

EPS-205

Compact Zone-Paging Mixer/Amplifier

- Five selectable output zones
- Three mic/line XLR inputs
- Three selectable background music (BGM) RCA inputs
- Tape record outputs
- 24-V dc emergency operation
- Up to three paging stations via RJ45
- Remote control of primary functions
- Input/output gain controls
- Treble/bass tone controls
- Various levels of priority paging
- Optional extension cards

Description

The Altec Lansing EPS-205 is an all-in-one five-zone powered paging mixer with unique optional extension capabilities including: prerecorded voice messaging, chime/alarm tones and voice operation. Unlike any other product, it provides three mic/line inputs, paging priority features, three selectable background music inputs, tape record outputs, inserts for EQ, and 200 watts of power into six 70-volt outputs: one direct output and five zoned outputs with relays and logic circuits. With the optional extension cards, it provides a complete front end for numerous applications including restaurants, Sunday-school paging, front-of-house paging, office buildings, commercial buildings, small meeting rooms and many more. See Figures 1 and 2 for front- and rear-panel diagrams.

Inputs

The input section includes three balanced

balanced RCA connections (inputs 4-6).

Inputs 1, 2 and 3 feature a specialty function. Input 1 includes a paralleled 7-pin DIN connector for use with a push-to-talk microphone.

Input 2 XLR is paralleled to the audio of the RJ45 connection, which is used to connect the Altec EPS-205/PS microphone paging stations (separate EPS-205/PS engineering data sheet available). Up to three paging stations may be connected in parallel to the main unit. The XLR connection at Input 2 may not be used in conjunction with the paging stations. Input 2 must be set to line-level input for proper function of the paging station.

Input 3, used with the voice-operation switch extension card (ANRS-90170), creates a priority auto-gate feature of the microphone connected to Input 3. Priority is internally set with jumpers.

Inputs 1, 2 and 3 have a Line/Mic switch and Gain adjustment adjacent to the XLR

cent to Input 3 on the rear panel.

Inputs 4-6 allow the connection of three background music (BGM) sources. The stereo RCA jacks are internally combined to mono. Only one BGM source can be routed through the unit. Switching of source is done on the front panel of the main unit (Aux control).

The front-panel controls for the inputs include bass/treble tone controls (Bass, Treble) and gain adjustment (Mic 1, Mic 2, Mic 3 and Volume).

Paging Station

Up to three microphone paging stations (EPS-205/PS) may be connected to the main unit via the RJ45 connection on the rear panel. Each paging station must be home-run back to the location of the main unit (or equipment rack) to be paralleled. Four-wire RJ45 cable must be used to connect the paging stations, providing power, audio and data to/from the main unit and the station. The paging station has a built-in mic preamp to

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The button must be depressed and held for the desired duration of the alarm. The momentary chime button on the paging station actuates the chime dingdong tone. The preannouncement chime is activated automatically and immediately prior to live or prerecorded voice (ANRS-90213) announcements. The preannouncement chime may be overridden via the J303 internal jumper setting. Each of these functions may be remotely activated via contact closure to ground from the remote control connector. Paging stations are not required to activate these features.

ANRS-90213: voice-messaging extension card provides up to one minute of nonvolatile prerecorded announcement which can be activated either via the paging station (EPS-205/PS) or the Remote Control connector. The level of priority of this prerecorded announcement can be set via internal jumper settings. With the J301 jumper setting "in," this feature takes primary priority over all other inputs thereby muting all other sources, allowing an emergency evacuation prerecorded announcement to be played through the system.

Recording, activation and interruption of the announcement may be done from the paging station (EPS-205/PS) or using Input 1 and the remote control connection.

To record from the paging station, depress and hold the Message, Stop and Talk buttons at the same time. Pause to allow the prechime tone, speak the message and release the buttons.

The prerecorded message may be changed at any time.

ANRS-90214 rack kit provides standard rack mounting ears for the EPS-205.

