ROVR™

Digital Addressable Ballast

New digital addressable ballasts let you take total command of your lighting

Product Profile

Now you can easily adopt the Digital Addressable Lighting Interface (DALI) open architecture protocol. ROVR, the new digitally addressable ballast from Advance, lets you set up any fluorescent lighting system configuration you desire, with such distinct dimming performance settings as up and down, on and off, fade rates, and more.

Roll Your Lighting Designs Over as Building Spaces Change

The ROVR ballasts let you program - then change - any lighting scene or configuration, to easily accommodate any moves, adds, or changes in your lighting design.

- Satisfy future tenant needs
- Customize lighting to exact space requirements
- Enable unrestricted lighting designs
- Change designs without ballast or fixture rewiring

Train Your Lighting to Protect Your Investments

With the new ROVR ballasts, you can now track, archive, and evaluate your lighting investments. ROVR reports ballast and lamp status, system faults, and performance failures.

- 100% to 3% dimming capability
- Precise regulation of lighting
- Archive and report energy savings
- Interface with Building Management Systems (BMS)

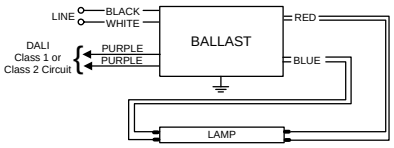
Applications

- Auditoriums
- Boardrooms
- Conference Rooms
- Department Stores
- Educational Facilities
- Healthcare Facilities
- Hotels
- Houses of Worship
- Restaurants
- Specialty Stores
- Executive Offices

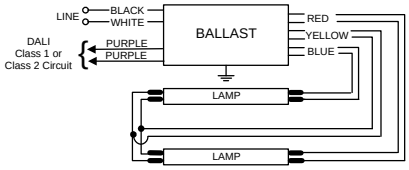
Design Highlights

- Operates directly from DALI control signal
  - Utilizes the global standard giving a choice of compliant controls
  - Supports sustainable design principles such as daylight harvesting
- 100% - 3% full range continuous dimming (T5/HO to 1%)
  - Adds flexibility to system
  - Improves visual comfort
- Internal protection circuitry
  - Protects the ballast in the event the power is connected to the control leads
- Programmed Start operation
  - Optimizes lamp life in frequent starting conditions
- Operates above 42 kHz
  - Minimizes risk of interference with infrared devices
  - Provides continuous flicker-free dimming
- IntelliVolt® Technology (120 through 277V - 50/60Hz)
  - Ensures shipment of correct voltage ballast or fixture for each application
  - Reduces SKU's required in inventory
- Lamp EOL protection circuit (Except 1, 2, 3 lamp T8)
  - Safely removes power from the lamp at end of life
  - Prevents lamp overheating
- Color coded, poke-in connectors for CFL, T5/HO and 4-lamp T8
  - Ensures wiring accuracy
  - Minimizes fixture assembly and ballast installation time

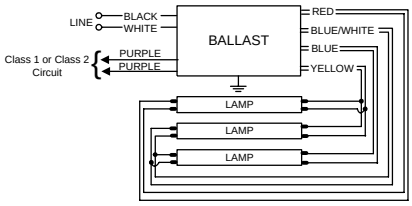
1-Lamp T8 & T5/HO Ballast - Fig. 55B



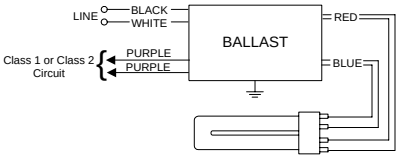
2-Lamp T8 & T5/HO Ballast - Fig. 56B



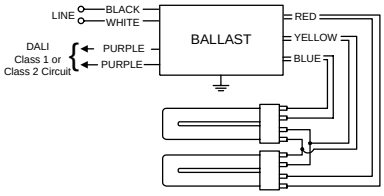
3-Lamp T8 Ballast - Fig. 57B



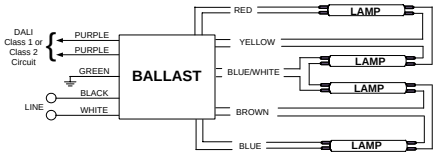
1-Lamp Long Twin Tube Ballast - Fig. 58B



