

KT-63™ LAMP EXTENDER

1. GENERAL

1.01 The KT-63 provides an electronic equivalent of relay contacts for use where the number of lamps in the key telephone system exceeds the capacity of the line card contacts. It can also be used as a power amplifier on a circuit-per-line basis. The KT-63 requires an auxiliary power supply.

2. DESIGN FEATURES

- 2.01 The solid state circuit requires no adjustments or maintenance.
- 2.02 Mounting holes and slots allow placement in an equipment cabinet, relay rack, or on a wall.
- 2.03 The KT-63 is equipped with six fused lamp circuits. Each circuit has a capacity of 20 lamps; however, the capacity of the auxiliary power supply must be considered.
- 2.04 All connections are made with a standard 25-pair connector cable.
- 2.05 An LED phase reversal indicator on the front panel lights when the auxiliary power supply is out of phase with the control voltage from the line card.

3. INSTALLATION

- 3.01 No special installation tools are required. Instructions are provided on each unit. Locate and secure the housing in an apparatus mounting, a relay rack or directly on a wall.
- 3.02 Fasten a connector-ended 25-pair cable to the KT-63 plug. Secure the connector with the bracket provided with the unit.
- 3.03 Terminate the cable on a Type 66 connecting block.
- 3.04 Make circuit connections as shown in Fig. 4.
- 3.05 If the auxiliary lamp power is from a Melco KT-631 Lamp Extender, the phase position of the KT-63, relative to the line card lamp power, is controlled by the KT-631 phase reversal switch.
- 3.06 If the auxiliary lamp power supply is not a KT-631, and the KT-63 phase reversal LED glows, do not attempt to correct the phase posi-

tion until it is determined if the auxiliary lamp power supply lamp return is grounded.

- a. If the auxiliary lamp power supply return is *not* grounded, reverse leads TG and TL.
- b. If the auxiliary lamp power supply return *is* grounded, remove ground from the return and reverse leads TG and TL.
- c. If the lamp return ground cannot be removed readily it may be possible to reverse the 117 VAC line cord to the auxiliary lamp power supply.



Fig. 1

- 3.07 The KT-63 will operate indefinitely in or out of phase, but will consume less power while in phase (LED indicator off).
- 3.08 On three-phase power the LED may not go when leads TG and TL or the line cord wires are reversed, but should glow dimmer or brighter. Leave wiring in position where the LED is dimmest.

3.09 If fuse should blow, test for shorts by placing on ohmmeter from LP lead to LG1.

3.10 Test all lamps.

4. MAINTENANCE

4.01 No provision is made for field adjustments. The unit can be tested by substitution with another KT-63 or by changing lines on the quick connect block.

4.02 Check voltages as follows:

Ground to L — 10V AC rms

Ground to LP — 10V AC rms \pm 0.5V

4.03 If fuse blows check lamp circuits per section 3.09.

4.04 The KT-63 is warranted against manufacturing and material defects. If it becomes defective within the warranty period, it will be repaired or replaced without charge. See the Melco Warranty Service Policy for return and repair details.

5. SPECIFICATIONS

AC Input 10V AC, 5A

AC Output 10V AC \pm 0.5V

Current rating per ckt. 2A

Operating temperature
range 0° to 50°C
32° to 122°F

Relative humidity 0 to 95%
(noncondensing)

Weight 1 pound

Dimensions 7" x 3.5" x 2.5"

6. ORDERING GUIDE

6.01 Order as follows:

(QTY) 120019 KT-63 LAMP EXTENDER
from your local supplier or distributor.

6.02 Further information or technical assistance on the KT-63 or any Melco product is available from:

MELCO LABS, INC.
P.O. Box 6909
Bellevue, WA 98008-0909
(206) 643-3400
TWX: 910-443-3040

