

SOUND SYSTEM INSTRUCTIONS

For Sound System Operator

For Memorial UMC

Wednesday, December 07, 2005

Memorial needs two sound operators for the 10 am service for pre service setup and assist each other during operation.

These are default settings. See additional pages for special setup instructions. Instructions are for use of main mixer only.

CHECK LIST FOR SETUP BEFORE SERVICE:

The sound operator(s) should arrive 45 minutes before 10 am to set up equipment.

1. DETERMINE MICROPHONE NEEDS

Check with Pastor and Music director every Sunday for exact microphone settings. Ask if there are guest speakers or special music.

2. STAND MIKES: (Placement) (Mikes on stands)

Usually there are two mikes left out on stands.

2.1. Place the stand with the guitar mike mount near the piano. This stand will have two mikes on it, one for guitar and one for speaking or singing. Remove the other mike and place it on the guitar pickup mount.

2.2. The top mike should plug into #5 and the guitar mike should plug into #6

3. CHOIR MIKES: (Adjustment)

3.1. Check the position of the choir mikes. Correct positions if necessary. White marks on the boom pivot should line up. Markers on the floor mark the positions of the stands. The mikes should point to the middle of the choir pews. These positions have been established for an even pickup of the Choir.

4. CHECK WITH CHOIR for any special sound system needs every Sunday. Solo's or small groups need may need a different setup. See additional pages for needs for more than two mikes on stands. The "Young Adults in Christ" band often plays at 9:45 and need extensive sound setup.

5. WIRELESS MIKE 1: (Batteries, Turn On)

5.1. Replace battery in wireless mike #1 body pack with freshly recharged batteries. Batteries are in the copy room beside the microwave. Place used batteries back in the charger.

5.2. Make this body pack available to the pastor.

5.2.1. Pastor Denice will have the microphone to plug in.

5.2.2. If a different pastor, there is a lapel mike available to plug in to it or use Wireless #2.

5.3. Operation the body pack

5.3.1. The mike is turned on (and off) by holding the top button. Denice is aware if this.

5.3.2. The light should be green.

5.3.2.1. A quick press of the top button will mute and un-mute the mike. The light is yellow when muted. Leave un-muted (green).

5.3.3. Do not press the button on the front.

6. WIRELESS MIKE 2: (Batteries, Turn On)

6.1. Use this mike if there is a guest speaker or another person who is to be a major speaker.

6.2. Place the lapel microphone about 5 inches below the chin.

6.3. Replace batteries with a freshly charged set.

6.4. Turn this mike on for the person and leave it on.

6.5. The light should be green.

6.5.1. A quick press of the top button will mute and un-mute the mike. The light is yellow when muted. Leave un-muted (green).

6.6. Do not press the button on the front. This can change the frequency.

7. WIRELESS MIKE 3: (Batteries, Turn On)

7.1. Put fresh rechargeable batteries in the mike from the recharger by the microwave.

7.2. Turn on the mike before the service and mute it.

7.2.1. To turn on PRESS and HOLD the mute button.

7.2.2. To mute, press the mute button quickly. The green light will turn yellow on mute.

7.3. Make this mike available to the Choir Director since she will be the first user of it. Before the service, place it on the little after-service communion table for her.

7.4. The Choir Director should lay the mike down in a location that can easily be retrieved. Or the sound operator can retrieve it from her when she is done.

8. PULPIT MIKE: (Adjust) (Plugged into the floor.)

Position so it is at about the correct height.

9. TURN ON SYSTEM (Switch located on the wall)

9.1. Turn on any equipment that may have been turned off

10. PLACE A BLANK CD IN THE CD RECORDER.

See attached CD instructions for CD recorder setup.

11. SET ALL AMPLIFIER KNOBS TO DEFAULT SETTINGS:

11.1. See attached chart for the default knob settings. The last person who used the sound system probably changed the settings and left them changed.

11.2. Pay attention to the Monitor 2 Level. If the system is operating before or after the service, keep this level down or muted in case there is somebody in the Library. Un-mute and turn up when service starts.

11.3. Set the Choir speaker, monitor 1, level so it is slightly higher than the main level controls.

11.4. Un-mute the mike inputs that will be used. Mute others.

These settings will change over time. The settings described below are what is in use at the time of printing of this document. Watch for updates of these instructions.

DURING SERVICE:

Note: The sound operator must already be familiar with the mixer. Detailed instructions for the mixer are attached.

