

## SECTION III OPERATION

### 3.1 CONTROL FUNCTIONS.

#### 3.1.1 MIXER.

Refer to figure 3-1. The nine mixer controls are located near the lower edge of the front panel of Broadcast Console 212G-1. They are identified by silk-screening as MIXER 1 through MIXER 9. Above each mixer control knob is located an audition/program (A/P) switch. The mixer controls adjust the signal levels fed to the program or audition circuits. MIXERS AT4 through AT9 are provided with CUE positions.

#### NOTE

Mixers should not be set in CUE position (extreme counterclockwise), except when this function is in use.

#### 3.1.2 MIXER SELECTOR SWITCHES.

Two mixer selector switches, S11 and S12, are located on the left-hand side near the top of the panel; they are identified as MIXER 1 and MIXER 2. MIXER 1 and MIXER 2 switches each select one of two low-level input lines to be fed to the preamplifiers. The panel designations for these switches are silk-screened on the front panel.

#### 3.1.3 PROGRAM/AUDITION SELECTOR SWITCHES.

Above each mixer control is located a program/audition selector switch. They are identified on the

panel by a silk-screened "A" to the left of the switch and a "P" to the right. These silk-screened letters indicate whether the input is being switched to program (P) or audition (A). The center position is "off."

#### 3.1.4 GAIN CONTROLS.

The MONITOR gain control, AT11, is located near the top, in the center of the left-hand portion of the front panel. The MASTER gain control, AT10, is located in the lower right-hand corner of the front panel. MONITOR gain control AT11 adjusts the input level to the monitor amplifier and MASTER gain control AT10 adjusts the input level to the program amplifier. CUE gain control R58 is located to the left of the meter. This control adjusts the input level to Cue Amplifier 356Q-1. The panel designations for these controls are silk screened on the front panel.

#### 3.1.5 MIXER 9 NET/REMOTE SWITCH.

MIXER 9 NET/REMOTE switch S14 is located in the upper right corner of the front panel. In the NET position, the network line is tied into the mixer 9 input circuit where the network line may be switched to program or audition. In the REMOTE position, mixer 9 is connected to remote function selector switches REMOTE 1 and REMOTE 2, S15 and S16.

#### 3.1.6 REMOTE FUNCTION SELECTOR SWITCHES.

The remote function selector switches, S15 and S16, are identified as REMOTE 1 and REMOTE 2, and are

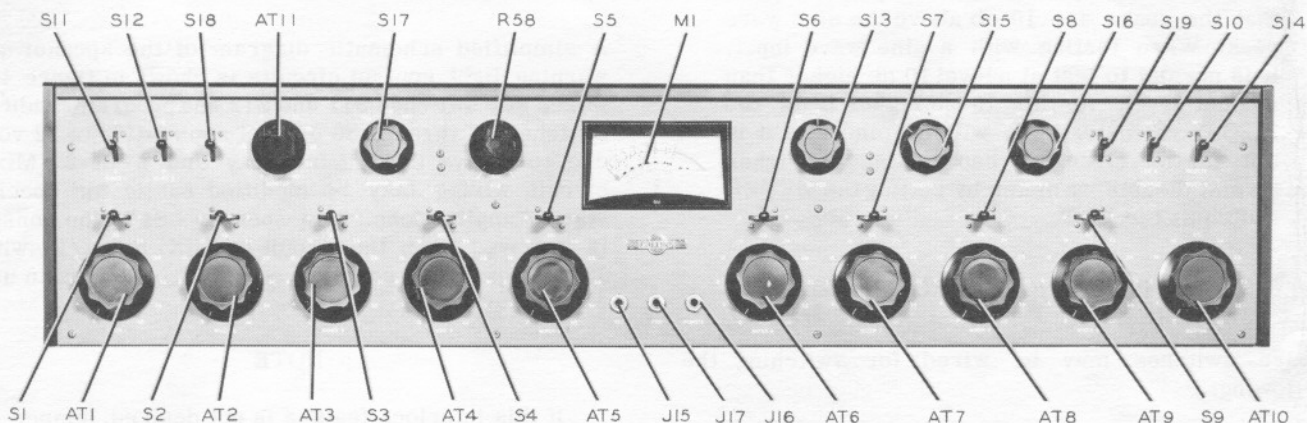


Figure 3-1. Broadcast Console 212G-1, Control Locations

located near the top, in the center of the right-hand portion of the front panel. Each has OFF, MON, CUE, and MIX positions. When both the audition/program switch and a REMOTE switch are set at OFF, the remote line is terminated in a resistive load. When a REMOTE switch is in the MON position, its remote line may be monitored by phones connected at the REMOTE monitor jack, J16. When one of the switches is in the CUE position, the cueing signal from the monitor amplifier may be fed back into the remote line for remote cue. In the MIX position, the signal from the associated remote line is sent to mixer 9 input when S14 is in the REMOTE position.

### 3.1.7 MONITOR INPUT SWITCH.

MONITOR INPUT switch S17 is located near the top and center of the left-hand portion of the front panel. It has AUD, PGM, and EXT positions. The AUD position permits the MONITOR level control and monitor amplifier to be connected to the monitor booster amplifier. When the MONITOR INPUT switch is in the PGM position, the program line is connected through a bridging pad to the MONITOR level control and monitor amplifier input. The EXT position permits a signal connected at terminals 37 and 38 of TB1 to be monitored through the MONITOR level control and monitor amplifier.

