Church Sound & Projection Desk – Setup & Sound Control

The following notes were presented by Richard Frost as part of a training course in the autumn of 2015 for aspiring audio visual technicians in Thatcham Methodist Church...

Arrival / Opening Up:

Can take some time, plan to arrive at least 30mins before the service. Don't forget: church keys & memory stick with presentation material (if needed). A printed Order of Service is also very useful. Desk Key with black plastic top lives in a plastic tub on the vestry windowsill. Vestry key is marked "2" (keys on hook inside 1st cupboard on LHS of door in back kitchen). Desk key is together with organ key, so coordinate with organist. Unlock & carefully slide the roll top desk cover open.

Blinds:

Lower blinds as required to see the screen, depending on how bright the sun is. Pull the cords carefully, the blinds are heavy, especially when fully down.

Power-up:

Switch-on the single AC mains socket on the wall to the left of the desk. This applies power to the AC mains sockets inside the desk. All related equipment, including projector & screen, is powered from inside the desk. Check ALL the electrical equipment is switched on. Projector & screen, loop amp, audio amp, both radio mic boxes, laptop power supply.

Lap-Top Login:

Switch on the lap-top by pressing the on/off button at the top left corner. Select "User " TMC and enter password "P3t3r" [enter] If other "User" shows (e.g. "Brazilian Church") left click on the back arrow first.

Initial settings:

On the audio amp, set the "Lectern" mic to "5" and all others to "0". Dials on the radio mic boxes should not be adjusted (leave at the start of the blue section).

Lowering / Raising the Projector Screen:

Point the white/grey screen remote control at the screen when operating it. Press and release the "down" arrow button to start lowering of the screen. Press the centre "stop" button when the bottom of the screen reaches the top of the notice board. If you don't press the "stop" button it will lower fully. Always check for obstacles before lowering (e.g. Christmas tree, Prayer table!) Screen position can be "fine tuned" using the up/down/stop buttons once the projector is on. At the end of the service, press the "up" button once – it will stop automatically.

Turning On the Projector:

Point the black/silver projector remote control at the projector when operating it. Press the "On/Off" button on the top RHS once to switch on the projector. After a brief warming-up period, the projector will come on. The projector screen height can now be optimized. Stand on a chair and adjust the projector position if absolutely necessary.

Turning Off the Projector:

IMPORTANT: Projector must undergo "COOLING DOWN" before switching off the AC mains supply. If "cooling down" is not observed, the projector bulb life is significantly reduced (£300 each). Point the black/silver projector remote control at the projector when operating it. Press the "On/Off" button on the top RHS twice to start the cool down period. After a few minutes, stand under the projector and check its display shows "STANDBY". Only then is it safe to switch off the projector AC mains supply.

Pulpit Mic:

Check it is plugged in to the wall box behind the pulpit and switched "ON". Stand behind the pulpit and check it is unobtrusive but angled toward the speaker's mouth. Ensure the "gooseneck" isn't touching the pulpit book rest.

Lectern Mic:

Check it is plugged in to the wall box to the side of the sanctuary and switched "ON". Position the mic over the Lectern top, angled toward the speaker's mouth. Ensure the boom arm isn't touching the Lectern book rest. Ensure the mic cable is routed safely, with no tripping hazard.

Checking the Radio Mic Batteries:

Check all 4 radio mic (2 lapel and 2 hand) for battery health before giving them out. Any found to have been left "ON" will need new batteries.

If "OFF" check the battery health by moving the switch to the "ON" position.

- A momentary flash of the red LED light means battery OK.
- If the red LED does not light, or stays lit, the batteries need changing.

Changing the Radio Mic Batteries:

Spare batteries are usually kept in a plastic box inside the desk. Lapel mic: slide open the battery compartment. Hand mic: twist open the battery compartment. Renew the AA cells observing correct polarity and reassemble.

Lapel Radio Mic:

Typically the Preacher & Worship Leader will use a Lapel mic.