2-Lamp Long Twin Tube Ballast - Fig. 59B

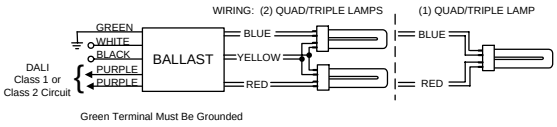


4-Lamp T8 Ballast - Fig. 167



DIAG. 167

1 & 2 -Lamp CFL Ballast - Fig. 165



Green Terminal Must Be Grounded

Ballast Dimensions

Fig. M5*

Fig. -BS

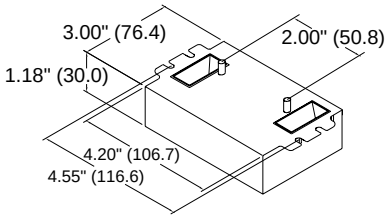


Fig. -LD

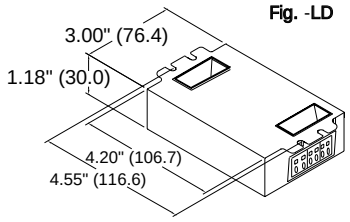


Fig. D*

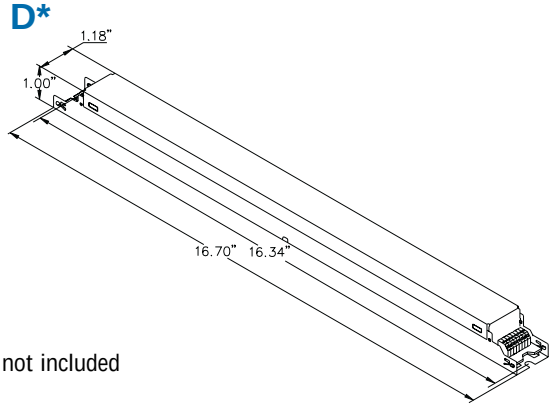
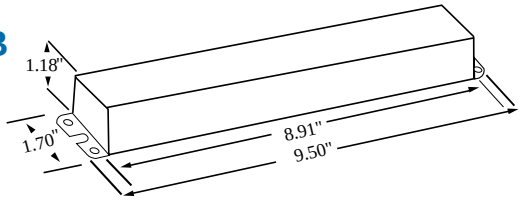


Fig. B



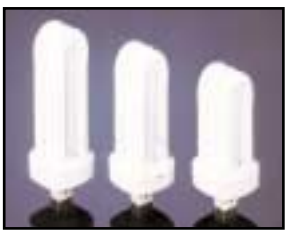
* Leads not included

T8 Linear

Long Twin Tube

T5/HO

Triple Tube 4-Pin CFL



Quad Tube 4-Pin CFL

Lamp Data		Min. Starting Temp. (˚F/˚C)	Input Volts	Catalog Number	Certifications		Line Current (Amps)	Input Power ANSI (Watts) max/min	Ballast Factor max/min	Max. THD % (at full light output)	Min. Power Factor	Dim./ Wiring Diagram
Number	Watts				UL	CSA						
F17T8, FBO16T8												
1	17	50/10	120	IDA-132-SC*	✓	✓	0.16	20/7	1.00/ 0.03	10	0.99	Fig. B/55B
			277		✓	✓	0.07					
2	17	50/10	120	IDA-2S32-SC*	✓	✓	0.30	36/11	1.00/ 0.03	10	0.99	Fig. B/56B
			277		✓	✓	0.13					
3	17	50/10	120	IDA-3S32-SC*	✓	✓	0.45	54/16	1.00/ 0.03	10	0.99	Fig. B/57B
			277		✓	✓	0.20					
F25T8, FBO24T8												
1	25	50/10	120	IDA-132-SC*	✓	✓	0.24	28/8	1.00/ 0.03	10	0.99	Fig. B/55B
			277		✓	✓	0.11					
2	25	50/10	120	IDA-2S32-SC*	✓	✓	0.43	52/12	1.00/ 0.03	10	0.99	Fig. B/56B
			277		✓	✓	0.19					
3	25	50/10	120	IDA-3S32-SC*	✓	✓	0.66	76/16	1.00/ 0.03	10	0.99	Fig. B/57B
			277		✓	✓	0.28					
4	25	50/10	120	IDA-4S32	✓	✓	0.77	96/22	0.88/ 0.03	10	0.99	Fig. D/167
			277		✓	✓	0.35					
F32T8, FBO31T8, F32T8/U6												
1	32	50/10	120	IDA-132-SC*	✓	✓	0.30	36/8	1.00/ 0.03	10	0.99	Fig. B/55B
			277		✓	✓	0.13					
2	32	50/10	120	IDA-2S32-SC*	✓	✓	0.57	68/13	1.00/ 0.03	10	0.99	Fig. B/56B
			277		✓	✓	0.24					
3	32	50/10	120	IDA-3S32-SC*	✓	✓	0.79	93/18	1.00/ 0.03	10	0.99	Fig. B/57B
			277		✓	✓	0.34					
4	32	50/10	120	IDA-4S32	✓	✓	0.98	116/25	0.88/ 0.03	10	0.99	Fig. D/167
			277		✓	✓	0.42					

* To be available January 2005

Ballasts utilizing poke-in connectors can accept wire gauge AWG 16-20.

