

ILD15BB

INDUCTION LOOP DRIVER

1. INTRODUCTION

The ILD15BB Induction Loop Driver is specially designed for use with lifts, though the unit can be used for other specialized purposes.

The unit has been designed to interface to the normal lift sound system, and incorporates the necessary battery backup to ensure correct operation when the AC power has failed.

The information in the following pages will help in achieving correct results with the installation and use of the equipment.

Warranty Information

This product carries a 5 year parts and labour warranty which could be invalidated if these instructions are not followed correctly, or if the unit is tampered with in any way.

The 5 year warranty is dated from the time the equipment leaves Ampetronic and NOT when it is installed.

NB. The battery carries a ONE year warranty.

2. PRELIMINARY INSTALLATION DATA.

2.1 Inspect the equipment upon unpacking to ensure that the contents of the shipping carton are not damaged.

2.2 Ensure that all the services which are needed to drive/operate the ILD15BB are available.

This involves the following:

AC power, 220 - 240 Volt, 25 VA maximum. Preferred cable 3-core 0.5 mm² or 0.75 mm².

Audio feed: (a) from lift loudspeaker system, (b) from 100 Volt line PA system if installed. Preferred cable: twisted pair, 0.5 mm² or 0.75 mm².

2.3 Install the unit in the place where it will be used. It is important to assess the cable positioning and access.

The normal mounting position is horizontal and uses the adhesive mounting strips provided.

In order to achieve a good placement, clean the area where the unit will be placed. The surface must be even, free from dust and grease.

Remove the paper backing from the 2 strips of adhesive tape fitted to the bottom of the unit, and position the unit in the correct place. As the tape has a very high adhesive strength, care must be taken as repositioning is almost impossible.

Should removal of the equipment be necessary, then the use of a thin strong wire as a cutter is the easiest way but the insertion of a knife under the edge can also cut the adhesive foam.

NOTE: if no suitable horizontal surface is available for fixing the equipment, then it can be fixed with screws to any suitable vertical surface. Four fixing holes are available in the base plate for this purpose. *Please note that the adhesive fixing must not be used in this vertical position.*

2.4 LOOP CONSTRUCTION

The actual loop installed in the lift cage needs to be designed and fitted in a particular way. Many lifts are built with metal walls and ceiling. Owing to the shielding effect of the metal walls, the loop cable needs to be on the INSIDE of the cage. This is normally achieved by constructing a special loop from metal bars fixed to, but insulated from, the ceiling. If the ceiling is not metal and a suitable hidden location can be found, normal insulated wire of 2.5 mm² or 4 mm² can be used. The connection from the loop to the equipment should be made using 2.5 mm² wire twisted as a pair.

Please consult Ampetronic Ltd. if in doubt about the structure of the loop system.

A suitable loop bar system can be supplied by Ampetronic.

2.5 CONNECTING EQUIPMENT.

The drawing on page 4 is a copy of the drawing printed on the inside of the lid of the ILD15BB. Hence these details are available whenever the unit needs attention. These details are an abbreviated version of the connection and setting up procedure.

Remove the top lid from the Loop Driver.

The cables should be fed through the appropriate cable bushes, and connected to the relevant terminals. Ensure that no stray wire strands protrude from any terminal. A small screwdriver is needed to open the terminals for the audio feeds.

Position cables in a neat manner, and tighten the cable clamps to ensure that the cables are fully restrained. The cables should be positioned in such a manner that any liquid spilled on to them will not run into the equipment.

2.6 SETTING UP - ADJUSTMENTS

Set the BATTERY SWITCH to the NORMAL position and connect the AC power to the equipment. The POWER LED lamp should be lit, and either the BATTERY CHARGE or BATTERY FLOAT LED lamps should

also be lit.

NOTE: the BATTERY SWITCH must be set to OFF when the equipment is disconnected for removal or storage, otherwise the battery will be fully drained by the load from the amplifier. Batteries should always be stored fully charged.

— Ensure that GAIN 1, GAIN 2 and DRIVE are fully anti-clockwise, and that the LOSS control is set about 2/3 of full rotation.

— Ensure that a signal is available on INPUT 1, from the lift loudspeaker system.

