

1/19/2012

BAL650C-2

Fluorescent Emergency Ballast

650 Lumens

- Works in conjunction with an AC ballast to convert new or existing fluorescent fixtures into unobtrusive emergency lighting
- Maintains illumination of one or two lamps in the emergency mode for a minimum of 90 minutes

Features

- Provides a minimum of 90 minutes of emergency illumination
- Can be installed inside, on top or in remote* of the fixture
- Can be used in both switched and unswitched fixtures
- UL 924 Listed for damp location
- UL listed for Retrofit/Field Installation
- Life safety NFPA 101
- NEC/OSHA
- Meets most state and local codes

Electrical

- Dual Voltage Input 120V/277 VAC, 60Hz
- Solid-state charger circuit
- Test Switch/Power Indicator light
- Temperature Rating (Ambient): 0°C to 50°C [32°F to 122°F]
- Maintenance-free, long life, Sealed Nickel Cadmium Battery
- Maximum battery recharge time: 24 hours

Housing

- Painted-white steel housing with 2' conduits on each end

Illumination

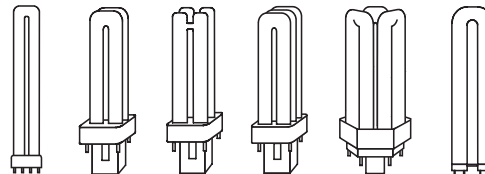
- Operates one in the emergency mode for a minimum of 90 minutes – please refer to page 2 for more information. Provides a maximum initial lumen output of 650 Lumens

Project:	
Catalog#:	
Approved by:	

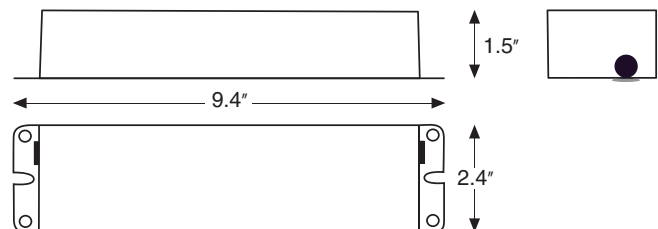


Lamp Compatibility

- Compatible with 1-lamp, 2-lamp, 3-lamp and 4-lamp fixtures with many ballast types including standard, rapid start, slimline, instant start, dimming and electronic AC ballast – consult factory regarding specific applications
- Compatible with many different lamp types – refer to back of page or contact customer service for more information
- Can only be used with G24d & Gx24d base lamps



Dimensions



* Conditions apply for remote mounting. Check with the factory for more information.
 Specifications subject to change without notice.



Lamp Compatibility Data

Project:	
Catalog#:	
Approved by:	

Emergency Ballast

Ballast Model No.		No. Of Lamps Operated	BAL650C-2	BAL650C-4	BAL500	BAL700	BAL1400	BAL3000
Lumen Output			650	750	500	700	1400	3000
Linear Fluorescent Lamps	T8	1 Lamp	-	17-40	17-40	40-110	40-110	40-215
		2 Lamp	-	-	-	17-40	17-40	17-40
	T10	1 Lamp	-	17-40	17-40	-	-	-
		2 Lamp	-	-	-	17-40	17-40	17-40
	T12	1 Lamp	-	17-40	17-40	40-110	40-215	40-215
		2 Lamp	-	-	-	17-40	17-40	17-40
Compact Fluorescent Lamps	4-Pin CFL	1 Lamp	-	40-42	13-39	40-42	40-42	-
		2 Lamp	-	13-39	-	13-39	13-39	13-42
	4-Pin Long CFL	1 Lamp	-	40-42	13-39	40-50	40-50	40-55
		2 Lamp	-	18-40	-	18-40	18-40	18-40
	2-Pin CFL	1 Lamp	13-26	-	-	-	-	-
	T9 Circline CFL	1 Lamp	-	20	20-40	-	-	-
2 Lamp		-	-	-	20-40	20-40	20-40	
Special Fluorescent Lamps	U-Bent	T8						
		1 Lamp	-	32,40	32,40	-	-	-
	2 Lamp	-	-	-	32,40	32,40	32,40	
	T12	1 Lamp	-	32,40	34,40	-	-	-
2 Lamp		-	-	-	34,40	34,40	34,40	

In applications involving 2, 3, or 4-lamp instant start ballasts, for 2-lamp emergency operation, only 1 lamp will go dim in the test mode. When power is cut off to the fixtures, both lamps will come on (in EM Mode) as they are suppose to.

