



type 2804

Battery Driven Power Supply

FEATURES:

- Two identical channels
- Cross switching between inputs and outputs
- 200 V, 28 V or 0 V polarization voltage supply for condenser microphones
- Fits B & K modular cassette system for rack mounting
- Standard 1,5 V dry cells
- Meter indication of battery condition

- Two 28 V 10 – 32 NF microsocket outlets for preamplifiers

USES:

- Field measurements of sound and vibration
- Field recording of data
- Measurements of sound insulation
- Traffic noise measurements

The Microphone Power Supply Type 2804 powers the B & K Microphone Preamplifiers, Half-inch Types 2639, 2645 and Quarter-inch Type 2633. It supplies 200 V, 28 V or 0 V polarization voltage for the condenser microphone, and 28 V supply for powering the preamplifier.

Two channels are provided. The inputs and outputs can be interchanged by a single switch to facilitate measurement at two positions without re-connecting the equipment.

Two additional power output microsockets are available at the back, each supplying 28 V DC. Maximum current is 2×2 mA or 1×4 mA.

For use with the wide range of condenser microphones available from B & K, 0 V, 28 V or 200 V microphone polarization may be selected by a simple internal modification to the printed circuit board located under the bottom panel of the 2804. The polarization voltage setting can be checked



from a socket on the rear panel of the instrument. Half-inch Condenser Microphone Type 4130 is designed for use with a nominal polarization voltage of 28 V, while 0 V is used for Pre-polarized Condenser Microphone Types 4129, 4155 and 4176.

To prevent battery drain the heating elements in the Types 2639, 2645 are not powered from Type 2804. However, provision is made on the rear of the 2804 for feeding the heating element from an external 6 V DC supply.

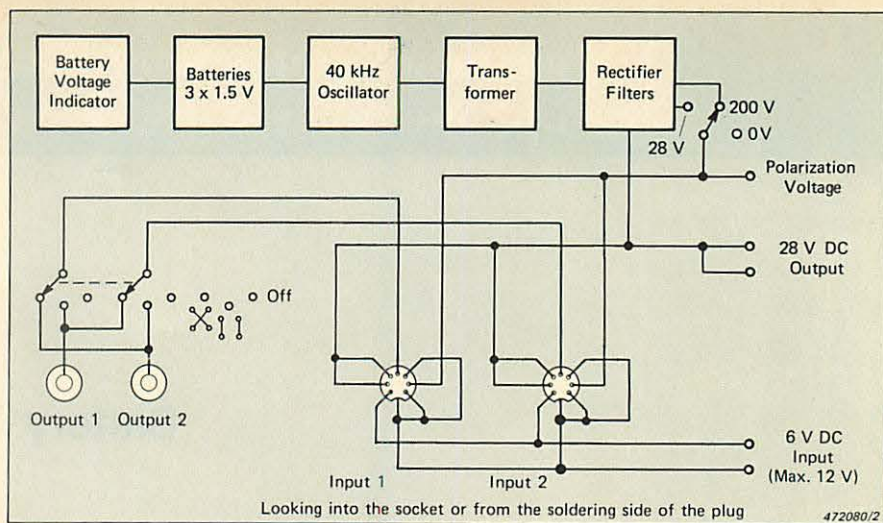


Fig. 1. Block Diagram of the Type 2804

Specifications 2804

INPUTS:

Two 7-pin sockets for direct connection of Microphone Preamplifiers: 1/2" Types 2639, 2645 and 1/4" Type 2633.

SIGNAL OUTPUTS:

Two standard 14 mm B & K sockets Input to output connections interchangeable by front panel switch

28 V DC OUTLETS:

Two 10 - 32 NF microsockets. Max. current 2 x 2 mA or 1 x 4 mA with no preamplifier at the input. Short circuit protected

TEMPERATURE RANGE:

With normal batteries: 0 to 40°C

With alkaline batteries: 0 to 60°C

Storing conditions: -25 to 70°C

HUMIDITY RANGE:

Up to 95% relative humidity at 40°C

POLARIZATION VOLTAGE:

200 V, 28 V, selectable by movable contact in the printed circuit. 0 V selection requires a

simple circuit adjustment. Stability $\pm 2\%$ for all conditions mentioned above and 3 to 5 V battery voltage

NOISE AND RIPPLE:

Gives no additional noise on output of Preamplifiers

ATTENUATION:

0 dB, both channels

CROSS-TALK ATTENUATION:

Better than 100 dB for frequencies below 20 kHz
Better than 80 dB up to 200 kHz

BATTERIES:

3 x 1.5 V IEC Type 20 (IEC Publication 86-2). 40 hours battery life for continuous operation with two Preamplifiers
Battery condition continuously displayed on meter during operation

PREAMPLIFIER SUPPLY VOLTAGE:

+28 V (2 x 2 mA or 1 x 4 mA) on input sockets or on output microsockets at the back

SOCKETS FOR HEATING ELEMENT:

Sockets are provided for a DC external source (Max. 12 V) for heating element in Types 2639, 2645

DIMENSIONS:

Height: 132,6 mm (5,2 in)

Width: 69,5 mm (2,7 in)

Depth: 200,0 mm (7,9 in)

(B & K module cabinet KK 0022, 2/12 of 19" rack module)

WEIGHT:

1 kg (2,2 lb)

1,27 kg (2,8 lb) including batteries

ACCESSORIES INCLUDED:

3 x 1.5 V Alkaline batteries QB 0004, IEC Type LR 20

Two adaptors Type DB 2609 for connecting earlier type B & K male plugs to input