Architects' and Engineers' Specifications

The compact powered paging mixer shall have three XLR inputs, phantom power switch, three stereo RCA inputs, 25-pin remote connector, RJ45 paging station connector, tape record outputs, two stereo break inserts, one direct output, five zoned outputs, 24-V dc connector, fuse socket, 110/230-V ac switch and main power connector on the

rear panel.

The front panel controls shall include detented, dB-scaled level potentiometers for each XLR input, one for the RCA inputs and one for the master level control; bass/treble tone trim potentiometers for inputs 1-4; and aux selection switch for the RCA inputs (4-6). Output controls on the front panel shall include detented dB-scaled level potentiometers and zone selection switches with green LED's for the five output zones.

The internal power amplifier shall be capable of delivering 200 watts of 70-volt amplification. It shall be capable of operating from a 110/230-V, 50/60-Hz ac line or from a 24-V dc battery source. The unit shall meet worldwide production safety requirements including CE standards (CSA/NTRL/C and UL Listing pending). Rear-mounted output connector shall be a Phoenix connector.

The EPS-205 shall meet the following specifications: nominal output power 200 watts (IEC) at 70 volts with transformer nominal output voltage or 25-ohms nominal impedance; sensitivity of the balanced inputs 1-3 shall range from 0.6 mV to 12 mV (mic/line) with maximum input voltage of 470 mV (mic) and 8.5 V (line); sensitivity of the unbalanced inputs 4-6 shall be 155 mV; distortion shall not exceed 1% with signal-to-noise ratio greater than 60 dBu; sensitivity of the monitor output shall be 8 dBu with an impedance of 600 ohms; bass control shall adjust 100 Hz by ± 10 dB; treble control shall adjust 1,000 Hz by ± 10 dB; sensitivity of the tape record output shall be 775 mV with impedance of 47 kilohms, unbalanced. The unit shall withstand operational temperatures ranging from 4 °C (40 °F) to 40 °C (104 °F). The unit shall be painted black with white lettering. Dimensions shall be 440 mm x 135 mm x 260 mm (17.4 in. x 5.3 in. x 10.3 in.) hwd. Net weight shall be approximately 11 kg (24.3 lb). The unit shall be the Altec Lansing EPS-205.

Limited Warranty

Altec Lansing products are guaranteed against malfunction due to defects in materials or workmanship for a specific period of time as noted in the individual product-

line statement(s) below, or in the individual product owner's manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our option) without charge. The product will be returned to the customer prepaid. **Exclusions and Limitations:** The Limited Warranty does not apply to: (a) exterior finish or appearance; (b) certain specific items described in the individual product-line statement(s) below; or in the individual product owners manual; (c) malfunction resulting from use of operation of a product other than as specified in the product data sheet or owner's manual; (d) malfunction resulting from misuse or abuse of the product; or (e) malfunction occurring at any time after repairs have been made to the product by anyone other than Altec Lansing Service or any of its authorized service representatives. **Obtaining Warranty Service:** To obtain warranty service, a customer must deliver the product, prepaid, to Altec Lansing Service or any of its authorized service representatives together with proof of purchase of the product in the form of a bill of sale or receipted invoice. A list of authorized service representatives is available from Altec Lansing Service at 600 Cecil Street, Buchanan, MI 49107 (800/234-6831 or FAX 616/695-4743). **Incidental and Consequential Damages Excluded:** Product repair or replacement and return to the customer are the only remedies provided to the customer. Altec Lansing shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. **Other Rights:** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Altec Lansing Electronics are guaranteed against malfunction due to defects in material or workmanship for a period of three (3) years for the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.