Specifications subject to change without notice.

Installation Instructions

When using this lighting device the safety precautions should be followed at all times.
PLEASE READ CAREFULLY AND FOLLOW ALL INSTRUCTIONS FOR YOUR OWN SAFETY

1. This device is designed for indoor use. Do not use outdoors.
2. Prior to installation, battery connector must be open to prevent high voltage from being present on our put leads (red & yellow).
3. This device is designed for use with One double twin-tube (quad) or one triple twin-tube compact fluorescent lamp shown in the Lamp Rating Chart as follows:

Lamp Rating Chart (Operates 1 Lamp)			
Twin-Tube CFL (2-pin)		Triple-Tube CFL (2-pin)	
Wattage	Base	Wattage	Base
10, 13, 18, or 26 watts	G24d	13, 18, or 26 watts	GX24d

4. Please ensure the electrical connections conform to the National Electrical Code and local regulations if applicable.
5. To avoid electric shock, please disconnect normal and emergency power supplies and battery connector of the emergency ballast before servicing.
6. This device is designed for factory or field installation in either the ballast channel or on top of the indoor fixtures. Do not install this device near gas or electric heaters.
7. AC power source of 120VAC or 277VAC is required.
8. The battery is sealed, non-maintenance, and is not replaceable in the field. Please contact manufacturer for information on service. Do not attempt to service the battery please.
9. Do not use accessory equipment that is not recommended by manufacturer. Failure to do so may cause unsafe conditions. Servicing should only be performed by qualified service personnel.
10. Do not use the product for other purpose that the product is NOT designed for.

Specifications subject to change without notice.

Installation Instructions

NOTE: All the branch circuit wiring has to be ready as well as an unswitched source of power before the fixture is installed. Confirm that the same branch circuit runs the emergency ballast and the AC ballast.

CAUTION: Inverter connector has to be opened for preventing high voltage on output leads (red & yellow). Wait until all the installation process is completed and AC is supplying power to the emergency ballast then join the inverter connector.

1. AC power has to be off before installation.
2. Choose the right wiring diagram to connect the emergency ballast to AC ballast and lamp.
3. Follow diagram 1 to connect the emergency ballast and test plate. Please ensure the electricity connections conform to the National Electrical Code and local regulations if applicable. The emergency ballast install u to half distance the AC ballast manufacturer recommends install the AC ballast from the lamp or install within 50 feet is recommended. Please choose the one in less distance. The emergency ballast could be mounted within 50 feet if there isn't AC ballast.
4. Cut the wire between the lamp holder and AC ballast and then connect the blue and blue/white wire from emergency ballast to AC ballast and the yellow and yellow/black wires to the lamp holder.
5. The emergency ballast has to be connecting to an unswitched 120VAC or 277VAC power source with no exception. Other voltages are not accepted!! Do not join the inverter connector until the fixture is completely installed and supply AC power to the emergency ballast.
6. An additional unswitched hot wire (120VAC or 277VAC) has to be run to the junction box and connected to the emergency ballast if there is in ON SWITCHED FIXTURES.
7. The battery needs to be charged for one hour in order to have short-term testing on the emergency function. Before having a long-term emergency function testing, the battery in emergency ballast has to be charged for 24 hours.
8. Please search in readily visible location and stock the label with "CAUTION: This Unit Has More Than One Power Supply Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And Emergency Power Supplies Before Servicing."
9. See Diagrams 2 and 3 showing basic switched and unswitched fixture connections. See back page for more detailed wiring schematics. The emergency ballast can be used with one- or two- multi-lamp fixtures; however, it only operates one lamp in the emergency mode.