Some will collect from the desk themselves (make sure you've checked the batteries first).

Otherwise you can give them out or leave them in the vestry if a visiting Preacher is running late.

Take an interest in ensuring the Lapel Mic is close to & pointing toward the speaker's mouth.

Ensure speakers do not have clothing / jewellery interfering with the mic.

For best signal, the battery pack is best worn on the individuals RHS or back. If not a regular speaker, tell them:

- If the lapel mic is ON or OFF at point of handover.
- That you will switch them ON/OFF during hymns etc (no need for them to do it).

Hand Radio Mic:

Typically a hand mic (OFF) is positioned near the communion table for anyone who needs it. They can also be used on stands etc. for voice or music / singing.

The ON/OFF switch has 3 positions:

- All the way down is OFF
- Centre is radio carrier only (no voice)
- All the way up is ON
- We really only need to use the OFF and ON positions

Advise users that the mics are quite sensitive – there is no need to get too close.

Hymn Board:

Use your Order of Service to put-up the hymn numbers on the board. This will help anyone who can't see the screen or prefers to use a hymn book.

Copyright Record:

Fill out the hymn numbers on the Copyright record.

Tips for Sound Control during a Service:

The Loop Amp drives a magnetic wire loop antenna in the church roof space. This signal is picked-up by hearing aids set to the "T" position and can be the only way in which a person using a hearing aid can hear what is being said. There are no adjustments on the loop amp itself, but it is important that:

- The loop amp is ON
- At least one level control on the audio amp is open at all times (e.g. Lectern set at 5)
- Every speaker uses a mic of some kind...even those who think their voices are loud enough!

When a lapel or hand radio mic is switched ON, a small red LED light (next to the "power on" light) will be lit. This is a good way of checking if a speaker has switched on their mic.

If a speaker starts talking and it becomes clear their mic is not on, be bold... as soon as appropriate, switch it on for them or bring it to their attention. Otherwise some of the congregation will not be hearing what is being said, and they will most likely be too polite to say!

When operating the sound desk, consider that you need to achieve the following at all times:

- Control the sound level as reproduced by the loudspeakers
- Ensure the loop amp is always being fed a signal

Recording of services may be added to the list again at a future date.

If one or more mics is turned up too far on the main amp controls, you will hear feedback (howling / whistling noise). To prevent or stop this:

- Turn OFF the level control of any mic that is not in use
- Turn down one or more level controls for the mics that are in use

Typical level control settings are:

- 5 for Lectern mic (6.5 max)
- 5 for Pulpit mic (6.5 max)
- 5.5 for Lapel mic (6 max)
- 3 for hand mic (5 max)

Requirements will vary depending on the individual speaker and proximity to the mic.

Turn the Lapel mic level controls down to zero during Hymns.

You may also wish to turn the Lapel mic level controls down during:

- The Lord's Prayer
- Communion (after the 1st few have taken)

Turn the CD / Aux level control up only for CD or Video playback. Adjust the level to suit (can be up to max if the source signal is low).

If a speaker moves back & forth in the pulpit, the Lapel mic signal can become intermittent. This can be compensated somewhat by keeping the pulpit mic level control at 3 as well as the Lapel mic level control at 5.5.

At the End of the Service:

Close the lapel mic level control to avoid broadcasting the speakers conversations in the event they do not switch OFF by themselves!

Collect the 4 radio mics and before replacing them in the box:

- Check the batteries are still OK for next time
- Ensure they are all switched OFF

Take down the hymn numbers and leave the empty board to the left of the sound desk ready for next time.

Follow the prior instructions for raising the projector screen and putting the projector into cool down and standby mode before switching off the AC mains supply.

Lower the roll top and ensure the desk is locked and the key is returned to the vestry.

Creation & projection of hymns, powerpoint presentations and other media is covered by the "Video Psalm" tutorials posted on Thatham Methodist Church website: http://tmchurch.weebly.com/videos