Adjust the GAIN 1 control so that the COMPRESSION led lamp just lights on the peaks of the signal.

— Repeat this operation for the signal on INPUT 2, the 100 Volt sound system input.

— With a signal on one of the inputs, increase DRIVE until the LOOP CURRENT led lamp is illuminated on signal peaks. Check the field strength of the loop inside the lift cage, and adjust until this is correct. The normal setting will be between 50% and 75% of rotation.

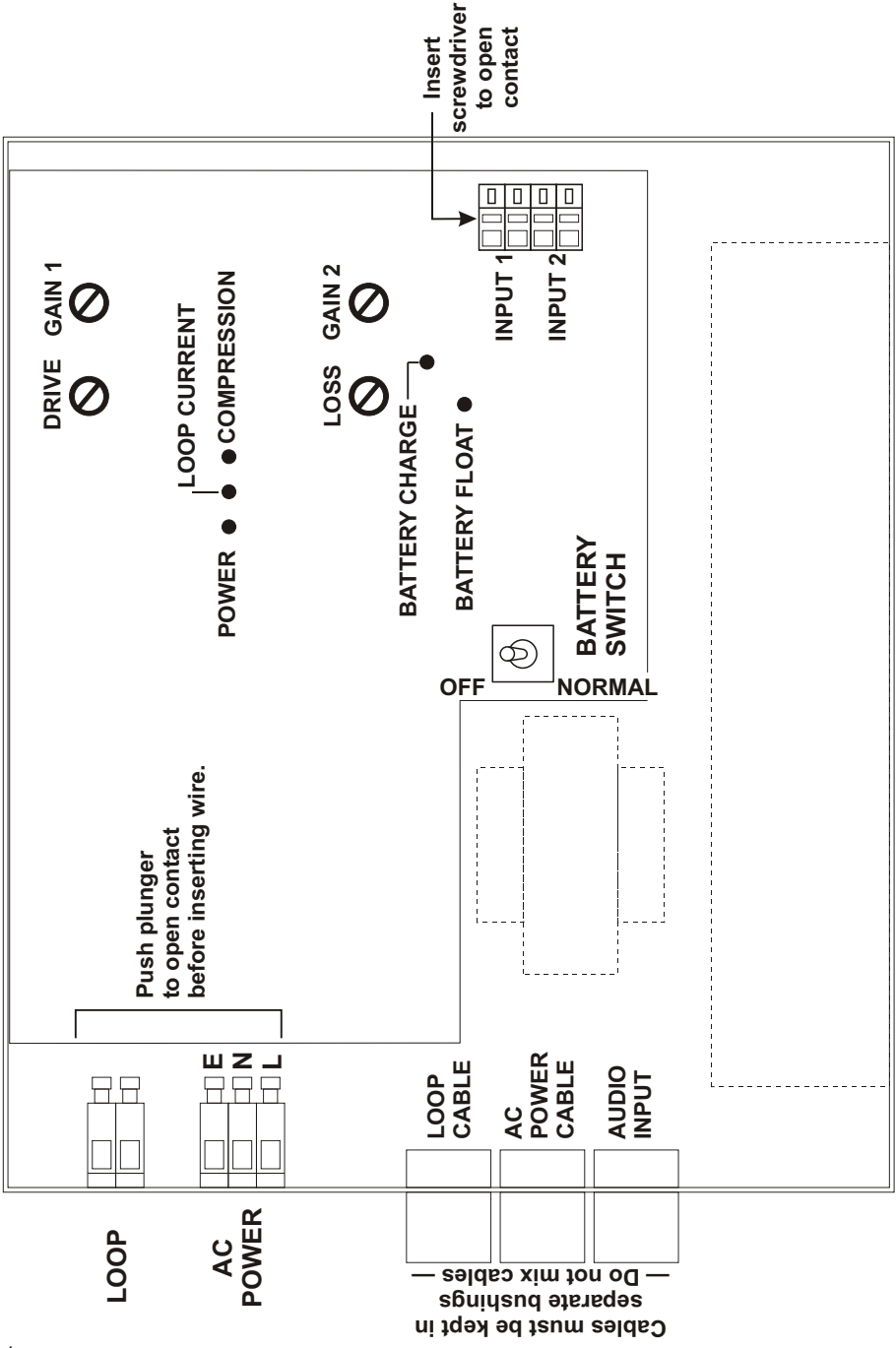
— Adjust the LOSS control if necessary to obtain the best quality sound. For the normal metal cages, the initial setting will be correct, but a lower setting will be needed when the lift cage is not all-metal.

