

WIDE BAND TRANSMITTER & RECEIVER FOR AM & FM STUDIO TO TRANSMITTER LINKS

TX300WB & RX300WB

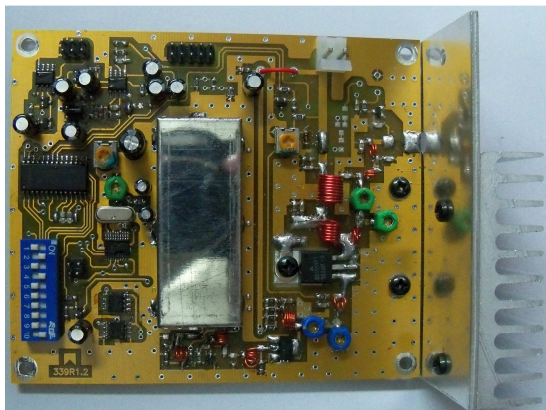
The TX300BA and RX300BA wide band audio boards has been designed to provide the customer with an option on a lower priced alternative in the short and medium range applications but without compromising the link quality from the standpoint of overall performance.

Frequency programming is easily set up via dip switch. This allows the user access to **1000** channels within the operational range, with **25 KHz** spacing in between and a typical **1.5%/2 %** bandwidth without retuning.

The **TX300BA** is equipped with a low distortion and high dynamic range frequency synthesizer featuring reduced dispersion modulation throughout the operational range. Maximum output power is **8/10 W** using MOS technology.

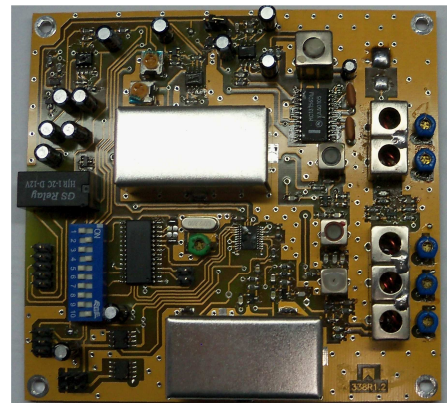
The **RX300BA** is a double conversion type with two synthesizers, a high selectivity front end and dynamic range to minimize spurious signals interference when operating in crowded radiofrequency environments. The first intermediate frequency depends on the operational band, and it is selected on start up to minimize the interferences from the second conversion oscillator. Output for remote main transmitter control carrier detection.

The transmitter and receiver design incorporates the latest in microprocessor and radio frequency MOS technologies and all fiberglass printed circuit boards with surface mount components.



Transmitter

- balanced/unbalanced input
- modulation level control
- modulation and output power level indication using Led VU meter



Receiver

- balanced/unbalanced output
- output level control
- input signal level indication using Led VU meters
- output for the main transmitter remote control

Frequency range: 200 Mhz-400 Mhz in 25 Mhz sub ranges.
Within each frequency range there are 1000 available channels with 25 KHz spacing.

Available frequency ranges: 200-225 Mhz / 225-250 Mhz / 250-275 Mhz / 300-325 Mhz / 325-350 Mhz / 350-375 Mhz / 375-400 Mhz

TECHNICAL SPECIFICATIONS TX300BA & RX300BA WIDE BAND AUDIO BOARDS GENERAL

Frequency range	200 Mhz - 400 Mhz in 25 Mhz sub ranges, 1000 channels with 25 Khz spacing.
Frequency programming	Dip switch.
Frequency stability	± 5 ppm, 0 °C to +45 °C.
Bandwidth without retuning	1.5-2 %.
Preenphasis / Deemphasis	0, 75 useg, jumper select.
Antenna	50 Ohms unbal.

TRANSMITTER

Output power	8 / 10 Watts maximum.
Spurious emission	- 55 dB.
Maximum ROE	1,5 :1.
Maximum deviation	± 75 Khz @ 100 % modulation.
Inputs	Mono : 2 K $\pm 5\%$ bal, XLR. Mpx : 2 K $\pm 5\%$ unbal, BNC.
Input level	Balanced : 2.0 Vef @ ± 75 Khz dev. Unbalanced : 2.0 Vef @ ± 75 Khz dev.
Frequency response	Mono : ± 0.5 dB, 30 - 15000 Hz referred to the standard preemphasis curve, jumper installed. Mpx : ± 0.5 dB, 30 Hz - 90 Khz, jumper removed.
Modulation dispersion	± 0.5 dB, center band referred.
Indications	Output power and modulation level, led VU meters.
Power request	12.0 Vcc a 14.0 Vcc, 13.6 Vcc typical / 1.5 A @ 12.5 Vcc, typical.
Dimensions	95.0 mm x 113.0 mm.

RECEIVER

Type	Double conversion, 70 Mhz (band depends) and 10.7 Mhz.
Deviation	± 75 Khz @ 100 % modulation.
Sensibility	> 10 uV @ 50 dB s/n, 1 Khz @ ± 75 Khz dev, mono output.
Image reject	> 60 dB.
Adjacent channel reject	> 60 dB @ 250 Khz.
Dynamic range	> 90 dB.
Outputs	Mono : bal/unbal, XLR. Multiplex: unbal, BNC.
Output levels	Balanced : 2.5 Vef @ ± 75 Khz dev. Unbalanced : 4.5 Vef @ ± 75 Khz dev.
Frequency response	Mono : ± 0.5 dB, 30 - 15000 Hz, referred to the standard deemphasis curve, jumper installed. Multiplex: ± 0.5 dB, 30 Hz - 90 Khz, jumper removed.
Indications	Input signal level, Led VU meters
Control output	Relay type NO/NC, for the main transmitter remote control, carrier detection synchronized, maximum current: 0.2 A.
Power request	12.0 Vcc a 14.0 Vcc, 12.5 Vcc typical 0.15 A typical.
Dimensions	111.5 mm x 116.0 mm



email: info@dhesistemas.com
www.facebook.com/dhesistemas

www.dhesistemas.com
www.twitter.com/dhesistemas

Rev. : 1.00
Date: 01/11/18.
Specifications may change without notice.