



**INDUSTRIES**

24100 FRAMPTON AVE., BLDG B, HARBOR CITY, CA 90710  
TEL: 310.517.1769 FAX: 310.517.0875 E'MAIL: dnhind@aol.com  
WEB: dnhindustries.com

# LUMITRON ISO CLASS

## LIGHT INTENSITY CONTROLLER



### SPECIFICATIONS

#### DESCRIPTION

The Lumitron ISO CLASS Controller is a solid state device which provides infinitely variable light intensity control. Power handling capabilities are sufficiently high to enable a single unit to handle the incandescent light load typically found in most controlled environment poultry houses.

The Lumitron ISO CLASS Controller modulates light intensity by regulating the amount of energy allowed through an ISOLated semiconductor power device. Only the power required to maintain the desired light intensity is consumed. Power output varies linearly in response to the control adjustment located on the cover of the unit.

#### FEATURES

- ISOLated Power Module that reduces wiring and allows the Heatsinks to be Grounded
- Simplified design enables access to the Control Board for setup or diagnostics
- Common Manual or Automatic Control for 2 or 3 leg Controllers
- Manual (potentiometer) or Auto (0-10 vdc) control signal

#### STANDARD SIZES

DESCRIPTION: 120VAC, 1 PHASE, 2 WIRE, 1 LEG CONTROL

MODEL NUMBER	PART NUMBER	MAX WATTS/UNIT	MAX AMPERES/LEG
RLI-120-4.8	01-1297	4800	40
RLI-120-8.4	01-1298	8400	70
RLI-120-12	01-1303A	12000	100

# LUMITRON ISO CLASS

## LIGHT INTENSITY CONTROLLER SPECIFICATIONS

DESCRIPTION: 240/120VAC, 1 PHASE, 3 WIRE, 2 LEG CONTROL

MODEL NUMBER	PART NUMBER	MAX WATTS/UNIT	MAX AMPERES/LEG
RLI-240/120-7	01-1305A	7200	30
RLI-240/120-12	01-1306A	12000	50
RLI-240/120-18	01-1307A	18000	75
RLI-240/120-24	01-1308A	24000	100

DESCRIPTION: 208- 240/120VAC, 3 PHASE, 3 WIRE, 2 LEG CONTROL

MODEL NUMBER	PART NUMBER	MAX WATTS/UNIT	MAX AMPERES/LEG
RLI-3-208/120-7	01-1310A	7200	30
RLI-3-208/120-12	01-1311A	12000	50
RLI-3-208/120-18	01-1312A	18000	75
RLI-3-208/120-24	01-1313A	24000	100

DESCRIPTION: 208- 240/120VAC, 3 PHASE, 4 WIRE, 3 LEG CONTROL

MODEL NUMBER	PART NUMBER	MAX WATTS/UNIT	MAX AMPERES/LEG
RLI-3-3-208/120-11	01-1315A	10800	30
RLI-3-3-208/120-18	01-1316A	18000	50
RLI-3-3-208/120-27	01-1317A	27000	75
RLI-3-3-208/120-36	01-1318A	36000	100

