

A Division of SCARECROW BIO-ACOUSTIC SYSTEMS LIMITED

## **INSTALLATION INSTRUCTIONS LVC 025 and LVC 100 SERIES LOUDSPEAKER CIRCUIT VOLUME CONTROLS**

### **INSTALLATION INFORMATION**

LVC025 and LVC100 are pre-adjusted to operate without change as simple 2 wires in, 2 wires out volume controls between amplifier and loudspeaker/s.

Connect the amplifier to inputs: A and B (B-1/P+A). Connect the loudspeaker/s to: +O/P- (output).

Now, some notes for further use:

- 25w and 100w versions are installer adjustable for either remote relay volume override (volume restoration) or amplifier/TRIWIRE TW1010 sourced, 3 wire, override options.

**PLEASE REMOVE THE PLUG-ON INTERFACE CONNECTORS  
TO REVEAL CONNECTION IDENTIFICATION.**

**ALWAYS CONNECT LOUDSPEAKERS TO O/P PINS, [- O/P +]**

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## **A) ADJUSTMENT FOR YOUR NEEDS; APPLICABLE TO BOTH LVC 025 & LVC 100 MODELS**

### **EX-FACTORY ADJUSTED FOR OPTION 1 (i) BELOW**

#### **1. SINGLE AMPLIFIER FOR PAGING AND PROGRAMME:**

##### **i) BASIC OPERATION OR REMOTE 24V OVERRIDE USE**

- a) if applicable, connect 24v d.c., active on paging override, observing polarity to energise the in-built relay [- RLY +]
- b) connect amplifier output to INPUT A & INPUT B, [B - I/P +A]
- c) check positions of RED, BLUE AND BLACK 'jumpers':
  - RED (PAGING LEVEL) : MAX :LK1 (HI) (LK2, LK3 intermediate levels)
  - : MIN :LK4 (LO)
  - BLUE (OVERRIDE MODE) : X-Z, LK5
  - BLACK (OPERATING MODE) : LK6, LK7

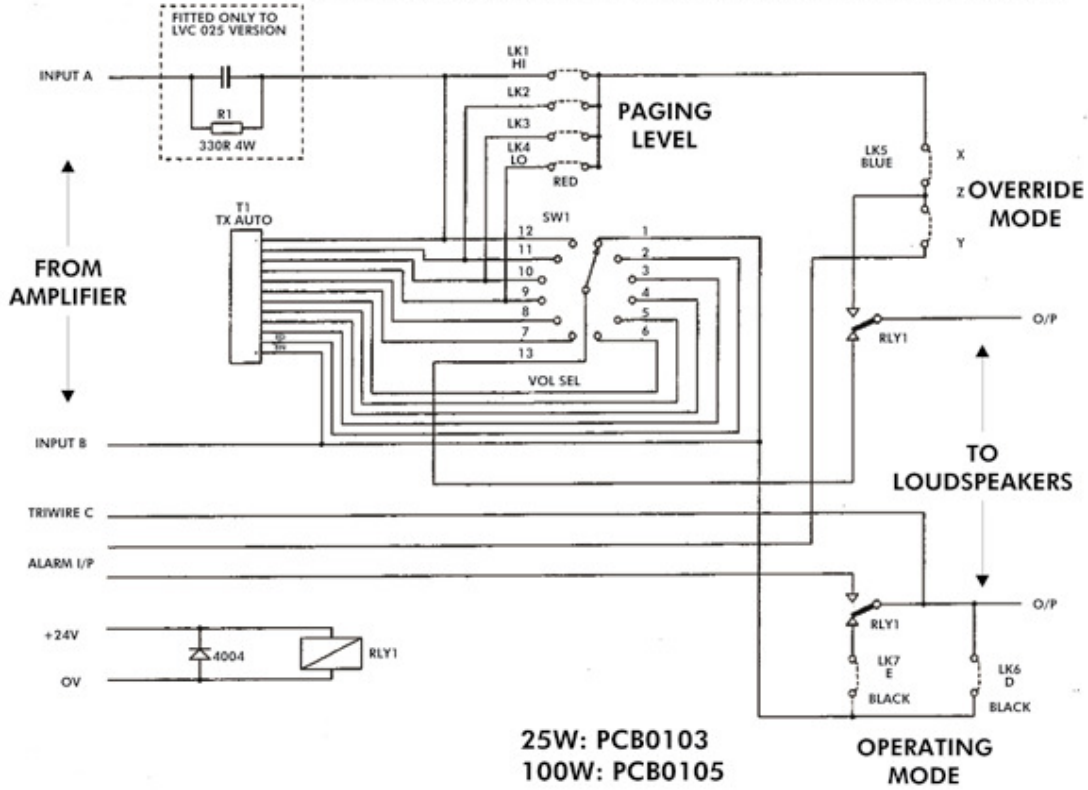
##### **ii) 3 WIRE SOURCED PAGING OVERRIDE USE**

