGE CARD
International																
Hatch	RS12-60M-LED-230V	ELV									NC					
IBL	4670.00	ELV			15%											
ItaLED	Avanti Uno	ELV			9%	NC					NC					
(Korean)	HIJ2501	ELV			1 lamp: 29% 2,3 lamps: 20% 4 lamps: 69%	NC		NC	NC		NC			NC		
Lightech	LET 75	ELV			1 lamp: NC 2 and more: 11%	25%		1 lamp: NC 2 and more: 16%	1 lamp: NC 2 and more: 18%	23%	NC	13%	12%			
Mode Lighting	ET-040-PL-230-RD (Puma LED)	ELV									NC				NC	7%
Mode Lighting	MOE-050-D-240	ELV			1,2 lamps: 14% 3 lamps and up: NC	1,2 lamps: 25% 3 lamps and up: NC		1,2 lamps: 17% 3 and more: NC	1,2 lamps: 21% 3 and more: NC	1,2 lamps: 26% 3 and more: NC	1,2 lamps: 28% 3 lamps and up: NC	1,2 lamps: 13% 3 and more: NC	1,2 lamps: 13% 3 lamps and more: NC			
Niko	320-00101 70W	ELV	11%	16%			22%									
Nobile	Konverter EN-150	ELV			26%	54%		5%	4%	5%	8%	5%	14%			

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Large dimmers International

Transformer	Dimmer -->		DeltaDore Tyxia 4840 (TE)	DeltaDore Tyxia 4940 (TE)	Dynalite DDMC802GL+ DGLDM401 (TE-LED)	Dynalite DDMC802GL+ DGTM402 (TE)	EVO-DDM-305-TE	Hager EVN002 (TE)	Helvar Digidim 452 (DALI) (TE)	Helvar Digidim 454 (TE)	ilight SCT 0405S	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (TE)	Lutron Energi Savr Node QS (Homeworks) OSNE-4A-D (LE)	Lutron Grafik Eye QS OSGR-6PCE + NGRX-ELV-CE (TE)	Lutron LP-RPM-4A-230 (TE)	Lutron Grafik Eye QS OSGRK-3PCE (LE)
International																
Noratel	LF84A-22012-GS	ELV			NC	NC			1,2 lamp: N C 3 lamps and up: 18%	NC	NC	NC		15%	NC	
Omnitronix	OMN60LT	ELV			16%	NC						13%				
Osram	ET-LED-30	ELV			15%	NC			16%	17%	NC	NC	NC	9%	13%	
Osram	ET-A 60	ELV			12%	21%			NC	NC	NC	27%		NC	NC	
Osram	ET-P 60	ELV			NC	28%			NC	NC	NC	NC		NC	NC	
Osram	ET-PARROT 70	ELV			NC	NC	NC		NC	NC	NC	NC	NC	NC	NC	
Osram	ET-RedBack 60	ELV			15%	NC			24%	30%		NC	NC			NC
Osram	HTM 70	ELV	8%	13%	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	
Osram	HTM 105	ELV	10%	16%	NC	NC		22%	20%	NC	NC	NC	NC	NC	23%	
Osram	HTM 150	ELV			NC	NC	NC		NC	NC	NC	NC		NC	NC	
Philips	Certaline 60W	ELV			20%	NC	17%		2%	4%	3%	NC	NC	14%	10%	

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Large dimmers International

Transformer	Dimmer -->														
			DeltaDore Tyxia 4840 (TE)	DeltaDore Tyxia 4940 (TE)	Dynalite DDMC802GL+ DGLEDM401 (TE-LED)	Dynalite DDMC802GL+ DGTM402 (TE)	Hager EVN002 (TE)	Helvar Digidim 452 (DALI) (TE)	Helvar Digidim 454 (TE)	iLight SCT 0405S	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (TE)	Lutron Grafik Eye QS QSGR-6PCE + NGRX-ELVI+CE (TE)	Lutron LP-RPM-4A-230 (TE)	Lutron QSGR-3PCE (LE)	Maintronic DAD1200 DALI (adaptive - LE) with DALI
International															
Philips	ET-E 10 LED	ELV			NC	NC		17%	NC	NC	NC	5%	NC		
Philips	ET-S 15 LED	ELV			NC			11%				7%			
Philips	ET-S 60	ELV			16%	NC		NC	25%		NC	7%		NC	
Philips	Primaline 105	ELV	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC		
Philips	Primaline 70	ELV			NC	NC		NC	NC	NC	NC	NC	NC		
Racer	RCT 50	MLV						NC	NC					NC	
SELF	SLT60-12VL-1	ELV			NC	NC		NC	NC	NC	NC	NC	NC		
TCI	MW70 LED	ELV			1 lamp: 23% 2 and more: 11%	27%		19%	17%	NC	27%	17%	16%		
TCI	Round 50	ELV			14%	20%		1 lamp: N C 2 lamps and up: 15%	18%	NC	28%	12%	10%		
Transtec	HP-300	MLV	12V Vivid AR111 12.5W International Compatibility, Rev 20Q2, 5/27/2020										12	20%	