For Warranty repair or service information, contact the service repair department

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Figure 1—Altec EPS-205 Front Panel

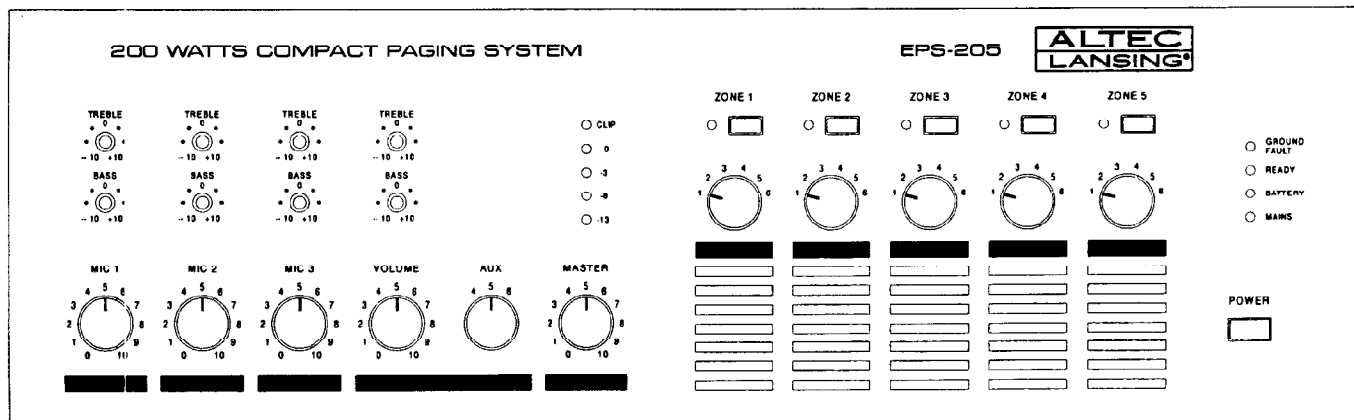


Figure 2—Altec EPS-205 Rear Panel

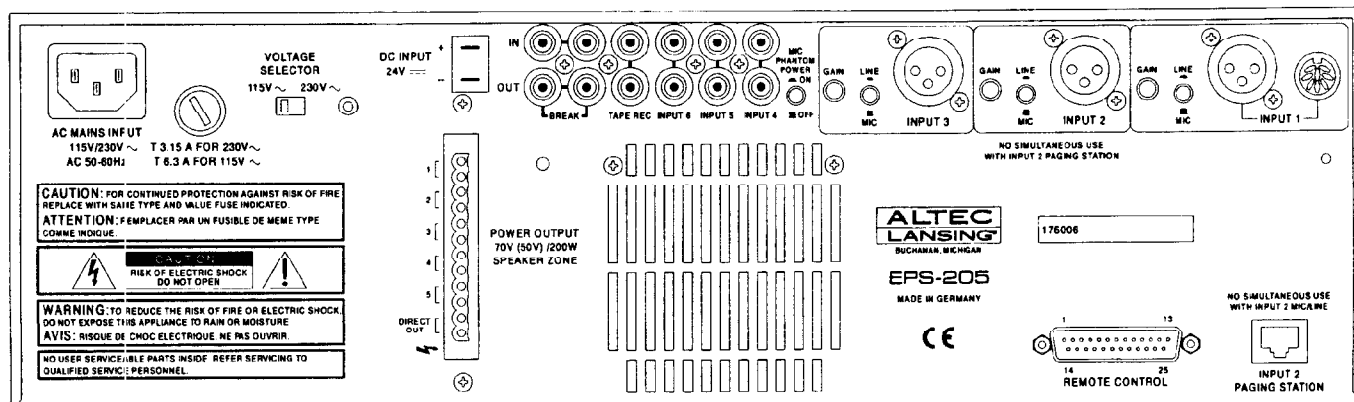
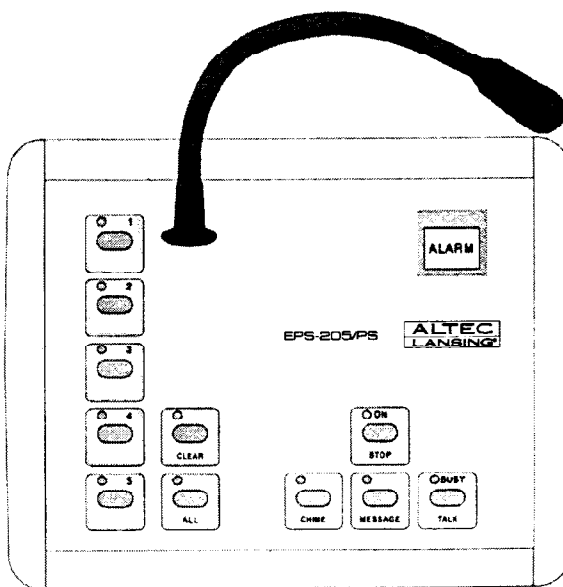


