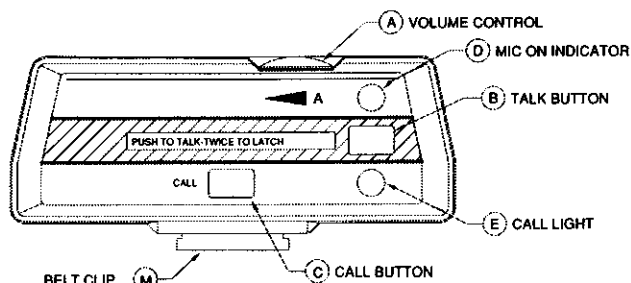


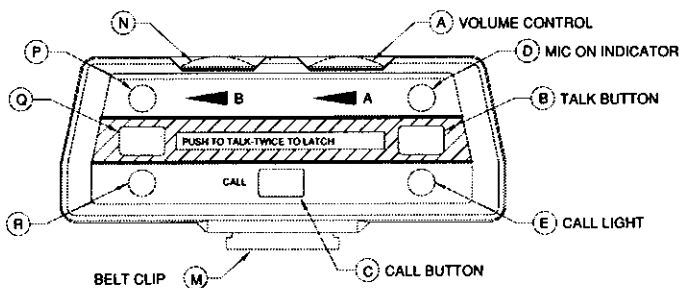
OPERATING INSTRUCTIONS

RS-501/502/522 BELTPACK

The Series 500 Beltpack intercom stations include a number of unique operating features. The following information will assist you in getting the most out of the unit for your specific application. Please take the time to read this document to familiarize yourself with the special features of this beltpack.



TOP VIEW RS-501



TOP VIEW RS-502/522

TOP PANEL CONTROLS:

VOLUME CONTROL (A) or (A & N):

The VOLUME control adjusts the listen level of the incoming intercom signal. The RS-501's single channel requires a single volume control. The RS-502 & RS-522 are dual channel units having a volume control for each channel. The listening level has no effect on the outgoing "talk" signal. Its range is from full off (counter-clockwise) to full on (clockwise).

TALK BUTTON (B) or (B & Q):

The TALK button turns the microphone circuit ON and OFF.

The button is "dual action". If it is pressed and held, its action is momentary only. The microphone circuit is turned on and remains ON only until the button is released.

If a "locking" action is desired, the TALK button must be tapped and released twice in quick succession. This action will latch the microphone circuit ON. It is released (turned OFF) by momentarily pressing and releasing the button again.

Internal jumpers allow the selection of several operating modes for the RS-502/522. See Page 3.

CALL BUTTON (C):

When the CALL BUTTON is depressed it transmits a "CALL" signal onto the intercom line to illuminate all other stations' call indicators on that channel.

(RS-502 and RS-522): The call signal is only sent to the channel (or channels) the unit is selected to talk on. IF NO TALK CHANNEL IS SELECTED, NO CALL SIGNAL WILL BE TRANSMITTED.

INDICATORS (all on top panel):

MIC "ON" INDICATOR (D) or (D & P):

The green MIC ON LED indicates that the microphone circuit is ON.

For RS-502/522 refer to Page 3.

CALL INDICATOR (E) or (E & R):

The CALL INDICATOR is a high intensity, multi-element, red LED that illuminates whenever a "Call" signal is present on the respective intercom line.

SPECIAL OPERATING INFORMATION:

"RMK" (REMOTE MIC KILL):

This feature makes it possible to reset beltpack microphone circuits from ON to OFF from a remote location.

This function is activated by a momentary (50ms.) interruption of the dc power to the beltpack. When power is restored to the beltpack, the unit "defaults" to the "MIC OFF" condition.

BELT CLIP & SURFACE MOUNTING ADAPTER(M):

An auxiliary Surface Mounting Adapter is provided with each Series 500 Beltpack. This adapter may be used in several ways:

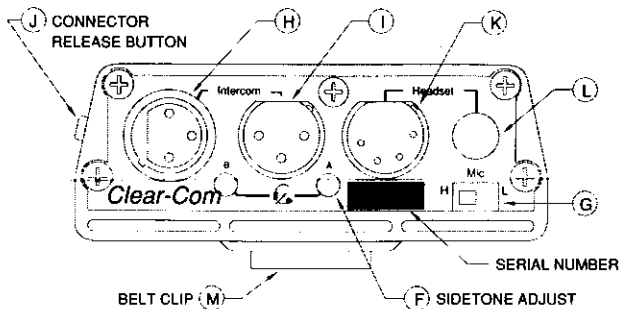
- To mount a beltpack to the underside of a counter or console, as a permanent operating position.
- To provide a convenient and secure temporary storage point, usually adjacent to an intercom wall connector.

