roger schult
german audio lab

Universalfilter W2377 MK2 (api ® 500 module)

The RS filter module W2377 MK2 was conceived and designed for recording and mixing studios, satisfying the demand for covering the entire audio spectrum with a single filter unit. This universal filter concept allows using the W2377 as a subtle program equalizer, and/or as creative tool for radical EQ and tone shaping alike.

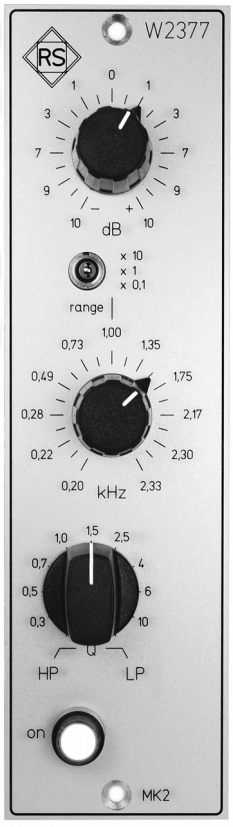
The W2377's fully parametric filter with three selectable frequency ranges covers the entire audio spectrum from 20 Hz to 23.3 kHz. Usefully, the overlapping frequency ranges are split into three decades that can be selected via a three-position switch to provide precise access to the entire frequency range of the unit. A high-grade, selected potentiometer adjusts the operating frequency while the Q-factor of the bell filter may be set between 10 and 0.3 via a rotary switch. As an additional feature, the Q-factor control includes a selectable high or low pass with a slope of 12 dB/octave at the left and right limits of the switch.

A backlit "on" pushbutton relay switch enables or disables the filter without switching noises in the signal chain. Conveniently, the brightness of the backlight can be adjusted using jumpers on the unit's electronics board.

As all Roger Schult products, the W2377 MK2 is hand-crafted and precision-engineered in Germany.

Technical Data
02 / 2015

High frequency filter (x10), "up" position	2 kHz to 23.2 kHz
Mid frequency filter (x1), "center" position	200 Hz to 2.3 kHz
Low frequency filter (x0.1), "down" position	20 Hz to 233 Hz
Gain, continuously variable rotary control	+/- 10 dB range
Q-factor, 11-position switch	0.3 / 0.5 / 0.7 / 1.0 / 1.5 / 2.5 / 4 / 6 / 10 as well as LP and HP
„on", LED backlit pushbutton	enable / disable filter module hard-bypass
Input (electronically balanced)	
Reference input level	+6 dBu
Maximum input level	+23 dBu
Input impedance	10 kOhm
Output (electronically balanced)	
Reference output level	+6 dBu
Maximum output level	+26 dBu / (0.05% THD+N)
Output impedance	40 Ohm
Gain at linear setting	0 dB (+0.1 / -0.2 dB)
Signal-to-noise ratio	< 100 dB
Noise level (UWTD / WTD)	< 80 dBq / < 76 dBq
Harmonic distortion	THD+N / 0 dBu 0.01%
Frequency range	20 Hz - 40 kHz (+ 0.1 / - 0.2 dB)
Delay time of hard bypass relais	max. 3 ms
Power supply	+/- 16 V on api ® - system + max.120 mA / -16V max. 60 mA
Module dimensions	115 mm x 172 mm (height x depth)
Faceplate dimensions	19" / 3 RU, 1.5" x 5.25" (width x height)
Faceplate finish	Aluminium, chromated Aluminium, white powder coat (5th)
Weight	0.55 kg



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