Lamp Data		Min. Starting Temp. (˚F/˚C)	Input Volts	Catalog Number	Certifications		Line Current (Amps)	Input Power ANSI (Watts) max/min	Ballast Factor max/min	Max. THD % (at full light output)	Min. Power Factor	Dim./ Wiring Diagram
Number	Watts				UL	CSA						
F54T5/HO												
1	54	50/10	120	IDA-154*	✓	✓	0.53	63/12.5	1.00/ 0.03	10	0.98	Fig. D/55B
			277		✓	✓	0.23					
2	54	50/10	120	IDA-2S54	✓	✓	1.05	125/24	1.00/ 0.03	10	0.98	Fig. D/56B
			277		✓	✓	0.45					
FC12T5/HO (55W Circline)												
1	55	50/10	120	IDA-154*	✓	✓	0.50	59/12.5	0.90/ 0.03	10	0.98	Fig. D/55B
			277		✓	✓	0.22					
2	55	50/10	120	IDA-2S54	✓	✓	0.96	114/24	0.90/ 0.03	10	0.98	Fig. D/56B
			277		✓	✓	0.42					

* To be available January 2005

Ballasts utilizing poke-in connectors can accept wire gauge AWG 16-20.

Lamp Data		Min. Starting Temp. (¡F/¡C)	Input Volts	Catalog Number	Certifications		Line Current (Amps)	Input Power ANSI (Watts) max/min	Ballast Factor max/min	Max. THD % (at full light output)	Min. Power Factor	Dim./ Wiring Diagram
Number	Watts				UL	CSA						
CFQ13W/G24q - 13W CFL Quad Tube Lamp (PL-C13W/4P, F13DBX/4P, CF13DD/E) CFTR13W/GX24q - 13W CFL Triple Tube Lamp (F13TBX/4P, CF13DT/E)												
1	13	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.14	18/6	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.07					
2	13	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.26	32/9	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.12					
CFQ18W/G24q - 18W CFL Quad Tube Lamp (PL-C18W/4P, F18DBX/4P, CF18DD/E) CFTR18W/GX24q - 18W CFL Triple Tube Lamp (PL-T18W, F18TBX/4P, CF18DT/E)												
1	18	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.15	20/7	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.08					
2	18	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.32	41/11	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.15					
CFQ26W/G24q - 26W CFL Quad Tube Lamp (PL-C26W/4P, F26DBX/4P, CF26DD/E) CFTR26W/GX24q - 26W CFL Triple Tube Lamp (PL-T26W, F26TBX/4P, CF26DT/E)												
1	26	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.22	28/8	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.10					
2	26	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.41	49/13	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.18					
CFTR32W/GX24q - 32W CFL Triple Tube Lamp (PL-T32W, F32TBX/4P, CF32DT/E)												
1	32	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.28	34/9	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.13					
2	32	50/10	120	IDL-2T42-M5-XX①	✓	✓	0.63	75/19	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.21					
CFTR42W/GX24q - 42W CFL Triple Tube Lamp (PL-T42W, F42TBX/4P, CF42DT/E)												
1	42	50/10	120	IDL-2S26-M5-XX①	✓	✓	0.38	46/9	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.17					
2	42	50/10	120	IDL-2T42-M5-XX①	✓	✓	0.82	98/18	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.36					
CFTR57W/GX24q - 57W CFL Triple Tube Lamp (F57QBX/4P, CF57DT/E)												
1	57	50/10	120	IDL-2T42-M5-XX①	✓	✓	0.55	65/16	1.00/ 0.03	10	0.98	Fig. M5/ 165
			277		✓	✓	0.24					
CFTR70W/GX24q - 70W CFL Triple Tube Lamp (F70QBX/4P, CF70DT/E)												
1	70	50/10	120	IDL-2T42-M5-XX①	✓	✓	0.63	75/16	1.00/ 0.03	10	0.99	Fig. M5/ 165
			277		✓	✓	0.27					

Note: ① Add suffix **–BS** for bottom mounting studs with single color-coded connector or
–LD for length mounting feet with dual-entry color-coded connectors.

