R-504 2 Band Shelf **Equalizer** + LO-CUT and HI-CUT



ARREL Audio Overview

ARREL Audio products, conceived for the professional user, combines high reliability, rugged design, audio quality, versatility and ease of use. They are perfect for recording every kind of music in all the situations where the maximum sound quality is needed especially for actual digital recording 24bit/192kHz environments where superior performance is required.

They are based on the use of the latest circuit topologies, characterized by very low distortion, ultra-low noise and very wide frequency response. ARREL Audio systems are designed and hand-assembled in Italy with minimum cabling to obtain the best mechanical performances and the minum degradation of the audio signal. ARREL audio devices are designed utilizing mostly through-hole technology which provides better performances when compared to surface mount technology.

Moreover, no custom electronic components are used in ARREL Audio units. Our aim is to transfer technology emerging from research in advanced innovative products.

R-504 2 Band Shelf Equalizer + LO-CUT and HI-CUT

The **ARREL Audio R-504** is an advanced single-channel equalizer conceived to offer to the 500 series user the superior audio performance of the ARREL audio high level products. The R-504 is characterized by high reliability, rugged design, outstanding audio quality, versatility and ease of use typical of the tradition of ARREL Audio products.

The R-504 equalizer is based on the Livio Agentini's "Single-Stage Parallel Configuration" patented design. This innovative phase coherent EQ design offers the lowest distortion/noise specifications, not available in other products.

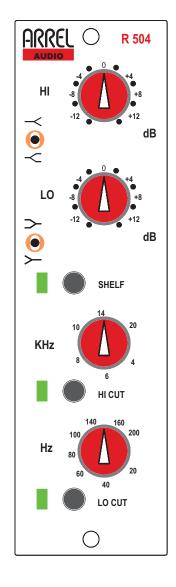
The R-504 filtering section offers LO, HI shelving filters with two switchable shapes. The Emphasis/De-Emphasis control range is ±14 dB. The HI-CUT and LO-CUT filters are characterized by 12/dB Oct. slopes and variable cut-off frequency control.

Each filter section can be individually activated by a button (LED). A bypass button is used for a true analog by-pass function (LED).

R-504 is is one of the models of the serie of equalizer that ARREL Audio conceived for the 500 series (the other models are R-502, R-503, R-505) in order to give to the user the best choice for its application.

The R-504, offers a very cool satin finish stainless steel front panel and a semi closed stainless steel enclosure and has been designed to be compliant with the 500-series standard.

R-504 is dedicated (due to his absolute sonic level quality) to high professional vocal recordings, classical instruments, high dynamic range instruments such as drums and percussions.



R-504 Technical Specifications



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Number of Channels:	1
Power Supply	± 16 VDC, very low power supply currents with respect to the 500 series standard
Line Input	Elecronically Balanced, Impedance 20ΚΩ, Input Level +4dBu, Max +20 dBu.
Output Level	Electronically Balanced, Level +4 dBu, Max +24 dBu, Output Impedance 100 Ω
Bandwidth	5 - 150 KHz ±1 dB, perfect square wave up to 20 KHz
Distortion + Noise	<0.003% (typical 0.001%).
Front Panel Controls	True By-Pass button (LEDs) for the three filter sections (SHELF, HI-CUT, LO-CUT), Shelf Gain (Emphasis/De-Emphasis) pot control, Range ± 14 dB with center detect (2 controls), Shelving shape control (LO and HI) switchable (2 shapes), Cut-Off Frequency control for LO-CUT and HI-CUT(2 controls).
Frequency Bands	LO: Shelf Shape, two position switch (two shapes), HI: Shelf shape, two position switch (two shapes), LO-CUT: 20/200 Hz, Slope 12 dB/Oct, Cut-Off frequency continuous control, HI-CUT: 4000/16000 Hz, Slope 12 dB/Oct, Cut-Off frequency continuous control.
Rear Panel Input Connectors	500 series compatible connector
Construction	Compliant 500-series rack with PSU and external audio connections, Single 500-series rack slot required for each R-501 module.
Dimensions	Series 500 compatible module
Weight	500 g

The information contained in this document has been carefully checked and we believed is accurate at the time of publication. In any case, we do not assume any responsibility for inaccuracies, errors or omissions nor any liability for any loss or damage resulting either directly or indirectly from use of the information contained in this manual.