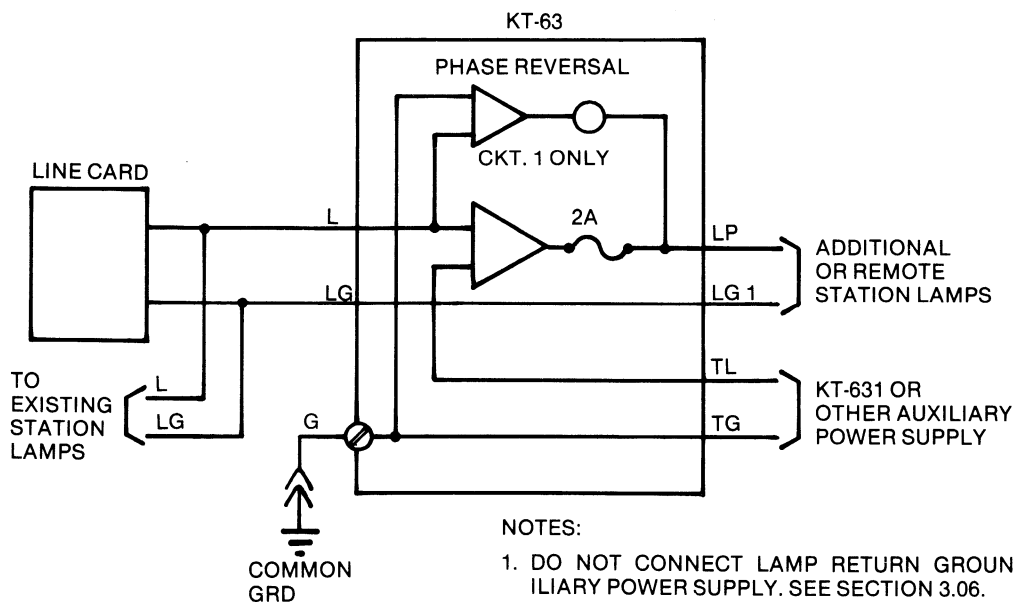


Fig. 2 — Application Schematic of KT-63.

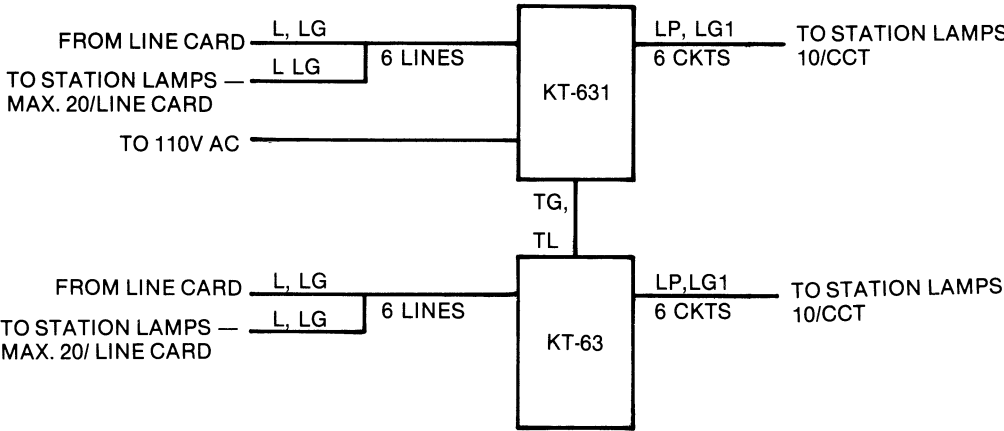


Fig. 3 — Application Schematic of KT-63 with KT-631.

DESIG		COLOR	CONN
LINE 1	LG	W-BL	26
	L	BL-W	1
LAMP CKT 1	LG1	W-O	27
	LP	O-W	2
LINE 2	LG	W-G	28
	L	G-W	3
LAMP CKT 2	LG1	W-BR	29
	LP	BR-W	4
LINE 3	LG	W-S	30
	L	S-W	5
LAMP CKT 3	LG1	R-BL	31
	LP	BL-R	6
LINE 4	LG	R-O	32
	L	O-R	7
LAMP CKT 4	LG1	R-G	33
	LP	G-R	8
LINE 5	LG	R-BR	34
	L	BR-R	9
LAMP CKT 5	LG1	R-S	35
	LP	S-R	10
LINE 6	LG	BK-BL	36
	L	BL-BK	11
LAMP CKT 6	LG1	BK-O	37
	LP	O-BK	12
TO KEY TEL. SYSTEM	NC	BK-G	38
	NC	G-BK	13
NOTE 1	TG	BK-BR	39
	TL	BR-BK	14
TO EXTENSION LAMPS		BK-S	40
		S-BK	15
		Y-BL	41
		BL-Y	16
		Y-O	42
		O-Y	17
		Y-G	43
		G-Y	18
		Y-BR	44
		BR-Y	19
		Y-S	45
		S-Y	20
		V-BL	46
		BL-V	21
		V-O	47
		O-V	22
		V-G	48
		G-V	23
		V-BR	49
		BR-V	24
	G	V-S	50
	NC	S-V	25

- NOTES:
1. CONNECT TERMINALS TG AND TL TO MELCO KT-631 LAMP EXTENDER WHEN USED. CONNECT TG AND TL TO 10V AC LAMP POWER SUPPLY WHEN KT-631 IS NOT USED.
- *NO CONNECTIONS.

Fig. 4 — KT-63 Connections.