TUGICOM RF DESIGN

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MPX170S Stereo Encoder

User Manual/Service



<u>MPX170S</u> HIGH QUALITY STEREO ENCODER

MPX170S stereo encoder provides excellent stereo separation while keeping low price, ease of use, and zero faults. Just connect 12V-15V, audio input from every CD or computer and connect the MPX output to every MPX ready transmitter.



Features

Full SMD design Over 40dB separation - Typical 45dB Operating from every 12-15V regulated voltage Low Audio Distortion, less than 0.5% Pilot Tone 19 KHz +/-3Hz Audio Response 30Hz to 50 KHz +/-0.6dB Pre-emphasis 50uS/75uS Audio Inputs Standard Line Level 0dBu 775mV adjustable No test equipment required for setting up transmitter Built & tested - just plug & play! Compact size: 2" X 2¹/4"

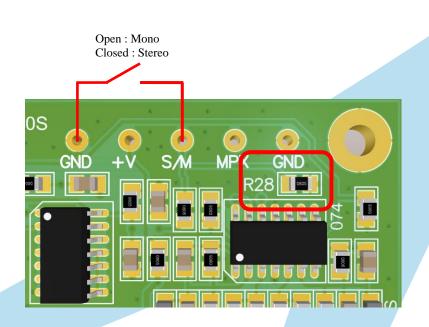
Installing and connecting

- 1. Install the MPX170S in your transmitter, for good connections to ground please use all screws.
- 2. Install the MPX170S far from power supply and RF source.
- 3. Connect DC regulated (DC+) supply to the VDC hole on the board.
- 4. Connect DC regulated (DC-) supply to the GND hole on the board.
- 5. Connect shield wire to the MPX out and the shield to the GND and the other side to any transmitter MPX input (TX180A).
- 6. Connect the audio source to the MPX170S RCA connectors.
- 7. Cancel the Audio pre-emphasis in your transmitter.
- 8. Before apply operating voltage check the polarity. Apply operating voltage and adjust the audio level using the trimmers.
- 9. The MPX170S can be operated in Mono/Stereo modes.(next page)
- 10. Default Pre-emphasis is 50uS, for 75uS follow the next page.



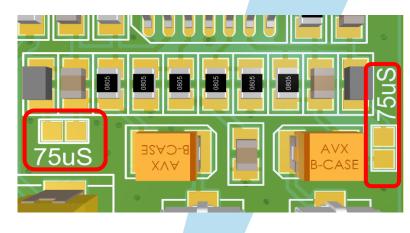
Switching to Mono/Stereo

- 1. In order to use this option, remove the resistor R28 which marked on the picture.
- 2. after removing the resistor, using S/M pin you can control the mode, when S/M is open circuit, the transmission will be in mono, when S/M is connected to GND the mode will be stereo.(shown in picture)



Changing Pre-Emphasis

1. Short the pads near the 75uS markings.



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