

E.L.S. Electronic Lighting System

Ballast Replacement Instructions

February, 1999

E.L.S. Ballast Replacement Instructions

Step 1

Turn off power to the frame.

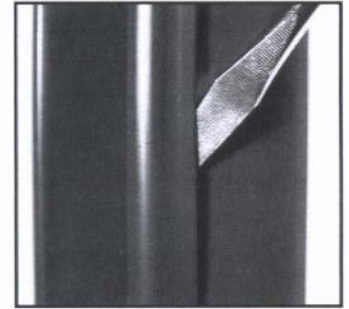
Step 2

Refer to drawings on the following pages for the ballast location and wiring.

Step 3

Remove the contact plate and retainer at the front of the frame mullion by inserting a flathead screwdriver under the back of the black contact plate retainer (Fig. 1). Gently pull up to unsnap the retainer from the mullion. Repeat for the other side of the mullion and remove the contact plate.

Fig. 1



Step 4

With the ballast now exposed, remove the screws located at the bottom and the top of the ballast and remove the ballast (Drawing #1).

Step 5

Disconnect or cut all lead wires. If cut, leave enough lead wire to re-connect new ballast with wire nut.

Step 6

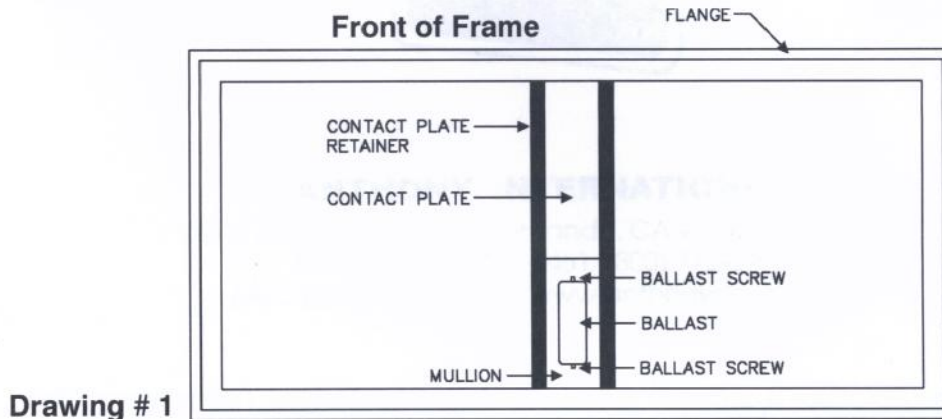
Re-install the ballast using the 2 screws removed in step 4.

Step 7

Re-connect the new ballast lead wires. See Page 6 through 9 for wiring information.

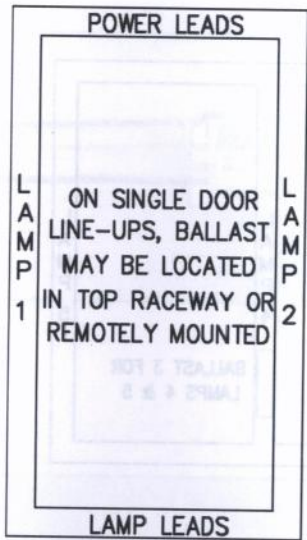
Step 8

Lay the contact plate flat on the mullion. Starting at the top, insert the contact plate retainer into the front edge of the mullion. Snap the retainer on the back edge of the mullion. Repeat the instructions for the opposite side.