MODEL IDENTIFICATION LABEL:

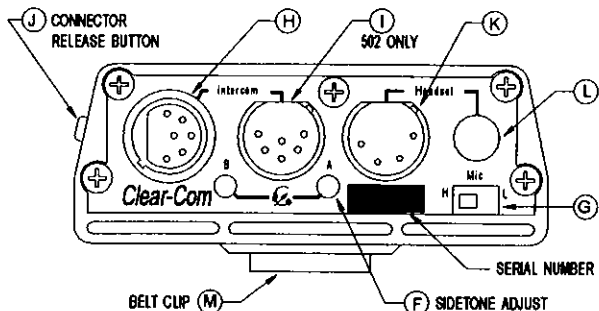
All Series 500 beltpacks have an label mounted in a groove in the front surface. These labels are color-coded for easy identification of the various models. The color-coding of current models is:

- Yellow: RS-501, single channel, monaural output.
- Blue: RS-502, two-channel, monaural output.
- Red: RS-522, two-channel, stereo output.





BOTTOM VIEW RS-501



BOTTOM VIEW RS-502/522

BOTTOM PANEL CONTROLS:

SIDETONE CONTROL (F):

The RS-501 has only one control, although there is an adjustment hole, but no control, for channel B. The second control is present only on two channel units (RS-502 & RS-522).

The SIDETONE control adjusts how much the operator hears himself in his earphone. It has no effect on the signal going to the intercom line and negligible effect on the signal from the intercom line. It is factory set for typical operation but may be adjusted to suit the user's preference.

OPTIONAL MICROPHONE LEVEL SWITCH (G):

This switch selects between Hi, (H) and Lo (L) gain for the microphone input.

Normal operation is "Hi" gain. The "Lo" gain position improves the signal-to-noise ratio in high noise environments.

BOTTOM PANEL CONNECTORS:

INTERCOM LINE CONNECTORS (H & I):

(RS-501) The 3-pin female (H) and male (I) XLR type INTERCOM connectors are to connect to the Clear-Com intercom line. They are wired in parallel and while the female connector is normally used as the "input", either one may be used as the input or as a loop-thru output.

(RS-502/522) The 6-pin female (H) connector is to connect to the Clear-Com intercom line.

(RS-502) (I) Loop-thru to (H).

RS-501

RS-502/522

WIRING:

Pin #1: COMMON
 Pin #2: +30 vdc
 Pin #3: INTERCOM
 Pin #4: _____
 Pin #5: _____
 Pin #6: _____

COMMON
 +30V
 CH. B INTERCOM LINE
 CH. A INTERCOM LINE
 NO CONNECTION
 NO CONNECTION

RELEASE BUTTON (J):

This button releases a male XLR type cable connector that has been plugged into the female INTERCOM line connector (H).

HEADSET CONNECTORS (K & L):

• 4-PIN CONNECTOR (K):

The 4-pin male XLR type connector is for headsets with dynamic microphones.

RS-501

RS-502

RS-522

• WIRING:

Pin #1: Mic(L)	Mic(L)	Mic(L)
Pin #2: Mic(H)	Mic(H)	Mic(H)
Pin #3: Hphone (L)	Hphone(L)	Hphone Com
Pin #4: Hphone (H)	Hphone(H)	CH.B Hphone(H)
Pin #5: _____	_____	CH.A Hphone(H)
Pin #6: _____	_____	Hphone Com

1/4" PHONE JACK (L):

If the "CARBON MIC" option is installed, there is a 1/4" Tip/Ring/Sleeve jack mounted to the right of the 4-pin connector. Otherwise, there is a plastic "knock-out" in that location.

The CARBON MIC jack is for most types of headsets that use carbon microphones or that are "carbon compatible".

• WIRING:

Tip: Mic input
 Ring: Earphone output
 Sleeve: Common

DISASSEMBLY:

Noting where small parts fit into the unit during disassembly will facilitate reassembly.

1. Place the unit face down & remove four corner screws. DO NOT remove the screw at the center of the plate.
2. Gently lift the bottom panel up about 1/2" & separate the two halves of the aluminum extrusion, setting them aside.
3. Gently fold down the top panel 90 degrees exposing J2-J5 near the edge of the circuit board adjacent to the XLR input, and set jumpers as required.