- a) connect amplifier output to INPUT A [I/P+A] & 'C'
- b) CONNECT OVERRIDE OUTPUT TO INPUT B [B-I/P] (see your amplifier manual to verify connecting, it may differ between manufacturers; refer to diagram included overleaf).
- c) check positions of RED, BLUE & BLACK jumpers:
  - RED (PAGING LEVEL) : inoperative in this use.
  - BLUE (OVERRIDE MODE) : inoperative in this use.
  - BLACK (OPERATING MODE) : remove and discard LK6, LK7

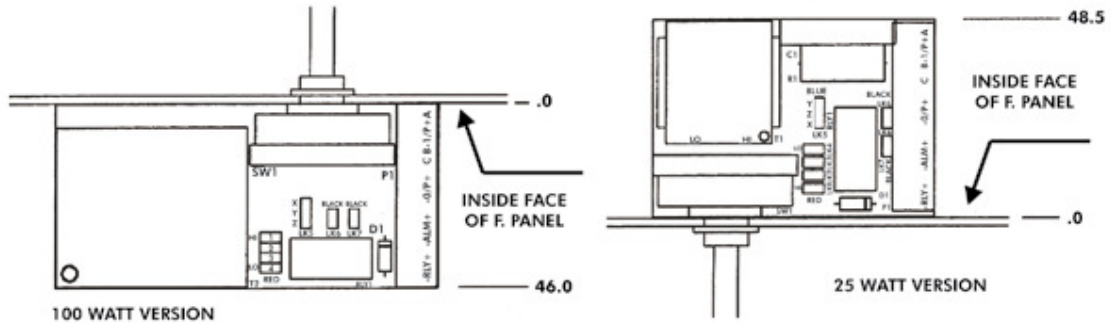
#### **2. DUAL AMPLIFIER USE; one for PAGING/ALARM, one for PROGRAMME**

- a) connect PAGING amplifier to ALARM pins [-ALM+]
- b) connect PROGRAMME amplifier to INPUT A & INPUT B, [B-I/P+A]
- c) check positions of RED, BLUE & BLACK jumpers:
  - RED (paging level) : inoperative in this use.
  - BLUE (override mode) : Z-Y, LK5
  - BLACK (operating mode) : remove LK6
- d) connect 24v d.c., active on paging override, observing polarity, to energise the in-built relay.[-RLY+] When energised the PAGING/ALARM amplifier will be connected to the 'SPEAKER' circuit in place of the PROGRAMME amplifier.

CIRCUIT DIAGRAM SHOWS ALL AVAILABLE FEATURES; NOT ALL OF THESE ARE APPLICABLE TO EACH VOLUME CONTROL TYPE. PLEASE REFER TO THE INTRODUCTORY PARAGRAPH.



JUMPER POSITIONS & CIRCUIT BOARD DIMENSIONS LVC 025 & LVC 100 ONLY



**RATED INPUT:**

LVC 100: 100w, 100v

LVC 025: 25w, 100v

See Introductory Note, page 1, for facilities.

