CARLSBRO

B-150 BASS SERIES

| | |
|---|---|
| B-150H | Amplifier Head |
| B-410C | Combo |
| B-158C | Combo |
| B-115C | Combo |
| B-410E | Enclosure |
| B-158E | Enclosure |
| B-115E | Enclosure |

# I N S T R U C T I O N  G U I D E

## NOTICE D'EMPOIE

## 1. INTRODUCTION

1.1 The 150 watt B-150 Series comprises 3 combos (B-410C B-158C and B-115C) and 3 head/enclosure options (B-150H plus B-410E, B-158E or B-115E). Head and combos are 150 watt units and the combos/enclosures house the following loudspeakers

| | | |
|---|---|---|
| B-410C/B-410E | - | 4 x 10" speakers |
| B-158C/B-158E | - | 1 x 15" + 1 x 8" speakers |
| B-115C/B-115E | - | 1 x 15" speaker |

1.2 The carefully researched range of features, including 11 band graphic EQ and numerous speaker options, ensure that the widest possible range of tone settings and playing styles are catered for. The supreme versatility and sound possibilities of these units can only be fully understood, and exploited, by systematic experimentation.

## 2. GENERAL INFORMATION

### 2.1 MAINS VOLTAGE

The amplifier is pre-set to operate from the nominal mains voltage stated on the rear panel.
- For 110v the working range is:- 105-120v, 50-60Hz
- For 220v the working range is:- 200-230v, 50-60Hz
- For 240v the working range is:- 225v-256v, 50-60Hz

The mains lead supplied should be plugged into the 3-pin I.E.C. mains socket and a suitable plug fitted to the other end. Care must be taken in wiring the plug and the following colour code must be observed:-

| | | |
|---|---|---|
| GREEN AND YELLOW | - | EARTH |
| BROWN | - | LIVE |
| BLUE | - | NEUTRAL |

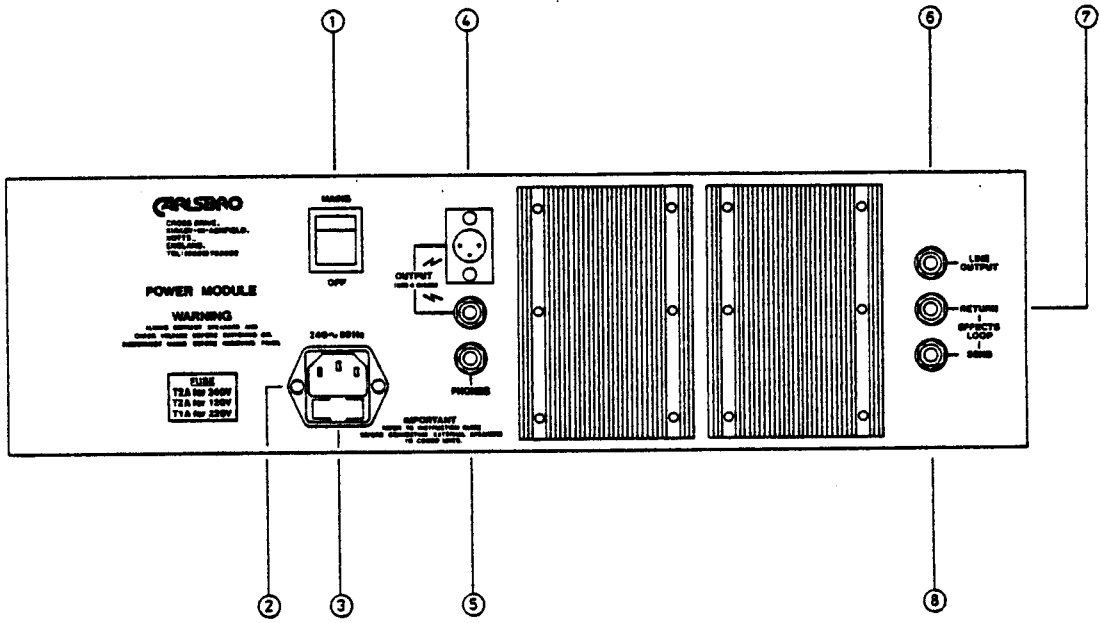
### 2.2 FUSE REPLACEMENT

Should the fuse need replacing, it is located on the rear panel. (See section 3) If the mains fuse needs replacement, FIRST DISCONNECT THE AMPLIFIER FROM THE MAINS SUPPLY, and then replace the fuse with the appropriate type and rating specified on the rear panel.

2.3 The LED power indicator on the front panel will glow immediately the amplifier is switched on. When switched off the light will extinguish gradually.

Before switching on ensure the VOLUME control is turned to 0.

