

230 Master Voice Channel Processor



Features

- Reflected Plate Amplifier Tube Mic Preamp
- EasyRider Compressor
- Logic Assisted Gate
- Split Band de-esser
- Aural Exciter
- Parametric EQ
- Big Bottom
- +4 dBu and -10 dBV outputs
- 24 Bit 96 kHz A/D
- AES, SPDIF and Optical outputs
- Low jitter word clock output
- Word Clock Input
- Cough Switch (Soft Mute)

SPECIFICATIONS - Aphelex Model 230 Master Voice Channel Processor

MIC INPUT

Connector	XLR-3F
Type	Transformerless, NPN active balanced, tube second stage
Input Z	2k ohms nominal
Maximum Input Level (MIL)	+25dBu
CMRR	>70 dB @ 60 Hz
Nominal Preamp Gain	20 to 65 dB
Phantom Power	+48VDC

Pad	20dB
EIN	-127dBu (Input Shorted)
Tube Type	12AT7/ECC81 Dual Triode

OUTPUT

Connector	XLR-3M and 1/4" TRS Phone Jacks
Type	XLR is Impedance Balanced (may be used unbalanced); TRS is unbalanced
Out Z Balanced	XLR 66 ohms
Out Z Unbalanced	XLR 33 ohms; TRS 600 ohms
Nominal Level	XLR +4dBu; TRS -10dBV
Maximum Output Level	+25dBu Unloaded; TRS +11dBV

COMPRESSOR

Attack / Release	Program dependent, user variable release baseline
Ratio	4:1
Threshold	Fixed
Knee	Medium Hard

GATE

Attack	0.1 millisecond
Hold / Release	300 milliseconds / 400 milliseconds
Threshold	Variable -50 to +20dB
Depth	Variable, 1 to 58dB

DE-ESSER

Attack	0.1 millisecond
Release	100 milliseconds
Threshold	Variable -20 to +20dB
Ratio	5:1
Active Band	4 kHz to 20kHz Linkwitz-Riley 24 db/octave crossover

INSERT

Connector type - Send	1/4" TRS Phone Jack, Balanced
Connector type - Return	1/4" TRS Phone Jack, Balanced
Nominal Operating Level	0 dBu
Point of Insertion	Between dynamics processing and equalizers

BIG BOTTOM

Frequency	50 Hz to 280 Hz
Tune	Off to +12dB

PARAMETRIC EQ

Frequency Tune	240 Hz to 8 kHz
Peak / Dip	±12dB

Q Range 0.5 to 5

AURAL EXCITER

Frequency Tune 500 Hz to 5kHz

Mix Off to +12dB

ANALOG AUDIO

THD < .01% @ +4dBu Out

IMD < .01% @ +4dBu Out

Freq Response (Flat) 18 Hz to 24kHz \pm 1dB

DIGITAL AUDIO

Internal Sample Rates 44.1KHz, 48KHz, 88.2KHz, 96KHz

External Sample Rates Automatically syncs to any word clock between 32KHz and 96KHz

Resolution 24 bits

Word Clock Input BNC Jack, High Z, Captures <1Vp-p to 5Vp-p

Word Clock Output BNC Jack, 75 Ohms, 5Vp-p

Dynamic Range Digital dynamic range greater than analog front end

Noise Dither Dithered by analog preamp noise floor. Equivalent to 16-bit digital audio dither.

Level Equivalency -20dBFS Digital = +4dBu Analog

OTHER SPECIFICATIONS

Power requirements 90-250 VAC 50-60 Hz 12W

Dimensions 19"W x 1.75"H x 8.25" D 1 Rack U (482.6mm x 44.5mm x 209.6mm)

Depth Behind Front Panel 7.5" (190.5mm)

Net Weight 6 lbs (2.73 kg)

Shipping Weight 9 lbs (4.1 kg)

All specifications are subject to change without notice.

APHEX
S Y S T E M S

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