

GLOSSARY

Unless specified otherwise, Radius M200 series radios are required.

B308: an option for the older M206 and M214 radios which adds the 16-pin accessory connector with programmable I/O.

B833: an option for the older M206 and M214 radios which includes the B308 option plus Rapid-Call signaling.

Bi-directional repeater: a repeater configuration in which the "receiver" and "transmitter" radios perform both receive and transmit functions. The audio and COR signals from the receiver of the "receiver" radio are routed to the transmitter of the "transmitter" radio. Unlike the unidirectional case, though, the audio and COR signals of the receiver of the "transmitter" radio are also routed to the transmitter of the "receiver" radio. Example: the "receiver" radio receives a signal on 159.420 MHz which is re-transmitted by the "transmitter" radio on 451.650 MHz. The "transmitter" radio then receives a signal on 451.650 MHz which is re-transmitted by the "receiver" radio on 159.420 MHz.

Console radio: a fixed (base station) or a mobile radio installation that has been designated as the controlling radio for the repeater or as the "hub" for communications. The console radio is not part of the repeater hardware.

CSQ: Carrier Squelch.

COR ("Carrier Operated Relay"): a carry-over term from the early days of repeater operation. COR is used in its generic sense and does not necessarily mean only Carrier Squelch operation. For the Radius 2-mobile repeater configurations, the COR signal is found on pin 8 or pin 14 of the 16-pin accessory jack (J3) of the radio. Whenever a "properly" identified signal is received a dc level change will occur on pin 8 or pin 14.

Cross band repeater: a repeater in which the "receiver" radio operates in a different frequency band than the "transmitter" radio. Example: the "receiver" radio operates on 159.420 MHz in the highband VHF and the "transmitter" radio operates on 451.650 MHz in the 450-470 MHz UHF band. Crossband repeaters may be either unidirectional or bi-directional.

Drop out delay: the time, in seconds, that the "transmitter" radio remains keyed, or on the air, after the input signal to the "receiver" radio ceases. Also known as "hang time".

EIA de-emphasized audio: the audio frequency response of the receiver that is measured at the speaker and at J3 pin 11 of the radio with JU551 in the "B" position.

EIA pre-emphasized audio: the audio frequency response of the transmitter for an audio input to the microphone or J3 pin 2.

Field radio: a mobile or portable radio that is neither a part of the repeater hardware nor a console radio. Field radios may intercommunicate via the repeater or directly.

Flat audio: receiver or transmitter audio that does not change appreciably in amplitude as the frequency of that audio is varied from 1 Hz to 3 kHz. The receiver audio response from J3 pin 11 with JU551 in the "A" position and the transmitter audio response for input to J3 pin 5 are "flat".

M200 series: a series of Radius radios that include the newer models M208 and M216 or the older models M206 and M214 with either the B308 option or the B833 option. The B833 option is required for remote Setup/Knockdown operation.

Normal receiver audio: see EIA de-emphasized audio.

"Normal" repeater: a repeater that uses an M200 series radio as the "receiver" radio and interconnects to the R*I*C*K with a 16-conductor cable. Not a "VLC" repeater. May be bi-directional or unidirectional.

PAC*RT: Portable Area Communications Repeater; a specialized cross band, bi-directional repeater configuration. Example: paramedics at an accident scene may use 450-470 MHz UHF portable radios to communicate with a highband VHF dispatcher.

Power-up: the initial application of operating potential (voltage) to the radios and the R*I*C*K.

"Properly" identified signal: all signals being received on a CSQ receiver or those signals with the correct PL tone or DPL code being received on a coded squelch receiver.

"Receiver" radio: the radio that is connected to "J5-RX" (or "J1-RX") of the R*I*C*K.

Repeater knockdown: to deactivate or to remove from service a repeater.

Repeater setup: to activate or to place into service a repeater.