1. **START CD RECORDER AT THE START OF SERVICE:** (if recording service)
Press the RECORD button. (After the recorder was set up before the service.)
2. **LEVEL ADJUSTMENT:** Different people require different adjustments. You need to be alert and follow the service. Turn down mikes not being used. Turn up mikes just before they are to be used. Level settings will depend upon the location of the mikes, the loudness of the speaker's voice, and how close the speaker is to the mike.
3. **HAND HELD WIRELESS MIKE, INPUT #3:**
Leave this mike un-muted and the level up before the service begins. The Choir Director will use this mike first.
4. **PASTOR'S MIKE, INPUT #1**
 - 4.1. Keep this mike level down until the pastor is ready to speak. Pay careful attention to determine when the pastor is to begin speaking before she speaks. (This actually applies to all mikes.)
 - 4.2. Adjust compression knob to about the 9 pm position.
 - 4.3. Reduce level of this mike when the pastor sings or is not speaking.
5. **STAND MIKES INPUTS #5 #6:**
 - 5.1. Notice if there is a guitarist. If so, turn up the guitar mike on input #6. (watch the signal level light. It should flash brightest on the input of the guitar mike when the guitar is strummed)
 - 5.2. Be ready to turn up the stand mike if some body from the choir area wants to use it.
6. **CHOIR MIKES, INPUTS # 7, #8**
Keep these mike levels down when choir is not singing. Un-Mute when choir sings. You probably will not notice if they are helping, but tests show that they do help.
7. **CONGREGATIONAL MIKE #10**
This mike is for recording and hearing assist systems.
 - 7.1.1. Normal position is about mid range.
 - 7.1.2. If all other mike levels are reduced, increase this input.
 - 7.1.3. If any other mike is in use, reduce this input level.
8. **LINE LEVEL ADJUSTMENTS:** (seldom adjusted)
 - 8.1. Move the **Center** and **Side** controls together.
 - 8.2. Keep the choir speaker slightly higher than the Center and Side sliders.
 - 8.3. Control the volume with the individual input sliders, not the Line Level sliders.
9. **MUDDLED SOUND**
 - 9.1. Turn the "highs" knob of the input in use to a higher setting.
 - 9.2. Reduce the "lows" knob slightly for the input in use.
 - 9.3. Reducing or increasing the "mid-morph" knob may also help.
 - 9.4. Push the "speech clarifier" button. Turn off for music.
10. **STOP CD RECORDING**
 - 10.1. Press the stop button.
 - 10.2. Press the "Final" button.
 - 10.3. Press the "Record button"
 - 10.4. Remove CD when done.
11. **SHUTDOWN:**
 - 11.1. Do not turn off any equipment.
 - 11.2. Turn down all mikes except #9
 - 11.3. Restore any knob positions back to default.
 - 11.4. Turn off at the main switch on the wall.

BASIC SOUND SYSTEM PRINCIPLES

1. Microphones do not “reach out” and get the sound. They work best when spoken into from 3 to 5 inches.
2. When microphones are turned up a little too high “ringing” or echoing occurs. This reduces intelligibility. (If the mike is close to the person’s mouth, it does not have to be turned up as much.)
3. When microphones are turned up higher than above, feedback (squealing) will start.
4. The maximum possible volume setting is just before ringing occurs.
5. The more microphones that are turned on, the less sensitive each one is. Turn down any mike that is not being used. (Note: If all mikes are spoken directly into, this sensitivity rule does not matter much.)
6. Two mikes picking up the same person will not be any louder. In fact phase distortion may occur which reduces intelligibility.
7. Wireless microphone receivers may pick up static when the microphone transmitter is turned off. Leaving the microphone on will block the static.
8. Wireless microphone batteries can go dead. Batteries need replaced every Sunday.

HEARING ASSIST SYSTEM

The audio from the PA is sent to receivers worn by people. It is very important that you keep a microphone open at all times. Mike 10 is for this purpose. Leave mike 10 un-muted.

INVENTORY OF MOVEABLE EQUIPMENT

- Two wireless body packs
- One Countryman head worn mike for wireless body pack (Kept in Denice’s office for Denice only)
- Two clip on lapel mikes for wireless body packs
- One hand held wireless mike
- Five wired microphones (3 stored in north organ chamber)
- Five microphone stands (two with guitar mike mounts) (3 stored in north organ chamber.)
- Five microphone cables.
- Five goose neck mounts for guitar mikes.
- One coupler for matching mike inputs to other equipment
- One Peavy submixer. Stored in north organ chamber.