

**This guide for Audio connections in St Peter's Church is in two parts**

**1**

**Connections between a computer and the Church PA system at the back of the Church.**

**2**

**The connections between the "audio-technica" microphones and the Church PA system at the Altar end of the Church.**

**1**

**Connections between a computer and the church sound and visual display.**

**On the back wall of the church at the end of the fixed bench are the connections to the church sound and projection system.**



**The computer is placed on a small table which is normally located behind the altar at the front of the church**



There are 4 connections to be made.  
Matching coloured circles are shown at either  
end of each cable.

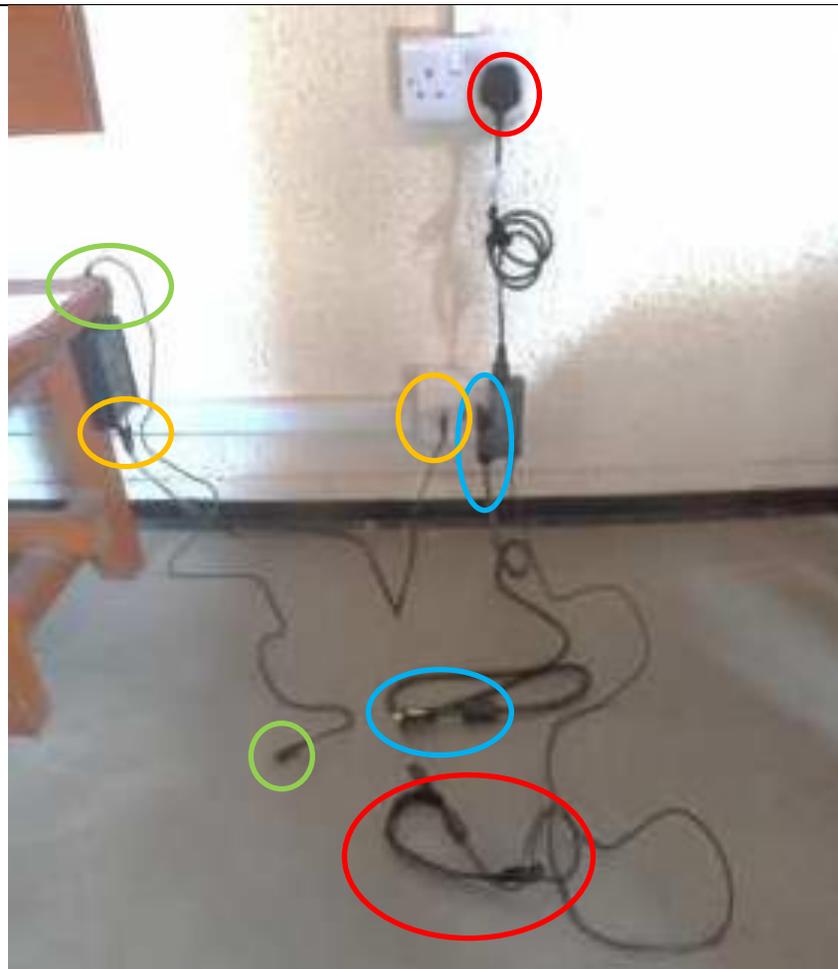
○ Power from the wall socket to the  
computer



○ The screen display from the computer  
to the wall mounted church projector.



○ From the headphones outlet on the  
computer to the input of church sound  
junction box.





From the output of the sound junction box to the church sound system.

Connect the sound lead from the bottom output of the junction box to the church sound system. This lead is often left plugged into the box under the bench with the unconnected end hanging over the framework.

The red and white 4mm plugs should be plugged into the corresponding coloured sockets on the wall.



There is a large to small diameter conversion plug left in the top of the junction box. Remove that and place it on the window ledge above. And fit the U3A larger diameter plug into the top of the junction box.

The church sound junction box has 3 volume positions. The switch is on the underside of the casing.

Nearest the altar is **LOW**  
 Middle is **MEDIUM** (usual default setting)  
 Nearest to the Wall; **HIGH**

Adjust if necessary to suit the sound output to the church system and tweet using the volume adjustment on the computer.



The Switch for power to the church projector is located in the church kitchen.

Make sure this is switched ON.



The wall mounted projector is switched on using the controller shown here below the projector image.

There will be a warming up delay when you switch it on, so **don't** click it a second time as this will switch it off again.

The wall mounted screen monitor is controlled by the controller shown here below the screen image.