## 3. REAR PANEL FACILITIES



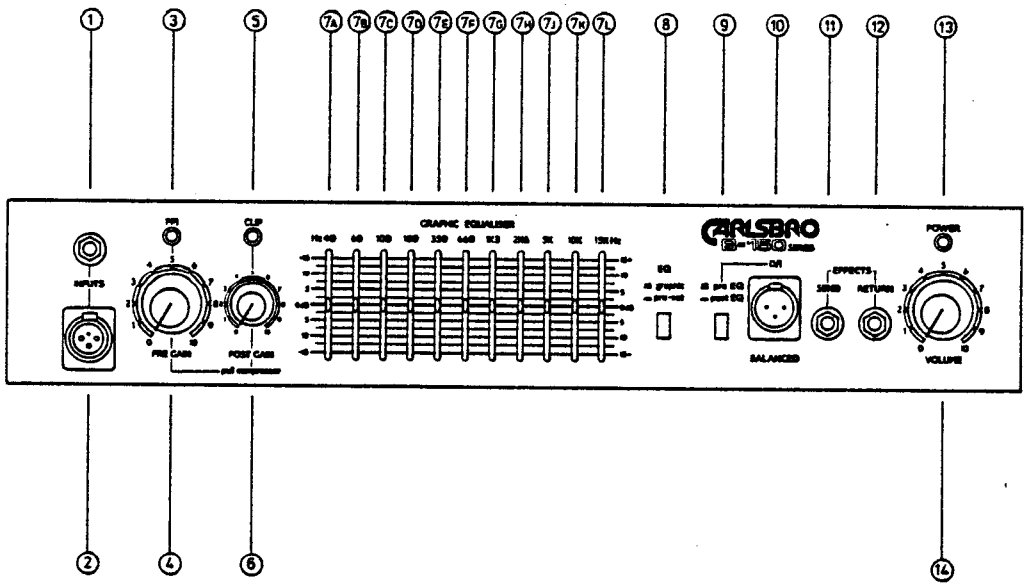

| | | |
|---|---|---|
| MAINS ON/OFF SWITCH | (1) | |
| 3 PIN MAINS SOCKET | (2) | |
| MAINS FUSE | (3) | (see 2.2) |
| OUTPUTS | (4) | 2 external loudspeaker connections are provided (1 x XLR and 1 x mono jack). NOTE: The internal loudspeaker(s) in combo units fully load the power amplifier and it is necessary to isolate the internal loudspeaker(s) by inserting a stereo jack plug into the PHONES (5) socket before connecting external speakers. The total load must not be less than 4 ohms. |
| PHONES | (5) | The phones socket provides a mono signal for a stereo headphone set. The internal loudspeaker is automatically disconnected when headphones are used. |
| LINE OUTPUT | (6) | Additional power amplifiers may be fed by connecting a jack lead from either the LINE OUTPUT (6) or EFFECTS LOOP - RETURN (7) Any number of suitable power amplifiers may be connected in this way. |

EFFECTS LOOP (7,8)

The pre-amp and power output sections of the unit may be electronically separated by inserting a jack plug into the EFFECTS LOOP - SEND (8) socket. This prevents the signal reaching the power amplifier and provides a low level output which is fully controlled by the front panel controls.

This signal may be fed into any suitable signal processing unit. The output from the signal processing unit may then be fed into the EFFECTS LOOP - RETURN (7) socket on the rear panel.

## 4. FRONT PANEL CONTROLS AND FACILITIES




INPUTS/JACK INPUT (1) High impedance mono jack input

XLR INPUT (2) High impedance XLR input. Pin connections 1 - Earth, 2 + 3 - Input.

| | | |
|---|---|---|
| PRE GAIN | (4) | Varies the input sensitivity of the amplifier and adjusts the incoming signal level to ensure the best signal to noise ratio and to prevent overload (as indicated by PPi (3)). When the COMPRESSOR is selected the PRE GAIN is used to set the compressor threshold level i.e. the point at which the compressor begins to operate. |
| "PPI" | (3) | Peak Programme Indicator (PPI) LED indicates the limit of the 'clean' dynamic range. 3dB of headroom remains when LED illuminates. |
| POST GAIN | (6) | Sets the optimum level to the GRAPHIC EQ (7). Unnecessary noise may be produced by boosted graphic frequencies if POST GAIN level is set too low. If POST GAIN level is set too high, undesirable clipping occurs (indicated by the CLIP LED (5)).<br><br>POST GAIN should be used with PRE GAIN to set optimum gain levels for<br>(a) Guitar type (b) Level through pre-amp section (c) Compression |
| "CLIP" | (5) | Monitors signal levels to the GRAPHIC EQ (7). The CLIP LED will light 3dB before clip point indicating 3dB of headroom remaining. In general, as more lift is applied to the GRAPHIC EQ sliders the POST GAIN control (6) will need reducing. |
| COMPRESSOR | | The variable compressor control is switched on by pulling the POST GAIN control (6). Rotation of the control varies the level of compression. |
| GRAPHIC EQ (7A to 7L) | | 11 band Graphic Equaliser<br>Each of the 11 sliders offer plus/minus 15dB at the following frequencies:-<br><br>40, 60, 100, 180, 350, 660 Hz<br>1.3, 2.6, 5.0, 10.0, 15.0 kHz<br><br>These frequencies have been selected to be particularly relevant to bass guitar applications. The frequencies listed show that most control is available in low frequency bands where tonal control is most necessary.<br>It is recommended that the faders be set in gentle curves for optimum sound performance. Each fader has a centre detent for easy identification of the flat response position. |

