

DIMENSION® PBX
AUTOMATIC WAKEUP SERVICE
AUDICHRON CROSS CONNECTION
AND RECORDING INSTRUCTIONS

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1. GENERAL

- 1.1 Parts 3 and 4 of this section cover the presently used digital AUDICHRON recorder/announcer. Parts 5 and 6 deal with the motor-driven (band record) AUDICHRON which is no longer shipped with Dimension PBX systems.
- 1.2 The digital recorder/announcer provides a 14 second variable message which can be recorded at the recorder/announcer location (auxiliary cabinet) or remotely (up to 350 feet away) via a remote record telephone. An optional 10 sec time and temperature message which is provided by another AUDICHRON machine can be locally engineered into the wakeup message. When provided with battery pack backup, the digital recorder/announcer is capable of providing the wakeup message during brief power failures. If power is lost for an extended period of time, the recorded message will be lost and will require re-recording.
- 1.3 See Section 9110 of this handbook for testing and troubleshooting the AUDICHRON wakeup message.

2. DOCUMENTATION

- 2.1 The Customer Order Document (COD) is required.
- 2.2 AUDICHRON Circuit Description and Equipment Specification document is supplied with the HQD 614 unit.
- 2.3 The Peripheral Equipment Maintenance Manual (ADD #500-997) can be used for reference.

PRIVATE

THE INFORMATION CONTAINED HEREIN SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED BELL SYSTEM EMPLOYEES.

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3. HQD 614 (DIGITAL) AUDICHRON CONNECTION