**The hand held remote controller can control the computer screen images, via the radio receiver inserted in to USB port on the side of the computer.**

**Open the front of the remote controller and remove the wireless dongle and place it in the USB port of the computer. Check the state of the battery.**

**Switch the power on/off switch to 'on'.**

**Moving the displays forward or backward is controlled by the two left and right arrow buttons.**

**To launch the start of the slide show use the smaller button indicated.**

**Black the screen at any time with the small button indicated.**

Using the timer

1. Press the Timer set button.
2. Use the Slide forward and back buttons to set the time. Holding the Slide forward or back button accelerates the speed at which numbers are displayed on the LCD.
3. Press the Timer set button again to confirm the time setting.
4. Pressing the Play/Pause button starts the timer. Pressing the Play/Pause button again pauses the timer.
5. The silent alarm will vibrate with 5, 2, and 0 minutes left. The timer will then start counting up.
6. Holding the Timer set button for 3 seconds clears the time setting.

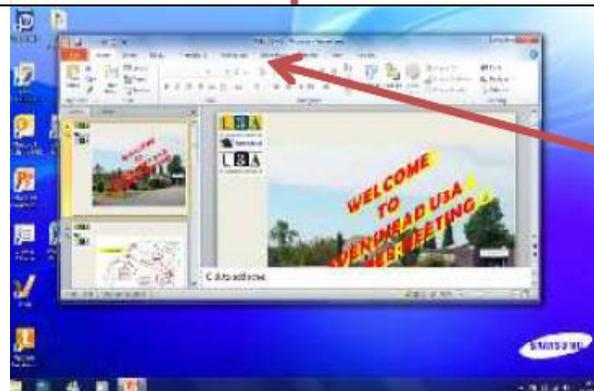


**Launch the slide show. Black the Screen  
Timer play/pause  
Timer set**

**Click on the icon shown on the computer screen to load the presentation.**

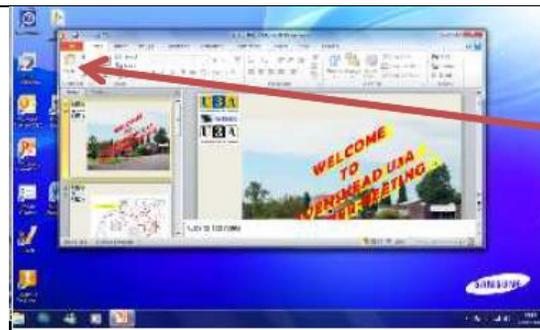


**Click on 'Slide show' to start the wallpaper slides.**



**To run the slide show click on "from the beginning"**

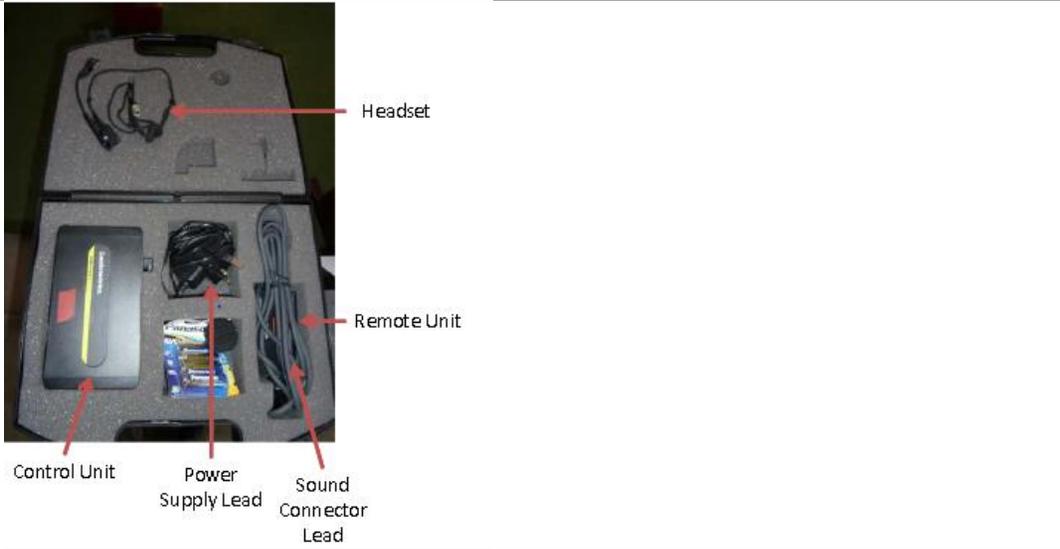
**The end the slide show press the escape key (top left of keyboard)**



