

# **DLB 600**

Manual

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DLB 600 Manual  
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# WARRANTY

If within a period of three years from the date of delivery of the equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship (but not faulty design) to such an extent that the effectiveness and/or the usability thereof is materially affected, the Equipment or the faulty component shall be returned to the Distributor or DDA and subject to the following conditions the Distributor or DDA will repair or at its option replace the defective components. Any components replaced will become the property of DDA.

Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Distributor or DDA) and postage and/or freight charges must be prepaid.

This Warranty shall only be available if:-

- i) The Equipment has been properly installed in accordance with the instructions contained in this manual.
- ii) The End User has notified the Distributor or DDA in writing within 14 days of the defect appearing.
- iii) No persons other than authorised representatives of DDA or the Distributor have effected any replacement of parts, maintenance adjustments or repairs to the Equipment.
- iv) The End User has used the Equipment for such purposes as DDA recommends with only such operating supplies as meet DDA's specifications or approval and otherwise in all respects in accordance with DDA's recommendations.

Defects arising as a result of the following are not covered by this Warranty : -

Faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air conditioning or humidity control.

Benefit of this Warranty may not be assigned by the End User. End Users who are consumers should note that their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.

DDA shall not be liable for any damage caused to persons or property due to :-

- i) Incorrect usage of the Equipment
- ii) Other equipment attached to the Equipment, which is not approved by DDA
- iii) Modifications made by non-authorised persons, or by using non-recommended parts, or incorrectly made.

In no circumstances shall DDA be liable for any indirect or consequential costs, damages or losses (including loss of business profits, operating time or otherwise) arising out of the use or inability to use the product, whether or not the likelihood of damage was advised to DDA or its distributor.

Fuses and filament lamps are specifically excluded from this warranty.

This notice does not affect your statutory rights.

# THE DLB600

## INTRODUCTION

The DLB600 Diode Linking Box gives added security to any console operation by allowing two power supplies to feed one console. In the event of one supply failing the other supply will take over the entire load and an indication will be given of the failure. There are no controls or adjustments associated with this product and correct operation will result as long as two supplies are connected. The unit may be rack mounted, carries CSA approval and is designed for use with power supplies of type PSU350, PSU350J or PSI2860.

## OPERATION

Connect a power supply to each input of the DLB600 and connect the output of the DLB600 to the console.

## THEORY OF OPERATION

Input 1 and Input 2 are identical and thus only input 1 will be described.

Power enters through CON1, a 6 pole XLR style male connector. LEDs 5, 6 and 7 are connected from the supply rails to ground giving a stable indication when good power is connected. The +18V rail and the +48V rail are fed to the inputs of IC2A via voltage dividing networks. Under normal circumstances pins 1 and 2 will then have about 8 volts applied to them which will be interpreted as logic high. Pin 3 will thus be low causing pin 11 of IC2D to be high. The -18V rail is connected to IC2C and will normally create a voltage of about 5 volts at pins 8 and 9. This is interpreted as a logic low and thus pin 10 will be high.

IC2B will have a high on each input causing the output to be low and TR3 as a consequence will be switched off. LED8 will thus be off and no fault indication will be given. D8 and D9 clamp the voltages at the input to the logic ICs to prevent them from going outside allowable limits. In the event of say the +18V rail failing, pin 1 of IC2A will go low causing pin 3 to go high. This in turn causes pin 11 of IC2D to go low and thus pin 4 of IC2B will go high. TR3 is now switched on and LED 8 will flash to warn of the fault condition. Depending upon the severity of the failure one or more of the LEDs associated with the faulty power supply may dim or extinguish completely.

The power supplies are connected together through diodes. D1 and D6 handle the relay supply (not used on some consoles) while D2 and D7 handle the +48V supply. These diodes are 1N4002s. Larger bridge rectifiers of the type KBU802 are used to handle the +18V and -18V rails as the current capacity of these supplies is much greater than for the phantom and relay supplies.

