TRANTEC

S-D7200, S-D7210 & S-D7300 Digital Wireless Transmitter Instruction Manual

Table of Contents

1. General Description

These UHF wireless microphone transmitters are designed for digital audio transmission.

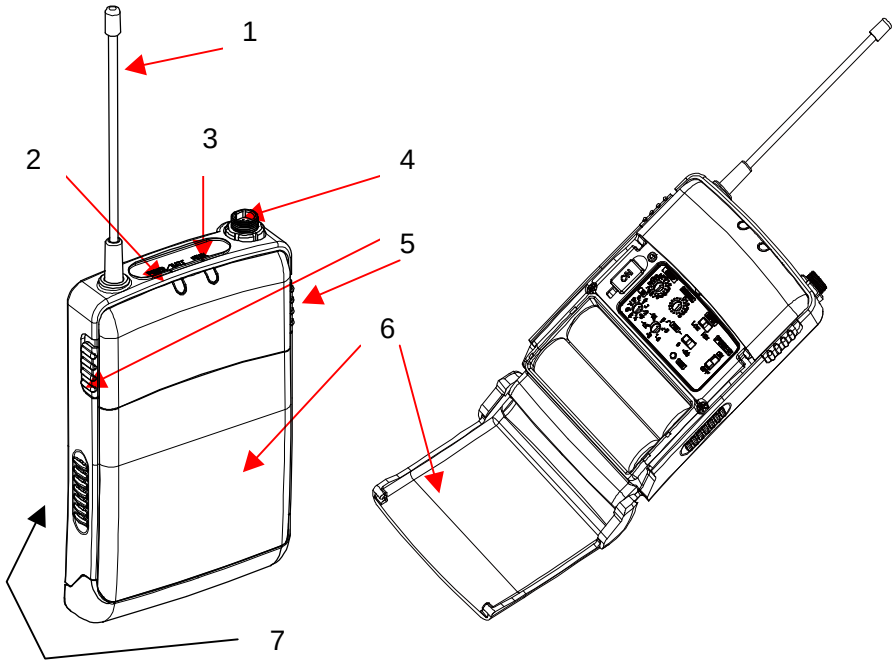
2. Features

- High quality 32kHz/24-bit digital audio data transmission
- Digital audio transmission capability eliminates the need for an analog compander, thus freeing the transmitter from compander-induced artefacts causing distortion and dynamic inaccuracies
- Available in Handheld (S-D7200 and S-D7210) and belt-pack type (S-D7300) transmitters
- Transmits remaining battery life data and audio information
- S-D7300 Belt-pack audio input is compatible with both microphone and High Z inputs e.g. Musical Instruments.