### ENCLOSURE

NEMA 1 WALL MOUNT WITH VENTILATING LOUVERS ON THE SIDE WALLS. SIZE: 15 IN. HIGH BY 16 IN. WIDE BY 9 IN. DEEP

### OPTIONS

SIMULATED SUNRISE/SUNSET.....TURNS LIGHTS ON AND OFF GRADUALLY OVER A 10 MINUTE PERIOD

HIGHER POWER CONTROLLERS.....CONSULT THE FACTORY IF YOUR REQUIREMENTS EXCEED THE LISTED RATINGS

TIME CLOCK.....PROVIDES FOR TIME OF DAY OPERATION TO TURN THE LIGHTS ON AND OFF

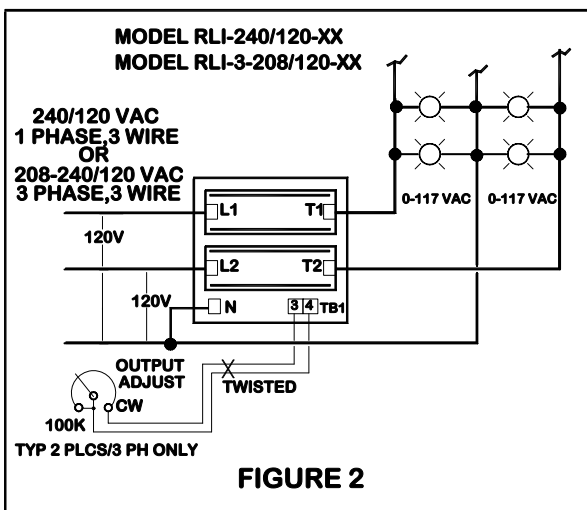
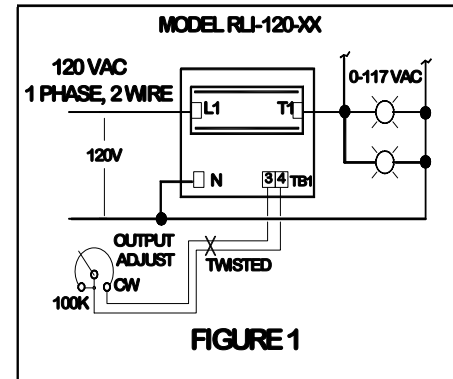
SPECIAL ENCLOSURES.....LUMITRON CONTROLLERS CAN BE PROVIDED IN VARIOUS TYPES OF ENCLOSURES AND IN SPECIAL CONFIGURATIONS SO THAT THE ENCLOSURE DOES NOT HAVE TO BE VENTILATED

DNH 04-8006B  
JANUARY 25, 2008

# LIGHT INTENSITY CONTROLLER INSTRUCTIONS

### INSTALLATION

1. Remove the Enclosure cover screws and carefully lower the hinged cover so as not to pull the internal wiring loose.
2. If it is necessary to remove the cover, disconnect the wiring at terminals 3&4 on TB1, on each Master Board, after noting which Control they are connected to. NOTE: It does not matter which of the wires connects to 3 or 4.
3. The Enclosure should be mounted on a vertical surface with 3 to 4 inches clearance, on each side, to allow air flow thru the enclosure. The open end of the louvers face down.
4. When installing the Higher Power 3 Phase units, it may be advisable to remove one or two Power Modules Prior to mounting the Enclosure.



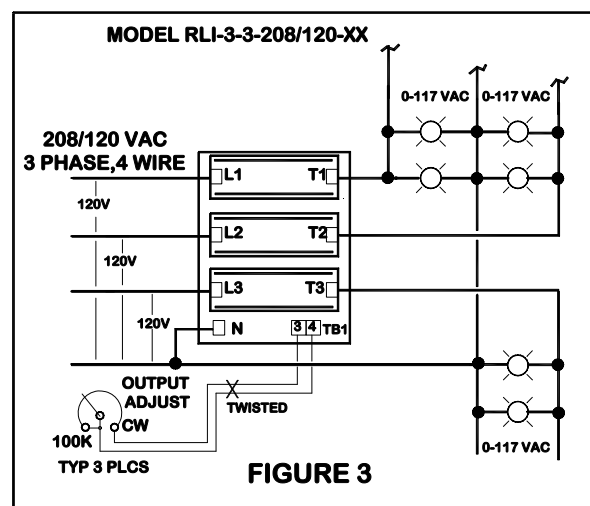
5. To remove a Power Module, disconnect any wiring that connects to another Module. Almost all the interconnections are plug-in.
6. Each Power Module is bolted to the Backpanel with two 1/4-20 Hex Head Screws. Remove only these screws to remove each Controller.
7. Once the Enclosure is mounted, replace the Modules and re-connect the wiring.
8. With all POWER Disconnected, connect the Incoming lines to the terminals marked L1, L2, L3 and N. Connect the Load wiring to the terminals marked T1, T2, T3 and N. Power Conduits may enter thru the top or bottom of the Enclosure.

**CAUTION:** The Ground Terminal (GND) is to be used as chassis ground only. This Terminal is not to be used as Circuit Ground.

9. Reconnect the wires that were disconnected in step 2.
10. Close the Cover on the Enclosure and replace the retaining screws. Installation is now complete.