**2**  
**Setting up the PA system between the “audio-technica” microphones and the church sound system at the altar end of the church.**

**The audio-technica system operates in the 800 Mhz frequency range.**

**This is one of two storage boxes.**



**The PA system, whether using a free standing speakers or the church system has these elements. Microphone with transmitter in the handle; receiver and either; Connection to the church system. or A mixer (part of the free standing loudspeaker.)**



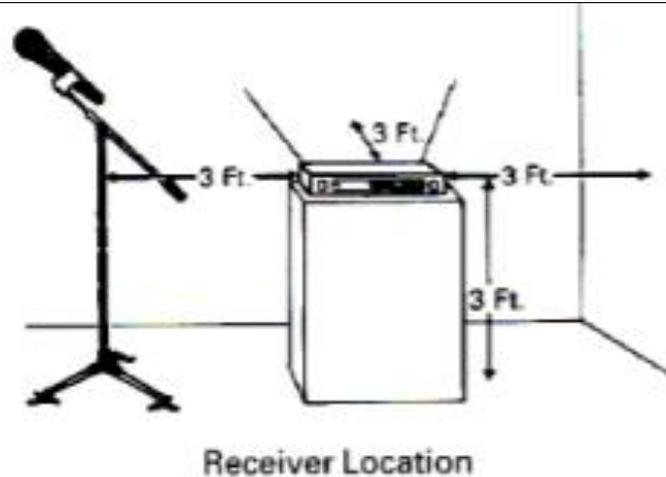
**OR**  
**Headset microphone with body worn transmitter ; receiver; (mixer free standing speaker only) and loudspeaker (s)**



**Setting up using the church sound system.**  
**Positioning of units is essential to obtain best results.**

**The receiver should be placed at least 3 feet (1m) above the floor and 3 feet (1m) away from any wall, machines or large sheets of metal. This is to avoid reflected radio signal echoes interfering with reception. If the microphone/transmitter is close to the receiver, this will create a feedback "screech"**

**The transmitter and receiver should be placed in direct line of sight of each other.**



**Front of Receiver.**

**The antennas should be placed at 45 degrees away from each other.**

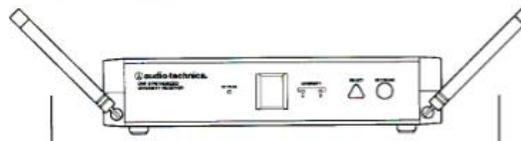
**When the microphone or body pack transmitters are switched on, one of the 2 diversity LED's should illuminate indicating that it is receiving a signal**

**If the signal, received from the transmitter is too loud and distorted, the AF Peak LED, is illuminated. In which case the volume output of the transmitter should be turned slightly anti clockwise. This is not affected by the receiver volume control.**

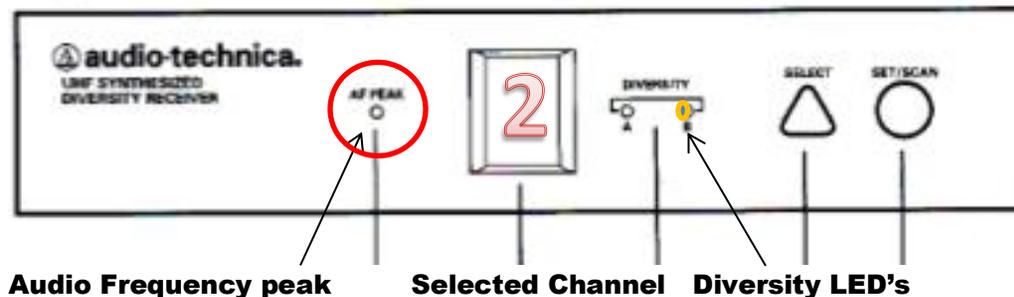
**There are 8 communication channels, within the 8,000 MHz range. The microphone and receiver must be tuned to the same channel.**