3. Items and Functions

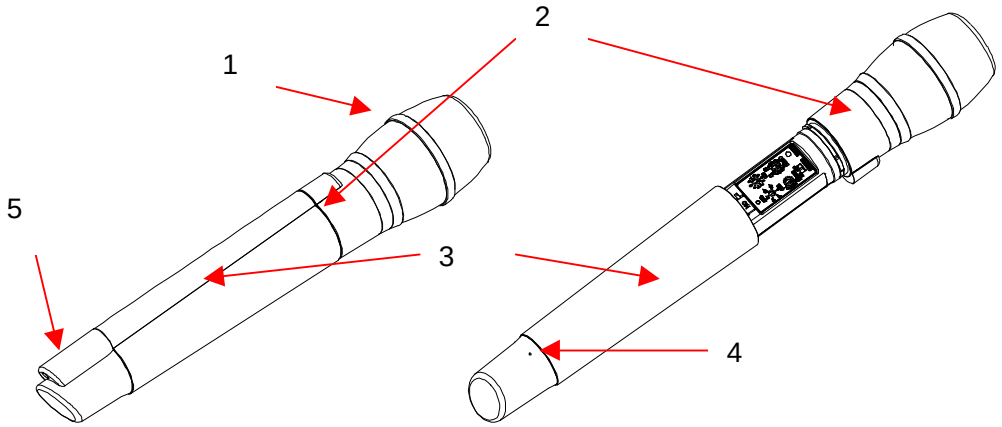
S-D7300 Belt-Pack Transmitter

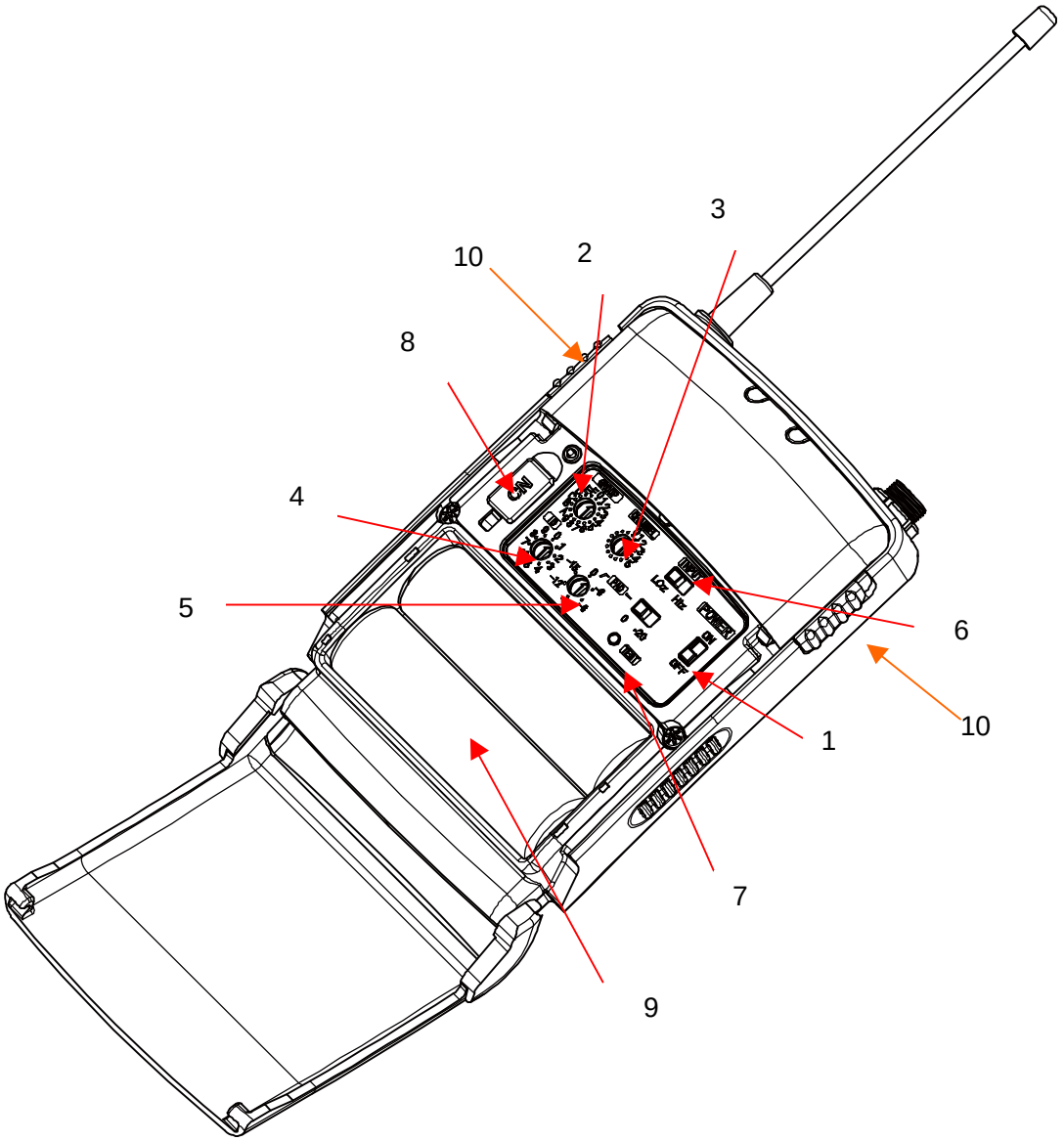
(1) Antenna
(2) Power/battery indicator. (Refer to “5. Indicators”).
(3) Peak indicator
(4) Microphone/instrument input
(5) Battery cover lock release knobs
(6) Battery cover
(7) Belt clip attached to rear (detachable and reversible)



