

Installation instructions for S10 Soundfield from Connevens

Check contents of kit, you should have the following:

- a) S10 Transmitter 
- b) Headset microphone 
- c) S10 Receiver/amplifier with two aerials, power supply and mains lead 
- d) Charging lead for S10 transmitter 
- e) 2 pairs of speakers ie 4 (!) 
- f) 100m reel of speaker cable *E626* (we know this is too much cable, but 100m reels are the cheapest form of supply) 
- g) 1 box of speaker cable clips ZHCC3X5 (using a cabling staple gun is preferable if you have one) 
- h) Wall bracket for S10 Receiver/amplifier 
- i) Tutor courtesy card B44S10CC 
- j) These installation instructions!

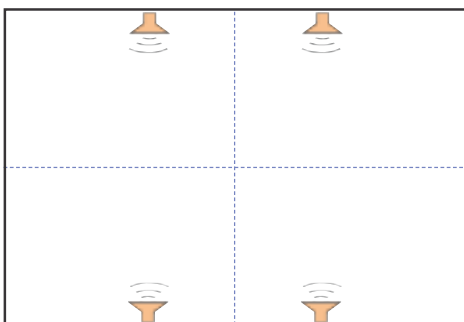
An overview of the installation steps are:

- 1) Decide where the speakers are to be fitted
- 2) Decide the easiest cabling run for the speakers – which may not be the shortest.
- 3) Decide where to mount the S10 Receiver/amplifier
- 4) Install the system
- 5) Test the system
- 6) Demonstrate and set the volume level for the user.

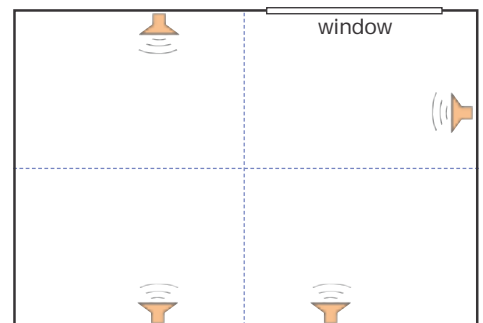
1. Deciding where to fit the speakers

Firstly please do **not** think home hi-fi and put the speakers in the corners, at waist level and point them to the centre of the room– this is the worst possible thing to do!

Placing loudspeakers for a classroom soundfield is more like deciding how best to light a room using 4 small lamps. If you think light you will not go far wrong. ie fitted above head height (2 to 2.5 metre high) each over a 1/4 of the room pointing down on the area to be covered.



The positioning of speakers is often predecided by physical objects such as windows. You have to fit 4 speakers so adapt your 'lighting' plan to give the best pattern for the students – perhaps avoiding the window, an unused end of a classroom or a teachers desk.



2. Deciding the easiest cabling run for the speakers.

Take advantage of existing features such as any wooden picture rails or perhaps notice boards (it is much easier to fit cable clips to wood than plaster). If you have a false ceiling the cable can be run above it. Sometimes using a piece of plastic mini trunking for any difficult runs is a good solution.

3. Deciding where to mount the S10 Receiver/amplifier

This is usually best done by discussing the options with the school staff. Is there an existing convenient shelf, existing wooden wall cupboard or perhaps even a walk-in store?

You do not have to use the supplied bracket however the two aerials must be used fully extended in a 60° 'V' shape 'flat' to where the teacher will normally stand – away from metal racking, pipes etc. otherwise the quality of radio reception will be reduced.

The S10 transmitter is recharged overnight using the charging lead from the rear of the S10 receiver/amplifier – if you are using the wall mount bracket this can be done by simply leaving the transmitter on top of the receiver/amplifier unit.

It should not be necessary to adjust the controls during a lesson so the S10 receiver/amplifier unit does not actually need to be beside the teacher. Mounting the unit away from little fingers is a good idea(!) and of course do not forget that you also need a 13A mains socket to power the system.

Finally a little hint for those who are using the wall bracket – a 10p piece is ideal for adjusting the side clamps.

Once the installation has been carried out, please do not under estimate the importance of ensuring that the teacher has the opportunity to experience listening to another person using the system. There are two reasons for this: firstly so that they become impressed at the natural sound and secondly it is hard for anyone to listen objectively to their own voice. It is also an excellent opportunity to 'play' at using the system with a colleague, allowing the teacher to gain confidence with their own 'performance'.

S10 Amplifier/Receiver controls and features

The Trantec S10 really is very easy to use. Let's walk you around the features, indicators and controls on the Trantec S10 receiver/amplifier.