**The two U3A sets are pre-selected and labelled; one to channel 2 and the other to channel 3**

**Figure B1-Antenna Position**



**Figure B2-Front Panel Controls and Functions**



**Audio Frequency peak**

**Selected Channel**

**Diversity LED's**

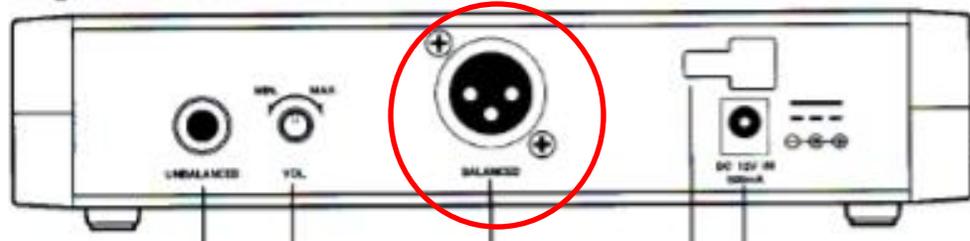
**Connections at the back of Receiver**

The balanced connection lead must be used between the receiver and the church mixer to match the socket in the Church PA system.

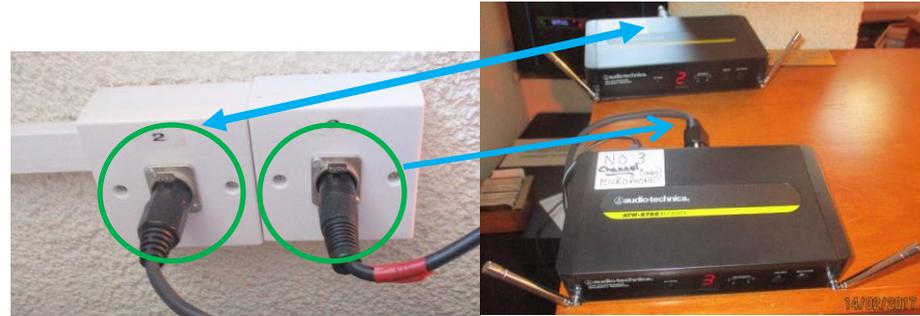
The Volume control should be set mid-way to start with and adjusted later as required.

Don't forget to set the aerials

**Figure C-Rear Panel Controls and Functions**



**Unblanced con. Volume. Balanced con. Power input**



Connect the power leads between the receiver(s) and the power outlets of the wall in the front right hand corner of the church.

The mains power cable should be wrapped around the restraint "hook" and plugged into a supply. Ensure the power switch to church AV equipment is 'on'.

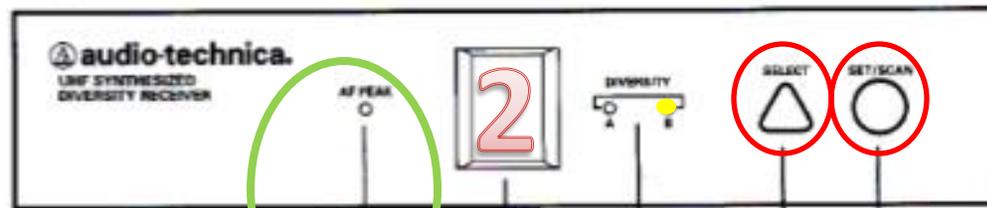


To select the channels.

Repeatedly press the select button at short intervals until the required channel is displayed. Then press and hold the set/scan button. The channel number should stop flashing and display the selected channel.

One of the Diversity LED's will illuminate to indicate which antenna (A or B) has better reception and is in operation.

**Figure B2-Front Panel Controls and Functions**



**AF Peak Channel Diversity LED's select set/scan**

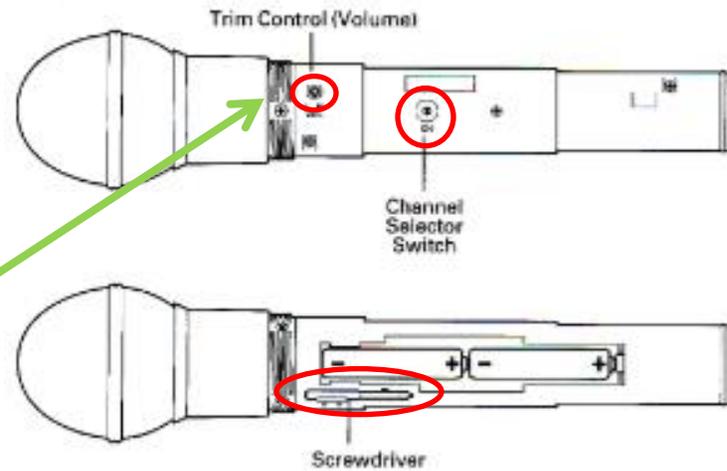
**Hand held microphone/transmitter.**

**To access the battery unscrew the lower body cover and slide off.**

**Be careful with the polarity of the batteries which is indicated in the battery chamber.**

**The trim Volume control is adjusted by the small screw driver held in an internal clip. The factory setting is full clockwise, (maximum gain). If the AF peak LED on the receiver, (see diagram on previous page) lights up continuously; trim the control (volume) on the microphone anti clockwise until the LED goes out**

**Figure H-Handheld Transmitter Interior View**



**Figure G-Handheld Transmitter Bottom View**



### Head set microphone transmitter.

To access the battery compartment, slide and hold the door catch and slide the cover open.