NOTE: SWITCH BOX IS NOT SUPPLIED

OPERATION:

THE CHARGING INDICATOR LIGHT WOULD BE ON TO INDICATE THE BATTERY IS BEING CHARGED WHEN AC POWER IS APPLIED. THIS EMERGENCY BALLAST WOULD FUNCTION AND OPERATE ONE (OR TWO LAMPS AT REDUCED ILLUMINATION) WHEN THE AC POWER IS FAILED THE DEVICE OF THIS EMERGENCY BALLAST WILL OPERATE 10 WATT TO 26 WATT LAMPS AT LEAST 90 MINUTES.

MAINTENANCE:

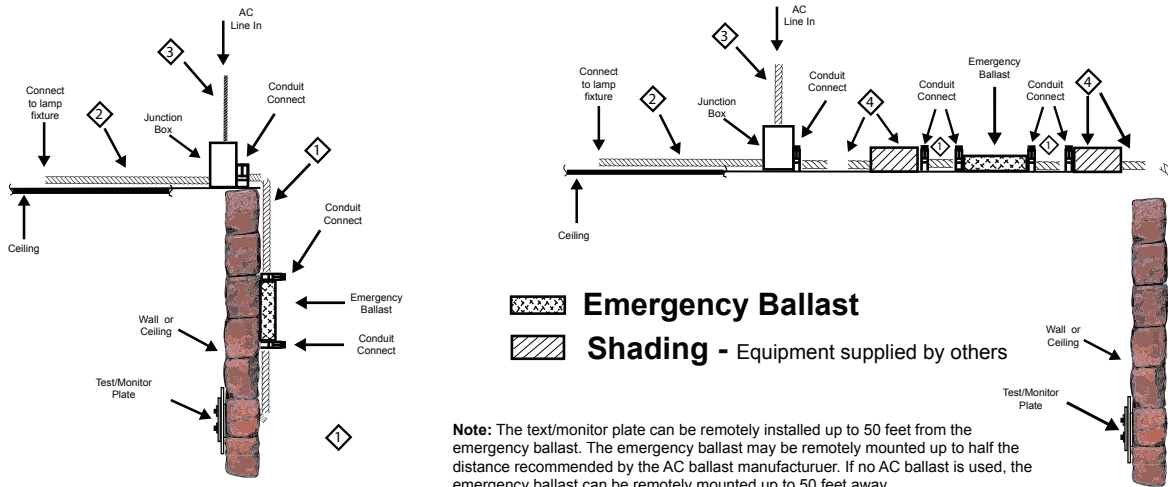
NOTE: SERVICES SHOULD ONLY BE PERFORMED BY QUALIFIED PERSONNEL. THE EMERGENCY BALLAST SHOULD BE CHECKED PERIODICALLY TO CONFIRM FUNCTIONING AND THE FOLLOWING SCHEDULE IS RECOMMENDED

- 1) TO INSPECT THE CHARGING INDICATOR EVERY MONTH AND CONFIRM THAT IS ILLUMINATED.
- 2) PUSH THE TEST SWITCH FOR 30 SECONDS TO ENSURE THE EMERGENCY BALLAST IS FUNCTIONING, RECOMMENDED TO PERFORM THIS TEST EVERY 30 DAYS.
- 3) PERFORMING A LONG-TERM (90 MINUTE BATTERY DISCHARGE) IN EVERY YEAR. ONE OR TWO LAMPS SHOULD BE OPERATED FOR NO LESS THAN 90 MINUTES.

Specifications subject to change without notice.

Installation Instructions

DIAGRAM 1



- ① - Flexible conduit (supplied) to connect ballast wire
- ② - Existing conduit to run existing wire to lamp holder (AC ballast on junction box). If AC ballast is on reflector, run yellow and blue wires from emergency ballast through this conduit
- ③ - AC line in
- ④ - Conduit and junction box (not supplied), necessary for remote installation