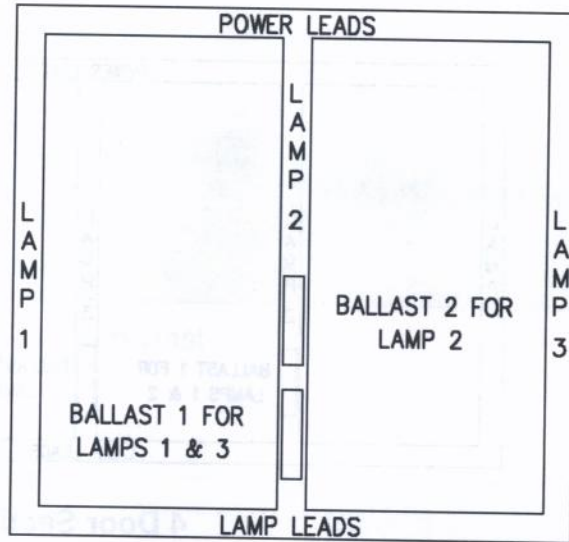


Drawing # 1

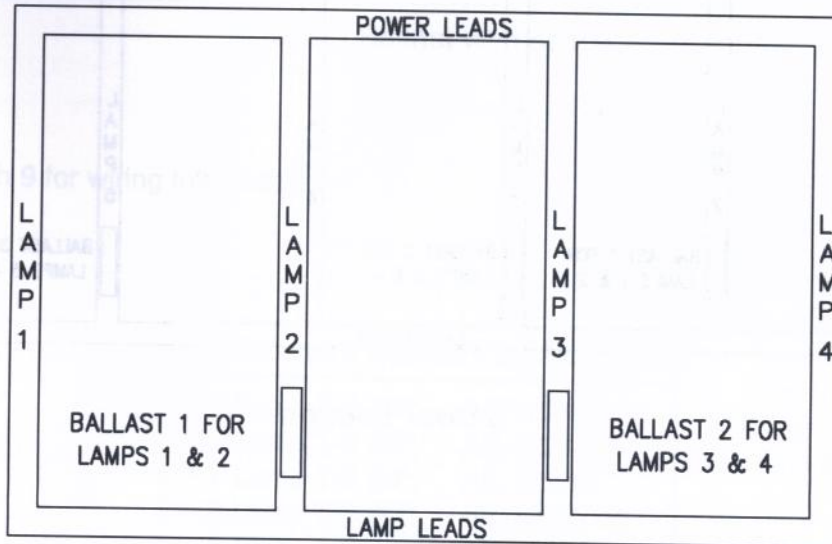
E.L.S. lighting system, 120V component layout, as viewed from the front (customer's side) of the case.



1 Door Section

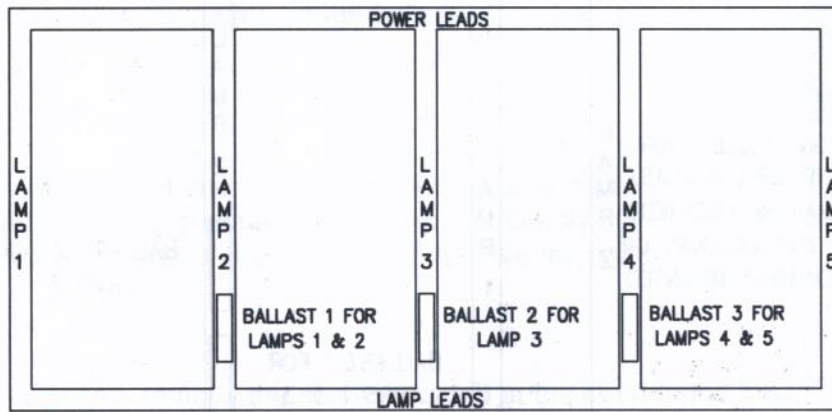


2 Door Section

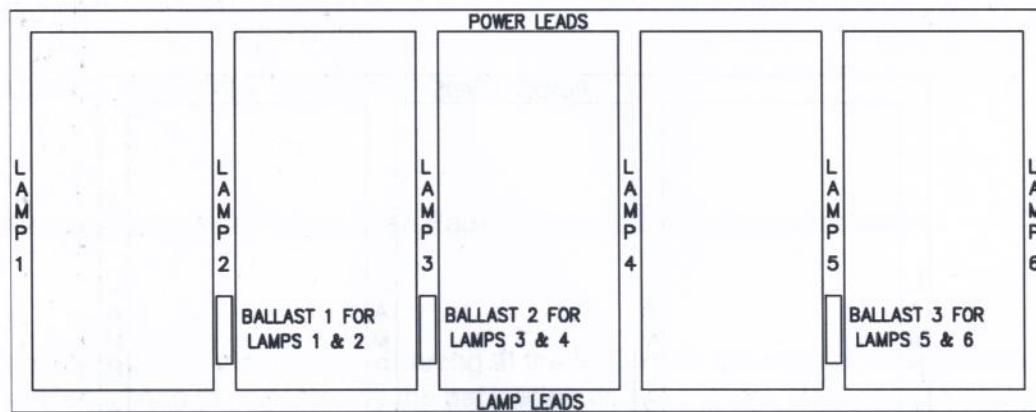


3 Door Section

E.L.S. lighting system, 120V component layout, as viewed from the front (customer's side) of the case.