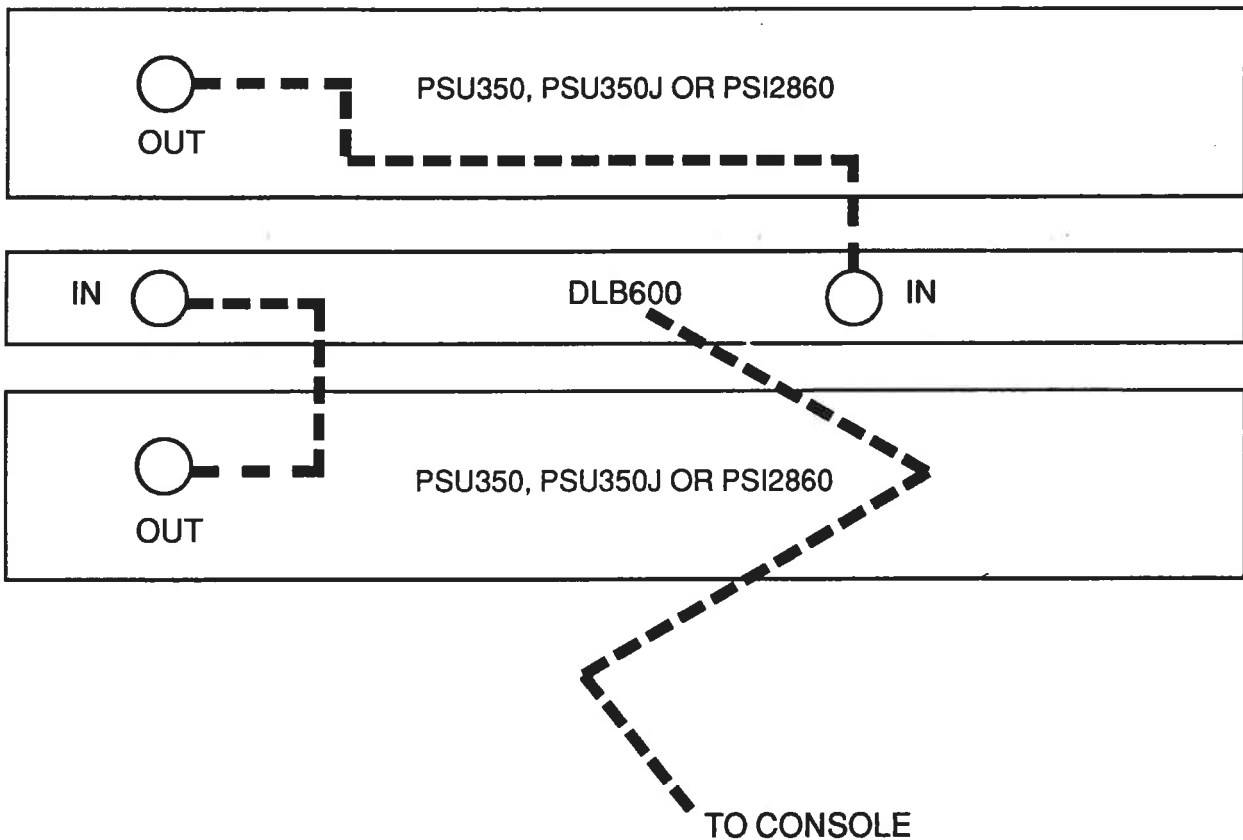
REG1, a 78L12 is used to derive the 12V logic supply while TR1 and associated components are used to clamp the relay supply.

## OPTIONS

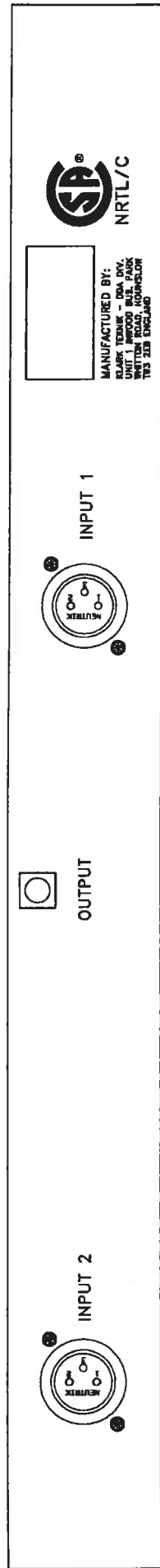
- APAC99-0015 Standard
- APAC99-0016 Supplied with an XLR to XLR cable adaptor for use with the FORUM range of consoles.

