



SL2000 SOUND LIMITER

INSTALLATION INSTRUCTIONS & SETUP PROCEDURE

(See pages 3,4 & 5 for setup procedure)

Installation Guide

ALWAYS CONTACT A COMPETENT ELECTRICIAN IF YOU HAVE ANY DOUBTS ABOUT ELECTRICAL WIRING.

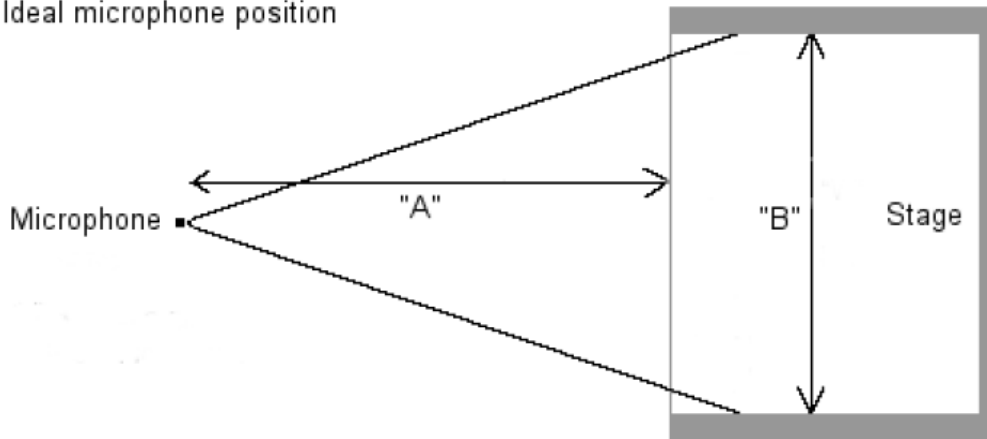
All wiring must be installed in accordance with IEE regulations and it is assumed that any persons attempting to fit the SL2000 kit are familiar with electrical Wiring protocols.

Refer to the SL2000 setup procedure later in this manual for connection details.

Installation

1. Find a suitable position for the SL2000 main unit and fix securely using the screw holes provided. This will usually be at a height of 2m or more above floor level. For smaller venues where a 2 gang socket outlet is sufficient the power supply can be obtained by replacing a socket on the ring main with the 45amp switch. In this case the SL2000 should be sited above the socket for ease of wiring. (Take care when fixing – there may be concealed cables.)
2. Find a suitable position for the microphone unit, avoiding locations that are too close to the noise source. In a typical venue, with the stage area at one end, the microphone should be positioned centrally, away from the stage at a minimum distance equal to the stage width. (See diagram below.) If there is more than one source of noise the microphone should ideally be positioned equidistant from each source. The microphone is connected to the main unit using single core screened cable. Try to avoid running the cable alongside any mains cables as this may affect the operation of the unit.

Ideal microphone position



Distance "A" should ideally be equal to or greater than distance "B"

3. The remote indicator must be situated where it can be seen from the stage and can usually be positioned adjacent to the microphone. For ease of fixing double sided sticky pads can be used to avoid damaging the case. Connect the indicator unit to the main unit using the 4 core cable which can be clipped alongside the microphone cable. It is not important which colour cores are used as long as the cores are connected in the same order at both ends.

4. Connect the socket outlets to be monitored to the 2CN2 output connector at the main unit.

5. Finally, ENSURING THAT THE MAINS POWER HAS BEEN SWITCHED OFF, connect the 2CN1 terminals on SL2000 to the incoming mains power. (If the SL2000 is not wired back to the consumer unit on its own separately fused circuit, a 40 amp switch or a fused spur should be used to provide isolation and all surface mounted mains cables should be protected using 20mm conduit or trunking)

Note: Once installed it is important to ensure that musicians / DJs connect their equipment to the socket outlet which is controlled by the sound limiter and it is advisable to blank off any other power sockets in the vicinity of the stage to avoid confusion.

6. Adjustment

Take care when carrying out adjustments inside the SL2000 as live parts are exposed once the cover is removed.

A suitable noise source will be required with a sound level sufficiently high to carry out the following procedure. Standing outside of the venue, one person monitors the sound level using the sound pressure level meter. Another person inside the venue adjusts the volume until the maximum permissible level outside is just exceeded. (This must be agreed with the local environmental health office but is usually around 45db at the perimeter of a residential premises.) Referring to the SL2000 setup procedure earlier in this manual, adjust VR1 (and VR2 / VR3 if required) until the unit triggers. Connect the sound source to the Sound limiter controlled socket and with the key switch in the active position, ensure that power is disconnected from the sound source when the maximum permissible sound level is exceeded.

SL2000 NOISE POLLUTION CONTROL SYSTEM

SETUP PROCEDURE (See pages 1 & 2 for installation instruction)

1. INITIAL POWER UP

ON INITIAL POWER UP THE TIMER / POWER INDICATOR WILL FLASH AND THE OK INDICATOR LED WILL THEN ILLUMINATE. DUE TO CERTAIN INSTALLATION CONDITIONS THE T1 AND T2 INDICATOR LED'S MAY FLASH BEFORE RETURNING TO THE OK INDICATION LED. THIS UNIT IS NOW READY FOR ADJUSTMENT.