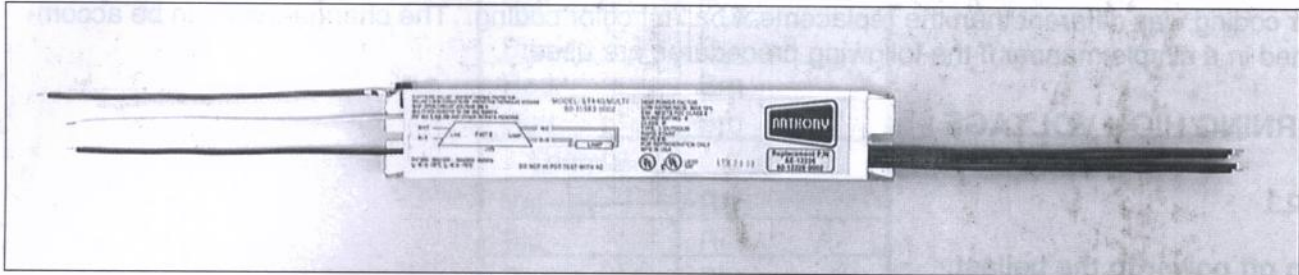


4 Door Section

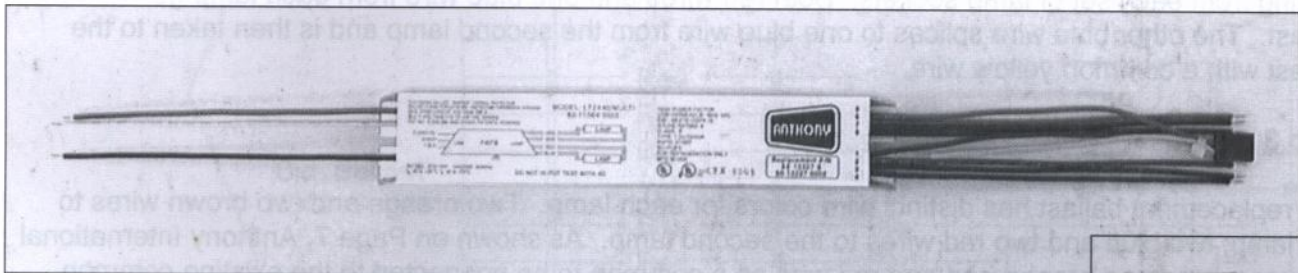


5 Door Section

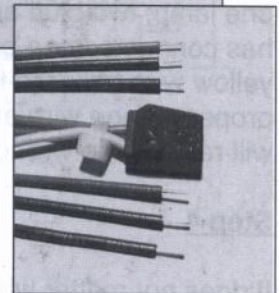
Replacement Ballast for all Production prior to March 20, 1997



1-Lamp Ballast



2-Lamp Ballast with splice



Factory splice

See Page 6 through 9 for wiring information.

Replacement Ballast Part Numbers

1-Lamp T-8 48":	AE-12242
2-Lamp T-8 48":	AE-12243-S
1-Lamp T-8 60":	AE-12226
2-Lamp T-8 60":	AE-12227-S
1-Lamp T-8 72":	AE-12272
2-Lamp T-8 72":	AE-12273-S

Replacing the 12xx Ballast with the LT2X/MULTI Series Ballast

The 12xx ballast was a seven wire model. The replacement ballast is an eight wire model. The 12xx color coding was different than the replacement ballast color coding. The change-over can be accomplished in a simple manner if the following procedures are used:

WARNING HIGH VOLTAGE

Step 1

Turn off power to the ballast.

Step 2

Identify which wires come from which lamp. The existing wiring consists of two red and two blue wires coming from each set of lamp sockets. Both red wires and one blue wire from each lamp go to the ballast. The other blue wire splices to one blue wire from the second lamp and is then taken to the ballast with a common yellow wire.

Step 3

The replacement ballast has distinct wire colors for each lamp. Two orange and two brown wires to one lamp; two blue and two red wires to the second lamp. As shown on Page 7, Anthony International has connected one orange and one red wire as a common to be connected to the existing common yellow wire from the lamps. The replacement ballast has no wire numbers and it is imperative that the proper orange wire and the proper red wire are connected together. Permanent damage to the ballast will result if the wrong wires are connected together.