## SPECIFICATIONS

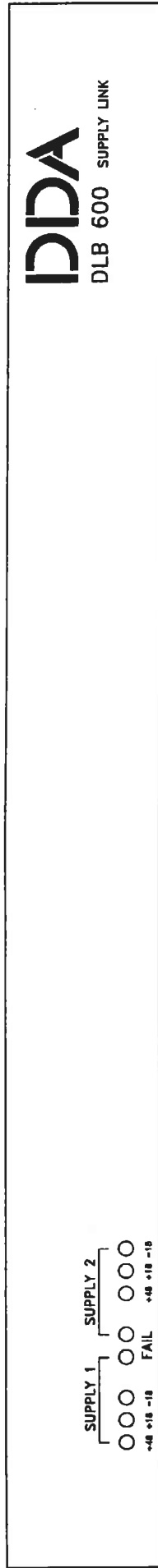
MAXIMUM CURRENT:	+48 V	350mA
	+18V	6A
	-18V	6A
FAILURE LIMITS:	A failure indication will be given for any rails falling below two thirds of the specified operating level.	
FAILURE INDICATION:	Flashing LED	
INPUT CONNECTIONS:	XLR Style 6 pole male connectors	
OUTPUT CONNECTIONS:	3 metre flying lead terminated in a 6 pole XLR style female connector.	
MOUNTING:	The unit may be rack mounted or used free standing. No ventilation is required.	



