



Matchbox™

For 4-pin Compact Fluorescent (7-18w)
and T5-Linear (8-13w) Lamps



electronic ballasts for 120V applications



INTRODUCING Matchbox™

Advance's newest family of Compact, Lightweight, High-Frequency Electronic Ballasts

Function

Advance has developed the 120v Matchbox™ electronic ballast family for T5 linear (8-13W) and 4-Pin compact fluorescent (7-18W) lamps. The Matchbox™ Family of electronic ballasts is derived from the circuit technology currently being applied in compact fluorescent integrated lamps. Matchbox™ features color-coded poke-in connectors. This ballast provides up to 25% energy savings compared with equivalent electromagnetic ballasts and up to 75% energy savings over incandescent systems.

Design Highlights

- Flicker-free, instant-start operation
- Up to 25% reduction in energy consumption compared with equivalent electromagnetic ballasts
- Up to 75% reduction in energy consumption compared with incandescent lamps
- Smaller in dimensions than electromagnetic ballasts used in same applications

Applications

- Undercabinet fluorescent lighting
- Task lighting (desk lamps)
- Ambience lighting (living rooms, bedrooms, kitchens)
- Orientation lighting (halls, staircases)
- Sign lighting (point of sale, shelf lighting)

Features	Benefits
Instant on	• Flicker-free starting
Electronic design	• No audible noise • Improved lamp life over 2-pin • Energy Savings • Low temperature starting (0°F)
Miniature housing	• Great fixture design flexibility • Lighter weight than magnetic
Stop circuit	• Safety
Class B Rating	• Can be used in residential applications • Meets Energy Star and consumer EMI requirements

Matchbox is offered in 3 basic package sizes:

- Linear - for one and two lamp applications (8.2"L X .94"W X .94"H)
- Rectangular - for one lamp applications (3.54"L X 1.85"W X .94"H)
- Rectangular - for two lamp applications (4.4"L X 1.85"W X .94"H)

Operates:

- (1) or (2) 7, 9 or 13W Twin Tube Lamp
- (1) or (2) 10 or 13W Quad Lamp
- (1) or (2) 8 or 13W T5 Lamp
- (1) 18W Quad or Triple Tube Lamp





Lamp Data		Input Volts	Min. Starting Temp (°F)	Catalog Number		Line Current (Amps)	Input Power ANSI (Watts)	Ballast Factor	Max. THD (%)	Min. Power Factor
Number	Watts			Linear Package	Square Package					
Twin - 7W										
1	7	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.13	8.0	1.02	150	>0.50
2	7	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.24	16.0	1.10	150	>0.50
Twin - 9W										
1	9	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.16	10.0	1.10	150	>0.50
2	9	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.29	20.0	1.11	150	>0.50
Twin - 13W										
1	13	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.16	11.0	0.90	150	>0.50
2	13	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.29	20.0	0.84	150	>0.50
Quad - 10W										
1	10	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.16	10.0	1.06	150	>0.50
2	10	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.29	20.0	1.06	125	>0.50
Quad - 13W										
1	13	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.20	14.0	0.99	150	>0.50
2	13	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.35	25.0	0.95	150	>0.50
F8T5										
1	8	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.16	10.0	1.32	150	>0.50
2	8	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.27	19.0	1.29	150	>0.50
F13T5										
1	13	120	0 °F	RMB-1P13-L2	RMB-1P13-S1	0.21	14.0	1.00	150	>0.50
2	13	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.38	27.0	0.95	150	>0.50
Quad - 18W										
1	18	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.21	14.0	0.93	150	>0.50
Triple - 18W										
1	18	120	0 °F	RMB-2P13-L2	RMB-2P13-S2	0.22	15.0	0.89	150	>0.50

Important Notes:

All model numbers shown include standard mounting chimneys and connectors without leads. Linear models (L2) are also available without chimneys - Add "NC" to part number.

> SMART SOLUTIONS <

for energy efficient lighting



Ballast Specifications

Section I - Physical Characteristics

1.0 The electronic ballast shall be furnished with poke-in wire trap connectors, color coded to ANSI standard C82.11.

Section II - Performance Requirements

- 2.0 The electronic ballast operates at a line voltage of 120 volts, 50/60 Hz.
- 2.1 The electronic ballast shall have a Power Factor greater than 0.50
- 2.2 The electronic ballast shall have an Instant Start type system.
- 2.3 The electronic ballast shall have a lamp end-of-life detection and shutdown circuit.
- 2.4 The electronic ballast shall be sound rated A.
- 2.5 The electronic ballast output frequency to the lamps shall be above 40KHz to minimize interference with infrared control systems, and eliminate visible flicker.
- 2.6 The electronic ballast shall meet ANSI C82.11, where applicable.
- 2.7 The electronic ballast shall withstand transients specified in ANSI C62.41-1991, Category A.

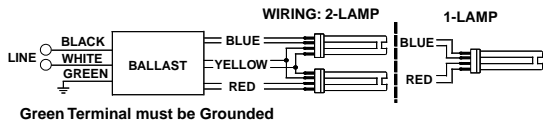
Section III - Regulatory Requirements

- 3.0 The electronic ballast shall meet the requirements of the Federal Communications Commission rules and regulations, Title 47 CFR part 18, for Consumer equipment.
- 3.1 The electronic ballast shall comply with all applicable state and federal efficiency standards.
- 3.2 The electronic ballast shall be Underwriters Laboratories (UL) Listed (Class P) and CSA Certified where applicable.

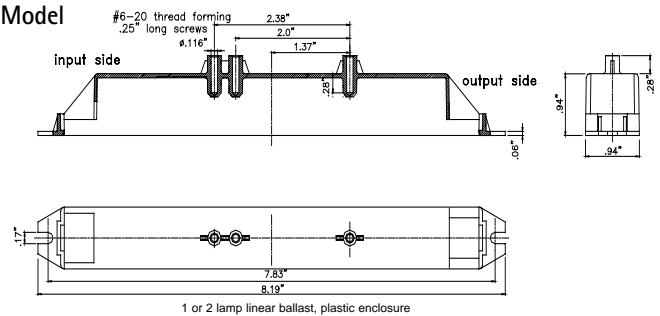
Section IV - Other

- 4.0 The electronic ballast shall not contain Polychlorinated Biphenyl (PCB's)
- 4.1 The electronic ballast shall carry a two-year warranty from the date of manufacture for operation at a case temperature of 65°C or less.
- 4.2 The manufacturer shall have a ten-year history of producing electronic ballasts for the North American market.
- 4.3 The electronic ballast shall be produced in a factory certified to ISO 9002 Quality System Standards.

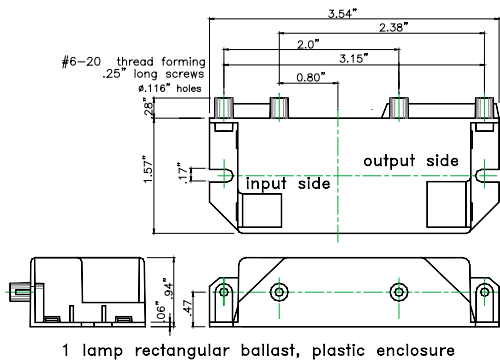
Wiring Diagram/Ballast Dimensions



L2 Model



S1 Model



S2 Model