3.1 Mount the Audichron Recorder/Announcer unit (Fig. 1) in the auxiliary cabinet using the hardware provided.

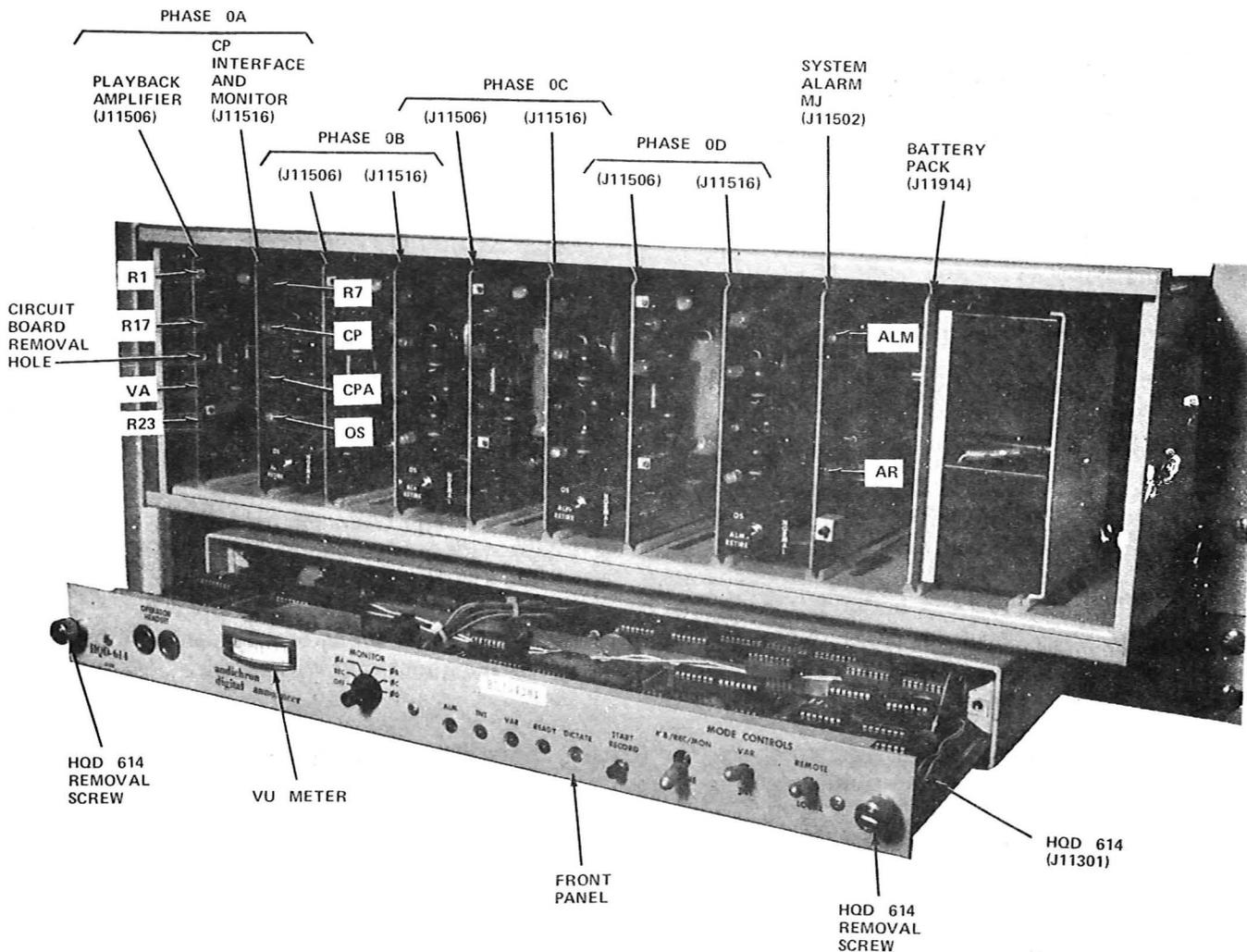


Fig. 1 - HQD 614 (front covers removed)

3. HQD 614 (DIGITAL) AUDICHRON CONNECTION (Cont'd)

3.2 Make ground and -48V connections (20 AWG) as shown in Fig. 2. Make ground connections first as polarity is critical.

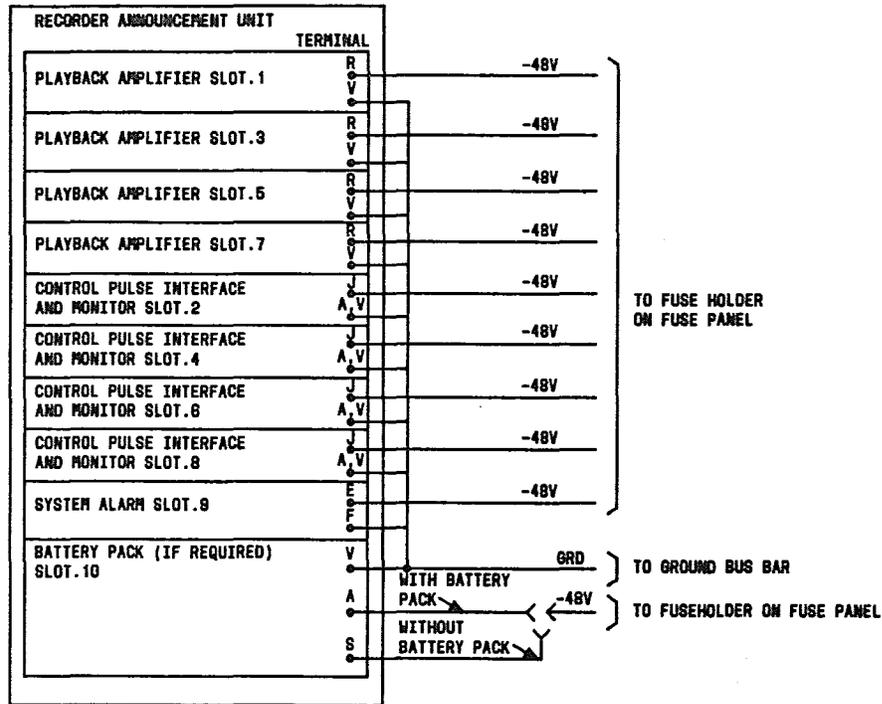


Fig. 2 - HQD 614 Fuse Panel Connections

3.3 Use the Trunk Carrier X-Conn section of the Customer Order Document to locate the conn blk in x-conn field used for the Audichron interface (Audichron uses trunk type 49). Make the cross-connects shown in Fig. 3. Refer to cross-connect tables for the Trunk Port carrier and Module Control and Trunk Port carrier in section 250.23 of this handbook for LC13B connections.

3.4 Verify that the DIP switches on the two Dimension LC13B ckt packs used for the Audichron interface are set for Automatic Wakeup Service (see Handbook 281, Section 10T for ckt pack option settings).