S-D7200 and S-D7210 Handheld Transmitters

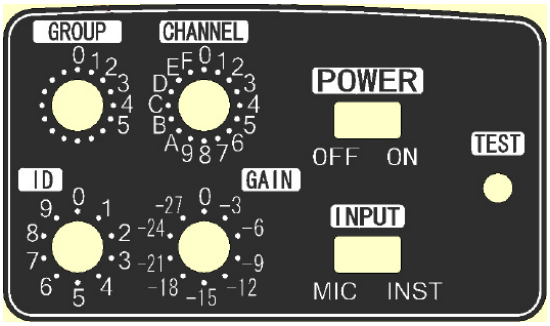
(1) Wind screen
(2) Lock ring
(3) Battery cover
(4) Pilot lamp
(5) Internal antenna



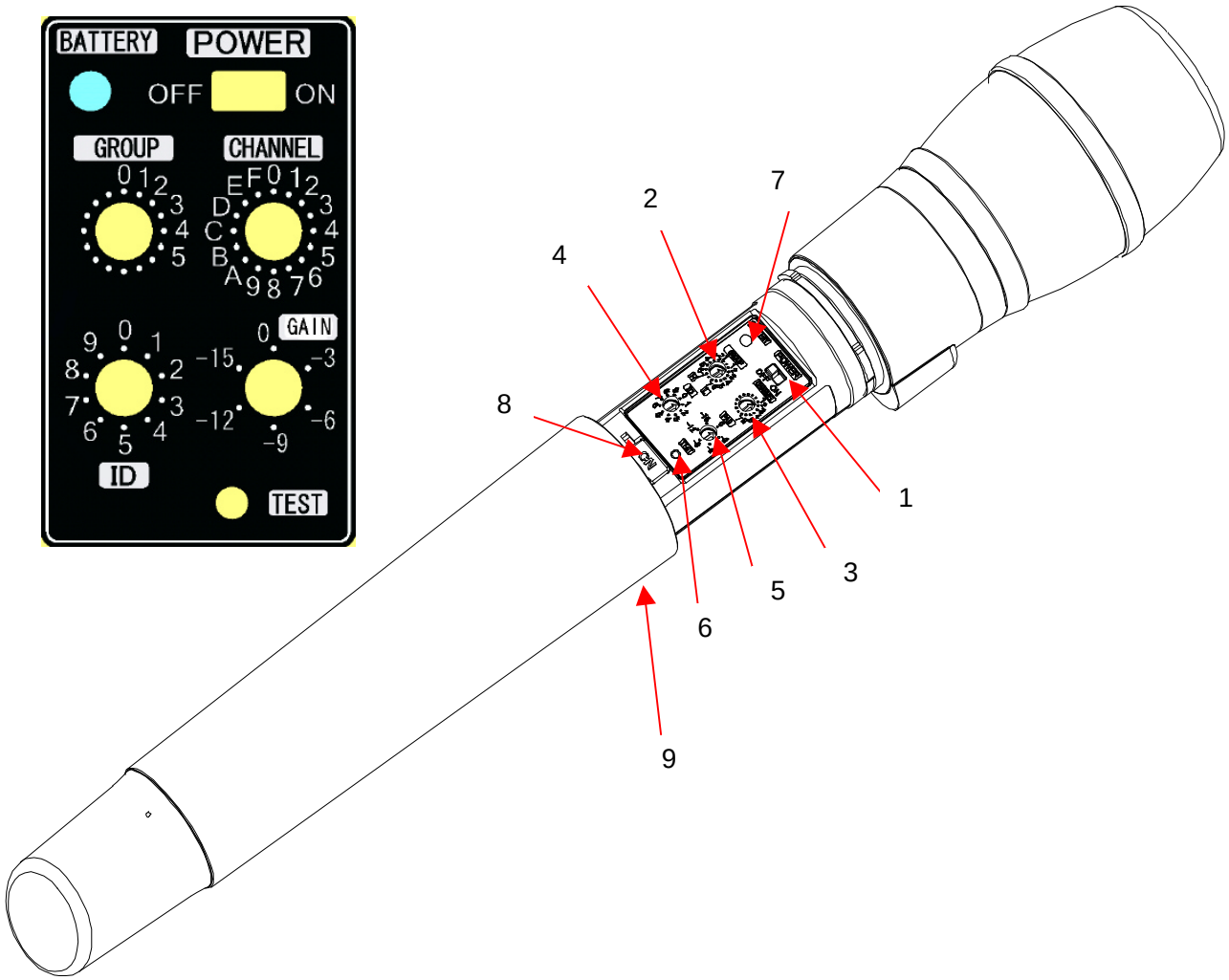


Inside battery cover (S-D7300)

(1) Power switch
(2) Group selector switch
(3) Channel selector switch
(4) ID selector switch
(5) Gain selector switch
(6) Microphone/instrument selector switch
(7) Test mode ON/OFF button
(8) I/O terminal
(9) Battery case
(10) Battery case release tabs



Inside battery cover (S-D7200/7210)



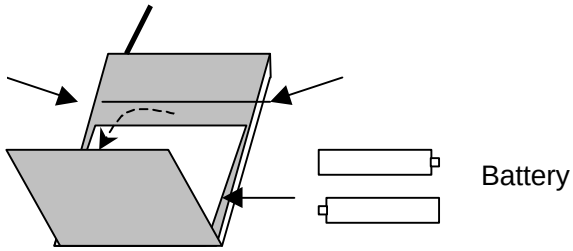
(1) Power switch
(2) Group selector switch
(3) Channel selector switch
(4) ID selector switch
(5) Gain selector switch
(6) Test mode ON/OFF button
(7) Power/battery indicator