| | | |
|---|---|---|
| GRAPHIC EQ PRE-SET | (8) | By-passes the 11 band GRAPHIC EQ SECTION (7). Provides an internally pre-set tone form to suit many playing styles. |
| PRE/POST EQ SWITCH | (9) | When switched to pre-EQ position (button 'out') the DIRECT INJECT (10) signal is taken before the GRAPHIC EQ SECTION (7) (The unequalised instrument signal is fed to the mixer/PA). When switched to post-EQ position ('in' position) the signal is taken after the EQ section (7) and after the EFFECTS LOOP ((11), (12)). |
| D/I BALANCED OUTPUT | (10) | A professional, balanced, low impedance, direct inject through 3 pin XLR connector (1 - Earth, 2 - Phase, 3 - Anti-phase). Is used to take an independent signal to a PA or recording mixer. |
| EFFECTS SEND SOCKET | (11) | A jack, line level, output which allows effects signal routing after the preamplifier/EQ sections but before the master volume. |
| EFFECTS RETURN SOCKET | (12) | A line level return, which is inserted before the master output. |
| MAINS ON LED | (13) | Glows immediately the amplifier is switched on. When switched off the light will extinguish gradually. The mains on/off switch is located on the rear panel |
| MASTER VOLUME | (14) | Allows overall control of volume level. |

## 5. LOUDSPEAKERS

The combos/enclosures house the following specially selected range of loudspeakers:-

| | | |
|---|---|---|
| B-410C/B-410E | - | 4 x 10" speakers |
| B-158C/B-158E | - | 1 x 15" + 1 x 8" speakers |
| B-115C/B-115E | - | 1 x 15" speaker |

Two external loudspeaker connections are provided (see rear panel facilities (section 3)). The internal loudspeaker(s), however, fully load the power amplifier and it is necessary to isolate the internal loudspeaker(s) by inserting a stereo jack plug into the PHONES socket before connecting external speakers.

## 6. TECHNICAL SPECIFICATIONS

### Front Panel

| | |
|---|---|
| Input Connectors | Mono jack socket and XLR |
| XLR pin connections | 1 - Earth: 2 + 3 - Input |
| Input sensitivity | Compressor On 8mV |
| | Compressor Off 15mV |
| Input Impedence | 68K ohms |
| Compressor Threshold | Variable by input control: 10mV to 1.5V |
| Compressor Range | 40dB |
| Maximum input | 20Vrms |
| Front Panel DI Output | |
| Level | 775mV (0dBm) balanced |
| Impedence | 50 ohms |
| Connections | 1-Earth |
| | 2-Phase |
| | 3-Anti-phase |
| Graphic Equaliser Frequencies | 40,60,100,180,350,660 Hz |
| | 1.3, 2.6, 5, 10, 15 KHz |
| Range | ± 15 dB |
| Pre-Set EQ | -8dB at 250Hz: + 8dB at 2.5KHz |
| Effects Loop | |
| Send | Level 500mV: Impedance 1K ohms |
| Return | Level 500mV: Impedance 18K ohms |
| Signal Indicators | Illuminate 3dB before 'clip' point |

## Power Amplifier

| | |
|---|---|
| Power Output | 150 watts into 4 ohms<br>105 watts into 8 ohms<br>for 5% THD at rated mains voltage |
| Effects Loop | |
| Send | Level 500mV: Impedance 1K ohms |
| Return | Level 500mV: Impedance 9K ohms |
| Line Output | Level 500mV: Impedance 1K ohms |
| Output connections | 1 x XLR and 1 x mono jack |
| Output load | Minimum 4 ohms |
| Phone socket | Stereo jack - isolates internal speakers in combos |
| Output Protection | Short circuit, mismatch, open circuit, reactive load and HF burn out. |
| Mains voltages | Factory set at 120v, 220v or 240v. |

| MODEL | Output into 4ohms | Impedence (ohms) | Speakers | Dimensions(cm) HT | W | D | Weight Kg |
|---|---|---|---|---|---|---|---|
| B-150H | 150w | - | - | 19 | 54 | 28 | 13 |
| B-410C | 150w | 4 | 4x10" | 80 | 59 | 38 | 38 |
| B-158C | 150w | 4 | 1x15" + 1x8" | 89 | 59 | 44 | 41 |
| B-115C | 150w | 4 | 1x15" | 78 | 59 | 38 | 39 |
| | Rated Power | | | | | | |
| B-410E | 200w | 8 | 4x10" | 68 | 59 | 44 | 32 |
| B-158E | 200w | 4 | 1x15" + 1x8" | 78 | 59 | 44 | 36 |
| B-115E | 200w | 8 | 1x15" | 66 | 59 | 44 | 34 |

In persuing a policy of continual improvement, Carlsbro reserve the right to alter the above specifications without prior notice.