

TR-4 DIGITAL RECORDER



TECHNICAL CHARACTERISTICS

Voltage.	12 V DC.
Minimum Consumption.	40 mA
Average Consumption.	350 mA
Automatic Control Gain. (ACG).	Yes.
Output Power.	5 W. R.M.S.
Output Impedance.	4-8 .
Protection against polarity inversion.	Yes.
Dimensions.	72 x 65 x 28 mm.
Weight	49 grs.

OPERATING MODE

The TR-4 is an electronic sounds recorder-player. It allows to store any music, conversation or sound effect up to 16 seconds as maximum time. The recording remains in memory even after disconnecting the power supply. It incorporates a 5 W.R.M.S power stage, automatic control gain, (ACG), protection of, as well as protection against the polarity inversion. It includes indication LED, microphone, and connection terminals.

POWER SUPPLY. The TR-4 must be supplied at 12 V.DC. Perfectly stabilized, for that reason we recommended you to not use simple rectifier or power supplies, that can negatively affect the circuit operating mode, but a power supply. We suggest you the FE-123, which is perfectly adapted to the circuit needs.

See General Wiring map. Connect positive and negative of the power supply to the corresponding input indicated on the drawing. Before to supply the module, verify that the assembly has been correctly done.

RECORDING. (REC). Connect a push button to the terminal indicted as "Rec" in the General Wiring map. You have to use a quality push button, otherwise, the message will record the electrical noise generated by this one. The maximum available time to record in the TR-4 module is of 16 seconds.

In order record, you have to maintain pressed the "Rec" push button. During this operation the LED will remain illuminated up to the end, or you exceed the available 16 seconds; moment in which the module will automatically stop the recording operation, and the LED will light off to indicate the whole record time used.

To basic use of the push button. If during the recording, instead of maintaining it firmly tight you press it again, the recording will be reseted erasing the previous record. Do never use the record with the repetition option activated.

PLAY. Connect a push button and a loudspeaker to the terminals indicated as "Play" and "Spk" on the General Wiring Map. You have to use a quality push button. To play the recorded message, you have to do a short pressure on the play push button; the module will play until the end of the message, independenty of its duration time.

VOLUME CONTROL. To vary the output volume, you have to adjust the RV-1 potentiometer according to you need. Potentiometer minimum is on the right and the potentiometer maximum is on the left. You have to smoothly turns the potentiometer to avoid steep jumps.

INSTALLATION. For a correct circuit operating mode, you have to use less than 25cm for push button cables. You also have to use a loudspeaker (minimum 10W), without exceeding one meter length for its wiring.

As far as possible you have to install the circuit in a metallic enclosure and to connect the module negative terminal to the enclosure.