### 3.1.8 METER INPUT SWITCH.

The METER switch, S13, is located to the right of the meter near the top of the front panel. It has GR, VU, and EXT positions. If Limiter Amplifier 356E-1 is used, the GR position provides indication of the gain reduction in decibels above threshold. In the VU position, the vu meter is connected to the output of the Program/Monitor Amplifier 356B-1. In the EXT position, the vu meter is connected to terminals 39 and 40 of TB1.

### 3.1.9 PROGRAM SWITCH.

The PROGRAM switch, S10, permits switching either LINE 1 or LINE 2 to the program channel. In the middle position, the program channel is terminated in a resistive load.

### 3.1.10 SPARE SWITCHES.

Two spare level switches, S18 and S19, are provided to be used as desired in any custom wiring. One is located to the left of the PROGRAM switch in the upper right portion of the front panel. The other is located to the right of the MIXER 2 switch. Refer to paragraph 2.3.8 for suggested functions for these switches.

## 3.2 OPERATING PROCEDURES.

### 3.2.1 ROUTINE OPERATION.

3.2.1.1 LOCAL PROGRAM ON THE AIR. The procedure to put a local program on the air is as follows:

- a. Select desired microphone inputs with the mixer selector switches, if applicable.

- b. Move the PROGRAM switch, S10, to LINE 1 or LINE 2 as desired.
- c. Set MASTER control, AT10, to 24.
- d. Rotate MONITOR INPUT switch, S17, to the PGM position.
- e. Move mixer key switches as required to the P position.
- f. Turn up applicable MIXER as required to desired level as indicated on VU meter.
- g. Adjust the level of monitor speakers as desired by use of MONITOR gain control, AT11.

3.2.1.2 AUDITION PROGRAM. The procedure to audition program is as follows:

- a. Select desired microphone inputs with the mixer selector switches if applicable.
- b. Move mixer key switches to the A position.
- c. Turn up the corresponding mixer controls.
- d. Set the MONITOR INPUT Switch, S17, to AUD.
- e. The audition may be heard over the monitor speakers. The level may be adjusted by means of the MONITOR GAIN control, AT11.

### 3.2.2 REMOTE LINE OPERATION.

3.2.2.1 REMOTE PROGRAM ON THE AIR. The following procedures are necessary to put a remote line on the air:

- a. Move MIXER 9 NET/REMOTE switch, S14, to REMOTE.
- b. Set associated REMOTE switch, S15 or S16, to MIX.
- c. Set MIXER 9 program/audition switch, S9, to P.
- d. Move PROGRAM switch, S10, to place program on desired line.
- e. Adjust MIXER 9, AT9, for proper level.

3.2.2.2 FEED CUE SIGNAL AND SWITCH REMOTE LINE TO ON THE AIR. To feed cue signal and switch remote line to on the air, set up as previously described for putting remote line on air, except set REMOTE function switch S15 or S16 to CUE. The cue signal is then fed from the monitor amplifier through the function switch to the remote line. When the cue is sent, the control room operator switches the REMOTE function switch S15 or S16 from CUE to MIX, and the remote line is on the air.

3.2.2.3 RECORD OPERATION. For normal record operation, an external recorder is connected to TB1, connectors 35 and 36. The record output is taken from the audition booster amplifier connected to J10 when MONITOR INPUT switch, S17, is in the AUD position.

### NOTE

Disconnect recorder from terminals 35 and 36 of TB1 when not in use.

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For recording network program while a local program is on the air, the following operating procedures may be used.

- a. Move MIXER 9 A/P switch, S9, to A.
- b. Move MIXER 9 NET/REMOTE switch, S14, to NET.
- c. Adjust MIXER 9 for desired level at terminals 35 and 36 TB1.

**3.2.2.4 TALK-BACK OPERATION USING SPEAKERS.**  
The following operating procedures are necessary for the control room operator to listen to a remote line when a speaker is used.

- a. Move MIXER 9 A/P switch, S9, to A.
- b. Set MONITOR INPUT switch, S17, to AUD.
- c. Move MIXER 9 NET/REMOTE switch, S14, to REMOTE.
- d. Set applicable REMOTE line switch, S15 or S16, to MIX.
- e. Adjust MONITOR gain control, AT11, and MIXER 9, AT9, for desired listening level.

f. The following operating procedures are necessary for the control room operator to talk to the remote operator: Set MONITOR INPUT switch, S17, to AUD. Move MIXER 3 A/P switch, S3, to A. Set Applicable REMOTE line switch, S15 or S16 at CUE. Adjust MONITOR gain control, AT11, for suitable remote listening level.

**3.2.2.5 TALK-BACK OPERATION USING HEAD-  
PHONES.** The following operating procedures are necessary for the control room operator to communicate with a remote line operator when headphones are used.

- a. Plug headphones into REMOTE jack, J16.
- b. Set MIXER 3 A/P switch, S4, to A.
- c. Move MONITOR INPUT switch, S17, to AUD.
- d. Adjust MONITOR gain control, AT11, for desired listening level.
- e. For the control room operator to talk to the remote operator, move the applicable REMOTE line switch, S15 or S16, to CUE. For the control room operator to listen to the remote operator, move the applicable REMOTE line switch, S15 or S16, to MON.