**MAXIMUM LOADS:**

LVC 100: 120w

LVC 025: 30w

**MAXIMUM INPUT****VOLTAGE:**

100v, R.M.S. 140v Peak (intended for use on 50/70/100v line distribution systems).

**MINIMUM NOMINAL****INPUT VOLTAGE:**

50v

**CONTROL ATTENUATION:**

60dB, in 12 steps, including off.

**PAGING ATTENUATION:**

12dB, in four steps (relay function only)

**OPERATING****FREQUENCY RANGE:**

150Hz through 15KHz except LVC 300 which operates to 40Hz

**OVERRIDE RELAY:**

24dc, other voltages on request.

(not applicable to LVC 010)

Will operate over the voltage range 75% to 120%.

Consumption :400mW, LVC 025 &amp; LVC 100

:900mW

**OPERATING IN SYSTEMS:**

1) If applicable, relay is diode suppressed; note polarity.

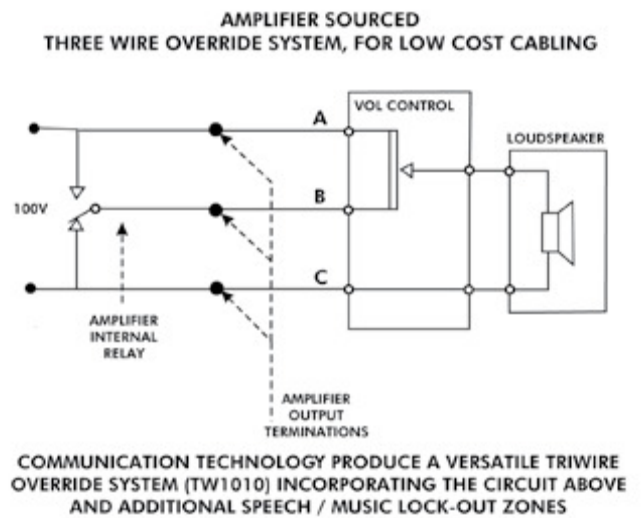
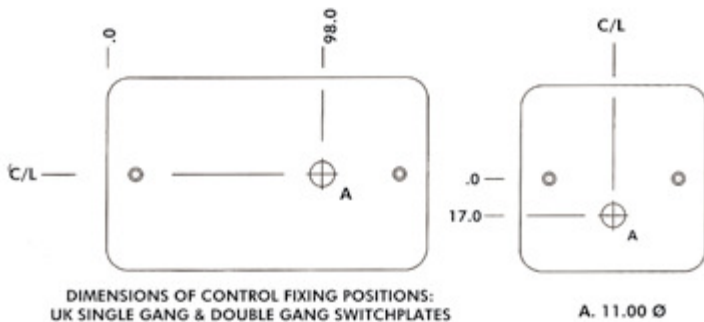
2) Not intended for use in accentuated bass music systems;

attenuation recommended below 150Hz on LVC 025 &amp;

LVC 100

**TERMINATIONS:**

Push-on Screw terminations, fixing to p.c.b. header pins.

Maximum cable size 2.5mm<sup>2</sup>; stripping length 6mm.**Useful points for system engineering: LVC 025 & LVC 100 only**

1. By removing the RED link, paging level, paging can be barred from single amplifier application

1.(i).

2. By removing the RED link and wiring a 1 pole 6 way switch, to be front panel mounted, in it's place it is possible to provide user adjustable paging level; just wire each LK, non shorted side (see under PC), to one pole of the switch in sequence and the common (rotary) contact to the shorted side of LK 1-4. Switch action recommended: [OFF, 0, -3, -6, -12, OFF].

3. By using the alarm input [-ALM+], LOCAL/REMOTE AMPLIFIER facilities can be obtained - e.g. 'HOUSE' SYSTEM/BANQUETING (local) SYSTEM. Consult us if you need help; requires 24v for relay operation.

4. Multiple programme selection for this volume control can be obtained by using [P.SEL.10] 10 way programme selector. See our TECHNICAL LEAFLET.