Ballasts

Mark X Architectural Dimming Ballast —
for T8, Compact Fluorescent and 40W Long Twin Tube Fluorescent Lamps

The Mark X architectural dimming ballasts deliver full-range dimming of T8 and compact fluorescent lamps. The Mark X ballast dims down to 5%, dims direct from the power line, requires no additional control leads and is economical and easy to install. The easy installation reduces costs when retrofitting existing incandescent and fluorescent dimming or non-dimming systems.

Features	Benefits
100% - 5%full-range continuous dimming	Gives the user flexibility to adapt the space to a wide variety of uses and moods: meetings, audio/visual presentations and computer work.
Operates from Mark X two-wire and other compatible dimmers	No extra wiring required when retrofitting an existing fluorescent dimming or non-dimming application. A wide choice of controls are available from several manufacturers to fit any decor.
Lamp ignition at any light output setting	Ballast does not have to ramp up to full light output and then dim. Will start at the 5% dim level. Increases the comfort level of the occupants.
Energy efficient	Electronic ballasts and T8 lamps provide lighting efficacies 40-50% higher than magnetic T12 dimming ballasts.
Operates above 42 kHz	Reduces potential interference with infrared remote control systems by not operating in the 30-42 kHz band where IR controls typically operate.

Ballasts

Advance Mark X

Catalog Number	Number Of Lamps	Lamp Type	Circuit Volts 60 Hz	Nominal Lamp Watts	Min. Amb. Start Lamp	Input Watts ANSI		Ballast Factor		Ballast THD Full Light Output	Ballast Power Factor	Operating Frequency (kHz)	
						Full Light	Min. Light	Full Light	Min. Light			Full Light	Min. Light
REZ132	NSN												
	1	F32T8	120	32	50°F	35	9	1.0	.05	<10	>.98	45	90
		F25T8	120	25	50°F	30	8	1.05	.05	<10	>.98	45	90
REZ2S32	NSN												
	2	F32T8	120	32	50°F	70	16	1.0	.05	<10	>.98	45	90
		F25T8	120	25	50°F	59	14	1.05	.05	<10	>.98	45	90
REZ3S32	NSN												
	3	F32T8	120	32	50°F	104	20	1.0	.05	<10	>.98	45	90
		F25T8	120	25	50°F	87	18	1.05	.05	<10	>.98	45	90
VEZ132	NSN:												
	1	F32T8	277	32	50°F	35	9	1.0	.05	<10	>.98	45	90
		F25T8	277	25	50°F	30	8	1.05	.05	<10	>.98	45	90
VEZ2S32	NSN:												
	2	F32T8	277	32	50°F	70	16	1.0	.05	<10	>.98	45	90
		F25T8	277	25	50°F	59	14	1.05	.05	<10	>.98	45	90
VEZ3S32	NSN:												
	3	F32T8	277	32	50°F	104	20	1.0	.05	<10	>.98	45	90
		F25T8	277	25	50°F	87	18	1.05	.05	<10	>.98	45	90
REZ-2Q26	2	NSN:											
		26W	120	26	50°F	58	16	1.0	.05	<10	>.98	45	90
VEZ-2Q26		NSN:											
		Quad 4-Pin	277	26	50°F	58	16	1.0	.05	<10	>.98	45	90
REZ-1T32	NSN:												
	1	Triple	120	26	50°F	31	8	1.05	.05	<10	>.98	45	90
		Triple	120	32	50°F	38	9	1.0	.05	<10	>.98	45	90
REZ-1T42	NSN:												
	1	Triple	120	42	50°F	49	10	1.0	.05	<10	>.98	45	90
VEZ-1T32	NSN:												
	1	Triple	277	26	50°F	31	8	1.05	.05	<10	>.98	45	90
		Triple	277	32	50°F	38	9	1.0	.05	<10	>.98	45	90
VEZ-1T42	NSN:												
	1	Triple	277	42	50°F	49	10	1.0	.05	<10	>.98	45	90
REZ-1TTS40	NSN:												
	1	FT40	120	40	50°F	41	10	.98	.05	<10	>.98	45	90
REZ-2TTS40	NSN:												
	2	FT40	120	40	50°F	80	17	.92	.05	<10	>.98	45	90
VEZ-1TTS40	NSN:												
	1	FT40	277	40	50°F	41	10	.98	.05	<10	>.98	45	90
VEZ-2TTS40	NSN:												
	2	FT40	277	40	50°F	80	17	.92	.05	<10	>.98	45	90