REASSEMBLY:

The unit is most easily reassembled in the following order:

1. Place the top panel face down and slide the right extrusion half (the one without the connector release button) around the unit.
2. Slide the circuit board insulating sheet, shiny side facing the board, between the extrusion half and the circuit board.
3. Place the belt clip into the slot of the right extrusion half, making certain that the belt clip retaining tab (located at the top of the clip) is locked between the edge of the extrusion and the top panel. Seat the extrusion half on the locating pins on the top panel.
4. Slide the left extrusion half around the unit, observing that the buttons on the extrusion & XLR connector are aligned. Check that the belt clip slips into its slot, that the main circuit board is set into its supporting grooves in both extrusion halves (the groove closest to the edge), and that both extrusion halves are properly seated on the top panels locating pins.
5. Seat the bottom panel to the extrusion halves, and insert and tighten the four screws.

USER PROGRAMMABLE FUNCTIONS

FOR MODEL RS-502 & RS-522 BELTPACKS

The information in this section explains in detail the various operating functions that are controlled by the Series 500 internal processor. Should you decide to change the programming, please take the time to thoroughly read this section.

GENERAL:

The Series 500 Intercom stations include a number of operating functions that can be programmed by the user. These functions enable the Series 500 units to be customized to most appropriately meet the needs of the user. The LISTEN and TALK audio circuits are switched ON and OFF by electronic analog switches. These electronic switches, as well as the indicator and CALL circuits, are controlled by the Clear-Com logic IC.

The functions are programmed by "opening" (cutting a circuit board trace) or "closing" (connecting with a wire) jumpers on the circuit board. The jumpers are located in the upper left hand corner of the main circuit board (when viewed from the front). They are labeled (from left to right) JP5, JP4, JP3, and JP2.

Normally the Model 502 is shipped from the factory programmed for "Two Channel Select". This means that the unit can only operate on Channel A or Channel B. Dual LISTEN is standard on the 502. Both LISTENS are always on and are only controlled by their respective Volume controls. The CALL signal send button is only active on the selected TALK channel.

Normally the Model 522 is shipped from the factory programmed for "Simultaneous Two Channel" operation. This means that the unit can talk to both channels, either together or separately. Dual LISTEN is standard on the 522 providing "Split Feed" to the headphones. Both LISTENS are always on and are only controlled by their respective Volume controls. The CALL signal send button is only active on the selected TALK channels.

FUNCTIONS:

INDICATOR LIGHT PROGRAMMING: (JP-2)

FACTORY DEFAULT: **CLOSED**

CLOSED: enables the green LED's to operate as Mic ON/OFF indicators.

OPEN: enables the green LED's to indicate which channel is selected to listen and talk.

TALK FUNCTION PROGRAMMING: (JP-4)

FACTORY DEFAULT: **CLOSED RS-502 OPEN RS-522**

CLOSED: enables TALKS to either Channel A or Channel B.

OPEN: enables TALKS to both Channel A and Channel B simultaneously, as well as selectively.

NOTE: When TALKING to both channels simultaneously, they are not tied together, "PARTY LINED".

LISTEN PROGRAMMING: (JP-5)

FACTORY DEFAULT: **OPEN**

OPEN: sets both LISTEN circuits ON. Listening volume on each channel can be set individually. If desired, a channels' volume can be turned completely OFF.

CLOSED: restricts the LISTEN circuits to operate on only one channel at a time. Selecting a Talk channel will activate that channels' LISTEN.

BOUNCE-BACK PROGRAMMING: (JP-3)

FACTORY DEFAULT: **CLOSED**

This function works interactively with other functions, programming channel A as a priority channel:

CLOSED: (OPTION DISABLED)

OPEN: with JP-5 CLOSED & JP-4 OPEN:

Latching Channel A's TALK gives Channel A's TALK priority. Subsequently pressing Channel B's TALK will activate Channel B momentarily, until the button is released, at which time the TALK function will "bounce-back" to Channel A.

Bounce-back will not operate if Channel B's TALK is latched or if Channel A's TALK is OFF.

OPEN: with JP-5 OPEN & JP-4 OPEN

Latching Channel A's TALK and LISTEN give them priority. Subsequently pressing Channel B's TALK will activate Channel B's TALK and LISTEN momentarily, until the button is released, at which time the TALK and LISTEN functions will "bounce-back" to Channel A.

Bounce-back will not operate if Channel B's TALK is latched.

OPEN: with JP-5 OPEN & JP-4 CLOSED

Bounce-back has no effect.