

# AVALON DESIGN

PURE CLASS A MUSIC RECORDING SYSTEMS



## COMPRESSOR-EQUALIZER

### CLASS A STEREO SIGNAL PATH

The Avalon VT-747SP combines a creative STEREO tube-discrete Class A opto-compressor with a musical six band program equalizer, L-R output level and gain reduction metering and internal regulated power supplies in a 2U space. Ideal for high performance DAW input signal conditioning, stereo buss compression-EQ, stereo keyboards and analog mastering applications.

### SPECTRAL-OPTO-COMPRESSION

The opto-compressor features a minimum signal path design. The optical attenuator acts as a passive level controller with a Class A, variable gain make-up amplifier. Full dynamic control from soft compression to hard-knee limiting can be achieved with master threshold, ratio-compression, attack and release controls. Gain reduction indication is a large analog VU meter. LF and HF contour parametric spectral controls can be routed into the side-chain path for enhanced frequency dependent compression with variable frequency and threshold levels. SC listen provides sidechain listen mode for monitoring. Sealed silver relays are used for all signal routing and bypass functions.

### SIX BAND PROGRAM EQUALIZER

The VT-747SP equalizer utilizes 100% discrete, Class A high-voltage transistors for optimum sonic performance. The six band STEREO program EQ incorporates the smooth characteristics of an all passive design. The frequency turnover, Q and amplitude ranges have been carefully chosen for each band to provide the most natural harmonic balance and lowest phase change while offering simple and effective tone control. The EQ can be placed pre or post of the opto-compressor for enhanced effects.

### TSP - TWIN SIGNAL PATH

The VT-747SP features TSP which gives you the choice of either tube tone or the classic, Class A discrete transistor sound by placing, high-voltage dual triode tubes or discrete amplifiers in the primary output amplifiers.

### INPUT-OUTPUT-METERING

Fully balanced DC coupled, Class A discrete amplifiers are utilized for the input and output drive interface with +36dB input headroom. A high quality analog VU meter indicates accurate gain reduction. Twin 60dB range LED meters provide fast L-R output status of all levels.

## VT-747SP

STEREO CLASS A, VACUUM TUBE-DISCRETE TWIN SIGNAL PATH OPTO-COMPRESSOR-EQUALIZER

### VT-747SP FEATURES

- Stereo Class A opto-compressor with spectral control
- Stereo Class A six band discrete passive program EQ
- TSP twin signal path, vacuum tube bypass
- Low noise -92dB
- Fully balanced Class A input and DC coupled outputs
- Stereo dynamic 60dB high resolution output meters
- High quality analog VU meter for gain reduction
- High headroom +36dB input before overload
- Spectral side-chain monitor for pre listen
- EQ pre-post selection for opto-compressor
- Sealed silver relays for all signal routing
- Internal discrete regulated power supplies
- Military vacuum tubes for long life and low noise



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## V T - 7 4 7 S P S P E C I F I C A T I O N S

<b>Circuit topology</b>	Dual triode vacuum tubes, high-voltage discrete Class A
<b>Input gain range</b>	Balanced, Class A, 20k ohms, -6dB to +16dB with high gain switch
<b>Maximum input level</b>	+36dB balanced XLR pin 2 hot
<b>Maximum output level</b>	+30dB balanced 600 ohms, DC coupled, discrete Class A
<b>Output type</b>	XLR connector, output trim gain -45dB to +10dB
<b>Noise 20kHz unweighted</b>	-92dB
<b>Distortion THD, IMD</b>	0.5%
<b>Frequency response -3dB</b>	1 Hz to 200kHz
<b>Gain reduction meter</b>	High quality, illuminated gain reduction meter 0dB to -20dB range
<b>Output meter</b>	Twin 20 segment LED VU meters with -27dB to +30dB range
<b>Compressor type</b>	Optical passive attenuator
<b>Make-up gain</b>	Variable 0dB to +10dB stereo tracking
<b>Threshold - Ratio</b>	Threshold variable -30dB to +20dB, ratio-compression variable 1:1 to 20:1
<b>Attack- Release</b>	Attack variable 2mS to 200mS, release variable 100mS to 5 seconds
<b>Side-chain spectral contour</b>	Variable threshold -15dB to +15dB, frequency 70Hz to 9kHz twin ranges
<b>Equalizer type</b>	Discrete Class A, passive design optimized for full range program material
<b>Frequency bands (6)</b>	Variable amplitude LF +/-16dB 10Hz shelf response Variable amplitude MF1 +/-6dB 100Hz selected Q response Variable amplitude MF2 +/-4dB 550Hz selected Q response Variable amplitude MF3 +/-4dB 2kHz selected Q response Variable amplitude MF4 +/-8dB 5kHz selected Q response Variable amplitude HF +/-16dB 32kHz shelf response
<b>AC power</b>	Internal toroidal 100v to 240v, 50-60Hz selectable, 55 watts maximum
<b>Dimensions</b>	19x 12x3.5 in (482x305x89mm)
<b>Weight</b>	221bs (10kg)
<b>Dimensions-shipping carton</b>	21 x 18 x 8 in (533 x 457 x 203mm)
<b>Weight-packed</b>	261bs (11.8kg)



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Avalon reserves the right to incorporate changes in design and in the specifications of this product without prior notice.