Figure 3—Altec EPS-205/PS Paging Station (separate engineering data sheet available)



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Figure 4—Remote Control Pin Chart

Pin	Description	Reference
1	Chime start	Alarm/chime extension kit 90213
2	Alarm start	Alarm/chime extension kit 90213
3	Message start	Voice messaging extension kit 90212
4	Message record	Voice messaging extension kit 90212
5	Message stop	Voice messaging extension kit 90212
6	Priority 1	Priority functions
7	Priority 2	Priority functions
8	Priority 3	Priority functions
10	Reply zone 1	Obligatory reception
11	Reply zone 2	Obligatory reception
12	Reply zone 3	Obligatory reception
13	Reply zone 4	Obligatory reception
14	Reply zone 5	Obligatory reception
15	Busy – open	Priority signal present
16	Busy – closed	No priority signal present
17	Busy – center	
18	Ready – open	System operates normally with no faults
19	Ready – closed	System has experienced fault condition
20	Ready – center	
21	Remote master	Remote master volume control extension kit 90178
23	Relay power	200-mA power for the operation of external relays
24	Ground	Ground
25	Monitor out	High-impedance output for connection of headphones or monitor

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Figure 5--Priority Jumper Settings Chart

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Jumper	Inserted "In"	Open "Out"
J301	Cascading Priority Sequence Inputs of higher priority override inputs of lower priority; paging stations have block priority with each other; priority sequence: voice messaging, alarm, chime, input 1, input 2, input 3 and aux	Mix-Mode Operation Standard mixing operation for inputs 1-3 and aux; Voice messaging, alarm and Chime take priority and mute all inputs; priorities 1-3 via remote connector mute the aux; paging station operation is NOT possible.
J302	Block Priority Running message of any input is finished without interruption. Voice messaging, alarm and chime possess higher priority than live messaging or BGM	(standard setting)
J303	Prechime Deactivated	Prechime occurs prior to a prerecorded or live voice announcement, when alarm/chime extension kit is inserted (standard setting)
J304	Input 1 Priority Allows a live announcement to take priority over voice messaging, alarm and chime.	(standard setting)
J305	Mic 2 + Mic 3 Mix Mode Mic 2 and 3 are mixed; aux mutes when mic 2 or 3 is activated; paging station operation NOT possible	(standard setting)
J306	For Use with Voice-Operation Extension kit Aux Duck/Ramp Background music will duck/ramp around announcements With J301 – Input 3 Priority Mic input 3 takes priority over other inputs	(standard setting)
J307/308	Paging Station Surveillance For use when a paging station does not answer the fault J307: paging station 1 J308: paging stations 1+2 J307+J308: paging stations 1+2+3 (surveillance occurs only in this order)	(standard setting)

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Figure 6—EPS-205 Circuit Board Locations for ANRS-90212 and ANRS-90213