Step 4

It does not matter which lamp is connected to the brown and orange wires or the blue and red wires from the ballast. However, it is important that the blue wires from the lamp sockets be grouped with the red wires from the same lamp.

Step 5

Once the above steps have been verified, simply connect the lamp wires to the ballast as shown on the wiring diagram on Page 7.

Step 6

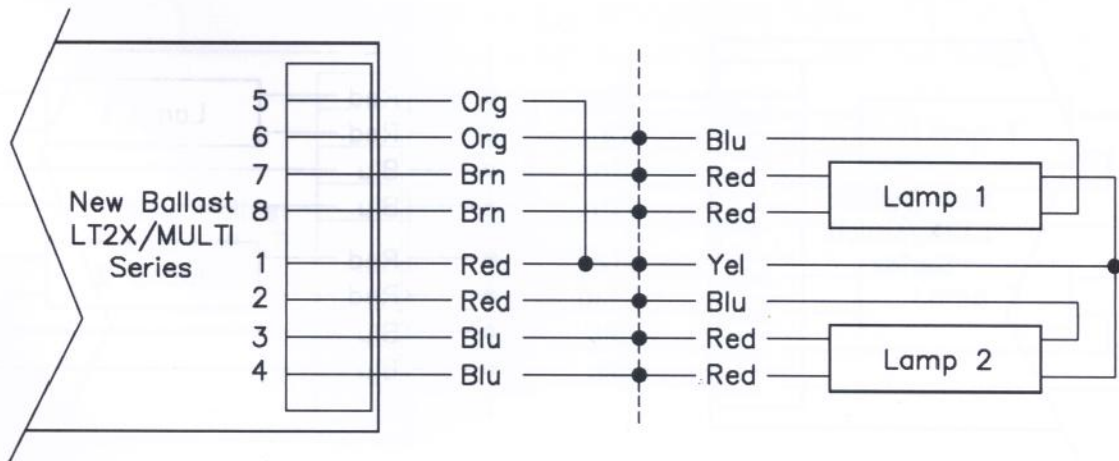
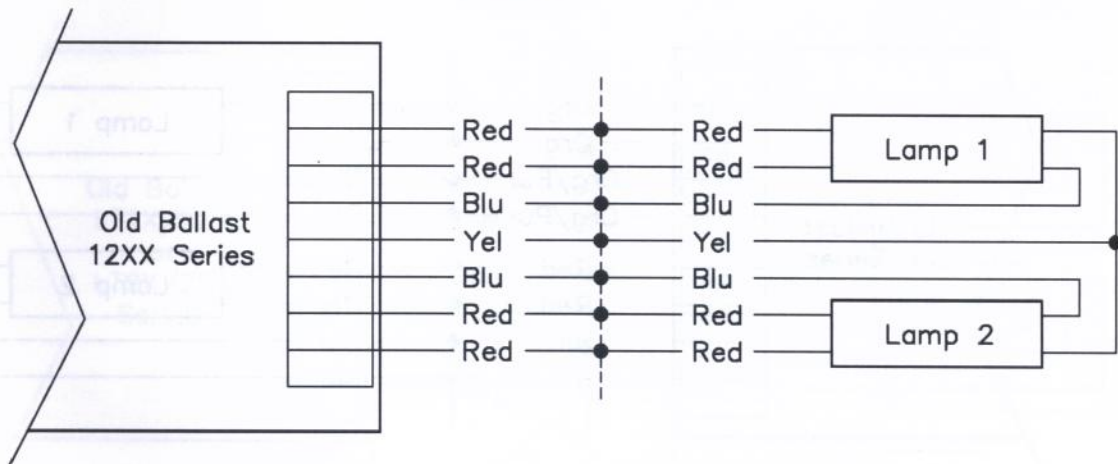
Ensure that the lamps have been rotated 90 degrees and are properly secured, in position, in the lamp sockets. Turn the power back on and the lamps should light. If there is any problem with the lamps lighting, please confirm that the lamps are good before contacting Anthony International.