(8) I/O terminal
(9) Battery case

4. How To Insert Batteries

(1) Open the battery cover
(2) Turn off the power
(3) Insert batteries, noting correct polarity
(4) Turn on the power and close the battery cover

(S-D7300 Belt-pack transmitter)

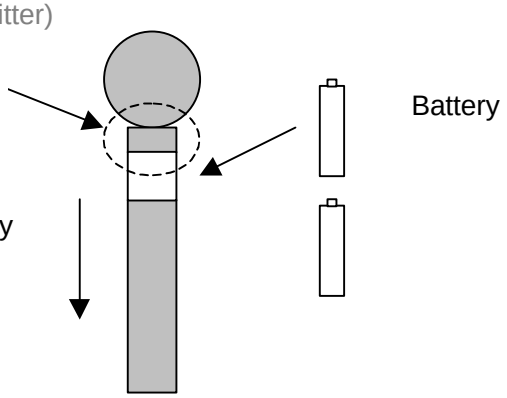
To open the battery cover, push the case release tabs on either side towards the top of the unit. The battery cover will then release.



(S-D7200/7210 Hand-held transmitter)

Rotate the locking ring anti-clockwise.

Pull the battery cover down.



The transmitter's setting panel section is back-lit while the battery cover is open, and extinguishes when closed.

5. Indicators

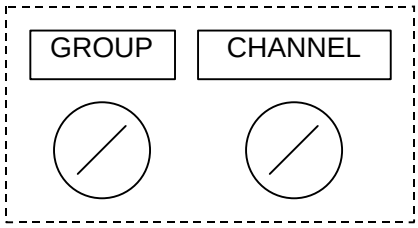
Peak: the LED lights when the audio input level reaches its peak.