The first piece of information, which it would be dangerous to assume has been explained to you, is what exactly the Trantec S10 is? The S10 is a combined audio amplifier and multi-channel radio microphone receiver. As the radio receiver is a diversity type, to minimise possible drop out, there are in fact two radio receiver channels (which is why there are two aerials) and also the electronics to automatically select the channel with the best radio signal. The power supply for the S10 is an external unit.

On the front is:

Power ON/OFF rocker switch

Transmitter Charging indicator – red flashing

Aux i/p level – volume control for Multimedia, TV, CD or Computer etc. if connected



Power on indicator – red

RF (radio) signal level

Bass, Treble and Volume controls – just like a more usual amplifier

On the rear is:

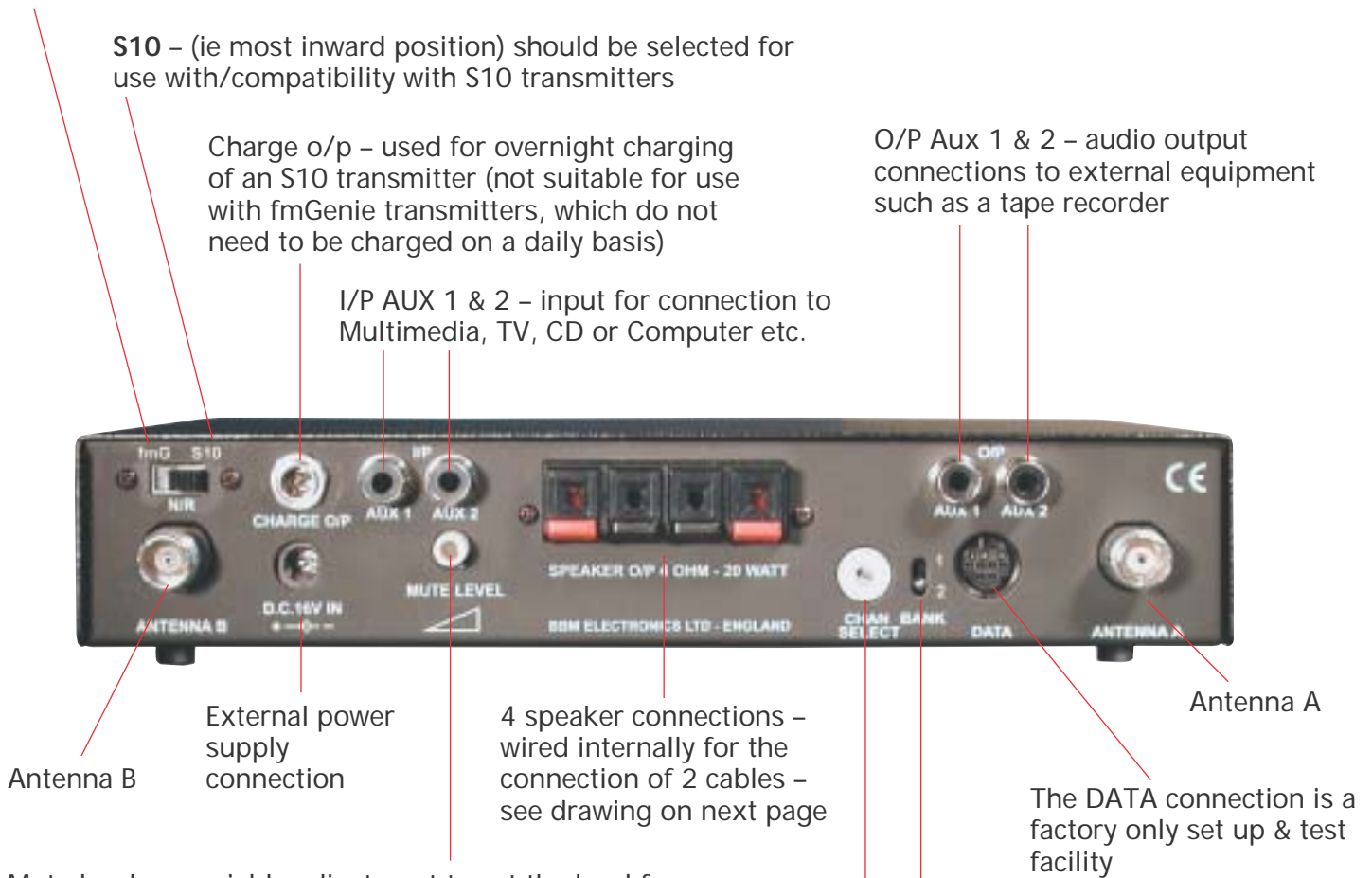
fmG – (ie most outward position) should be selected for use with Connevens fmGenie transmitters

S10 – (ie most inward position) should be selected for use with/compatibility with S10 transmitters

Charge o/p – used for overnight charging of an S10 transmitter (not suitable for use with fmGenie transmitters, which do not need to be charged on a daily basis)

O/P Aux 1 & 2 – audio output connections to external equipment such as a tape recorder

I/P AUX 1 & 2 – input for connection to Multimedia, TV, CD or Computer etc.