Ballast Replacement Wiring Information

Replacing the 12xx Series Ballast with a LT2X/MULTI Series Ballast

12xx Series	LT2X/MULTI Series
Lamp 1	Lamp 1
Yel	Org
Blu	Org
Red	Brn
Red	Brn
Lamp 2	Lamp 2
Yel	Red
Blu	Red
Red	Blu
Red	Blu

Table 1



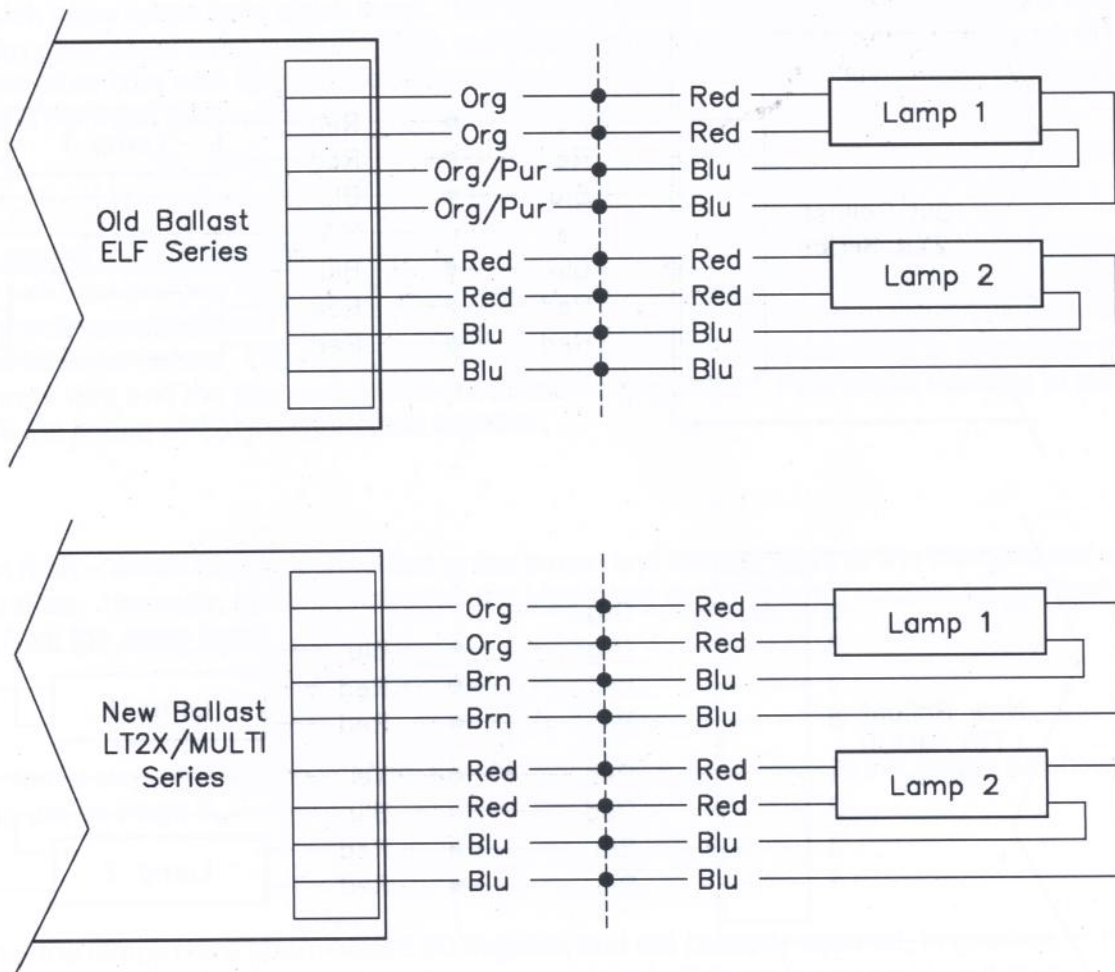
Note:

1. When replacing 12xx Series with LT2X/MULTI Series, leave the factory splice of the orange and the red wires intact and connect the new ballast as shown in Table 1.

