

Combining innovative design with carefully selected materials, the PGF8000 Series fader provides the features and reliability that you expect from a Penny+Giles product.

Conductive plastic tracks, precious metal contacts and twin guide rods ensure smooth operation whilst maintaining excellent long term electrical and mechanical performance. • 100mm stroke

- internal track switch facilities
- external microswitch options
- single or dual channels
- linear, audio log or VCA outputs

# www.pennyandgiles.com

# PGF8000 SERIES LINEAR MANUAL FADERS

# PGF8000 linear manual fader



# SELECT THE FADER OPTIONS YOU REQUIRE

| Stroke length                 | 100                   |                     |                       |                |
|-------------------------------|-----------------------|---------------------|-----------------------|----------------|
| Output law                    | Log audio t           | aper <sup>2</sup>   | Linear <sup>1</sup>   | VCA 6          |
| Output channels               | One 0                 | Two 2               |                       |                |
|                               | series                | stroke              | law                   | channels       |
| Fader type                    | PGF8                  | 1                   |                       |                |
| Please enter the codes for yo | our first three optio | ns. This will ident | ifv the fader data sh | nown opposite. |

| Resistance       | <b>5k</b> Ω C | 10kΩ D   | VCA2k7Ω E |
|------------------|---------------|----------|-----------|
| Mounting threads | M3            | 4-40 UNC |           |
| J                |               |          |           |

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Safety warning

**50Vdc maximum voltage** The PGF8000 is designed for operation at voltages not exceeding 50Vdc

### SWITCH OPTIONS

#### Pre-fade listen

An internal switch which operates before the active track is reached. This is at the infinity end of the fader and always under spring load.

Internal pre-fade listen track switch\* (2mA max)

Internal track switch\* (2mA max)

External microswitch (100mA max)

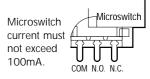
Overpress mechanism (no internal switch)

**Detent mechansism** 

#### Fader start/Auxiliary

An internal track switch or external microswitch which operates when the slider is within 4mm from the infinity mechanical stop.

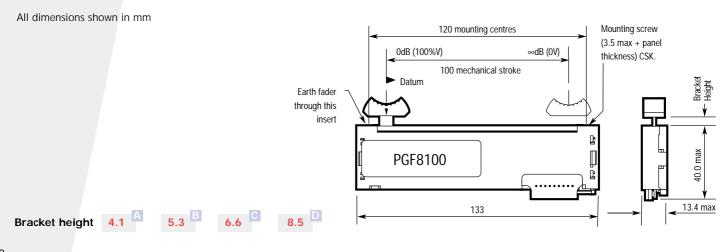
0



# Only one option per column can be selected

Note:\*Available only on mono units.

## DIMENSIONS AND KNOB BRACKET OPTIONS



# **OUTPUT LAW CHARACTERISTICS**

### Log audio taper

Maximum insertion loss 0.5dB - typical input related crosstalk 85dB

| Туре         | Accuracy                        | Matching accuracy<br>for stereo option<br>(relative to track 1) | Cut off | Туре         | Accuracy | Matching accuracy (relative to track 1) |  |
|--------------|---------------------------------|---|---------|--------------|----------|---|--|
| 8120<br>8122 | ±1.0dB (0-20)<br>±2.0dB (21-40) | -<br>±1.0dB(0-40)   | 100dB   | 8110<br>8112 | ±2.0%    | -<br>±2.0%                              |  |
| 0122         | ±2.00B (21-40)                  | ± 1.000(0-40)   |         | 0112         |          | 2.070                                   |  |

Note: The ratio of fader resistance to wiper load should be 100:1 or higher.

