



## W2344 MK2 RS-MATRIX - Extended stereo image processing system

The W2344 is designed by the RS-Laboratory to process audio material in stereo and M/S mastering environments. With two flexible inserts external signal processors can be integrated in the stereo chain as well as in the M/S signal path. The integrated switch matrix of both inserts, featuring a pre/post and an on/off function, and the flip function between insert 1 and insert 2 allow an immediate evaluation of the M/S and the stereo processing with or without the external signal processors. W2344 extended aural editing system (RS Matrix)

### W2344 MK2 filter functions

- Control function for the phasing of the left channel
- Control switch for mono compatibility
- Switch to swap both inputs
- Continuous control of the input gain between -5 dB and +5 dB
- Control of the stereo width from mono to a factor of two
- Pre listening function of the stereo width with a dedicated switch
- Phase corrected solo function for the mid and the side signal
- Two fully parametric M/S EQs with activation switch (filter on)
- Two separate switchable inserts in the M/S- or stereo-signal chain
- Pre-/post function of the inserted signal processors
- Flip function for both inserts 1 and 2

### source 1/2

The W2344 allows the selection of two stereo input sources

### L+R / phase L / L<->R - Mono compatibility phase and left/right inversion

The W2344 comes with a mono switch (L+R) in the input section to check mono compatibility, a phase switch (phase L) - so that the phase of the left channel can be changed to 180 degrees - and a switch to invert the left and right channels (L<->R)

### input level

Separated controls for L and R allow to adjust the input level in a range of  $\pm 5$  dB.

### insert 1 / insert 2

Inserts for external signal processors with pre- and post-function.

Both inserts can be alternatively switched to the stereo signal chain as well as before (pre) or after (post) the M/S matrix. An example for such an application is the quick comparison of the processor setting in M/S or stereo.

### solo - M and S solo function

The W2344 system offers the possibility to monitor the phase corrected side and mid signal with separate solo switches for the M and S signal.

### The EQ section

The system offers the possibility of editing the mid and the side signal separately via two integrated fully parametric equalizers. Thereby different resolutions of the filter frequency in both channels ensure an optimal adjustment for the use in the side and the mid channel. The filter frequency and the gain can be controlled precisely with the dedicated knobs for each parameter. The frequency range of the filter can be extended with a dedicated switch to a factor of 3.

The range of the Q factor can be set between 0.3 and 10 with a 9-stage ELMA switch and in the initial and end position of the ELMA switch the bandpass filter can be switched to a highpass or lowpass filter with the possibility to set the cut-off frequency with the "frequency" control. To control filter effects on the audio signal, both filter modules can be activated / deactivated via two "filter-on" switches.

### Flip function of insert 2

With the flip function insert 1 and insert 2 can be swapped instantly.

### The stereo-width function

The continuous stereo width potentiometer controls the width of the side channel from mono to a factor of two. The impact of the edited base width can be compared with the setting of the unedited setting via a dedicated switch "normal stereo".

### on - bypass-switch

Deactivates the RS\_MATRIX via hard-bypass (on)

### The user interface

All pushbutton switches of the W2344 are illuminated if they are activated. That offers a reliable visual control of all settings of the unit.

Optionally available is a rasterized resolution of the filter potentiometers, that allows a complete reproduction of all settings. With this option the W2344 becomes an ideal tool for ambitious mastering jobs.

As all Roger Schult products, the W2344 MK2 RS-MATRIX is hand-crafted and precision-engineered in Germany.



## Technical Data

Tentative spec sheet, 01/2018

### Filter - side signal

Frequency range 125 Hz to 6 kHz  
(375 Hz to 18 kHz on activated x3-function)  
Gain, 41 stepped Alps-rotary control range -10 dB / +10 dB  
Q-factor, 11-position switch 0.3 / 0.5 / 0.7 / 1.0 / 1.5 / 2.5 / 4 / 6 / 10  
HP on left stop, LP on right stop  
„S“-solo, switch solo/preview side channel  
„x3“-switch extend frequency range up to factor 3  
„S“-filter on, switch activate filter function for side channel

### Filter - mid signal

Frequency range 15 Hz to 500 Hz  
(45 Hz to 1.5 kHz on activated x3-function)  
Gain, 41 stepped Alps-rotary control range -10 dB / +10 dB  
Q-factor, 11-position switch 0.3 / 0.5 / 0.7 / 1.0 / 1.5 / 2.5 / 4 / 6 / 10  
HP on left stop, LP on right stop  
„M“-solo, switch solo/preview mid channel  
„x3“-switch extend frequency range up to factor 3  
„M“-filter on, switch activate filter function for mid channel

### Input (electronically balanced)

Reference input level +6 dBu  
Maximum input level +27 dBu  
Input impedance 47 kOhm

### Output (electronically balanced)

Reference output level +6 dBu  
Maximum output level +27 dBu  
Output impedance 55 Ohm  
Gain at linear setting 0 dB (+0.1 / -0.2 dB, 20 Hz - 40 kHz)  
Signal-to-noise ratio < 100 dB  
Noise level, THD+N / 0 dB 0.009 % (20 Hz - 40 kHz)

Delay time of hard bypass relays max. 3 ms  
Power supply 230 V AC, 50 Hz, 65 Watt  
Optional 115 V AC, 60 Hz, 65 Watt

Dimension 19" / 5 RU, 483 x 88 x 330 mm (wxhxd)  
Weight 5.5 kg

### External power supply N2304

Dimension 106 x 83 x 185 mm (wxhxd)  
Weight 4.9 kg



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