Ballasts

Mark VII®
Controllable Electronic Ballast

for 1, 2, and 3 Rapid Start F32T8 and F25T8 Fluorescent Lamps and 1 & 2 FT40W/ 2G11/RS Compact Fluorescent Lamps

The Mark VII controllable electronic ballast delivers continuous control of light outputs and energy use for one, two, and three F32T8 and F25T8 rapid start fluorescent lamps. The Mark VII can also be part of a fully integrated energy management system designed to provide full control of the lighting and energy requirements of an entire building. In conjunction with an energy management system (EMS), the Mark VII ballast will maintain complete control of lighting energy costs. It will reduce energy operating costs, reduce demand charges and control lighting systems to maintain the right amount of light–day or night.

Advance Mark VII						
Catalog Number	Volts	Number Lamps and Type	ANSI Wattage Range Max.-Min.	Ballast Factor Range	Ballast Power Factor	Ballast THD (Full Light Output)
RZTT-132	NSN					
	120	(1) F32T8	33-9	.88 - .05	>.98	<10%
		(1) F25T8	25-8	.94 - .05	>.98	<10%
RZT-2S32	NSN					
	120	(2) F32T8	64-14	.88 - .05	>.98	<10%
		(2) F25T8	49-13	.94 - .05	>.98	<10%
RZT-3S32	NSN					
	120	(3) F32T8	93-18	.88 - .05	>.98	<10%
		(3) F25T8	76-16	.94 - .05	>.98	<10%
VZT-132	NSN					
	277	(1) F32T8	33-9	.88 - .05	>.98	<10%
		(1) F25T8	25-8	.94 - .05	>.98	<10%
VZT-2S32	NSN					
	277	(2) F32T8	64-14	.88 - .05	>.98	<10%
		(2) F25T8	49-13	.94 - .05	>.98	<10%
VZT-3S32	NSN					
	277	(3) F32T8	93-18	.88 - .05	>.98	<10%
		(3) F25T8	76-16	.94 - .05	>.98	<10%
RZT-1TTS40	NSN					
	120	(2) F25T8	38-11	.88 - .05	>.98	<10%
RZT-2TTS40	NSN					
	120	(2) F25T8	76-16	.88 - .05	>.98	<10%
VZT-1TTS40	NSN					
	277	(2) F25T8	38-11	.88 - .05	>.98	<10%
VZT-2TTS40	NSN					
	277	(2) F25T8	76-16	.88 - .05	>.98	<10%

Ballasts

Mark V®
Integrated Circuit Electronic Ballast

for 1, 2, and 3 Rapid Start F32T8 and F25T8 Fluorescent Lamps

The Improved Mark V ballast with <10% THD is an integrated circuit electronic ballast which offers a wide range of features for specialized lighting applications. It is the only full-family (one, two and three lamp) of programmed rapid start ballasts that operate at 0° F. The Mark V ballast uses a custom integrated circuit which monitors lamp and ballast conditions to ensure optimal system lighting performance

Advance Mark V						
Catalog Number	Volts	Number Lamps and Type	ANSI Wattage Range Max.-Min.	Ballast Factor Range	Ballast Power Factor	Ballast THD (Full Light Output)
RIC-132	NSN					
	120	(1) F32T8	33	.88	>.99	<10%
		(1) F25T8	25	.94	>.99	<10%
RIC-2S32	NSN					
	120	(2) F32T8	64	.88	>.99	<10%
		(2) F25T8	49	.94	>.99	<10%
RIC-3S32	NSN					
	120	(3) F32T8	93	.88	>.99	<10%
		(3) F25T8	76	.94	>.99	<10%
VIC-132	NSN					
	277	(1) F32T8	33	.88	>.99	<10%
		(1) F25T8	25	.94	>.99	<10%
VIC-2S32	NSN					
	277	(2) F32T8	64	.88	>.99	<10%
		(2) F25T8	49	.94	>.99	<10%
VIC-3S32	NSN					
	277	(3) F32T8	93-18	.88	>.99	<10%
		(3) F25T8	76-16	.94	>.99	<10%

Ballasts

Standard Electronic Ballast

for 18W and 26W Quad and 26W, 32W and 42W Triple Rapid Start Compact Fluorescent Lamps

Advance standard electronic ballasts for Compact Fluorescent Lamps are designed to provide high quality performance and value to down-lighting application.s The Advance compact ballast line encompasses the most popular lamp combinations currently in the marketplace - 18-and 26-watt Quad lamps and 26-, 32-, and 42-watt Triple lamps.