2. ADJUSTMENT

VR-1 (THE OVERALL MICROPHONE GAIN) SHOULD BE ADJUSTED* ACCORDINGLY TO DETERMINE THE DESIRED DECIBEL (dB) LEVEL REQUIRED TO TRIGGER THE UNIT.

3. FINE ADJUSTMENT

VR-2 HIGH FILTER ADJUSTMENT - THIS SHOULD BE ADJUSTED* IF YOU REQUIRE MORE OR LESS SENSITIVITY TO VOCALS ETC.

VR-3 LOW FILTER ADJUSTMENT -THIS SHOULD BE ADJUSTED* IF YOU REQUIRE MORE OR LESS SENSITIVITY TO LOW FREQUENCIES I.E. BASS.

* ADJUSTMENT: ANTI-CLOCKWISE > LESS SENSITIVE / CLOCKWISE > MORE SENSITIVE.

VR-5 TIMER ADJUSTMENT, NORMALLY SET TO 1 TO 1.5 SECOND INTERVALS GIVING AN

OVERALL TIME OF APPROX 7 - 10 X 2 SECONDS. INTERVAL STEPS CAN BE SET BY OBSERVING THE FLASHING POWER INDICATOR LED ONCE ON PLUS ONCE OFF = 1 CLOCK

PULSE. 5 PULSES = CUTOFF, 5 MORE PULSES TO AUTO RESET. 10 PULSES = 1 COMPLETE CYCLE.

AFTER BEING TRIGGERED AND THE VOLUME NOT BEING REDUCED, THE UNIT WILL THEN CUT OFF POWER FOR THE TIME YOU HAVE PRESET, AND THEN IT WILL RESET.

KEYSWITCH

THE KEYSWITCH HAS TWO SETTINGS, MONITOR AND ACTIVE.

MONITOR - ALLOWS THE UNIT TO ASSESS THE MUSIC BUT IT WILL NOT CUT OFF THE POWER IF THE PRESET LEVEL IS MET.

ACTIVE- ALLOWS THE UNIT TO MONITOR THE MUSIC AND THE POWER WILL BE CUT OFF IF THE PRESET LEVEL IS MET.

SL2000 NOISE POLLUTION CONTROL SYSTEM

TERMINAL CONNECTIONS

MAIN PANEL CONNECTIONS:

M1 - MICROPHONE +
M2 - MICROPHONE - (EARTH/SCREEN)

ENSURE SCREENED MICROPHONE CABLE IS USED TO CONNECT MIC TO M1 AND M2

NOTE: ON BOARD RELAY CONNECTIONS (J & K) CAN BE REGARDED AS AN ON/OFF SWITCH (I.E. WHEN UNIT DISPLAYS GREEN OK LED, CONTACTS ARE CLOSED, WHEN RED OFF LED IS DISPLAYED CONTACTS ARE OPEN CIRCUIT. THE UNIT MUST BE POWERED UP AND THE MIC MUST BE CONNECTED TO ENSURE STEADY GREEN OK LED. OTHERWISE J - K IS OPEN CIRCUIT).

J - ON BOARD RELAY NORMALLY OPEN (WHEN UNIT IS NOT POWERED UP)
K - ON BOARD RELAY COMMON
J-K - IS USED TO SWITCH THE 30 AMP RELAY COIL / CONTACTOR COIL OR OTHER DEVICE DEPENDING ON INSTALLATION REQUIREMENTS.

NOTE: CONNECTIONS A-D ARE LOW VOLTAGE DRIVE OUTPUTS ONLY, AND ARE CONNECTED TO CORRESPONDING CONNECTIONS ON REMOTE LIGHT DISPLAY IF FITTED.

A - TRAFFIC LIGHTS 0 VOLT (COMMON)
B - TRAFFIC LIGHTS RED CHANNEL
C - TRAFFIC LIGHTS YELLOW CHANNEL
D - TRAFFIC LIGHTS GREEN CHANNEL

FA1 - FIRE ALARM + 24V DC INPUT FROM ANY EXISTING FIRE ALARM SYSTEM (USUALLY NEAREST BELL OR SIREN)
FA3 - FIRE ALARM NEGATIVE INPUT

P1 - EARTH
P2/P2A AND P3/P3A ARE 18V AC INPUT/OUTPUT CONNECTIONS FROM TXI SECONDARY MAINS TRANSFORMER. THE 18V AC AVAILABLE AT THESE CONNECTORS IS ALSO USED TO POWER LOW VOLTAGE AUXILIARY PANELS OR DEVICES. IE. REMOTE RELAYS ETC.

RELAY PANEL CONNECTION.

J - CONNECTS TO J ON MAIN BOARD. (ALREADY CONNECTED)
K - CONNECTS TO K ON MAIN BOARD (ALREADY CONNECTED)

P2 - CONNECTS TO P2 ON MAIN BOARD (ALREADY CONNECTED)
P3 - CONNECTS TO P3 ON MAIN BOARD (ALREADY CONNECTED)

SL2000 NOISE POLLUTION CONTROL SYSTEM

TERMINAL CONNECTIONS – Cont.