Power/Batt: indicator and pilot lamp

Indicator Status	Remaining Battery Life (alkaline) (hrs)
Lit green	3 – 6
Lit orange	1.5 – 3
Lit red	0 – 1.5
Flashing red	0 (Batteries must be replaced)

The indicator flashes yellow when in test mode. (Refer to “10. Test Mode Button”)
The indicator flashes green if the transmitter is set to an invalid group channel for which no usable frequency is assigned. (Refer to “6. Group and Channel Settings”)

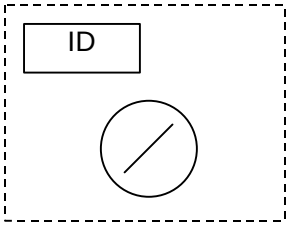
6. Group and Channel Settings



(1) Open the battery cover
(2) Turn off the power
(3) Use the supplied screwdriver to set the group and channel as required
(4) Turn on the power and close the battery cover

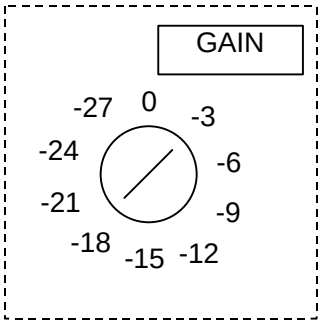
Note: The power/battery indicator will flash green if the transmitter is set to a group or channel where no frequency is assigned.

7. ID Numbers



The procedure for setting the ID number is the same as the group and channel setting method explained in Section 6 above.
The AF is muted at the receiver if the transmitter’s ID number does not match that of the receiver.
Refer to the receiver instruction manual for more information.

8. Gain Selector Switch



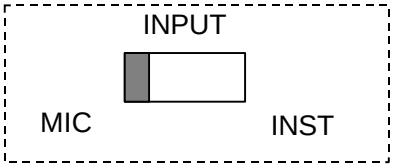
This switch is used to change the transmitter’s input sensitivity.
The gain setting procedure is the same as the group and channel setting method explained in Section 6 above.

The gain of the belt-pack transmitter (S-D7300) can be changed in 10 steps from 0 to –27dB (see diagram right).

The gain of the handheld transmitter (S-D7200/7210) can be changed in 6 steps from 0 to –15dB.

9. Microphone/Instrument Selector Switch (S-D7300 only)

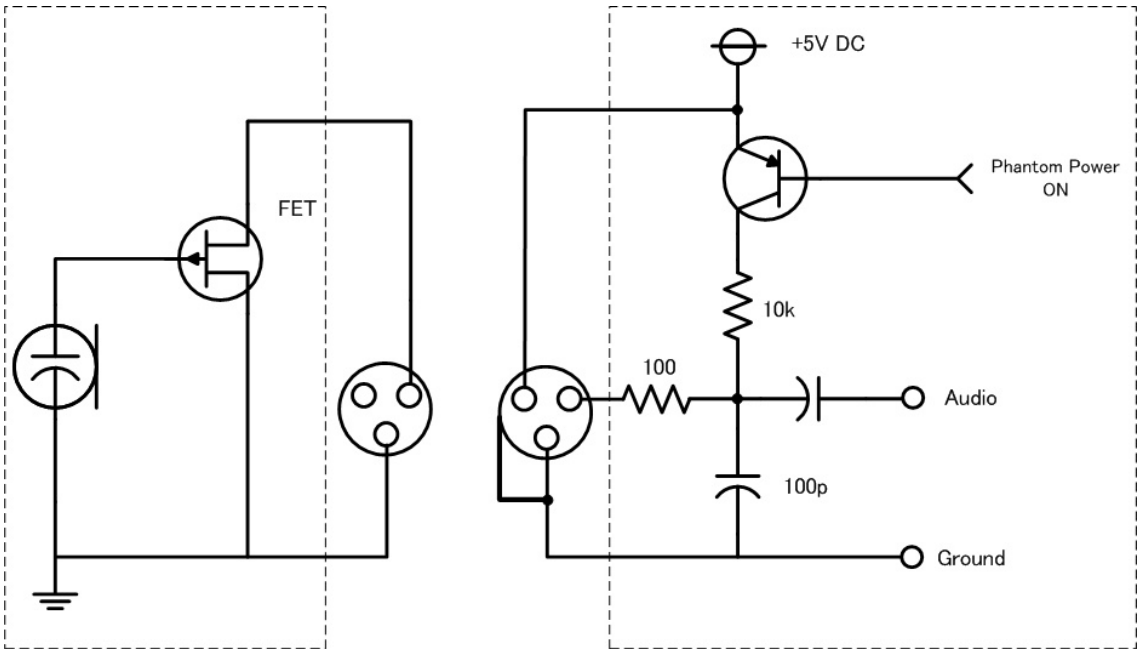
Set this switch as required.
(1) Open the battery cover
(2) Turn off the power
(3) Set the switch to “MIC” or “INST”
(4) Turn on the power and close the battery cover



Place the switch in the “MIC” position when connecting a microphone. Internal impedance is 800kΩ and internal phantom power (5V) turns on.