3. HQD 614 (DIGITAL) AUDICHRON CONNECTION (Cont'd)

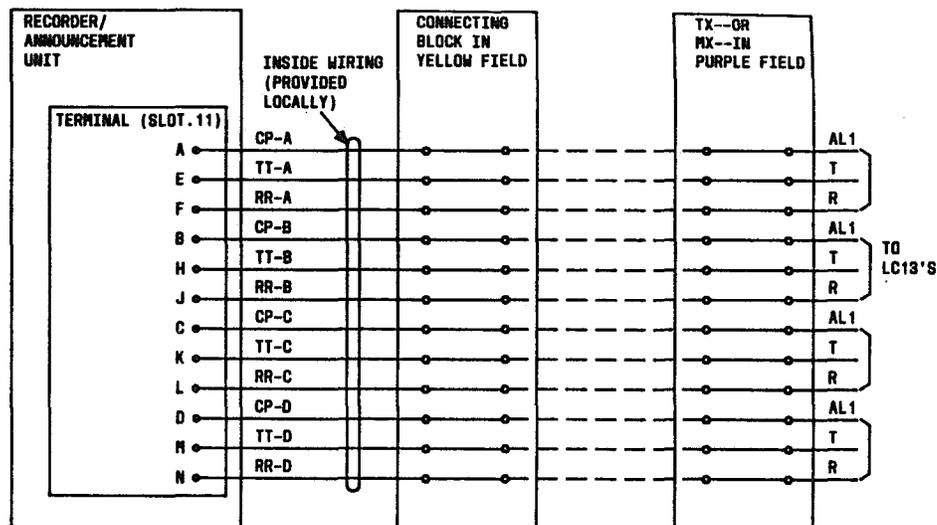


Fig. 3 - HQD 614 Cross Connections

3.5 If the remote control unit has been provided, do the following:

- 1) Fabricate a cable using a minimum of 12 pair, 24 AWG, maximum length of 350 feet wire (provided by WECO) and the 50-pin in-line male and female connectors (provided by AUDICHRON). A pre-assembled cable equipped with amphenol 50-pin in-line connectors or equivalent may be used instead of assembling the above cable on site, if desired.
- 2) Use the cable to connect the Recorder/Announcer to the remote record telephone (See Fig. 4 on Page 5).

3.6 Insert ckt packs as shown in Fig. 1. Battery pack (J11914) is optional.

3.7 Install 10 fuses in fuse panel for the leads connected in step 3.2. A fuse associated with a particular ckt should always be removed before installing or removing the ckt.

3.8 Attach the plexiglass covers to the Recorder/Announcer.



Fig. 4 - Remote Record Unit

4. HQD 614 (DIGITAL) AUDICHRON RECORDING

4.1 To record a 14 sec variable message at the Audichron location:

4.1.1 Insert the headset into the OPERATOR HEADSET jack on the front panel.

4.1.2 Check that the REMOTE-LOCAL mode control switch is in the LOCAL position and that the VAR-TNT mode control switch is in the VAR position (the VAR-TNT switch is connected only if Time and Temperature is provided).

4. HQD 614 (DIGITAL) AUDICHRON RECORDING (Cont'd)

- 4.1.3 Operate the MONITOR switch to the REC position.
- 4.1.4 Operate the MB/REC/MON-ON-LINE mode control switch to the MB/REC/MON position.
- 4.1.5 Momentarily depress the START-RECORD button. The READY lamp will light, indicating record is requested. When the DICTATE lamp lights, and the READY lamp goes off, recording has begun.
- 4.1.6 Speak into the headset transmitter and check that the speech levels peak at "0" VU on the VU meter.

Note: A pre-recorded cassette message can be used for message input using an Audichron provided cassette adapter cable to connect the recorder to the Audichron recorder/announcer.

- 4.1.7 When the DICTATE lamp goes off, monitor the playback on Phase A by operating the MONITOR switch to the ϕA position and listening on the headset receiver. Monitor the playback on ϕB , ϕC , ϕD in a similar manner.
- 4.1.8 If the monitored message is not acceptable, repeat steps 4.1.5 thru 4.1.7.
- 4.1.9 Place the newly recorded message in service by operating the MB/REC/MON-ON-LINE mode control switch to the ON-LINE position.
- 4.2 To activate a 10 sec local time and temperature message at the Audichron location:
 - 4.2.1 Check that the MB/REC/MON-ON-LINE mode control switch is in the MB/REC/MON position and the REMOTE-LOCAL switch is in the LOCAL position.
 - 4.2.2 Operate the VAR-TNT mode control switch to the TNT position.
 - 4.2.3 Momentarily depress the START-RECORD button. The READY lamp will light, indicating record has been requested, when the READY lamp goes off, continuous recording has begun.
 - 4.2.4 Monitor the playback on Phase A by inserting a headset into the OPERATOR HEADSET jack and operating the MONITOR switch to ϕA and listening on the headset receiver. Monitor the playback on ϕB , ϕC , and ϕD in a similar manner.
 - 4.2.5 Place the automatically continuously updated TNT message into service by operating the MB/REC/MON-ON-LINE mode control switch to the ON-LINE position.