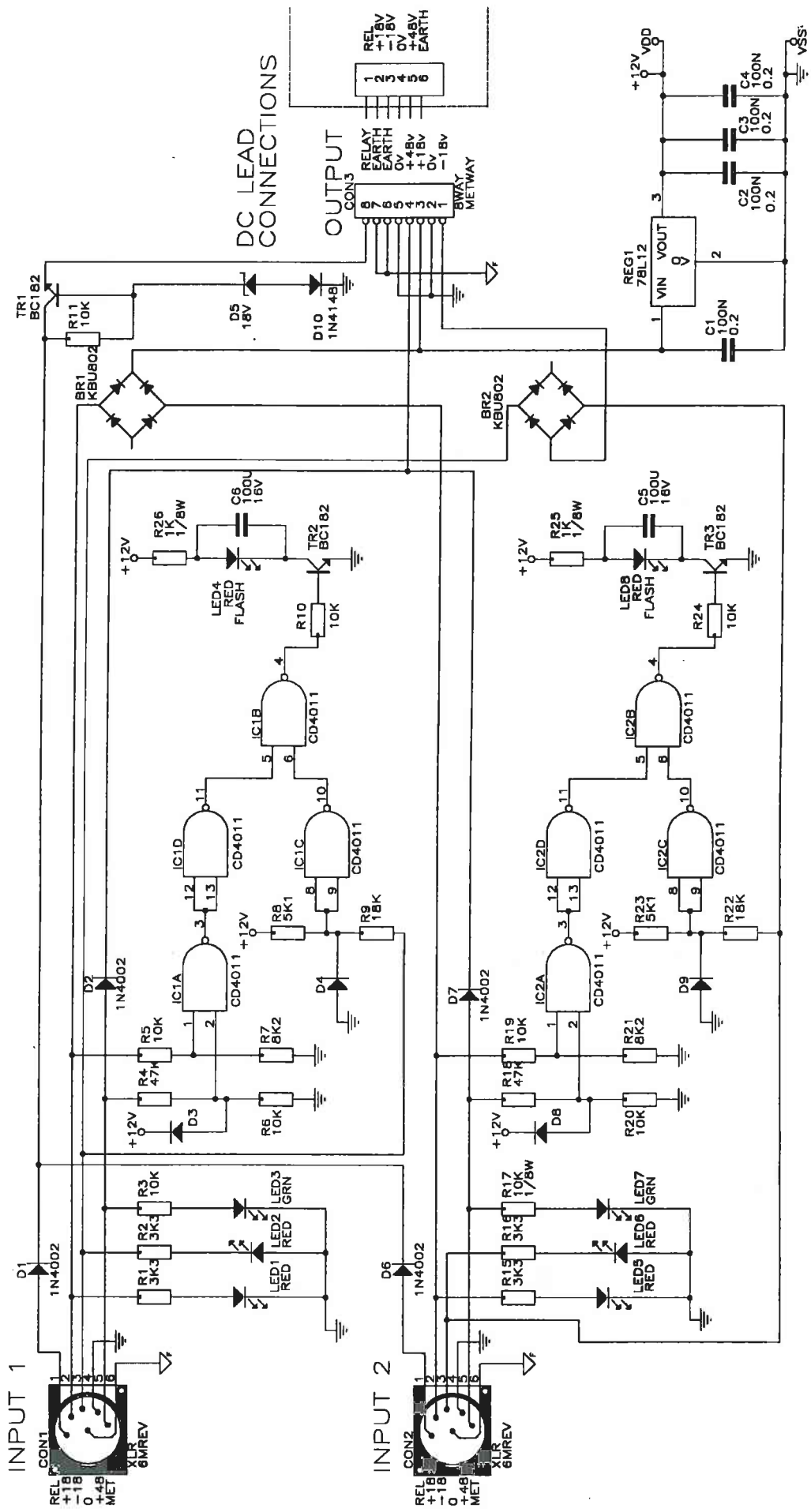
REAR PANEL



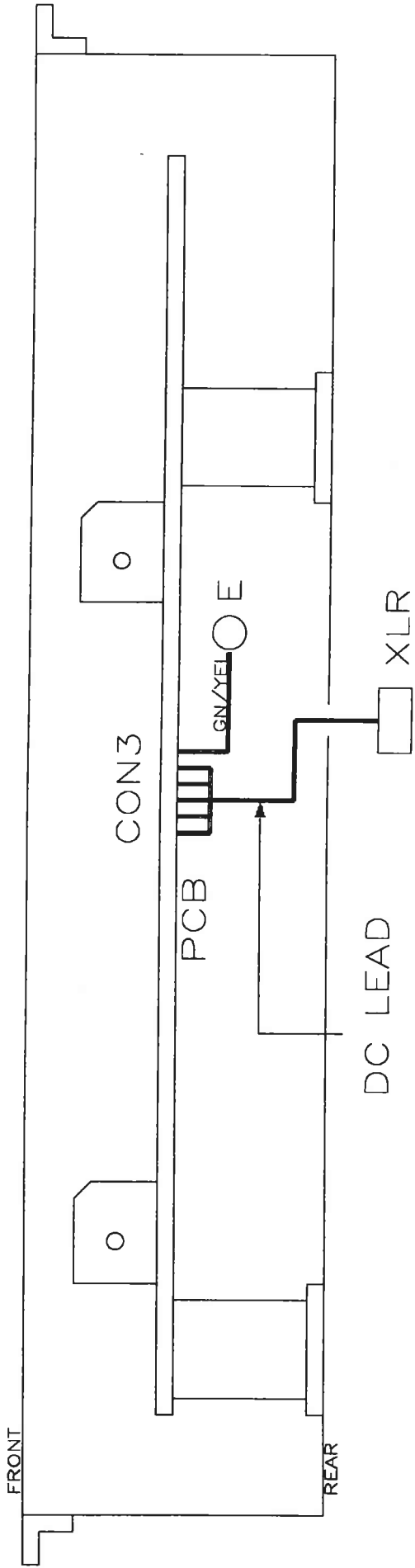
FRONT PANEL



DLB600 PANELS



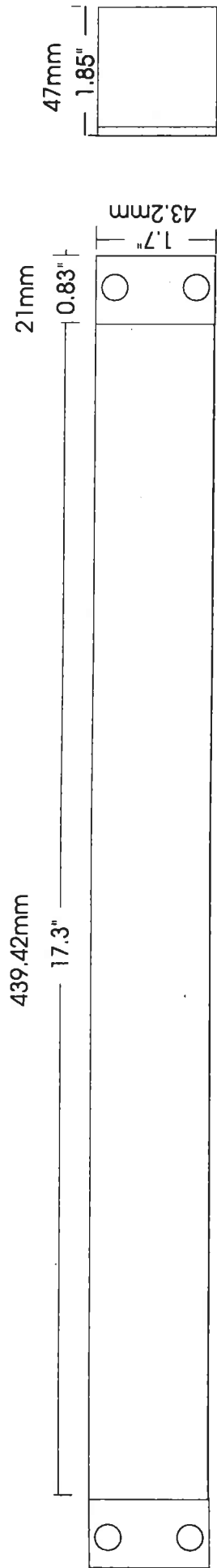
DLB600 CIRCUIT DIAGRAM



DC LEAD CONNECTIONS (ACBL17 - 101)

DC LEAD	PCB CON 3	XLR
BLACK	RELAY	PIN 1
BROWN	+18V	PIN 2
RED	+18V	PIN 3
PURPLE	-18V	PIN 4
BLUE	-18V	PIN 4
YELLOW	0V	PIN 5
ORANGE	0V	PIN 6
GREEN	+48V	
WHITE	EARTH	
SCREEN		





WEIGHT : 0.98KG

DLB600 DIMENSIONS