### OPERATION

1. Turn on the AC Power to the Lumitron Controller.
2. Clockwise Rotation of the Control Knob (S) increases the light intensity.

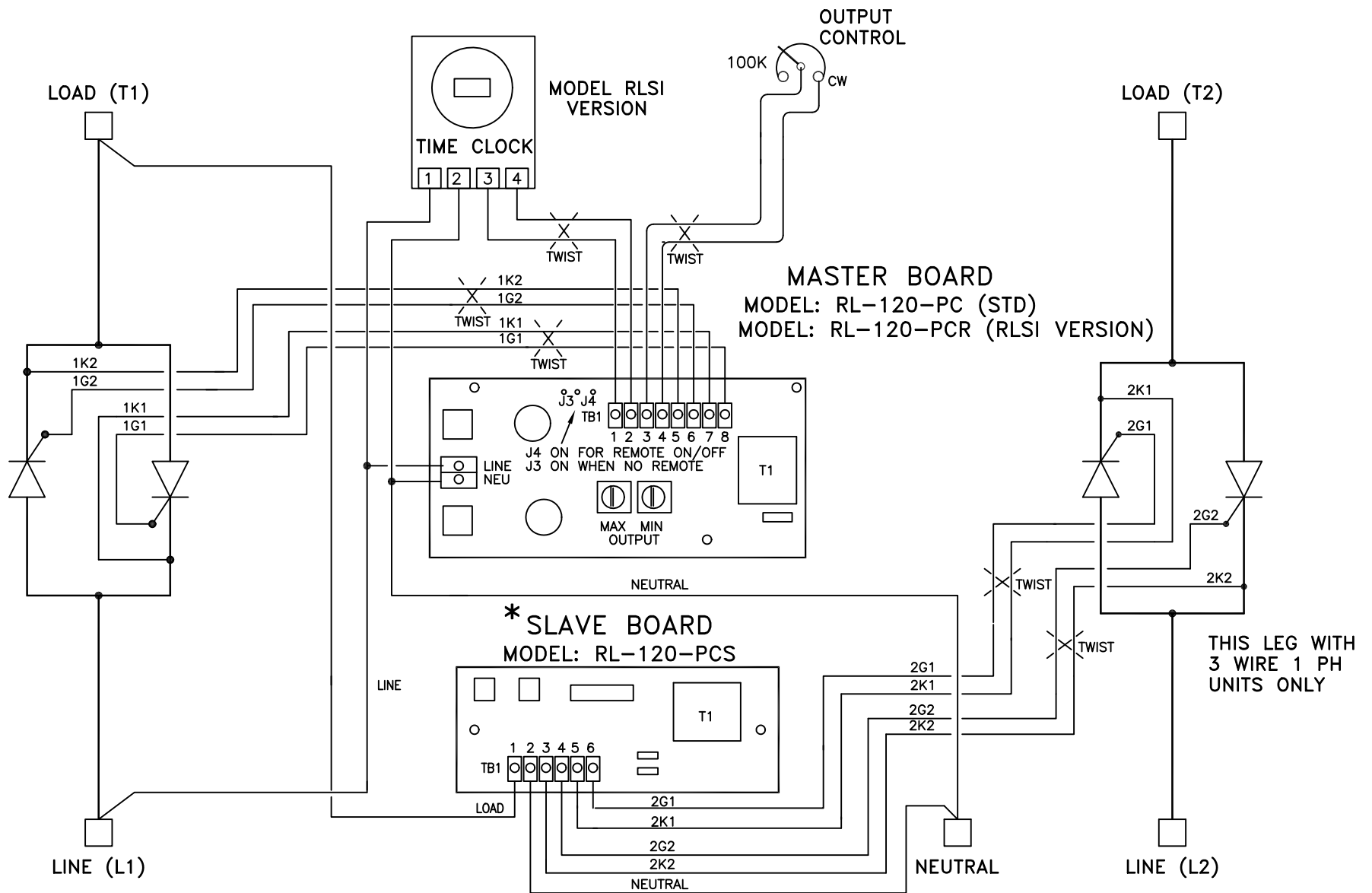


**LIGHT INTENSITY CONTROLLER  
INSTRUCTIONS****ADDITIONAL INSTRUCTIONS FOR THE RLSI MODEL****INSTALLATION**

1. Install the Controller per the instructions on page 1.
2. Connect the Normally Open contact of a 24 hour, or similar Time Clock, to the terminals marked SW1 and SW2 on the Master Board.
3. If you are not using a Timer, connect a SPST Switch to terminals SW1 and SW2.