When adjusting the LOSS control, it may be necessary to adjust the DRIVE setting in order to maintain correct field strength.

— When the equipment is fully set up, refit the top cover with the screws provided.

2.7 **COMPLETION OF INSTALLATION**

When the equipment is installed in a satisfactory manner, the supplied (or equivalent) special DEAF LOGO should be fixed inside the lift in a suitable, clearly visible location, so that hearing aid users are aware of the facility.



Connection Data.

AC Power: 3 terminals, Live, Neutral, Earth

Loop: 2 terminals

Audio: ◆ Input 1 from system loudspeaker.

◆ Input 2 from 100 Volt line speaker system.

All connecting cables must be firmly clamped in the cable clamps, and positioned to minimize any liquid transfer into the unit.

Battery activation.

The equipment is shipped with the battery switched off.

While commissioning or removing equipment, move BATTERY SWITCH to NORMAL for normal use, or OFF for transit and storage.

Initial setting up.

Ensure AC power is present, and the BATTERY SWITCH is in the ON position.

The POWER led lamp and either the BATTERY CHARGE or BATTERY FLOAT led lamp must be illuminated.

Adjustment.

Initial setting:

◆ Turn GAIN 1, GAIN 2 and DRIVE fully anti -clockwise. Set LOSS control to 2/3 of full rotation.

◆ Apply input signal to input 1, and adjust GAIN 1 so that the COMPRESSION led lamp just lights up on peaks. Repeat same for input 2, adjusting GAIN 2.

◆ With input signal on one input, increase DRIVE until the LOOP CURRENT led lamp is lit, and the correct field strength is obtained in the lift car.

◆ Adjust LOSS control for best sound quality. This may need a readjustment of the DRIVE control.

3. TECHNICAL SPECIFICATION

3.1 Inputs:

— INPUT 1 is adjusted for a signal taken from the voice coil of the lift sound system.

The level is equal to 1.2 Volt rms (+3.6 dBu).

Input impedance 2.8 k Ω .

— INPUT 2 is adjusted to take a feed from the 100 Volt sound system.

Input impedance 100 k Ω .

- 3.2 **Loop Current:** Peak value greater than 9 Amp, peak voltage 1.5 Volt, into a low-resistance SINGLE-TURN loop.
- 3.3 **Compression:** Compression range of 36 dB before overload. Attack and Decay time constants optimised for speech.
- 3.4 **Frequency Response:** 80 Hz to 5 kHz \pm 1.5 dB, at low level, measured as loop current.
- 3.5 **Loss Correction:** Metal loss correction is adjustable from 0 to 3 dB per octave.
- 3.6 **AC Power Input:** 230 Volt AC operation 50-60 Hz. Power consumption 18 W. Maximum.
- 3.7 **Battery Backup:** internal 2 Ah 12 Volt battery with charging circuits, having a full 3-state charge-overcharge-float control states. Battery power sufficient for 12 hours standby + 0.5 hours full power operation.
- 3.8 **Dimensions:** Length:255 mm Width:190 mm Height: 90 mm.
- 3.9 **Weight:** 3.8 Kg.

The ILD15BB is designed and manufactured in England by Ampetronic Ltd.

DECLARATION OF CONFORMITY

Manufacturer: Ampetronic Ltd.
Address: Northern Road, Newark,
Nottinghamshire, NG24 2ET.
United Kingdom.

Declares that the product:

Description: Induction Loop Driver
Type Name: ILD15BB

Conforms to the following Directive(s) and Norm(s):

Directive 89/336/EEC
EMC: EN55103 (1 & 2) 1997
Directive 73/23/EEC
Safety: EN60065 (1995)

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L.A. Pieters
Managing Director
Ampetronic Ltd.