Note: When the hotel is using a variable wakeup message and a TNT message, the VAR-TNT switch on the Recorder/Announcer must be set to the TNT position at all times except when recording a new variable message. In this case, after recording the new variable message, the TNT message must be reactivated by executing steps 4.2.1 thru 4.2.5 above.

4. HQD 614 (DIGITAL) AUDICHRON RECORDING (Cont'd)

- 4.3 To record a variable message via the remote control unit (Fig. 4):
- 4.3.1 Whenever the remote control unit is used, the REMOTE-LOCAL switch on the Audichron Recorder/Announcer unit must be in the REMOTE position.
 - 4.3.2 At the remote control unit, insert the telephone handset into the dual jack on the side of the unit.
 - 4.3.3 Check that the VAR-TNT switch is in the VAR position (this switch is connected only if TNT is provided).
 - 4.3.4 Operate the MONITOR switch to the REC position.
 - 4.3.5 Operate the MB/REC/MON-ON-LINE switch to the MB/REC/MON position.
 - 4.3.6 Momentarily depress the spring-loaded REC switch. The RDY lamp will light, indicating record has been requested. When the DICT lamp lights, and the RDY lamp goes off, recording has begun.
 - 4.3.7 Speak into the handset transmitter and check that the speech levels peak at "0" VU on the LEVEL meter.

Note: A pre-recorded cassette message can be used for message input by using an Audichron-provided cassette adapter cable. This cable can be plugged into the dual jack on the side of the remote control unit and connects the recorder to the remote control unit.

- 4.3.8 When the DICT lamp goes off, monitor the playback on Phase A by operating the MONITOR switch to the ϕ A position and listening on the handset receiver. Monitor ϕ B, ϕ C, and ϕ D in a similar fashion. If the monitored message is not acceptable, repeat steps 4.3.6 thru 4.3.8.
 - 4.3.9 Place the newly recorded message into service by operating the MB/REC/MON-ON-LINE mode control switch to the ON-LINE position.
- 4.4 To activate a time and temperature message from the remote control unit:
- 4.4.1 Whenever the remote control unit is used, the REMOTE-LOCAL switch on the Audichron Recorder/Announcer unit must be in the REMOTE position.
 - 4.4.2 At the remote control unit operate the MB/REC/MON-ON-LINE switch to the MB/REC/MON position.

4. HQD 614 (DIGITAL) AUDICHRON RECORDING (Cont'd)

- 4.4.3 Operate the VAR-TNT switch to the TNT position. When time and temperature is provided, always leave this switch in the TNT position except when recording a new variable message.
- 4.4.4 Momentarily depress the spring-loaded REC switch. The RDY lamp will light, indicating record has been requested. When the RDY lamp goes dark, continuous recording has begun.
- 4.4.5 Place the continuously updated time and temperature message into service by operating the MB/REC/MON-ON-LINE mode control switch to the ON-LINE position.

5. HQI-112 (BAND) AUDICHRON CONNECTION

- 5.1 Using the hardware provided with the unit, mount the recorder/announcer in the area designated (usually the auxiliary cabinet).
- 5.2 Install flywheel (shipped loose):
- 5.2.1 Remove the plexiglass front cover of Audichron unit.
- 5.2.2 Remove the record head protection pin and styrofoam packing material.
- 5.2.3 Disengage record heads from contact with record band by pulling outward on head mounting bars (See Fig. 5) and rotating bar clockwise.