Antenna B

External power supply connection

4 speaker connections – wired internally for the connection of 2 cables – see drawing on next page

Antenna A

The DATA connection is a factory only set up & test facility

Mute level – a variable adjustment to set the level for muting poor radio signals (ie to help eliminate any shoosshing noises as the transmitter goes out of range) – if in doubt set to the mid position.

	Bank 1	Bank 2
0	173.350	174.150
1	173.400	174.200
2	173.450	174.250
3	173.500	174.300
4	173.550	174.350
5	173.600	174.400
6	173.650	174.450
7	173.700	174.500
8	173.750	174.550
9	173.800	174.600
A	173.850	174.650
B	173.900	174.700
C	173.950	174.750
D	174.000	174.800
E	174.050	174.850
F	174.100	174.900

The receiver has a 32 multichannel facility. The 32 channels are actually in 2 banks of 16. So the Channel select makes the 1-16 choice and the bank 1 or 2 switch selects which bank of 16.

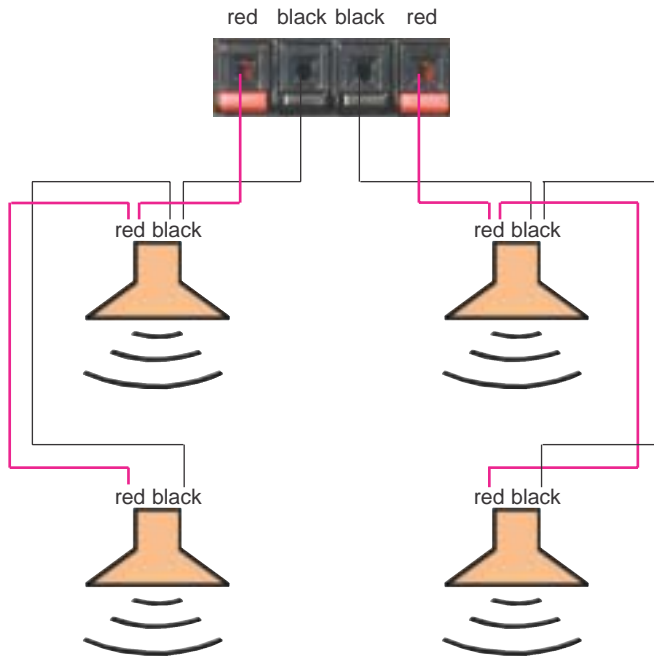
Whilst each receiver has a capability of 32 channels there are actually 3 sets of 32 channels which can be factory programmed giving a full choice of 96.

Speaker wiring

Speaker wiring – one cable run down each side of the classroom wiring a pair of speakers in parallel, it is important to maintain the correct polarity when connecting the cable so we suggest connecting the black trace wire to the black terminal(!) *(Each speaker is 4 Ohms thus we now have 2 Ohms on each cable)*.

The S10 has 4 terminals – red, black, black, red. Connect the two cable runs, one to the left pair and one to the right pair, again maintaining correct polarity ie black trace wire to the black terminals.

(The terminals are in fact wired internally to connect the two cable runs in series making the load on the amplifier 4 Ohms. The actual amplifier connections are the 2nd and 4th terminal as viewed from the rear, which you would need to know if you wanted to test the amplifier with just one speaker)



The cable is white with a black stripe along one wire. The white only wire should always be connected to the red terminals and the black stripe wire always to the black terminal.

Set so that volume control on receiver/amp is between one third and two thirds in use.

S10 transmitter information

General instructions for using the S10 transmitter are included in the Tutor courtesy card.



The display on the transmitter shows the frequency and which channel bank of 16 is selected.



The hidden controls are:

Channel bank change – press to change, then check display

Microphone sensitivity adjustment

A hole with no purpose in an S10 transmitter!

Channel change – press to change, then check display



FINAL NOTE: Probably the most useful bit of advice that we can give to a user is to get involved with setting up and understanding their equipment from the beginning. Adjusting tone & volume controls should not be regarded as a 'black magic' art only for a technician. It is not unknown for our customer services team to receive a phone call asking for permission to turn the volume up or down!

Understanding how the equipment works is important as it will prove very expensive to request a technician service visit every time somebody turns a volume to zero or the cleaner unplugs the power supply!