2CN1 30 AMP INPUT CONNECTOR:

L - 240 VOLT AC SUPPLY INPUT LIVE.
N - 240 VOLT AC SUPPLY INPUT NEUTRAL
E - INPUT EARTH.

NOTE: IT IS RECOMMENDED THAT THE SUPPLY TO CNI IS TAKEN FROM A SEPARATE 30 AMP ELCB/RCCD IN THE ON SITE CONSUMER UNIT.

2CN2 30 AMP OUTPUT CONNECTOR:

L - 240 VOLT AC CONTROLLED OUTPUT LIVE.
N - 240 VOLT AC CONTROLLED OUTPUT NEUTRAL
E - OUTPUT EARTH.

2CN3: LIVE, NEUTRAL AND EARTH CONNECTIONS TO TX I PRIMARY. (ALREADY CONNECTED)

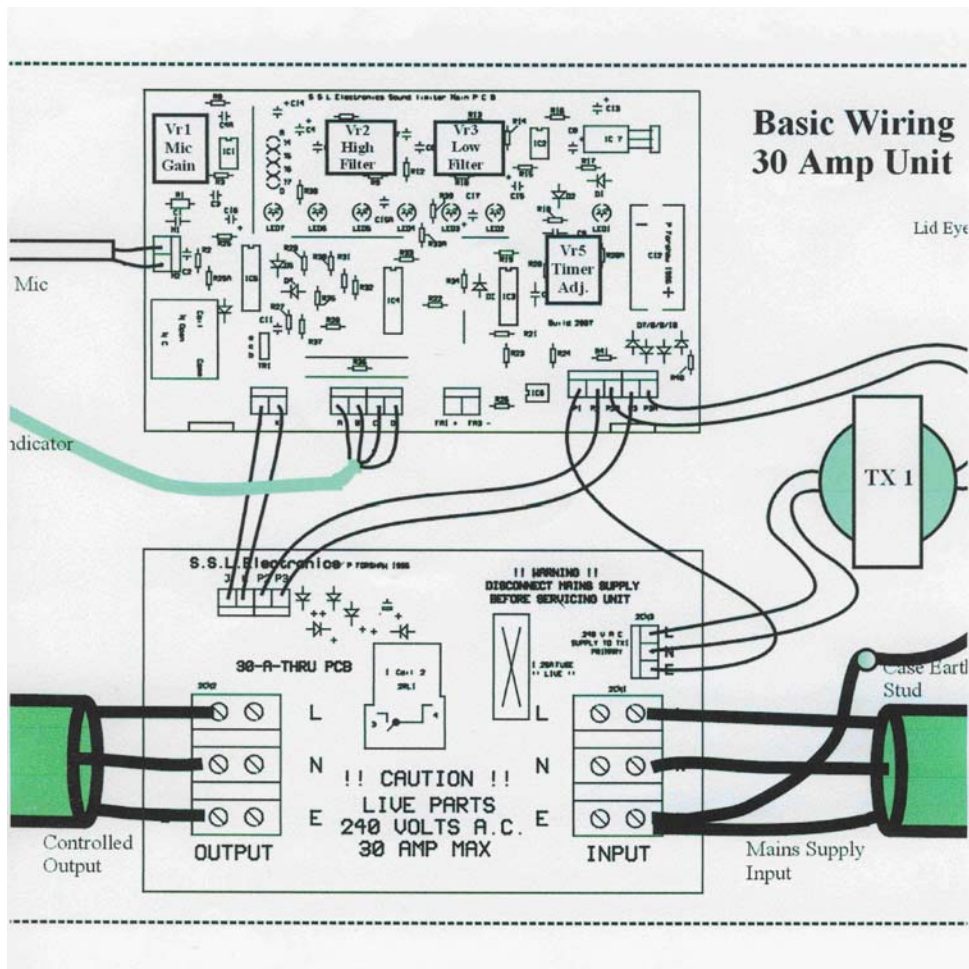
TRAFFIC LIGHT REMOTE DISPLAY:

A, B, C, D CONNECT TO CORRESPONDING CONNECTORS ON MAIN PANEL (240 VOLT AC MAINS POWERED DISPLAYS SHOULD BE SUPPLIED VIA 5 AMP SWITCHED SPUR OR SIMILAR TO EURO CONNECTOR, LOW VOLTAGE CONNECTIONS, A, B, C, D STILL CONNECT TO A, B, C, D RESPECTIVELY ON MAIN PANEL)

THIS UNIT IS TO BE INSTALLED BY QUALIFIED PERSONS ONLY. ALL WIRING SHOULD CONFORM TO CURRENT REGULATIONS. ALL EARTH CONNECTIONS SHOULD BE MADE AND TESTED BEFORE USE. DISCONNECT SUPPLY BEFORE SERVICING.

SL2000 NOISE POLLUTION CONTROL SYSTEM

DIAGRAM OF CIRCUIT BOARDS



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