Advance Standard - Rapid Start Compact Fluorescent Lamps										
Catalog Number	Number of Lamps	Lamp Type	Circuit Volts	Nominal Lamp Watts	ANSI Wattage	Ballast Factor	Max. Line Current (Amps)	Power Factor	LCCF	Max. THD
REL-1T32	NSN:									
	1	Triple	120	26	32	1.05	.25	>.98	<1.7	20%
	1	Triple	120	32	37	1.0	.31	>.98	<1.7	20%
REL-1T42	NSN:									
	1	Triple	120	42	48	1.0	.41	>.98	<1.7	20%
REL-2Q18	NSN:									
	2	Quad	120	18	39	1.0	.39	>.98	<1.7	20%
REL-2Q26	NSN:									
	2	Quad	120	26	58	1.0	.49	>.98	<1.7	20%
VEL-1T32	NSN:									
	1	Triple	277	26	32	1.05	.11	>.98	<1.7	20%
	1	Triple	277	32	37	1.0	.14	>.98	<1.7	20%
VEL-1T42	NSN:									
	1	Triple	277	42	48	1.0	.18	>.98	<1.7	20%
VEL-2Q18	NSN:									
	2	Quad	277	18	39	1.0	.14	>.98	<1.7	20%
L-2Q26	NSN:									
	2	Quad	277	26	58	1.0	.21	>.98	<1.7	20%

Small Can Instant Start Electronic Ballast

for (1) or (2) 32W, 25W and 17W T8 fluorescent lamps

Advance Transformer's new "Small Can" standard electronic ballast is designed to instant start one or two 32W, 25W or 17W T8 lamps. The Small Can is becoming increasingly important to customers who wish to use sleeker, lower profile fixture. This improved design is 45% smaller and 33% lighter than our "Standard Can" while maintaining the industry standard foot print.

"Small Can" Standard Electronic Ballast							
Catalog Number	Volts	No. of Lamps and Type	Line Amps	ANSI Input Watts	Ballast Factor	LCCF	Ballast THD
REL-1P32-SC	NSN:						
	120	(1) F32T8	0.27	32	0.92	<1.7	<20%
			0.23	27	0.92	<1.7	<25%
			0.19	21	0.95	<1.7	<30%
REL-2P32-SC	NSN:						
	120	(2) F32T8	0.49	58	0.88	<1.7	<20%
			0.31	47	0.90	<1.7	<25%
		(2) F17T8	0.31	34	0.92	<1.7	<30%
VEL-1P32-SC	NSN:						
	277	(1) F32T8	0.12	32	0.92	<1.7	<20%
			0.10	27	0.92	<1.7	<25%
		(1) F17T8	1.08	21	0.95	<1.7	<30%
VEL-2P32-SC	NSN:						
	277	(2) F32T8	0.21	58	0.88	<1.7	<20%
		(2) F25T8	0.17	47	0.90	<1.7	<25%
		(2) F17T8	0.13	34	0.92	<1.7	<30%
GEL-2P32-SC	NSN:						
	347	(2) F32T8	0.17	59	0.88	<1.7	<20%
			0.14	48	0.96	<1.7	<25%
		(2) F17T8	0.11	34	0.37	<1.7	<30%

Bi-Level Switching Electronic Ballast

to Switch Between 2 and 4 or 2 and 3 Rapid Start F32T8 or F25T8 Fluorescent Lamps

Advance Transformer designed the bi-level switching electronic ballast to save energy and adjust lighting levels in fluorescent fixtures using standard light switches. The ballast toggles between lighting two lamps and four lamps in four-lamp T8 fixtures and two lamps and three lamps in three-lamp fixtures. It is easy to install and operate because only one ballast is required per fixture and no new controls or light switches are needed.