**OPERATION**

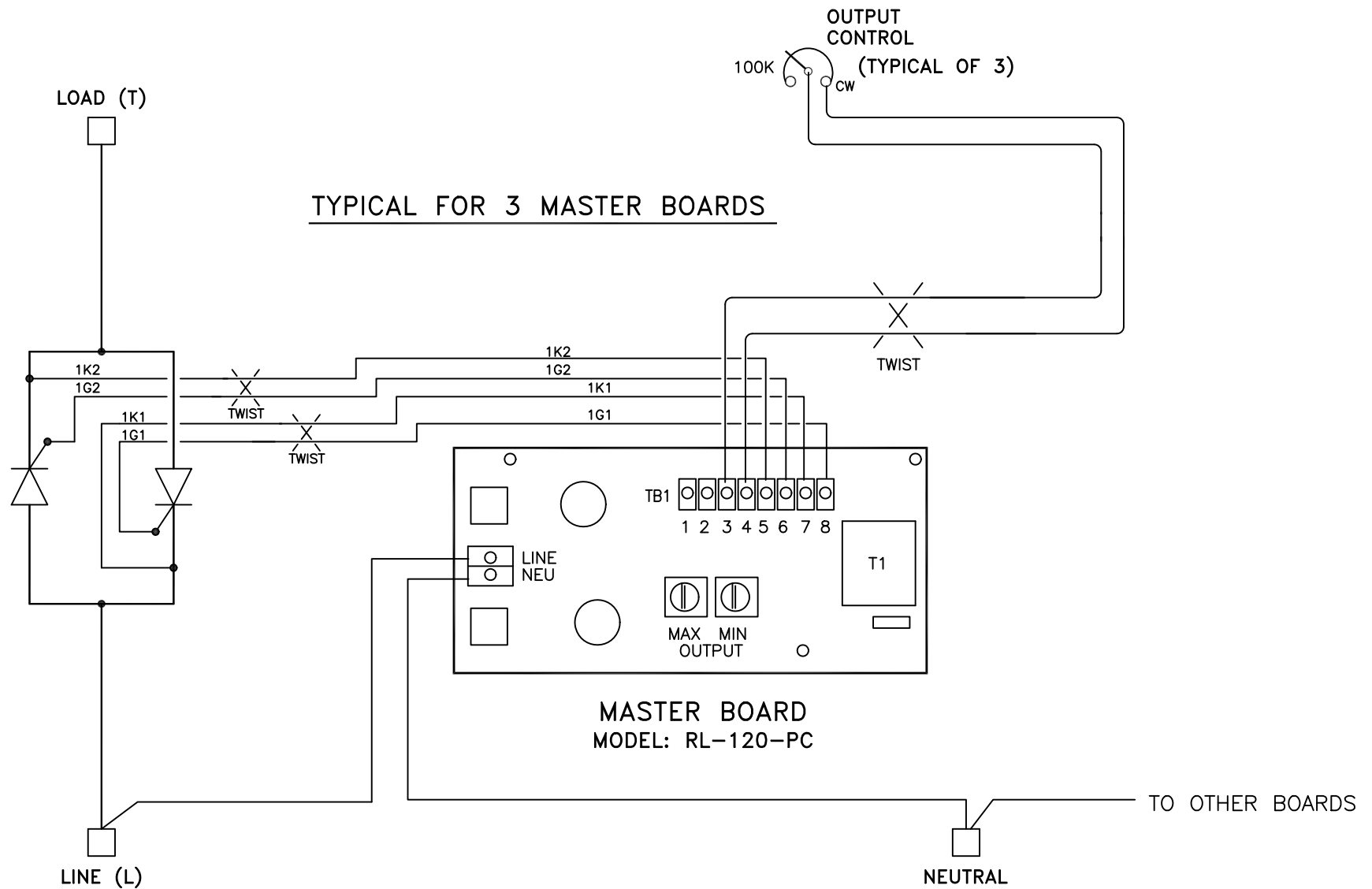
1. Turn the Control Knob fully counter-clockwise.
2. Turn the Time Clock or the Manual Switch to the "ON" position.
3. Turn on the AC Power.
4. Slowly turn the Control Knob fully clockwise. Allow the Controller to remain in this condition for 15 Minutes.
5. Adjust the controller for the desired Light Intensity.
6. If utilizing a Time Clock, set the desired On and Off times.
7. When the Timer reaches the Preset Time, to turn Off, the Lights will gradually reduce in intensity until they are completely Off.
8. When the Timer again reaches the Preset Time, to turn On, the lights will gradually increase in intensity until the Preset Level is reached.



