

# GOLDING AUDIO LTD

## DP2 / DP4 Specification

Dimmer Pack with Built in Ramp Generator (2 / 4 way)

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### General

Both dimmer packs are housed in a 1U enclosure with the option of Rack or Wall mounting. The DP2 unit contains two dimmers and the DP4 unit contains four dimmers. Supply, Output and Control connections are made via plug in connectors on the rear of the units enabling easy installation and service. The dimmers can be controlled in a number of ways, either via internal ramp generators for contact closure operation or from an external control voltage input. With many control permutations possible the need of additional external control equipment is eliminated in most cases.

### Dimmer features

#### Contact Closure Operation.

Each dimmer is equipped with onboard ramp generators, four pre-set pots accessible on the front panel are used to set Minimum level, Maximum level, Fade up and Fade down rates of the dimmer.

Upon a contact closure to the control input connector on the rear of the unit the dimmer will fade to the pre-set Maximum level at the pre-set Fade up rate and remain until the contact is released, it will then Fade down at the pre-set Fade down rate to the pre-set minimum level.

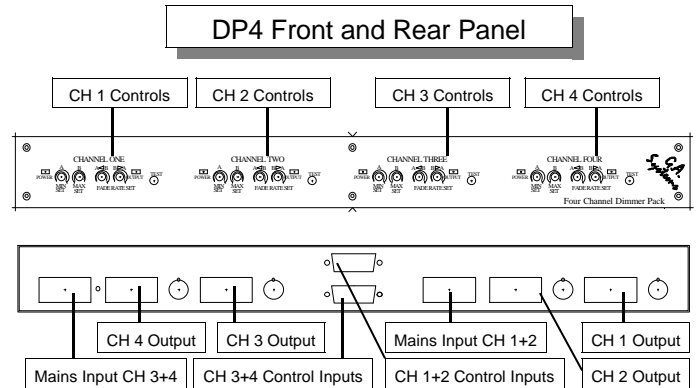
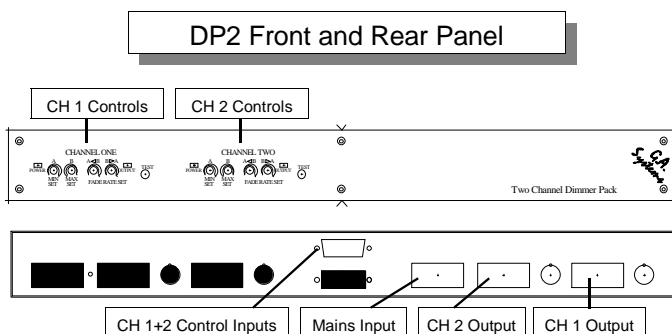
The above operations can be inverted i.e. the lamp sits at the maximum pre-set level and fades down upon a contact closure etc. this option is enabled via a link in the control input connector.

Each dimmer is equipped with an output test switch and status LED situated on the front panel. This switch will present a full level output on the related channel.

#### Control Voltage Input Operation.

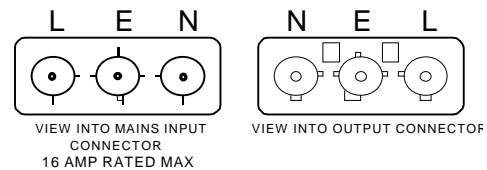
A variable control voltage 0 to 10v can be applied via the control input connector from an external source such as the MAPS control system to allow fully programmable dimming.

### Connection and Control Diagrams



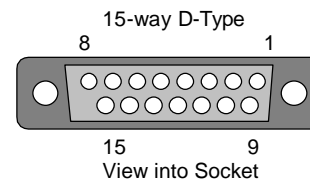
### Mains Input / Output

The mains input and output connectors detailed below are used on both DP2 and DP4 dimmer packs. DP4 dimmer packs use two mains input connectors one for dimmer channels 1 + 2 the other for channels 3 + 4, both connectors must be used.



### Control input connector

The control input connector detailed below is used on both the DP2 and DP4. The DP4 dimmer pack uses two connectors one for dimmer channels 1 + 2 the other for channels 3 + 4. The connector and it's functions are covered later on page 2/2.