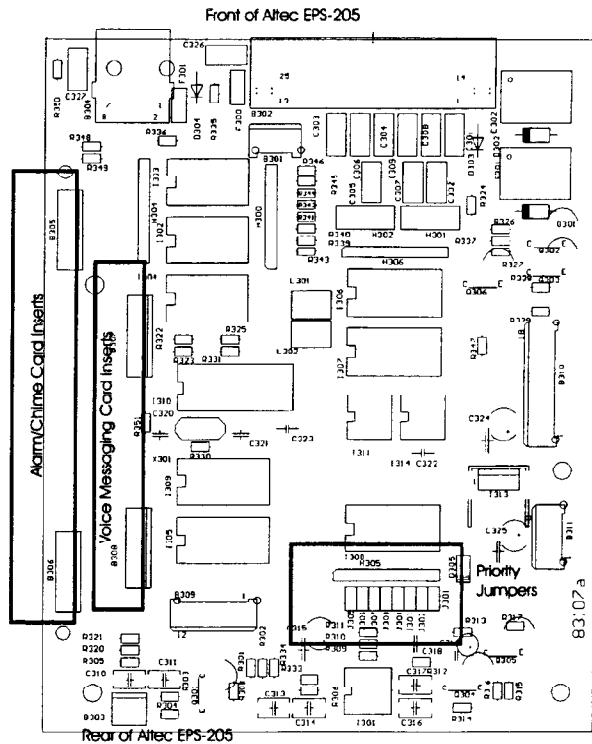


Figure 7—ANRS-90212 Alarm/Chime Card

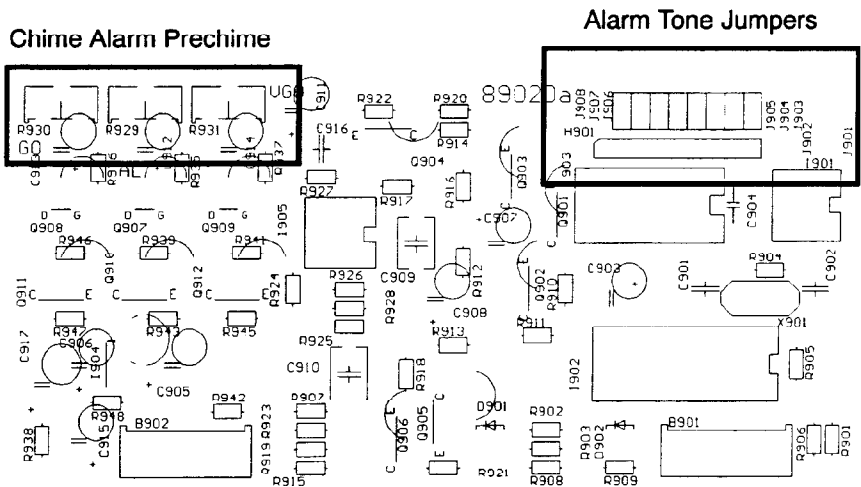
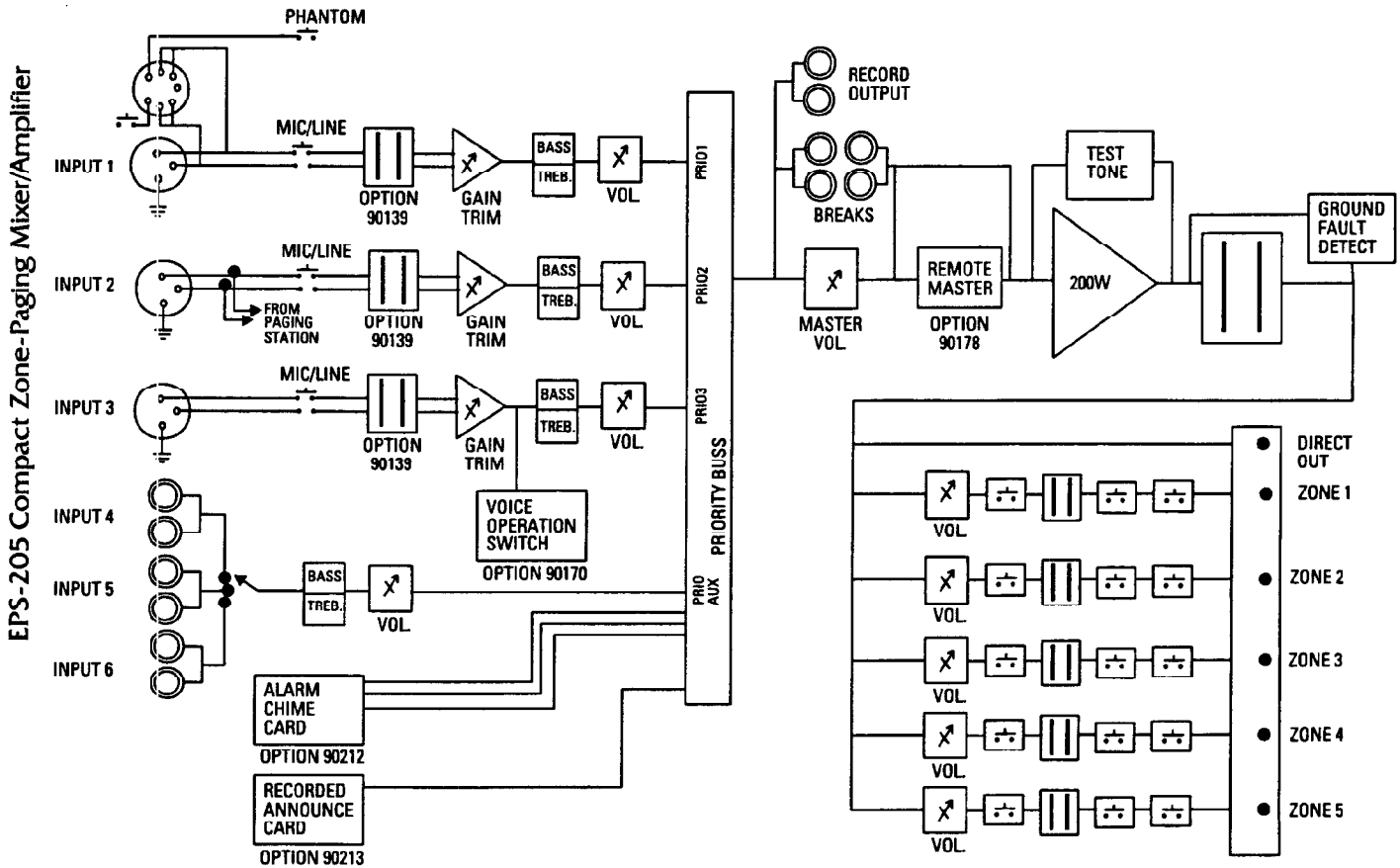