Transmitting channel can be selected using the screwdriver held in the clip.

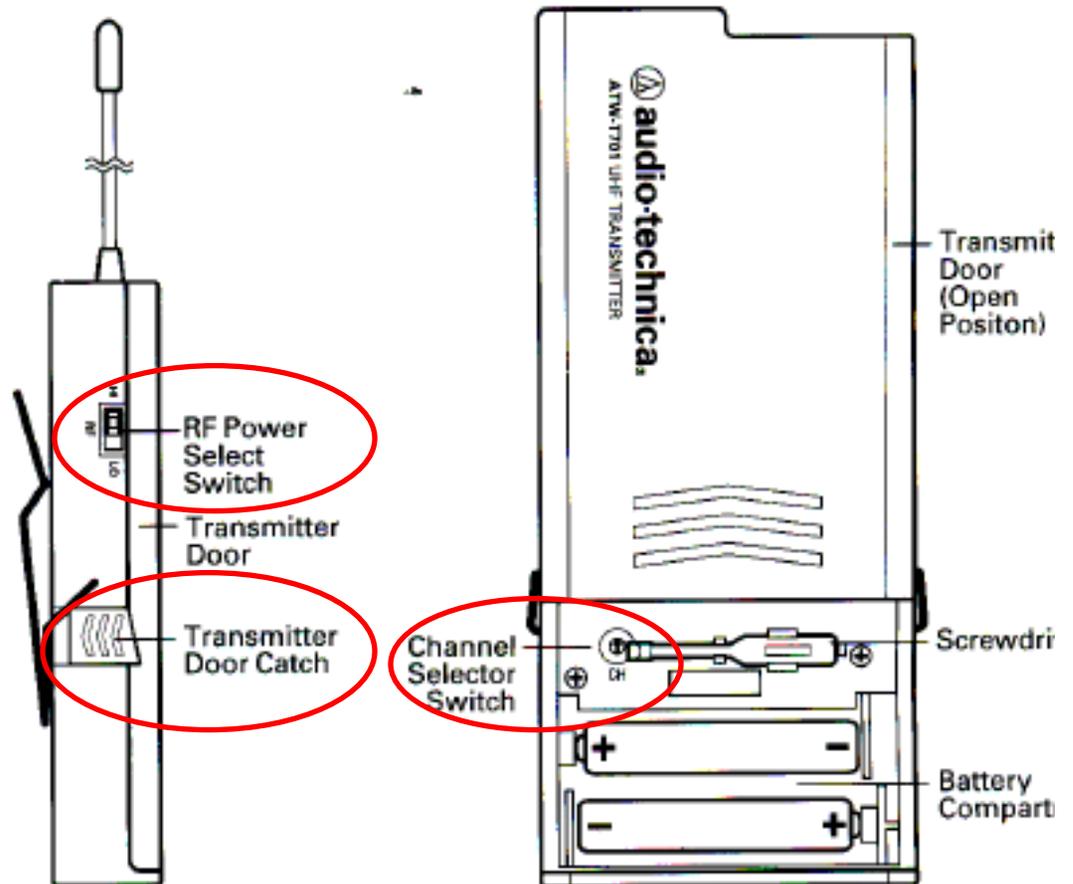
The Radio Frequency power select switch offers a high medium and setting. Set to Medium and adjust if signal too weak or powerful on testing.

Do not attempt to change the length of the small antenna. For best results allow the antenna to hang freely.

Keep away from other internal or external body worn electrical devices.