Bi-Level Switching Electronic Ballast										
Catalog Number	Input Volts	Number of lamps	Lenght	Min. Watts	Start Temp F°	Line Amps	ANSI Input Watts	Ballast Factor	THD %	Power Factor
F32T8, FBO81T8 & F32T8/U										
REL-4P32-2LS	120	4	4'	32	32	0.94	110	0.87	<20	0.99
VEL-4P32-2LS	277					0.41				
REL-4P32-2LS	120	3	4'	32	32	0.79	93	0.96	<25	0.98
VEL-4P32-2LS	277					0.35				
REL-4P32-2LS	120	2	4'	32	32	0.63	73	1.10	<30	0.96
VEL-4P32-2LS	277					0.27				
F25T8, FBO24T8										
REL-4P32-2LS	120	4	3'	25	32	0.74	88	0.90	<25	0.98
VEL-4P32-2LS	277					0.33				
REL-4P32-2LS	120	3	3'	25	32	0.64	75	1.0	<30	0.97
VEL-4P32-2LS	277					0.28				
REL-4P32-2LS	120	2	3'	25	32	0.51	58	1.16	<30	0.92
VEL-4P32-2LS	277					0.28				
REL-4P32-2LS	NSN:									
VEL-4P32-2LS	NSN:									

Centium®

Program Rapid - Start, Small Can Electronic Ballast

for (1), (2), (3) or (4) F32T8, F25T8 and F17T8 fluorescent lamps

Advance Transformer's new Centium® Program Rapid-Start "Small Can" electronic ballast is designed to operate one, two, three or four T8 lamps. The Small Can is becoming increasingly important to customers who wish to use sleeker, lower profile fixture. This improved design is 45% smaller and 33% lighter than our "Standard Can" while maintaining the industry standard foot print. This product family can now satisfy demand for a complete range of rapid-start applications — particularly where long lamp life or frequent switching is required.

"Small Can" Standard Electronic Ballast							
Catalog Number	Volts	No. of Lamps and Type	Line Amps	ANSI Input Watts	Ballast Factor	LCCF	Ballast THD
REL-1P32-SC	NSN:						
	120	(1) F32T8	0.27	32	0.92	<1.7	<20%
			0.23	27	0.92	<1.7	<25%
			0.19	21	0.95	<1.7	<30%
REL-2P32-SC	NSN:						
	120	(2) F32T8	0.49	58	0.88	<1.7	<20%
		(2) F25T8	0.31	47	0.90	<1.7	<25%
		(2) F17T8	0.31	34	0.92	<1.7	<30%
VEL-1P32-SC	NSN:						
	277	(1) F32T8	0.12	32	0.92	<1.7	<20%
			0.10	27	0.92	<1.7	<25%
		(1) F17T8	1.08	21	0.95	<1.7	<30%
VEL-2P32-SC	NSN:						
	277	(2) F32T8	0.21	58	0.88	<1.7	<20%
		(2) F25T8	0.17	47	0.90	<1.7	<25%
		(2) F17T8	0.13	34	0.92	<1.7	<30%
GEL-2P32-SC	NSN:						
	347	(2) F32T8	0.17	59	0.88	<1.7	<20%
		(2) F25T8	0.14	48	0.96	<1.7	<25%
		(2) F17T8	0.11	34	0.37	<1.7	<30%

Ballasts

Centium®
Instant-Start, Micro 1.0 Electronic Ballast
for (1) or (2) F32T8 or F25T8 Lamps

Advance Transformer designed the Centium ® Micro 1.0 to be the smallest available electronic ballast on the market, operating (1) or (2) F25T8 and F32T8 linear and U-bend lamps.

Design Highlights

- Measure 9.5"L x 1.08"W x 1.04"H. 68% smaller than Advance's standard ballast.
- Weighs < .75 lbs. 70% lighter than Advance's standard ballast.
- Rated for 70°C case temperature without the use of potting compound.
- Operates at 0°F/-18°C.
- Fully integrated, internally soldered copper leads for a safe, firm, and long-lasting electrical connection.
- Microprocessor technology; fewer components than traditional electronic ballasts.
- Virtually no audible noise.