DIAGRAM 2

SWITCHED FIXTURE

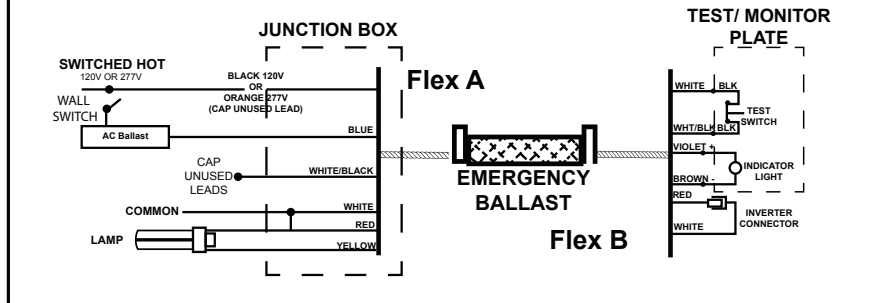
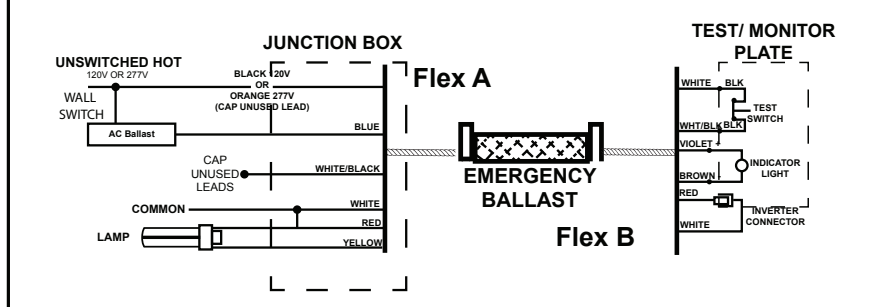


DIAGRAM 3

UNSWITCHED FIXTURE



For 120V, connect unswitched hot to black emergency ballast lead and cap unused orange wire.
For 277V, connect unswitched hot to orange emergency ballast lead and cap unused black wire.

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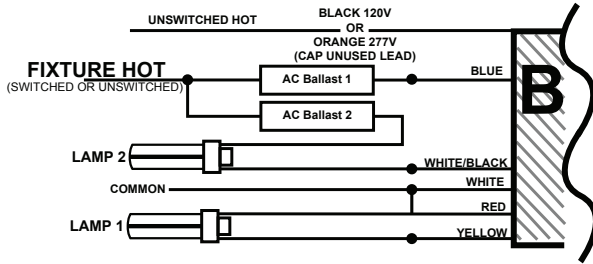
Wiring Diagrams

Note: Emergency Ballast and AC Ballast must be fed from the same branch circuit. Typical Schematics only, may be used with other ballasts, consult the factory for other wiring diagrams.

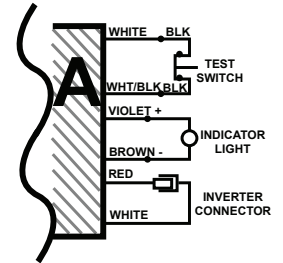
WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

