

## USER'S GUIDE

- THE TEXT OF THIS INSTRUCTIONS WILL BE PRINTED ON THE SURFACE OF THE INDIVIDUAL BOX AT THE TIME OF MASS PRODUCTION.

### 1. PRODUCT SPECIFICATION

- 1) COMMODITY : SELF-BALLASTED LAMP
- 2) **MODEL NO : EQUR1220R3T**
- 3) CONSUMPTION POWER : 17 W
- 4) INPUT VOLTAGE : AC 120 V  
CURRENT : 280 mA
- 5) FREQUENCY OF INPUT LINE : 60 Hz
- 6) LIFE : 10,000 Hrs

### 2. USER ' S GUIDE

- ELECTRONIC BALLAST
- INSTANT ON, FLICKER-FREE AND LIGHT WEIGHT
- RELIABLE OPERATING TEMPERATURE RANGE :  $-10^{\circ}\text{C}$  TO  $40^{\circ}\text{C}$

#### 1) CAUTION

- ① DO NOT USE WITH DIMMING CIRCUITS, ELECTRONIC TIMERS OR PHOTOCELL DEVICE.
- ② DO NOT USE IN TOTALLY ENCLOSED FIXTURES, WHERE EXPOSED TO WEATHER, EMERGENCY EXIT FIXTURES OR LIGHTS.
- ③ NEVER DISASSEMBLE OR MODIFY THE LAMP.
- ④ USE ONLY 120V 60 Hz CIRCUITS.
- ⑤ RISK OF ELECTRIC SHOCK - USE IN DRY LOCATIONS ONLY.
- ⑥ DO NOT USE MORE THEN 25 LAMPS PER 20 Amp. BRANCH CIRCUIT.
- ⑦ INSTALL AND REMOVE LAMP FROM FIXTURE BY GRASPING THE PLASTIC BODY.

#### 2) NOTE

- ① THIS PRODUCT MAY CAUSE RADIO INTERFERENCE WITH RADIOS, CORDLESS PHONES OR REMOTE CONTROL DEVICE. IF INTERFERENCE OCCURS, RELOCATED THIS PRODUCT AWAY FROM THE DEVICE OR REMOVE THIS PRODUCT OUT OF THE LINE OF SIGHT WITH THE REMOTE CONTROL RECEIVER.
- ② DO NOT TOUCH THE LAMP AS SOON AS TURN OFF BECAUSE IT IS VERY HOT.

## DESCRIPTION OF CIRCUIT FUNCTION

NAME OF APPLICANT : JUNG WOO INTERNATIONAL INC.

NAME OF PRODUCT : SELF-BALLASTED LAMP

MODEL NO : EQU	R1213/T	EQU	R1220P3	ESL	1215	
	EQU	R1215/T	EQU	R1220R4	ESL	1220
	EQU	R1220/T	EQU	R1225	ESL	1225
	EQU	R1220R3T	EQU	R1225R4		

1. AC POWER SUPPLIED THROUGH E26 BASE OF DEVICE IS RECTIFIED AND BOOSTED TO DC BY PASSING BOTH OF THE RECTIFYING CIRCUIT (D1, D2) AND THE ELECTROLYTIC CONDENSER (C7, C8)  
AT THIS TIME, ALL OF THE HARMFUL NOISE INCLUDING HIGH FREQUENCY NOISE OCCURRED IN SWITCHING CIRCUIT IS ELEMENATED WHEN THIS RECTIFIED DC IS PASSED THROUGH LINE FILTER (LF1)
  2. THE TRANSISTOR HALF BRIDGE INVERTER GENERATES THE 40KHz-50KHz HIGH FREQUENCY VOLTAGE POWER BY SWITCHING OPERATION OF THE TRANSISTORS (Q1, Q2) WITH THE RECTIFIED DC POWER IN RECTIFYING CIRCUIT, AND THIS GENERATED HIGH FREQUENCY VOLTAGE POWER LIGHTS THE FLUORESCENT LAMP.
  3. AT THIS TIME, LAMP IS LIGHTED AS TWO STEPS WHICH IS MAIN POWER IS PASSED TO FILAMENT AFTER PREHEATING OF PTC IN ORDER TO EXTEND LAMP LIFE BY AVOIDING THE RAPIDLY SCATTERING OF EMISSION MATERIAL ON FILAMENT.
  4. WHEN SWITCHING OPERATION OF ELECTRONIC BALLAST IS MADE UP, ACTION OF THE DIAC (Q3) STOPS AS DISCHARGING THE CONDENSATED POWER IN CONDENSOR (C6) BY BOTH OF THE DIODE (D3) AND THE TRANSISTOR (Q2).
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