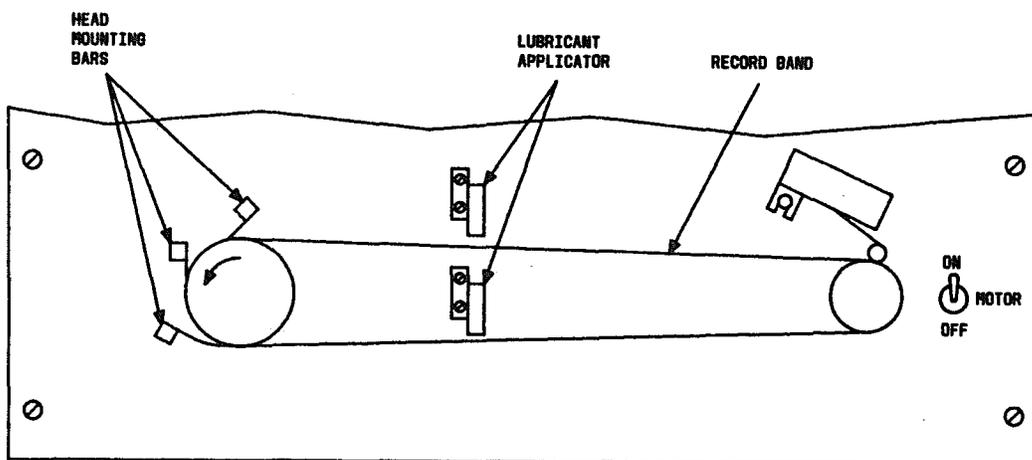


Fig. 5 - HQI-112 Record Band

5. HQI-112 (BAND) AUDICHRON CONNECTION (Cont'd)

- 5.2.4 At the rear of unit to the right of the motor is the flywheel shaft. Remove the retainer sleeve.
- 5.2.5 Install and secure the flywheel on shaft.
- 5.2.6 Rotate the head mounting bars counterclockwise and push into place.
- 5.3 Insert ckt packs as shown in Fig. 6. Up to twelve channels can be utilized, however, four channels (shown) is the norm.

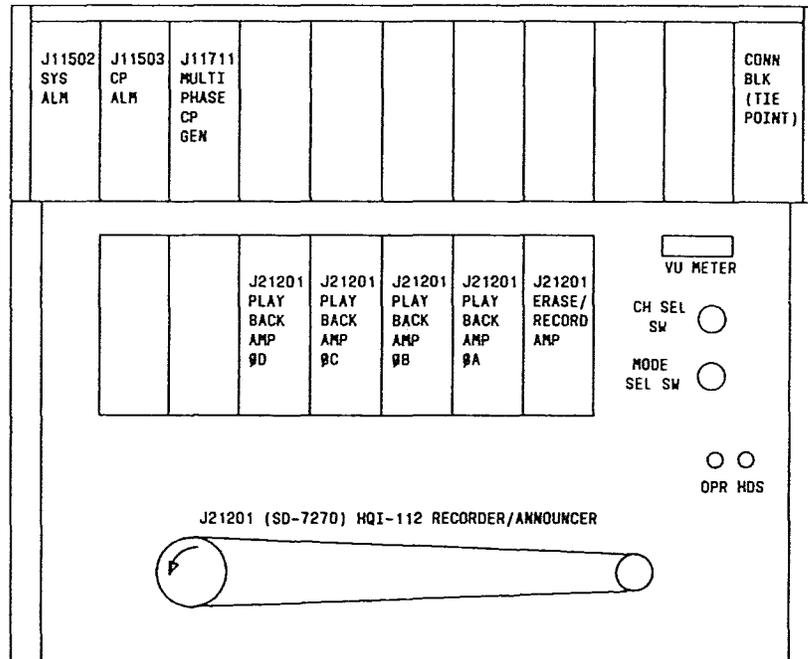


Fig. 6 - HQI-112 Ckt Pack Locations

- 5.4 Connect ground and -48VDC between ckt packs and fuse panel (See Table A):

CAUTION: Polarity is critical. Connect the ground leads first.

5. HQI-112 (BAND) AUDICHRON CONNECTION (Cont'd)

5.4.1 Strap terminal V of ERASE/RECORD ckt pack to ground bus bar on back side of fuse panel .

5.4.2 Strap terminal F of SYSTEM ALARM ckt pack to ground bus bar.

5.4.3 Strap each of the E terminals of the SYSTEM ALARM, CP ALARM, and MULTI PHASE CP GEN ckt packs to 3 different and presently empty fuseholders on the fuse panel. Strap the R terminals of each PLAYBACK AMP ckt pack to presently empty fuseholders on the fuse panel. Strap the J terminal of the ERASE/RECORD ckt pack to a presently empty fuseholder. See Table B.

