



“Wireless Solutions for High-Tech Industries”

Model MB Remote Interface Option

This option consists of a 15-pin D-sub connector mounted on the rear of the Model MB, an internal integrated circuit audio amplifier (type LM383) and associated components and the wiring between the connector, amplifier and other parts of the MB.

The D-sub connector pin functions are identified on drawing 1101620. Additional information follows:

- Pin 1:** Grounding the “mic ptt” terminal activates the transmitter. This is equivalent to pressing the microphone push-to-talk switch.
- Pin 2:** The remote microphone audio level required is approx. -20 to -10 dBm (80 to 250 millivolts), which corresponds to the audio output of typical aircraft type microphones. This terminal connects internally to 13.8 vdc, via 2000 ohms, providing a “bias” current of approx. 6 ma. to the microphone.
- Pins 3-4-5-6:** Provide connections points for separate ground connections from the microphone, external tape recorders or other devices, and for power to external equipment.
- Pins 7-8:** Can be connected to two 4 ohm or four 8 ohm remote speakers (maximum total audio power output is approx. 7 watts).
- Pin 9:** The 500-600 ohm receiver audio output can be used with amplifier-type remote stations (like the SSC 805AY or equivalent), or amplifier-type remote speakers, or to transmit the MB’s audio output over telephone lines, or for a tape recorder. The level adjustment trim pot is accessible with the MB’s top cover removed, at the rear right of the main pc board. If the audio is to be transmitted over telephone lines, set the level to approx. 0 dBm (0.77 v).
- Pin 10:** Grounding this squelch disable terminal unsquelches the receiver (remote operator can confirm that the MB is “on” or can hear weak signals).
- Pin 11:** If the receiver is squelched, this voltage is approx. 0.1 vdc. When the squelch is broken (when a signal is received) the voltage rises to approximately 12 vdc.
- Pin 15:** approx. 14 vdc at 500 ma is available to power external equipment such as remote amplifiers or remote stations like the SSC model 805AY. If more current is required, use an external power supply.

Both audio outputs contain not only the receiver audio output, but also the transmitter modulation (“sidetone”). If a remote speaker is connected, it must be well removed from the transmitting microphone, to prevent a squeal or howl due to feedback from the speaker to the microphone. When the 500-600 ohm audio output is connected to a tape recorder, the voices of both the pilot and the ground operator will be recorded.