#### CH1 and CH2

1. CH1 0v
2. CH1 10v Control Voltage IN
3. CH1 Non-Invert Mode Select
4. CH1 Inverted Mode Select
5. CH2 0v
6. CH2 10v Control Voltage IN
7. CH2 Non-Invert Mode Select
8. CH2 Inverted Mode Select
9. CH1 Trip Switch IN
10. CH1 10v Control Voltage out
11. CH1 Mode Select Common
12. N/C
13. CH2 Trip Switch IN
14. CH2 10v Control Voltage out
15. CH2 Mode Select Common

#### CH3 and CH4

1. CH3 0v
2. CH3 10v Control Voltage IN
3. CH3 Non-Invert Mode Select
4. CH3 Inverted Mode Select
5. CH4 0v
6. CH4 10v Control Voltage IN
7. CH4 Non-Invert Mode Select
8. CH4 Inverted Mode Select
9. CH3 Trip Switch IN
10. CH3 10v Control Voltage out
11. CH3 Mode Select Common
12. N/C
13. CH4 Trip Switch IN
14. CH4 10v Control Voltage out
15. CH4 Mode Select Common

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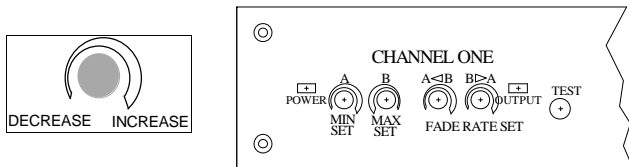
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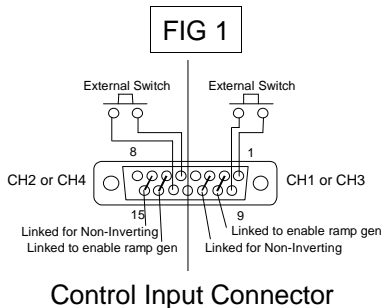
### Contact Closure Operation

Each dimmer is equipped with onboard ramp generators, the four pre-set pots shown below are used to set minimum level, Maximum level, Fade up (  $A < B$  ) and Fade down (  $B > A$  ) rates of the each dimmer. An LED "OUTPUT" is provided to mimic the dimmers output status.



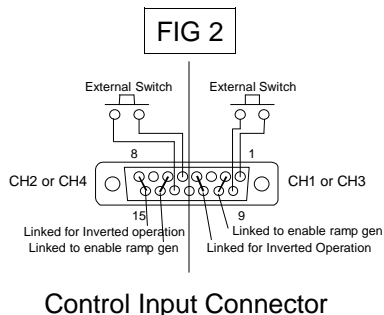
### Non Inverted Operation

Operating upon a contact closure to the control input connector FIG 1 the dimmer will fade to the pre-set Maximum level at the pre-set Fade up rate and remain until the contact is released, it will then Fade down at the pre-set Fade down rate to the pre-set minimum level.



### Inverted Operation

The above operations can be inverted i.e. the lamp sits at the maximum pre-set level and fades down upon a contact closure etc. this option is enabled via a link in the control input connector. FIG 2



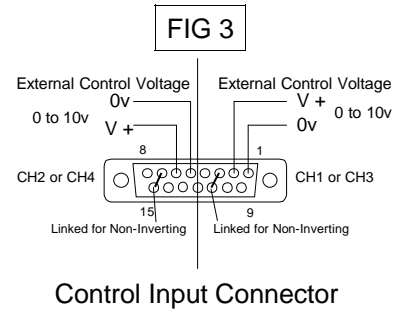
**NOTE:**  
Both DP2 and DP4 units are shipped with control input connectors linked as FIG 1 (Contact closure operation Non-Inverting output.)

### Control Voltage Input Operation

A variable control voltage 0 to 10v can be applied to the control input connector ( FIG 3 and 4 ) from an external source to control dimming.

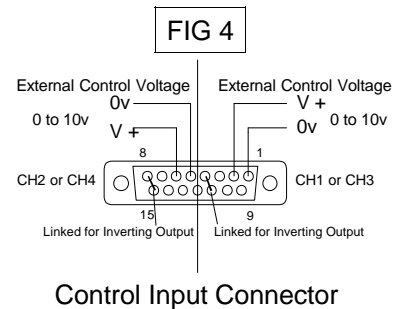
### Non Inverted Operation

With 0v applied to the control input the output will be OFF, as the control voltage is increased the output will rise proportionately at 10v the output will be fully ON (FIG 3.)



### Inverted Operation

The above operations can be inverted i.e. With 0v applied to the control input the output will be fully ON, as the control voltage is increased the output will fall proportionately at 10v the output will be OFF (FIG 4.)



### NOTE:

When dimmer channels are configured for control voltage input operation, all front panel controls will be inoperative.

### Specifications

Supply Voltage	220 to 250v A.C. 50/60Hz
Mains Input Connector	Free cable socket with screw terminal and clamp
Output Connector	Free cable plug with screw terminal and clamp
Control Input Connector	15 way D-Type Socket
Output Resistive Load	1500w per dimmer channel
Output Inductive Load	1000w per dimmer channel
Control Voltage Input	0 - 10v D.C. 10K
Contact Closure Input	Dry contact closure

Case Dimensions non-rack mounting  
Models DP2 and DP4 W - 425mm D - 210mm H - 44mm

Case Dimensions Rack Mounted  
Models DP2 and DP4 W - 483mm D - 210mm H - 44mm