Lamp Data		Min. Starting Temp. (¡F/¡C)	Input Volts	Catalog Number	Certifications		Line Current (Amps)	Input Power ANSI (Watts) max/min	Ballast Factor max/min	Max. THD % (at full light output)	Min. Power Factor	Dim./ Wiring Diagram
Number	Watts				UL	CSA						
FT36W/2G11/RS - 36W Long Twin Tube Lamp (PL-L36W, F39/36BX, FT36DL)												
1	36	50/10	120	IDA-1TTS40-SC*	✓	✓	0.32	38/9	1.00/ 0.03	10	0.99	Fig. B/58B
			277		✓	✓	0.14					
2	36	50/10	120	IDA-2TTS40-SC*	✓	✓	0.64	75/16	1.00/ 0.03	10	0.99	Fig. B/59B
			277		✓	✓	0.27					
FT40W/2G11/RS - 40W Long Twin Tube Lamp (PL-L40W, F40/30BX, FT40DL)												
1	40	50/10	120	IDA-1TTS40-SC*	✓	✓	0.32	38/11	1.00/ 0.03	10	0.99	Fig. B/58B
			277		✓	✓	0.14					
2	40	50/10	120	IDA-2TTS40-SC*	✓	✓	0.64	76/16	1.00/ 0.03	10	0.99	Fig. B/59B
			277		✓	✓	0.28					
FT55W/2G11 - 55W Long Twin Tube Lamp (F55BX, FT55DL)												
1	55	50/10	120	IDA-154*	✓	✓	0.50	59/13	0.90/ 0.03	10	0.98	Fig. D/58B
			277		✓	✓	0.22					
2	55	50/10	120	IDA-2S54	✓	✓	0.96	114/24	0.90/ 0.03	10	0.98	Fig. D/59B
			277		✓	✓	0.42					

* To be available January 2005

Controllable Light Output Electronic (Fluorescent)

Ballast Specification for Controllable Light Output Electronic Fluorescent

ROVR™

Section I - Physical Characteristics

1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.

1.2 Ballast shall be available in a plastic/metal can or all metal can construction to meet all plenum requirements.

1.3 Ballast shall be provided with poke-in wire trap connectors or integral leads color coded per ANSI C82.11.

Section II - Performance Requirements

2.1 Ballast shall be Programmed Start.

2.2 Ballast shall be provided with integral protection circuitry to withstand connection of low voltage control leads to mains power supply. In this event, ballast shall default to maximum light output.

2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.

2.4 Ballast shall operate from 50/60 Hz input source of 120V or 277V with sustained variations of +/- 10% (voltage and frequency) with no damage to the ballast. IntelliVolt models shall operate from 50/60 Hz input source of 120V through 277V with sustained variations of +/- 10% (voltage and frequency) with no damage to the ballast.

2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.

2.6 Ballast shall have a Power Factor greater than 0.98 at full light output and greater than 0.90 throughout the dimming range for primary lamp.

2.7 Ballast shall have a minimum ballast factor of 1.00 at maximum light output and 0.03 at minimum light output for primary lamp application.

2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less throughout the dimming range in accordance with lamp manufacturer recommendations.

2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.

2.10 Ballast shall have a Class A sound rating.

2.11 Ballast shall have a minimum starting temperature of 10C (50F) for primary lamp.

2.12 Ballast shall provide Lamp EOL Protection Circuit for all T5, T5/HO, CFL lamps, and T8 lamps operating on 4-lamp ballast.

2.13 Ballast shall control lamp light output from 100% - 3% relative light output for T8 and CFL lamps and 100% - 1% relative light output for T5/HO lamps.

2.14 Ballast shall ignite the lamps at any light output setting without first going to another output setting.

2.15 Ballast shall tolerate sustained open circuit and short circuit output conditions without damage.

Section III - Regulatory Requirements

3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).

3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.

3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.

3.4 Ballast shall comply with ANSI C82.11 where applicable.

3.5 Ballast shall comply with the requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, Non-Consumer (Class A) for EMI/RFI (conducted and radiated).

Section IV - Other

4.1 Ballast shall be manufactured in a factory certified to ISO 9002 Quality System Standards.

4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.

4.3 Manufacturer shall have a fifteen year history of producing electronic ballasts for the North American market.

4.4 Ballast shall be controlled by a Class 1 or Class 2 low voltage DALI controller.

4.5 Ballast shall be Advance Transformer part # _____ or approved equal.

Supports sustainability

ROVR ballasts play a critical role within "sustainable" or "green" building design, a concept defined as the degree to which a structure's site planning, building materials, working environment, and building management systems minimize the building's impact on the environment. Through their ability to help facility professionals track, archive, and evaluate the on-going performance of their lighting system with precision as well as conserve energy through such popular strategies as daylight harvesting and load shedding, Advance's ROVR ballasts fully support sustainability as measured by the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Green Building Rating System™ performance standards.

FLEXIBLE

SUSTAINABLE

CONTROLLABLE

Form No. EL-2230-R01 6/04

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