Replacing ELF Series Ballast with a LT2X/MULTI Series Ballast

LT2X/120 & 220 Series	LT2X/MULTI Multi Series
Lamp 1	Lamp 1
Org	Org
Org	Org
Brn	Brn
Brn	Brn
Lamp 2	Lamp 2
Red	Red
Red	Red
Blu	Blu
Blu	Blu

Table 2



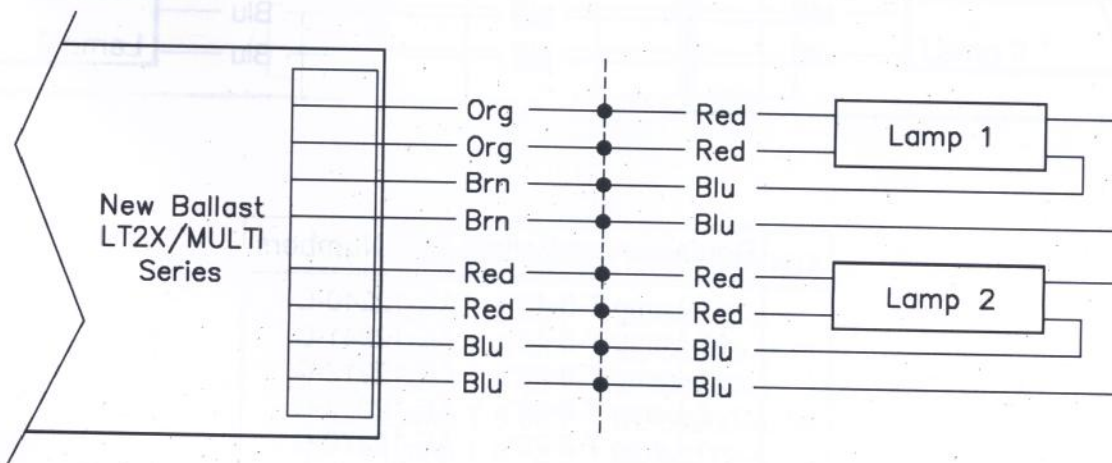
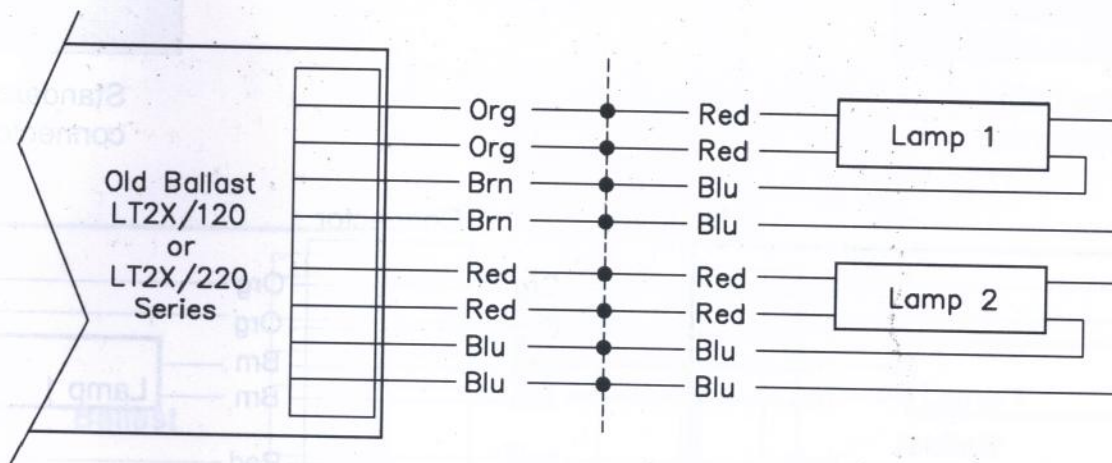
Note:

1. When replacing ELF Series with LT2X/MULTI Series, cut apart the factory splice of the orange and red wires and connect the new ballast as shown in Table 2.

Replacing the LT2X40/120, LT2X40/220 Series Ballast with a LT2X/MULTI Series Ballast

LT2X/120 & 220 Series	LT2X/MULTI Multi Series
Lamp 1	Lamp 1
Org	Org
Org	Org
Brn	Brn
Brn	Brn
Lamp 2	Lamp 2
Red	Red
Red	Red
Blu	Blu
Blu	Blu