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST - Large dimmers International

Transformer	Dimmer -->															
			DeltaDore Tyxia 4840 (TE)	DeltaDore Tyxia 4940 (TE)	Dynalite DDMC802GL+ DGLEDM401 (TE-LED)	Dynalite DDMC802GL+ DGTM402 (TE)	EVO-DDM-305-TE	Hager EVN002 (TE)	Helvar Digidim 452 (DALI) (TE)	Helvar Digidim 454 (TE)	iLight SCT 04055	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (TE)	Lutron Energi Savr Node QS (Homeworks) QSNE-4A-D (LE)	Lutron Grafik Eye QS QSGR-6PCE + NGRX-ELVI-CE (TE)	Lutron LP-RPM-4A-230 (TE)	Mode Lighting Mirage MP-10-01 / Tiger / Evolution WITH LEADING EDGE CARD
International																
Tridonic	TE-0070 C101	ELV			10%	22%			1 lamp: N C 2 lamps and up: 13%	17%	1 lamp: N C 2 lamps and up: 29%	26%		10%	1 lamp: N C 2 lamps and up: 21%	
Tridonic	TE Viper 22176072	ELV			NC	50%						NC				
Tridonic	TE-0050 C101	ELV			7%	18%			1 lamp: N C 2 lamps and up: 10%	17%	NC	NC		10%	NC	
Truelux	PH12VLN	ELV	17%	11%	22%	NC	17%	28%	18%	15%	24%	NC	NC	NC	10%	NC
Varilight	YT50	ELV	17%	11%	22%	NC	17%	28%	18%	15%	24%	NC	NC	NC	10%	NC
Varilight	YT50LZ	ELV			19%	22%			16%	17%	24%	NC	NC	13%	11%	
Verbatim	V70 (#52900)	ELV										NC	NC			

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY LIST – Special dimmers

Transformer	Dimmer -->		Dimming Loop Potentiometer	DALI Controller	0-10V	Casambi CBU PWM4	DALCNET DLC1248-1CV/DALI	FIBARO RGBW	HELVAR LL1-CV-DA (DALI)	Lunatone DALI PWM 16W 89453829	Multiloop LEDixia
Europe											
DC	12V	Electronic/DC				28%	2%	1%	NC	1%	0%
Hytronix	HE403-A	Electronic/DC		2%							
Lightech	LET 75W 12V Dimming Loop	ELV	NC								
Meanwell	PWM-90-12 (300Hz version)	Electronic/DC			16%						
Quanzhou Smarts Electronics and Technology	DALI SMT-012- 030VM	Electronic/DC		2%							
Truelux	DA12VPWM	Electronic/DC		7%							

SORAA VIVID AR111 12V 12.5W - DIMMER/TRANSFORMER COMPATIBILITY - International

Dimming compatibility Notes:

- Compatibility tests are conducted by Soraa (unless stated otherwise) under bench conditions as guidance for the user; results at the application site may differ due to variability in usage conditions or in dimmer or transformer components/manufacturing.
- Regards compatibility tests conducted by dimmer manufacturer, please contact the manufacturer for more details and/or reports.
- If the transformer's minimum wattage is not met, the lamp may only operate under nominal conditions (nominal line voltage and thermal conditions where the lamp is at full power).
- The lamp load (or number of lamps) should meet minimum load requirement of respective dimmer.
- If the dimmer and transformer is not listed, please consult with Soraa before making recommendations to the end customer.
- Transformer/dimmer maximum load should not be exceeded. Please follow transformer/dimmer manufacturer's guidelines regarding maximum load with LED lamps. To calculate the estimated maximum number of lamps, please download our calculator from the following link: <https://res.cloudinary.com/soraa/raw/upload/v1452276139/content/max-lamp-load-calculator.xlsx>
Or following the guidelines stated on page 2 of this document.

--%	Dims to < 20% (of the measured light output)
--%	Dims to 20-30% (of the measured light output)
NC	Not compatible (or dims to >30%)
Blank cell	Not tested
	Not valid combination

- (*) One or more test results with this transformer added to the compatibility list as of this Revision