A. Two (2) Lamp Fixture Using Two (2) Reactor AC Ballasts *(Lamp 1 operates in emergency mode)*

1. B) FLEX Conduit Wiring Diagram:

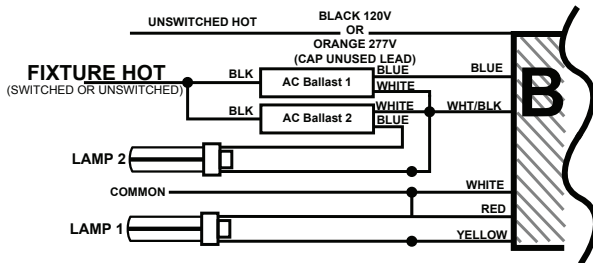


2. A) FLEX Conduit Wiring Diagram:

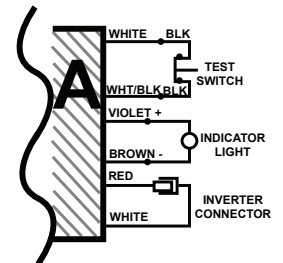


B. Two (2) Lamp Fixture Using Two (2) Autotransformer AC Ballasts *(Lamp 1 operates in emergency mode)*

1. B) FLEX Conduit Wiring Diagram:

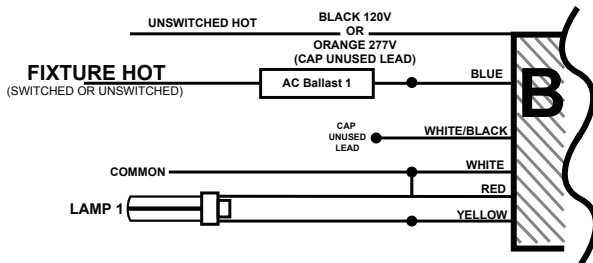


2. A) FLEX Conduit Wiring Diagram:

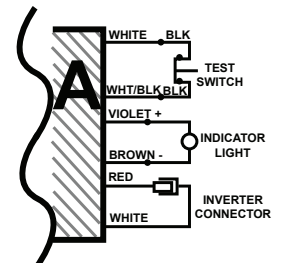


C. One (1) Lamp Fixture Using One (1) Reactor AC Ballast

1. B) FLEX Conduit Wiring Diagram:

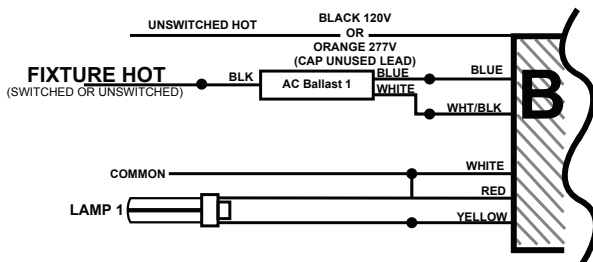


2. A) FLEX Conduit Wiring Diagram:

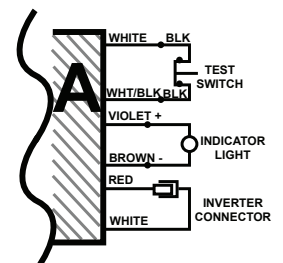


D. One (1) Lamp Fixture Using One (1) Autotransformer AC Ballast

1. B) FLEX Conduit Wiring Diagram:



2. A) FLEX Conduit Wiring Diagram:



Specifications subject to change without notice.

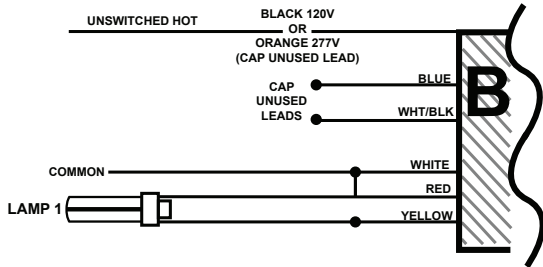
Wiring Diagrams

Note: Emergency Ballast and AC Ballast must be fed from the same branch circuit. Typical Schematics only, may be used with other ballasts, consult the factory for other wiring diagrams.

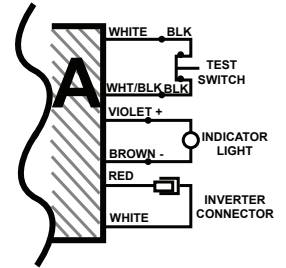
WIRE DIAGRAMS FOR 1-LAMP EMERGENCY OPERATION

E. One (1) Lamp Fixture without AC Ballast

1. B) FLEX Conduit Wiring Diagram:



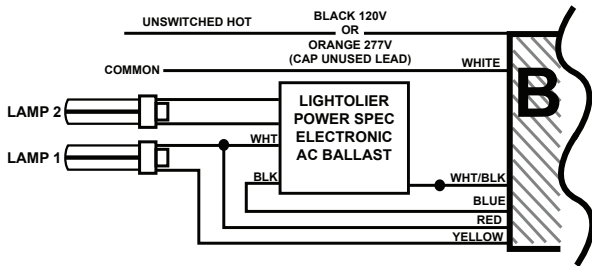
2. A) FLEX Conduit Wiring Diagram:



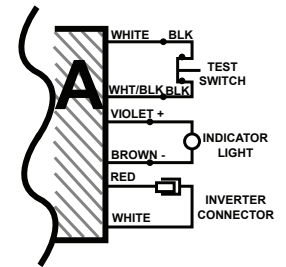
F. Two (2) Lamp Fixture Using Two (2) Lamp Lightolier Power Spec Electronic AC Ballast

(Lamp 1 operates in emergency mode)

1. B) FLEX Conduit Wiring Diagram:



2. A) FLEX Conduit Wiring Diagram:



Specifications subject to change without notice.