TABLE A
Ckt Pack to Fuse Panel Connections

PLACE STRAPS FROM			TO	
CIRCUIT PACK	TERMINAL	STRAP DESIG		
ERASE/RECORD AMP	V	GRD	GRD BUS BAR on cabinet fuse panel	
SYS ALM	F			
	E	-48V	Fuseholders on cabinet fuse panel	
CP ALM	E			
MULTI PHASE CP GEN	E			
PLAYBACK AMP	ØA			R
	ØB			
	ØC			
	ØD			
ERASE/RECORD AMP	J			

TABLE B
Ckt Pack to Tie Point Connections

CONNECT CABLE FROM *				TO CONN BLK/TIE POINT	
CIRCUIT PACK	TERMINAL	LEAD			
		COLOR	DESIG	TERMINAL	
MULTI PHASE CP GEN	R	W-BL	CPØA	A	
	J	BL-W	CPØB	B	
	7	W-O	CPØC	C	
	13	O-W	CPØD	D	
SYS ALM	U	R-O	A	P	
	S	O-R	B	R	
PLAYBACK AMP	ØA	N	W-G	TT	E
		P	G-W	RR	F
	ØB	N	W-BR	TT	H
		P	BR-W	RR	J
ØC	N	W-S	TT	K	
	P	S-W	RR	L	
ØD	N	R-BL	TT	M	
	P	BL-R	RR	N	

* Insulate and store spare leads

5.5 Make ckt pack to tie point connections:

5.5.1 Using the 12-pair cable provided, make the connections shown in Table C. Insulate and store the unused leads.

5.6 Alarm connection:

5.6.1 Terminals P and R of tie point provide a dry contact closure alarm circuit. Connect these two terminals to an alarm system per local requirements.

5.7 Cross-connect Audichron to PBX:

5.7.1 Use the Trunk Carrier X-Conn section of COD to locate the conn blk in x-conn field used for the Audichron interface (Audichron uses trunk type 49).

5. HQI-112 (BAND) AUDICHRON CONNECTION (Cont'd)

5.7.2 Make the cross-connection of the 12 leads shown in Table C.

TABLE C
HQI - 112 Cross Connections

CONNECT IN CABLE FROM RECORDER/ANNOUNCEMENT UNIT CONN BLK/TIE POINT			TO CONN BLOCK RX- OR TX- IN YELLOW FIELD
CHANNEL	DESIG	TERMINAL	TERMINAL
1	CPØA	A	AL1
2	CPØB	B	AL1
3	CPØC	C	AL1
4	CPØD	D	AL1
1	TT	E	T
	RR	F	R
2	TT	H	T
	RR	J	R
3	TT	K	T
	RR	L	R
4	TT	M	T
	RR	N	R

5.8 Power up:

5.8.1 With A.C. power still not connected, place 1-1/3 amp fuses (provided locally) in fuseholders used in step 5.4.

5.8.2 Plug unit line cord into AC receptacle on cabinet distribution panel.

5.8.3 At front of Audichron unit, set the ON/OFF switch to ON.

5.8.4 Replace all covers on front and rear of unit.

6. HQI-112 (BAND) AUDICHRON RECORDING

6.1 Remove the plexiglass front cover. Insert the headset into the OPERATOR HEADSET jack on the front panel.

6.2 Operate the Channel Selector Switch to the desired channel. With a 4-phase system, this would be either Channel 1, 2, 3, or 4.

Note: On the CP GENERATOR ckt pack located in the upper left of unit, there are 4 vertically arranged red lamps. The top lamp is for Channel 1, the second lamp is for Channel 2, the third lamp is for Channel 3, and the bottom lamp is for Channel 4. These lamps light one at a time in a continuous cycle.

6. HQI - 112 (BAND) AUDICHRON RECORDING (Cont'd)

- 6.3 Operate the Mode Switch to ERASE. Observe the lamp for your channel and wait until this lamp flashes at least twice (two ERASE operations). Note that to change the Mode Selector switch from PLAYBACK to RECORD and vice versa, the metal tab to the left of the switch must be held in.
- 6.4 When ready to record, operate the Mode Switch to RECORD. Begin speaking into the headset immediately following the flash of the lamp for your channel. Dictation must end prior to the next flash of the lamp for this channel. That is, you must move the Mode Selector switch from RECORD to PLAYBACK before the lamp lights again.
- 6.5 With the Mode Selector switch on PLAYBACK, listen to the just recorded message on the headset. Watch the VU METER and verify that the speech level peaks at "0" VU.
- 6.6 Repeat steps 6.2 thru 6.5 for the other channels.
- 6.7 Place the newly recorded channels into service by operating the Mode Selector switch to either the MONITOR or METER OFF position. Leave it at this "on line" position for normal automatic wakeup service.
- 6.8 A wakeup announcement on a cassette recorder can be transferred into the Audichron by connecting a patch cord between the cassette recorder and the OPERATOR HEADSET jack on the front of the Audichron. When the cassette recorder is turned on the message will be recorded by the Audichron.

Reason for issue:
New Section

Manager, Denver PBX PECC