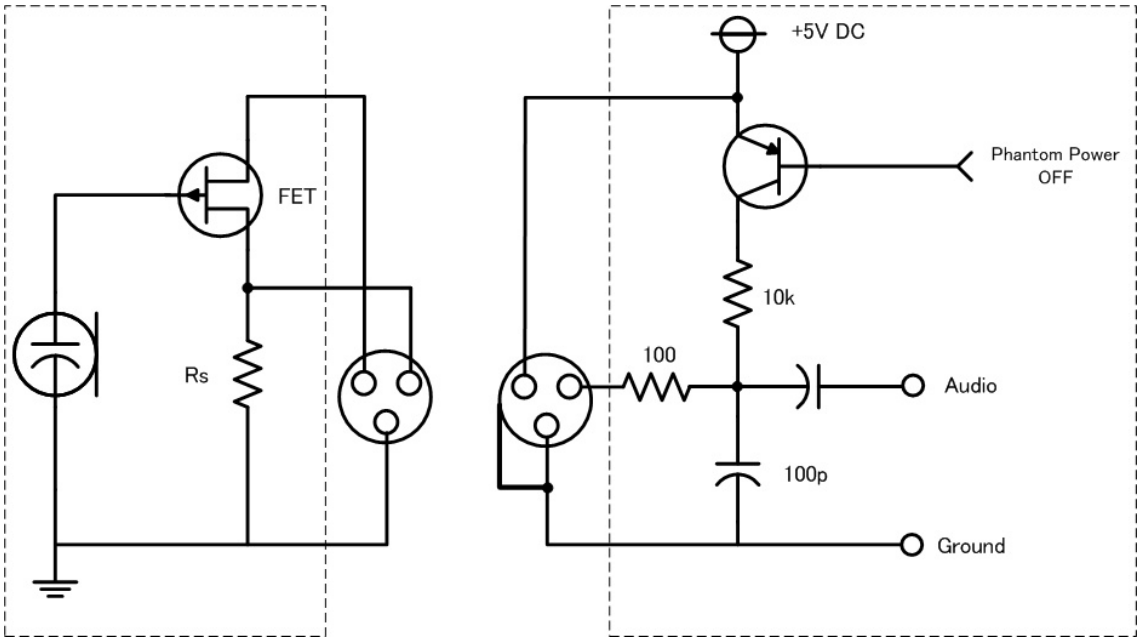
Place the switch in the “INST” position when connecting an instrument. Internal impedance is approximately 10kΩ and internal phantom power (5V) turns off.