Test conditions • wiper load  $100k\Omega$  log only • element resistance  $10k\Omega$  • frequency for crosstalk and cut-off 15kHz  $\bullet$  frequency for law accuracy 1kHz  $\bullet$  insulation resistance 20M $\Omega$  at 50Vdc

Pin 1

Pin 2

Pin 3

Pin 1

Pin 2

Pin 4

Pin 5

Pin 6

Pin 7

Pin 9

Pin 1

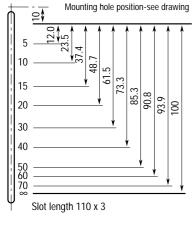
Pin 2

Pin 3

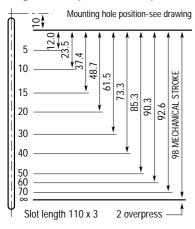
Pin 4

#### PANEL GRADUATIONS/SLOTS

#### Log audio taper



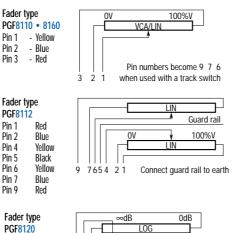
#### Log audio taper with overpress

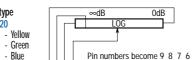


# **CIRCUIT DIAGRAMS/TERMINATIONS**

Linear

Maximum end volts 1.0%





Note: Pins 2+3 and 7+8 should be ioined to obtain cut-off.

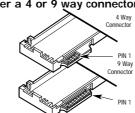
when used with a track switch

## Fader fitted with either a 4 or 9 way connector



- Red

432



#### PGF8112 - Red Pin 1 Pin 2 - Blue Pin 3 Green Pin 4 Yellow Pin 5 Black Pin 6 Yellow Pin 7 - Green Pin 8 - Blue Pin 9 - Red

Available on mono

- Black

- White

- Grey

- Black

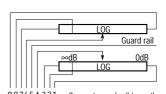
faders only

Pin 1 Pin 2

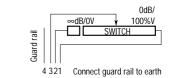
Pin 3

Pin 4

Fader type



987654321 Connect guard rail to earth Note: Pins 2 + 3 and 7 + 8 should be joined to obtain cut-off.



## FADER KNOB OPTIONS

The following knob colours are available in both 11mm and 16mm widths. Knobs are available to purchase separately.



# TO ORDER OR OBTAIN A QUOTATION PLEASE CONTACT YOUR NEAREST SALES OFFICE AND ADVISE:

The series number and description, the output law, resistance, fixing threads, switches and bracket height

For example: • PGF8000 manual fader • 100mm stroke • log law • 1 channel • 10kΩ resistance • M3 mounting inserts • internal track switch 4.1mm knob bracket height. Penny+Giles would code this fader as:

|            | series | stroke | law | channels | resistance | inserts |     | swit | ches |   | bracke | et |
|------------|--------|--------|-----|----------|------------|---------|-----|------|------|---|--------|----|
| Fader type | PGF8   | 1      | 2   | 0        | / D /      | M       | / S | -    | _    | - | / A    |    |



## VCA

Refer to Penny+Giles for laws other than standard

| Туре | Slider travel<br>(mm) | %<br>Output | %<br>Tolerance |
|------|-----------------------|-------------|----------------|
| 8160 | 0 Ó                   | 100         | -1.0           |
|      | 12.0                  | 95          | ±2.0           |
|      | 23.5                  | 90          | ±2.0           |
|      | 37.4                  | 85          | ±2.0           |
|      | 48.7                  | 80          | ±2.0           |
|      | 61.5                  | 70          | $\pm 3.0$      |
|      | 73.3                  | 60          | $\pm 3.0$      |
|      | 85.3                  | 50          | -              |
|      | 90.8                  | 40          | -              |
|      | 96.3                  | 30          | -              |
|      | 100.0                 | 0           | +1.0           |



# www.pennyandgiles.com

#### Penny & Giles

Faders and controllers, position sensors, joysticks and solenoids for commercial and industrial applications.

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# Quality Approvals



Penny+Giles are accredited to BS EN ISO 9001:2008 Quality is at the heart of all our systems ensuring the reliability of our products from initial design to final despatch.

Certificate No. LRO 0924881

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#### EMC Directive 2004/108/EEC

The products detailed in this document are supplied as components for installation into an electrical apparatus or system. They are outside the scope of the EEC directive and will not be CE marked.

The information contained in this brochure on product applications should be used by customers for guidance only.

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