



roger schult
german audio lab

Studio Tone Shaper
W2395

Operating Manual
Quick Guide

W2395 Operating Manual for api ® 500 system Version 03.2015
roger schult D 50374 Erftstadt Peter-May-Str. 104

Table of Contents

Page

2	Table of Contents
3	Introduction Safety Notices
4	Product Details Controls and Operation The parametric mid-band EQ The Baxandall EQ
5	Installation Installing the W2395 module in an api ® 500 system Recycling
6	Specifications
7	Box contents and compatibility
8	Manufacturer, contact and support

Dear customer, we sincerely thank you for purchasing our product.

The W2395 module for the api ® 500 system that you have purchased was manufactured according to highest manufacturing standards adhering to all European and national guidelines currently in effect. EMV compatibility has been certified and the appropriate records are available at the manufacturer. Upon shipment, the product left the manufacturer in perfect working condition according to factory specifications.

In order to maintain the factory specs and guarantee safe operation in the future, we advise that you read the included operating manual as well as further safety documents (see below) - they contain important notes for operating and handling your product. When passing the unit on to third parties, please also make them aware of these documents.

Any use outside of the applications described in this manual may cause damage to the product and may further imply to hazards such as electrical shorts, fire, electric shocks, etc. The product must not be altered or modified. The enclosed safety and hazard notices about this product refer to the installation and operation in an api ® 500 system. Consequentially, there may be relevant guidelines and regulations that affect operation, even if they don't apply to our product directly. Installation and operation should therefor be carried out by trained personell only.

If you should have technical questions to this product, please contact our technical support team. You will find the contact details in the appendix of this manual.

Controls and Operation

The parametric mid-band EQ

Gain (rotary control)

The module has one rotary gain control with a range of -10 dB to + 10 dB.

Frequency (rotary control)

The frequency control adjusts the filter frequency between 155 Hz and 3.5 kHz.

Q-factor (toggle switch)

A three position switch adjusts the quality factor of the bandpass filter between $Q = 0.4$ (wide), $Q = 0.7$ (medium), and $Q = 1.5$ (narrow).

The Baxandall EQ

Gain (fader)

Both the high and the low frequency bands have their own fader for adjusting the gain of the EQ, covering a range of +/- 12 dB.

Frequency (toggle switch)

Three-position toggle switches allow setting the shoulder frequency of the filter to 45 Hz, 66 Hz or 90 Hz in the low band, and 1.9 kHz, 3.6 kHz or 6.3 kHz in the high band.

“on”-switch

The “on”-switch allows removing the EQ from the signal path by means of a relais (“hard bypass”). An illuminated switch indicates that the EQ is inserted and active.

Installation in an api ® 500 system

Instructions for installing the W2395 filter module

Please note that electric potential differences and electrostatic discharges (ESD) can destroy your api ® 500 system and the W2395 module. Please make sure to discharge any potential electrostatic charges by touching a plumbing pipe, heating pipe or any other piece of metal connected to earth before installing the W2395 module. Neutral electric potential is a prerequisite to any installation or reconfiguration of electronics modules and their interconnections.

Turn off your api ® 500 rack or console and all connected devices. Remove any blank panels that might cover the slot you have chosen for installation of the module.

Center the module between the two threaded mounting holes and evenly insert the module into the free slot without applying brute force. Secure the W2395 module with both screws. The module is ready for operation once the appropriate connections in the rear of the api ® box have been taken care of.

Recycling

Please stay eco-friendly and dispose of all defective and obsolete devices at a certified collection facility according to local laws and regulations.



The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more details on available collection facilities please contact your local movement Office or the retailer where you purchased this product.

Specifications

Tentative spec sheet, 03/2015

Low band EQ, adjustable frequency	45 Hz / 66 Hz / 90 Hz
Gain, continuously variable	+/- 12 dB range via fader
Mid band frequency	155 Hz to 3.5 kHz, continuously variable
Gain, continuously variable	+/- 10 dB range via rotary control
Q-factor, 3-position switch	narrow, wide, medium (Q-factor 1.5 / 0.4 / 0.7)
High band EQ, adjustable frequency	1.9 kHz / 3.6 kHz / 6.3 kHz
Gain, continuously variable	+/- 12 dB range via fader
„on“, backlit switch	enable / disable filter module hard bypass

Input (electronically balanced)

Reference input level	+6 dBu
Maximum input level with linear setting	+15 dBu
Input impedance	10 kOhm

Output (electronically balanced)

Reference output level	+6 dBu
Maximum output level	+22 dBu / (0.05% THD+N)
Output impedance	40 Ohm
Gain at linear setting	0 dB at 1 kHz (+0.2 / -0.2 dB)
Signal-to-noise ratio	< 76 dB
Noise level (UWTD / WTD)	< 80 dBq / < 75 dBq
Harmonic distortion	THD+N / 0 dBu 0.009%
Frequency range	20 Hz - 40 kHz (+/- 0.2 dB)
Delay time of hard bypass relais	max. 3 ms
Power supply	+/- 16 V via api ® -system + max. 110 mA / -16V max. 70 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	Aluminum, chromated
Weight	0.54 kg

Box contents and compatibility

Box contents

- W2395 module in api ® 500 system
- Quick start guide in German
- Quick start guide in English

Compatibility

The compatibility certification records for this product are available upon request from the manufacturer.

As all Roger Schult products, the W2395 is hand-crafted and precision-engineered in Germany.

roger schult
german audio lab

D 50374 Erftstadt
Peter-May-Strasse 104

www.rogerschult.com
info@rogerschult.com

Manufacturer

roger schult
german audio lab

Peter-May-Str.104
D 50374 Erftstadt

www.rogerschult.com
info@rogerschult.com



Studio Tone Shaper W2395