Wiring diagrams

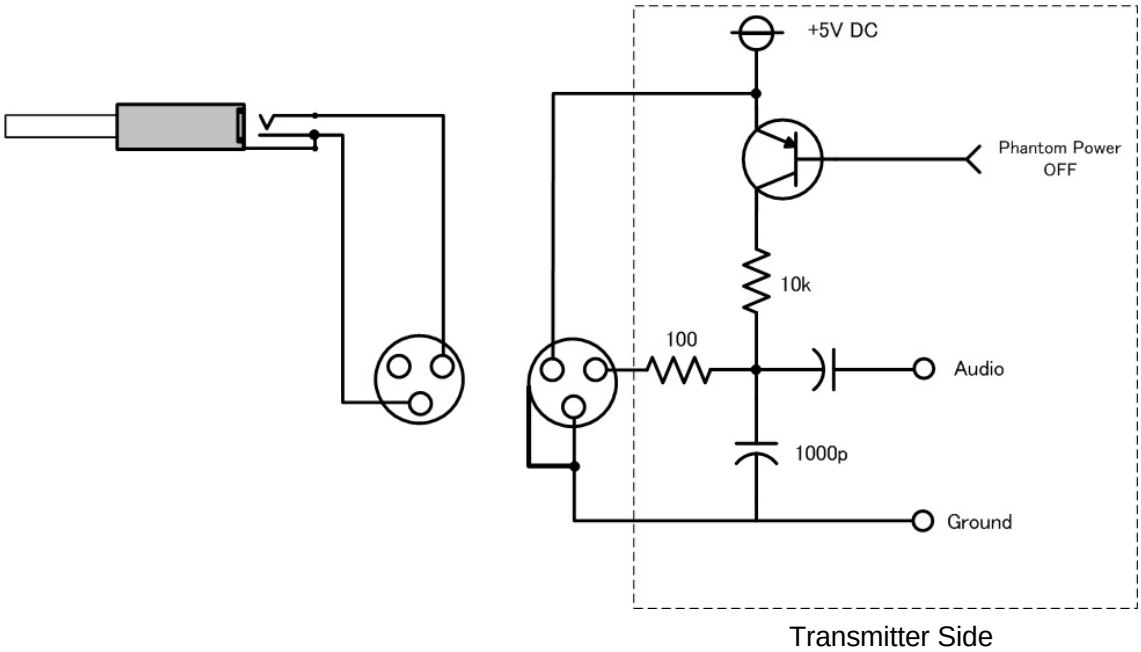


Microphone Side Transmitter Side

Connection for 2 wire microphone

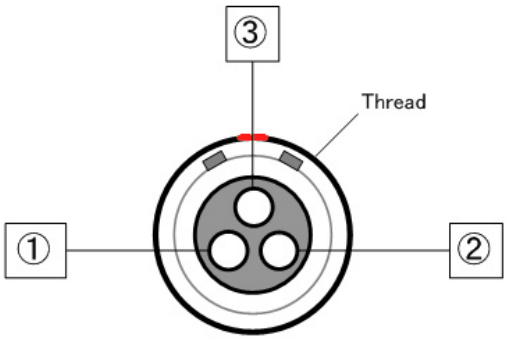


Connection for 3 wire microphone



Connection for Instrument

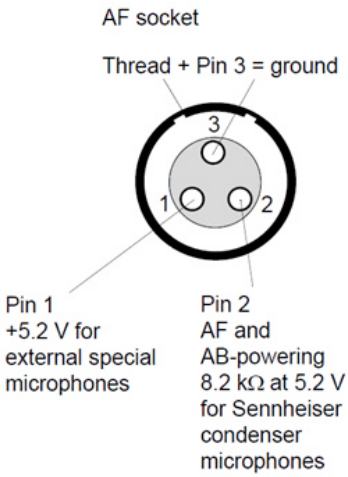
AF Connector



Pin Connections

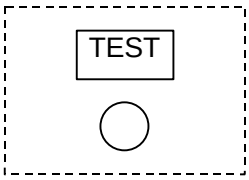
Pin1 +5V
Pin2 AF/Phantom +5V
Pin3+Thread Ground

＊Pin2
Depend on AF Input Selection
Mic⇒with Phantom +5V
Inst⇒without Phantom



10. Test Mode Button

This is a factory test mode button and not intended for customer use. Depressing the switch will put the unit into test mode, indicated by the flashing red power LED. Pressing the button again, or turning the power off and on will return the unit to normal operation.