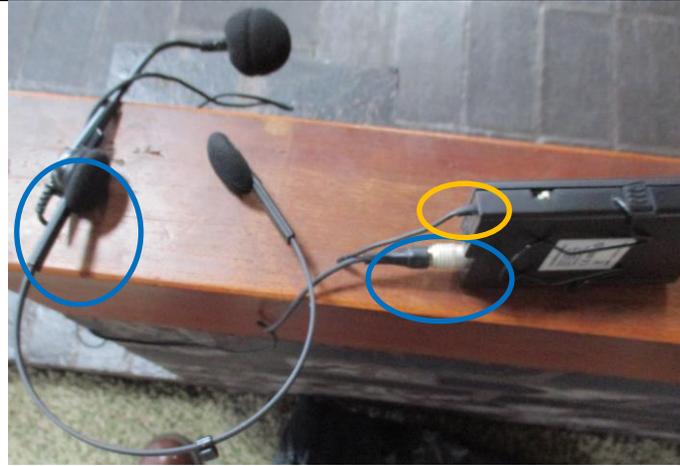
### Figure D-UniPak Transmitter



**The headset microphone and battery powered transmitter.**

○ Take care when connecting the 4 pin microphone lead connection. There are slots to ensure that the connection is inserted in the correct orientation. Make sure the outer metal securing ring snaps into place.

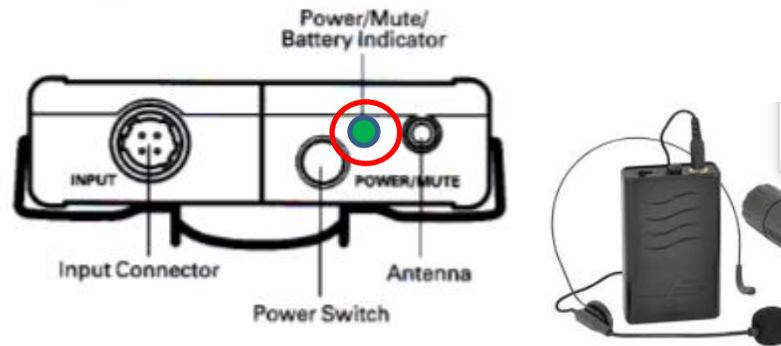
○ Short transmitter antenna cable. Leave to hang loose.



**Switch the transmitter 'on' by pressing the power switch and hold it down while the LED changes from red to green.**

**Press briefly to change to mute (changes to red LED). Press briefly to un-mute. Press and hold down to switch it off.**

**Figure F-UniPak  
Transmitter Top View**



**Unipac Transmitter instrument and microphone controls, allow you to set the optimum settings for either microphone or an instrument.**

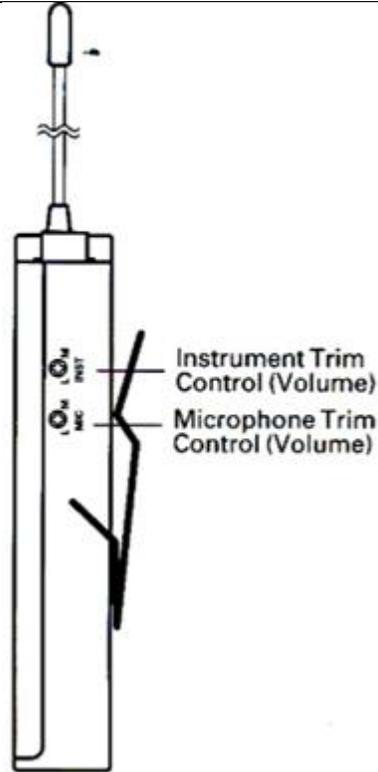
**When the transmitter is being used with a microphone, set the microphone trim fully clockwise (maximum) and the instrument trim fully anti-clockwise (min.).**

**When used with an instrument, reverse the settings; instrument fully clockwise (max.) and Microphone fully anti-clockwise (min.)**

**When testing the PA system.**

**If using a microphone make an initial adjustment on the mixer that allows audio through the system.**

**If using an instrument make an adjustment of the instrument amplifier input that will allow audio through the system.**



**On the side of the transmitter. Set the transmitter strength as shown.**



**This equipment is not used regularly**

**We have a ProSound combined mixer/loud speaker and 2<sup>nd</sup> speaker, which can be connected to the audio-technica receiver.**

**A general view of the master loudspeaker.**

- Sound connection between transmitter and master loud speaker.**
- Mains power connection for transmitter.**
- Connection between master and second loudspeaker.**
- Mains power connection for Loudspeaker**



Set the volume and bass control knobs to the positions shown,  as a starting position for testing the sound performance.



The Pro Sound transmitters (ex Southwell U3A) operate on fixed frequency. The head set microphone is marked 174. MHz. It is not compatible with the Audo-Technica system, which operates in the 800 MHz range.

Alan Paul revised 7.12.17 and 11.4.18