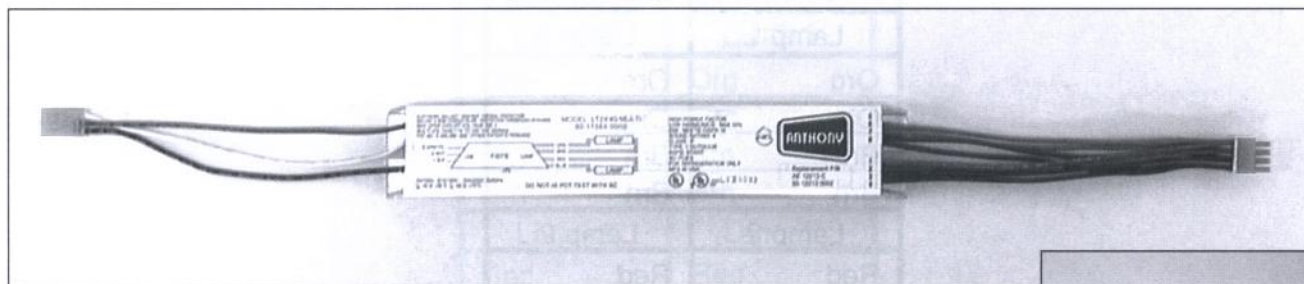
Table 3



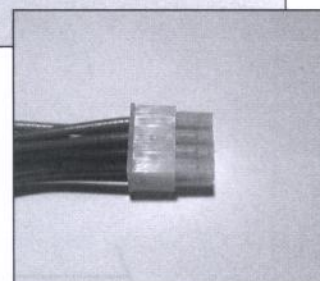
Note:

1. When replacing LT2X40/120 or LT2X40/220 with LT2X/MULTI Series, cut apart the factory splice of the orange and red wires and connect the new ballast as shown in Table 3.

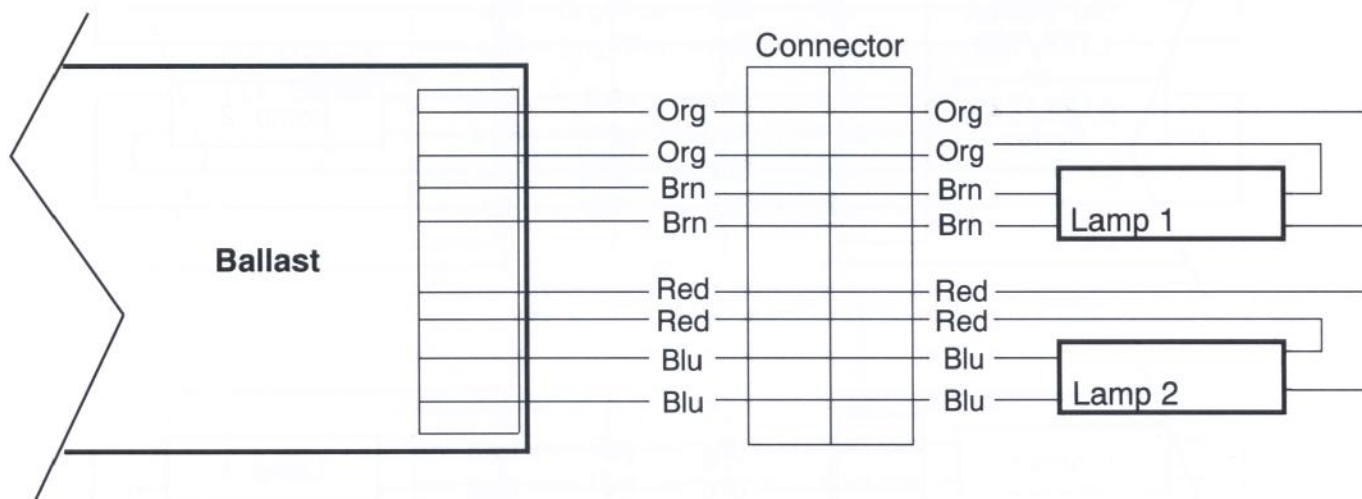
E.L.S./Standard Ballast with Connectors as of 3/20/97