Instant-Start, Micro 1.0 Electronic Ballast							
Catalog Number							
RCN-132-MC	NSN:						
VCN-132-MC	NSN:						
RCN-2M32-MC	NSN:						
VCN-2M32-MC	NSN:						
Catalog Number	Volts	No. of Lamps	Input Amps	Input Watts	Ballast Factor	Power Factor	Max. THD-%
RCN-132-MC	120	(1) F32T8	.25	30	.98	>.99	<10
VCN-132-MC	277	(1) F32T8	.11	30	.98	>.99	<10
RCN-2M32-MC	120	(2) F32T8	.49	59	.88	>.99	<10
VCN-2M32-MC	277	(2) F32T8	.21	59	.88	>.99	<10
RCN-132-MC	120	(1) F25T8	.21	25	.98	>.98	<10
VCN-132-MC	277	(1) F25T8	.09	25	.98	>.98	<10
RCN-2M32-MC	120	(2) F25T8	.41	49	.88	>.98	<10
VCN-2M32-MC	277	(2) F25T8	.18	49	.88	>.98	<10

Ballasts

Advance Transformer Magnetic Ballasts

E-PAK 34 Energy-Efficient Magnetic Ballast

Optimized 2 and 3 Lamp Operation for 34W T12 Fluorescent Lamps

The federal Energy Policy Act (EPACT) has legislated many popular, but inefficient full wattage, 40W fluorescent lamps out of production. The energy-saving, 34W T12 lamp is now the new industry standard. Until now the only ballast choice for the 34W lamp was the ballast designed for full-wattage 40W lamps. However, a 40W ballast is not designed to maximize the efficiency of a 34W lamp. The E-PAK 34 magnetic ballast is specifically designed for optimal performance with the 34W lamp.

Feature	Benefit
Lower power consumption	Users gain maximum energy savings versus 40W ballast operation.
2-lamp ballast	4 watts savings (6%)
3-lamp ballast	12 watt savings (10%)
Cost Effective	Energy efficient alternative for replacement and new construction for facilities with low burning hours or low utility rates.
1.7 Crest Factor	Maximizes lamp life and lumen maintenance.
Supports EPACT lamp legislation	Helps Green Lights Partners and corporate community achieve energy efficiency mandates.

For 34W F40 T12/ES (straight) and FB40 T12/ES (U-bend)

Catalog Number	
R-2S34-TP	NSN:
V-2S34-TP	NSN:

Catalog Number	Circuit Volts	Number of Lamps	Certification	Line Current (Amps)	Input Power ANSI (Watts)	Ballast Factor	Total Har. Dist. (%THD)	Power Factor
R-2S34-TP	120	2	UL, CSA, E, CSA-E	.57	68	.87	<15	.98
V-2S34-TP	277	2		.25				
R-2S34-TP	120	3	UL, CSA	.85	103	.88	<20	.97
V-2S34-TP	277	3		.37				

Advance Rapid Start Magnetic Ballast

for (2) 18W and 26W Quad 4-pin Compact Lamps

The Advance rapid start magnetic ballast is the cost-effective ballast for compact fluorescent downlighting systems. These ballasts are available for two 18 or 26 watt Quad 4-pin lamps. This rapid start magnetic ballast design com-bines the proven performance of electromagnetic circuitry with the high efficiencies of 4-pin compact fluorescent lamps.

Rapid Start Magnetic Ballast For Compact Lamps									
Catalog Number									
R-2Q18-4P-TP	NSN:								
V-2Q18-4P-TP	NSN:								
Catalog Number *	Lamp Data		Circuit Volts	Mimimum Starting Temp. (F°)	Line Current (Amps)	Input Power (Watts)	Ballast Factor	Max. THD (%)	Power Factor
	No.	Watts							
	CFQ18W/G24q, PLC18W/4P, F18DBX/4p, CF18DD/E								
	2	18	120	50	0.39	46	1.0	15	0.98
	2	18	277	50	0.17	46	1.0	15	0.98
	CFQ26W/G24q, PLC26W/4P, F26DBX/4p, CF26DD/E								
R-2Q26-4P-TP	2	26	120	50	0.57	65	1.0	15	0.97
V-2Q26-4P-TP	2	26	277	50	0.25	65	1.0	15	0.97

* Ordering Information
Add suffix - W to Catalog Number for White Can with leads exiting end of ballast.
Add suffix - BLS to Catalog Number for Black Can with Bottom Leads and Studs.