11. Specifications

Model:	Handheld type: S-D7200 and S-D7210 Belt-pack type: S-D7300
Radio Signal Type:	G1D and G2D
Transmitting Frequency Range:	692.125 MHz – 720.975MHz (Band 1) 721.125MHz – 750.975MHz (Band 2)
Oscillation System:	Crystal-controlled PLL synthesizer system
Rated Antenna Power (W):	less than 50mW
Transmission Range:	Over 100M (open area)
Maximum Input Sound Pressure:	142dB spl (when gain is –15dB) (handheld type)
Maximum Input Level:	+7dBu (when gain is –27dB) (belt-pack type)
Internal Microphone Element:	S-D7200: Unidirectional moving-coil dynamic type S-D7210: Unidirectional electret condenser type
Audio LPF characteristics. (-3dB):	S-D7200/S-D7210: 50Hz S-D7300: 20Hz (MIC position), 30Hz (INST. Position)
Antenna (Built-in Type):	S-D7200/S-D7210: Internal helical antenna S-D7300: 1/4 whip antenna
Battery:	Two AA alkaline batteries
Battery Life:	Approx. 5.5 hr (typical)
Operating Temperature Range:	0 to 50°C
Modulation System:	pi/4 shift DQPSK
Audio Resolution:	24 bits
Encoding System:	Trantec Proprietary
Dynamic Range:	Over 103dB (A-weighted)
Distortion:	< 0.06%
Connector:	LEMO 3-pin connector (S-D7300 only)
Weight:	S-D7200 356 g (including batteries) S-D7210 312 g S-D7300 166 g
Dimensions:	S-D7200 / S-D7210 approx. 257 x 48mm S-D7300 approx. 93 x 62 x 20mm

12. Accessories Supplied

2 x AA alkaline batteries
Storage pouch
Screwdriver
Microphone holder (S-D7200/7210 only)
Instruction manual

13. Frequency Tables

(Frequency in MHz)

Band 1

Channel	Group 0		Group 1		Group 2		Group 3		Group 4		Group 5
0	692.125		692.125		698.125		704.125		710.125		716.125
1	692.475		692.500		698.500		704.500		710.500		716.500
2	692.925		692.875		698.875		704.875		710.875		716.875
3	693.475		693.250		699.250		705.250		711.250		717.250
4	694.125		693.625		699.625		705.625		711.625		717.625
5	695.025		694.000		700.000		706.000		712.000		718.000
6	696.475		694.375		700.375		706.375		712.375		718.375
7	698.225		694.750		700.750		706.750		712.750		718.750
8	700.125		695.125		701.125		707.125		713.125		719.125
9	702.775		695.500		701.500		707.500		713.500		719.500
A	703.875		695.875		701.875		707.875		713.875		719.875
B	706.625		696.250		702.250		708.250		714.250		720.250
C	709.725		696.625		702.625		708.625		714.625		720.625
D	713.925		697.000		703.000		709.000		715.000		721.000
E	716.125		697.375		703.375		709.375		715.375		721.375
F	720.975		697.750		703.750		709.750		715.750		721.750

Band 2

Channel	Group 0		Group 1		Group 2		Group 3		Group 4		Group 5
0	722.125		722.125		728.125		734.125		740.125		746.125
1	722.475		722.500		728.500		734.500		740.500		746.500
2	722.925		722.875		728.875		734.875		740.875		746.875
3	723.475		723.250		729.250		735.250		741.250		747.250
4	724.125		723.625		729.625		735.625		741.625		747.625
5	725.025		724.000		730.000		736.000		742.000		748.000
6	726.475		724.375		730.375		736.375		742.375		748.375
7	728.225		724.750		730.750		736.750		742.750		748.750
8	730.125		725.125		731.125		737.125		743.125		749.125
9	732.775		725.500		731.500		737.500		743.500		749.500
A	733.875		725.875		731.875		737.875		743.875		749.875
B	736.625		726.250		732.250		738.250		744.250		750.250
C	739.725		726.625		732.625		738.625		744.625		750.625
D	743.925		727.000		733.000		739.000		745.000		751.000
E	746.125		727.375		733.375		739.375		745.375		751.375
F	750.975		727.750		733.750		739.750		745.750		751.750

CE Declaration of Conformity CE
This equipment is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EC or 73/23/EC.

More information is available from www.trantec.co.uk

IMPORTANT NOTICE.
Before using this wireless microphone system, please observe the requirements of each country with respect to frequency allocations and individual licensing requirements.

This symbol indicates that this piece of electrical/electronic equipment must be disposed of separately from normal waste at the end of its operational life. Please dispose of this product by taking it to your local recycling or collection point.