Figure 8—ANRS-90212 Jumper Settings

Jumper	Description
J901	Alarm – DIN Alert (1,200...500 Hz) – standard setting
J902	Alarm – slow whoop alert (500...1,200 Hz)
J903	Alarm – jump tone (impulse 925/1,075 Hz)
J904	Chime – dual tone
J905	Chime – triple tone – standard setting
J906	Chime – quadruple tone
J907	Pre-Chime – dual tone – standard setting
J908	Pre-Chime – single tone

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Figure 9—Schematic System Diagram



Specifications

Nominal Output Power:
200 W

Nominal Output Voltage:
70 V

Nominal Output Impedance:
25 ohms/440 nF

Input Sensitivity (mic/line):
0.6 mV/12 mV

Maximum Input Voltage (mic/line)
470 mV/6.5 V

Input Sensitivity (unbalanced line):
155 mV

Distortion:
<1%

Signal-to-Noise Ratio:
>60 dB

Monitor Output:
8 dBu/600 ohms

Bass/Treble Controls:
100 Hz: ±12 dB
1,000 Hz: ±12 dB

Record Output (unbalanced):
775 mV/47 kilohms

Operational Voltage:
115/230 V ac, 50-60 Hz,
24 V dc

Environmental Temperature:
5-40 °C (40-104 °F)

Dimensions (approximate):
135 mm (5.3 in.) high
440 mm (17.3 in.) wide
260 mm (10.2 in.) deep

Weight:
11 kg (24 lb)



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