- NOTES: 1. MAX OUTPUT ADJUST IS FACTORY CALIBRATED. FIELD ADJUSTING MAY CAUSE ERRATIC OPERATION.
2. LOADS CONNECT LINE TO NEUTRAL.

\* = USED WITH 3 WIRE 1 PH UNITS ONLY

CONTRACT NO. LUMITRON 1PH AND 1PH 3 WIRE		<b>DNH INDUSTRIES</b> 24100 FRAMPTON AVE. BLDG B, HARBOR CITY, CALIFORNIA 90710 U.S.A.	
APPROVALS		TITLE: CONTROL WIRING DIAGRAM LUMITRON MODELS RL/RLSI LIGHT INTENSITY CONTROLLERS	
DRAWN T.D. DELEON	DATE 2.6.95	SIZE A	S.O. NUMBER DWG. NO. 02-1871
CHECKED D. HITT	DATE 2.6.95	SCALE NONE	REV. D
REVISED D. HITT	DATE 04.30.01	CALC. WT.	ACT. WT.
		SHEET	

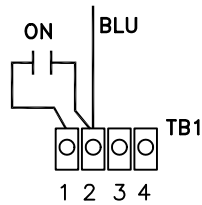


NOTES: 1. MAX OUTPUT ADJUST IS FACTORY CALIBRATED. FIELD ADJUSTING MAY CAUSE ERRATIC OPERATION

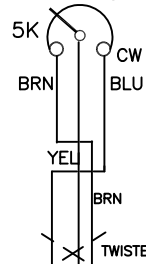
CONTRACT NO. LUMITRON 3PH/4W		<b>DNH INDUSTRIES</b>			
		24100 FRAMPTON AVE. BLDG B, HARBOR CITY, CALIFORNIA 90710 U.S.A.			
		TITLE: CONTROL WIRING DIAGRAM LUMITRON RL 3PH 4WIRE LIGHT CONTROL			
APPROVALS		DATE		SIZE	S.O. NUMBER
DRAWN T.D. DELEON		2.21.95		A	DWG. NO.
CHECKED D. HITT		2.21.95			02-1873
REVISED D. HITT		05.25.98		SCALE	ACT. WT. SHEET
				NONE	