Ballast with Connectors



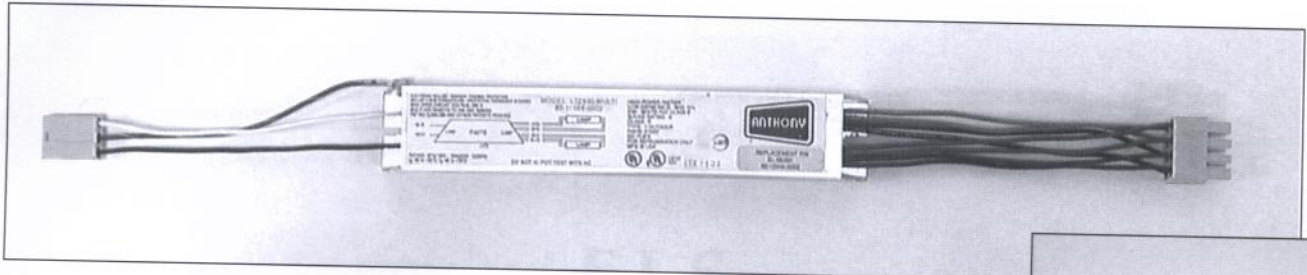
Standard size
connector



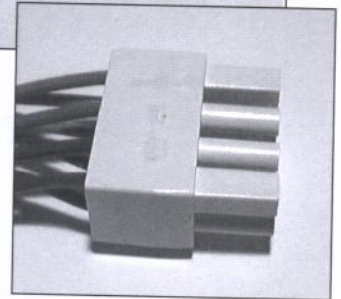
Replacement Ballast Part Numbers

1-Lamp T-8 48":	AE-12240-C
2-Lamp T-8 48":	AE-12241-C
1-Lamp T-8 60":	AE-12212-C
2-Lamp T-8 60":	AE-12213-C
1-Lamp T-8 72":	AE-12270-C
2-Lamp T-8 72":	AE-12271-C

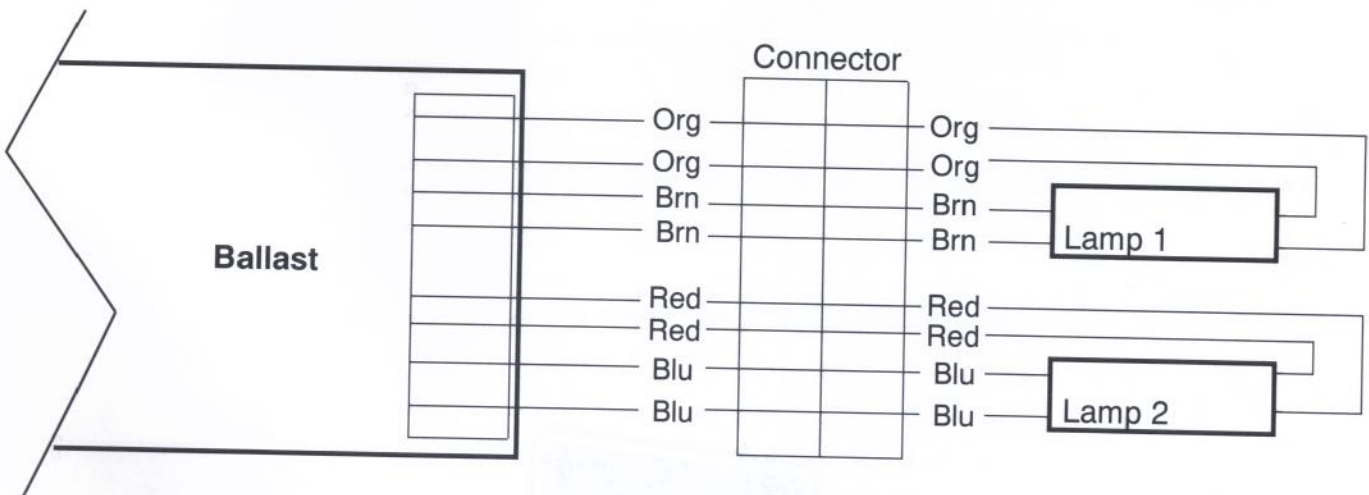
**E.L.S./Connexion™ Ballast with 1000 Volt Connectors
Available from July, 1998**



Ballast with 1000 Volt Connectors



1000 volt connector



Replacement Ballast Part Numbers

1-Lamp T-8 48":	EL-58148-A
2-Lamp T-8 48":	EL-58248-A
1-Lamp T-8 60":	EL-58160-A
2-Lamp T-8 60":	EL-58260-A
1-Lamp T-8 72":	EL-58172-A
2-Lamp T-8 72":	EL-58272-A



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