



VP88 CIRCUIT BLOCK DIAGRAM  
FIGURE 13

## SPECIFICATIONS

### Type

Single-point stereo (MS configuration) condenser

### Frequency Response (See Figures 9 and 10)

40 to 20,000 Hz

### Polar Pattern (See Figures 11 and 12)

Mid Cartridge: Cardioid (unidirectional)

Side Cartridge: Bidirectional

### Output Impedance

Rated at 150 (100 W actual). Recommended minimum load impedance: 800 W (may be used with loads as low as 150 W with reduced clipping level)

### Sensitivity (1 kHz, MS mode)

Open Circuit Voltage: -66 dB (0.5 mV) Mid. (Side level 1.6 dB higher than Mid level) (0 dB=1 V/Pa)

### Side Level

(Stereo mode; relative to Mid level)

Low: -6.0 dB; Medium: -1.9 dB; High: +1.6 dB

### Clipping Level (1 kHz)

800 W Load (less than 1% THD)  
-12 dBV (0.25 V)(Mid output, 1% THD)  
-10 dBV (0.30 V)(Side output, 1% THD)  
150 W Load (less than 3% THD)  
-25 dBV (0.06 V)(Mid output)  
-19 dBV (0.11 V)(Side output)

### Maximum SPL

800 W Load: 129 dB  
150 W Load: 119 dB

### Hum Pickup

-4 dB equivalent SPL in 1 millioersted field (60 Hz)

### Self Noise

(Mid, Side, Left and Right outputs; equivalent sound pressure levels)  
24 dB typical, A-weighted  
28 dB typical, weighted per DIN 45405

### Dynamic Range

105 dB (maximum SPL to A-weighted noise level)

### Signal-to-Noise Ratio\*

70 dB (IEC 651) at 94 dB SPL

\*S/N ratio: difference between microphone output at 94 dB SPL and microphone self-noise A-weighted.

### Overvoltage Protection

Maximum External Voltage applied to Pins 2 through 5 with respect to Pin 1:  $\pm 75$  Vdc

### Polarity

Positive pressure applied from any direction to the Mid cartridge or from the left to the Side cartridge in the MS mode, or applied from the front in the Stereo mode produces positive voltage on pin 2 relative to pin 3 (Mid/Left) and pin 4 relative to pin 5 (Side/Right).

### Power

Phantom:

Supply Voltage: 9 to 52 Vdc

Current Drain: 1.3 mA/output; 2.6 mA total

Battery:

Type: 6 V cylindrical\*; Life: 70 hours\*\*

Current Drain: 2.4 mA total

### Environmental Conditions

Operating: -18 $\times$  to 57 $\times$  C (0 $\times$  to 135 $\times$  F)  
(Relative Humidity <90%)

Storage: -29 $\times$  to 74 $\times$  C (-20 $\times$  to 165 $\times$  F)  
(Relative Humidity <80%)

### Cables (see Figure 10)

*Y-Splitter Cable (supplied):* 0.76 m (30 in.) vinyl-jacketed, dual-shielded, 2-conductor with 5-pin female XLR connector on microphone end and two 3-pin male XLR connectors on equipment ends.

*Microphone Extension Cable (Model C110; optional):* 7.6 m (25 ft.) vinyl-jacketed, shielded, 4-conductor with 5-pin male XLR connector on one end and 5-pin female XLR connector on other end.

### Case

Brass and nickel-plated aluminum construction with stainless steel grille. Finished in satin black vinyl enamel

### Dimensions

Length: 11-7/16 in.; 290mm. Front Diameter: 1-9/16 in. 39.7mm; Diameter at Cable connection: 1-1/16 in.; 27mm.

### Net Weight

417 grams (14.7 oz) less battery and cable