### OPTIONAL ON/OFF CONTROL

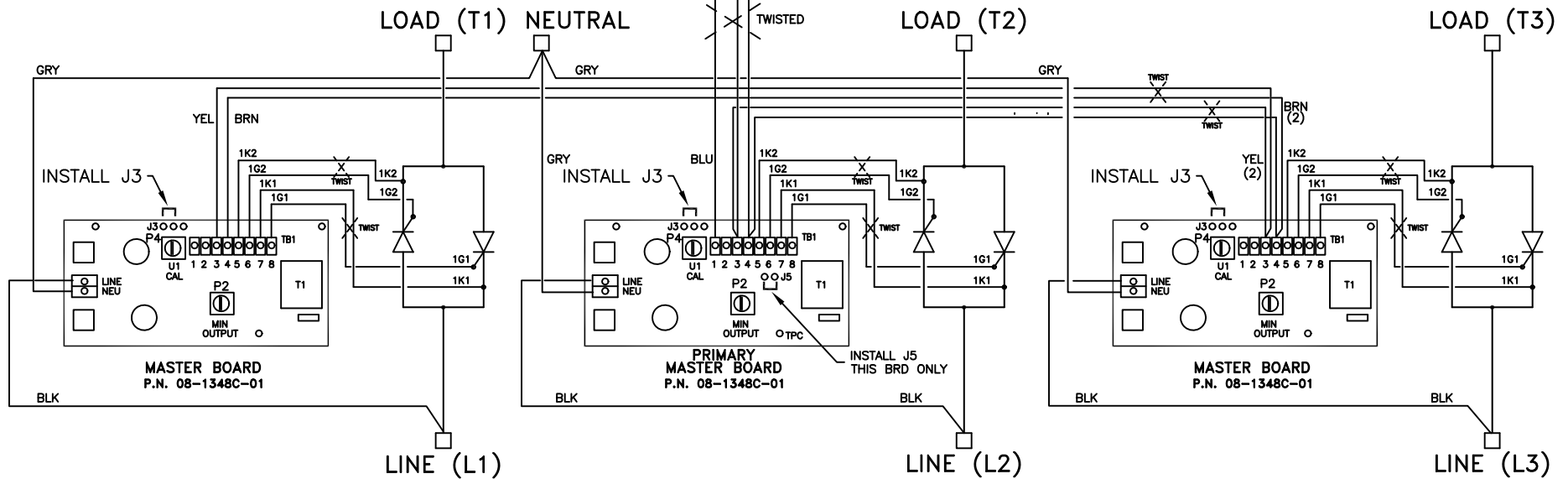
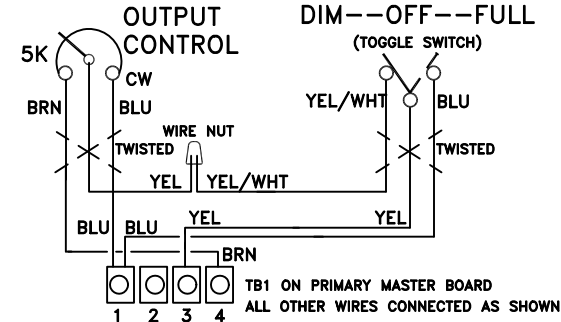
1. CONNECT THE BLUE WIRE FROM THE OUTPUT CONTROL TO TB1-2 ON THE PRIMARY MASTER BOARD.
2. CONNECT AN ISOLATED CONTACT BETWEEN TB1-1 AND TB1-2
3. CLOSE THE CONTACT TO TURN THE OUTPUT ON.



### OUTPUT CONTROL



### OPTIONAL DIMMER CONTROL SWITCH



### OUTPUT BALANCE ADJUSTMENT

1. SET OUTPUT ADJUST FULL CCW (MIN OUTPUT).
  2. ADJUST THE MINIMUM OUTPUTS (P2), ON EACH BOARD, FOR 5 VAC OUTPUT. AC METER AT T1, T2, T3 AND NEUTRAL
  3. ADJUST THE OUTPUT CONTROL FOR MID RANGE.
  4. DETERMINE WHICH OUTPUT IS LOWEST.
  5. ADJUST THE MINIMUM OUTPUTS, ON THE TWO HIGH PHASES, CCW TO BALANCE. NOTE: THIS ADJUSTMENT IS VERY SENSITIVE.
  6. YOU SHOULD BE ABLE TO BALANCE THE PHASES WITHIN 5 VAC.
- COMMENT: ADJUSTING THE OTHER CONTROL ON THE BOARDS CAN CAUSE SEVERE UNBALANCE OR ERRATIC OPERATION.

CONTRACT NO.					
LUMITRON 3PH/4W /SINGLE INTENSITY CONTROL					
APPROVALS		DATE		24100 FRAMPTON AVE. BLDG B, HARBOR CITY, CALIFORNIA 90710 U.S.A.	
DRAWN D. HITT		09.08.98		TITLE: CONTROL WIRING DIAGRAM	
CHECKED				LUMITRON RLI 3PH 4WIRE	
REVISED D. HITT		04.15.99		LIGHT CONTROL/1 LEVEL ADJUST	
SIZE	S.O. NUMBER	DWG. NO.	REV.		
A		02-2043	B		
SCALE	NONE	CALC. WT.	ACT. WT.	SHEET	