

IMG Stageline Wireless Microphone Frequencies

The IMG Stageline brand offers a wide range of audio equipment designed for both the professional and home user

When using two or more wireless microphones it is important to select two frequencies which are more than 0.5 MHz apart to avoid co-channel interference and intermodulation between the systems

Wireless microphones on frequencies 863.000MHz to 865.000MHz in Ch 70 are deregulated and license free in the UK & EU

Please note that not all channels are legal for use in the UK

TXS-611 & TXS-631 Systems

These are 80 channel systems working on frequencies in Ch 70 which are deregulated and license free in the UK & EU

	Frequency - MHz		Frequency - MHz		Frequency - MHz		Frequency - MHz
Ch 00	863.000	Ch 20	863.500	Ch 40	864.000	Ch 60	864.500
Ch 01	863.025	Ch 21	863.525	Ch 41	864.025	Ch 61	864.525
Ch 02	863.050	Ch 22	863.550	Ch 42	864.050	Ch 62	864.550
Ch 03	863.075	Ch 23	863.575	Ch 43	864.075	Ch 63	864.575
Ch 04	863.100	Ch 24	863.600	Ch 44	864.100	Ch 64	864.600
Ch 05	863.125	Ch 25	863.625	Ch 45	864.125	Ch 65	864.625
Ch 06	863.150	Ch 26	863.650	Ch 46	864.150	Ch 66	864.650
Ch 07	863.175	Ch 27	863.675	Ch 47	864.175	Ch 67	864.675
Ch 08	863.200	Ch 28	863.700	Ch 48	864.200	Ch 68	864.700
Ch 09	863.225	Ch 29	863.725	Ch 49	864.225	Ch 69	864.725
Ch 10	863.250	Ch 30	863.750	Ch 50	864.250	Ch 70	864.750
Ch 11	863.275	Ch 31	863.775	Ch 51	864.275	Ch 71	864.775
Ch 12	863.300	Ch 32	863.800	Ch 52	864.300	Ch 72	864.800
Ch 13	863.325	Ch 33	863.825	Ch 53	864.325	Ch 73	864.825
Ch 14	863.350	Ch 34	863.850	Ch 54	864.350	Ch 74	864.850
Ch 15	863.375	Ch 35	863.875	Ch 55	864.375	Ch 75	864.875
Ch 16	863.400	Ch 36	863.900	Ch 56	864.400	Ch 76	864.900
Ch 17	863.425	Ch 37	863.925	Ch 57	864.425	Ch 77	864.925
Ch 18	863.450	Ch 38	863.950	Ch 58	864.450	Ch 78	864.950
Ch 19	863.475	Ch 39	863.975	Ch 59	864.475	Ch 79	864.975

TXS-606 Series - Including TXS-606, TXS-616, TXS-626, TXS-636 & TXS-646 etc.

These are 1000 channel systems working on frequencies in between 672.000 MHz and 697.000 MHz on channels 46 to 48 which are regulated and need a license for use in the UK

	Group 00	Group 01	Group 02	Group 03	Group 04	Group 05	Group 06	Group 07	Group 08	Group 09
	Frequencies - MHz									
Ch 00	672.000	674.500	677.000	679.500	682.000	684.500	687.000	689.500	692.000	694.500
Ch 01	672.025	674.525	677.025	679.525	682.025	684.525	687.025	689.525	692.025	694.525
Ch 02	672.050	674.550	677.050	679.550	682.050	684.550	687.050	689.550	692.050	694.550
Ch 03	672.075	674.575	677.075	679.575	682.075	684.575	687.075	689.575	692.075	694.575
Ch 04	672.100	674.600	677.100	679.600	682.100	684.600	687.100	689.600	692.100	694.600
Ch 05	672.125	674.625	677.125	679.625	682.125	684.625	687.125	689.625	692.125	694.625
Ch 06	672.150	674.650	677.150	679.650	682.150	684.650	687.150	689.650	692.150	694.650
Ch 07	672.175	674.675	677.175	679.675	682.175	684.675	687.175	689.675	692.175	694.675



Ch 08	672.200	674.700	677.200	679.700	682.200	684.700	687.200	689.700	692.200	694.700
Ch 09	672.225	674.725	677.225	679.725	682.225	684.725	687.225	689.725	692.225	694.725
Ch 10	672.250	674.750	677.250	679.750	682.250	684.750	687.250	689.750	692.250	694.750
Ch 11	672.275	674.775	677.275	679.775	682.275	684.775	687.275	689.775	692.275	694.775
Ch 12	672.300	674.800	677.300	679.800	682.300	684.800	687.300	689.800	692.300	694.800
Ch 13	672.325	674.825	677.325	679.825	682.325	684.825	687.325	689.825	692.325	694.825
Ch 14	672.350	674.850	677.350	679.850	682.350	684.850	687.350	689.850	692.350	694.850
Ch 15	672.375	674.875	677.375	679.875	682.375	684.875	687.375	689.875	692.375	694.875
Ch 16	672.400	674.900	677.400	679.900	682.400	684.900	687.400	689.900	692.400	694.900
Ch 17	672.425	674.925	677.425	679.925	682.425	684.925	687.425	689.925	692.425	694.925
Ch 18	672.450	674.950	677.450	679.950	682.450	684.950	687.450	689.950	692.450	694.950
Ch 19	672.475	674.975	677.475	679.975	682.475	684.975	687.475	689.975	692.475	694.975
Ch 20	672.500	675.000	677.500	680.000	682.500	685.000	687.500	690.000	692.500	695.000
Ch 21	672.525	675.025	677.525	680.025	682.525	685.025	687.525	690.025	692.525	695.025
Ch 22	672.550	675.050	677.550	680.050	682.550	685.050	687.550	690.050	692.550	695.050
Ch 23	672.575	675.075	677.575	680.075	682.575	685.075	687.575	690.075	692.575	695.075
Ch 24	672.600	675.100	677.600	680.100	682.600	685.100	687.600	690.100	692.600	695.100
Ch 25	672.625	675.125	677.625	680.125	682.625	685.125	687.625	690.125	692.625	695.125
Ch 26	672.650	675.150	677.650	680.150	682.650	685.150	687.650	690.150	692.650	695.150
Ch 27	672.675	675.175	677.675	680.175	682.675	685.175	687.675	690.175	692.675	695.175
Ch 28	672.700	675.200	677.700	680.200	682.700	685.200	687.700	690.200	692.700	695.200
Ch 29	672.725	675.225	677.725	680.225	682.725	685.225	687.725	690.225	692.725	695.225
Ch 30	672.750	675.250	677.750	680.250	682.750	685.250	687.750	690.250	692.750	695.250
Ch 31	672.775	675.275	677.775	680.275	682.775	685.275	687.775	690.275	692.775	695.275
Ch 32	672.800	675.300	677.800	680.300	682.800	685.300	687.800	690.300	692.800	695.300
Ch 33	672.825	675.325	677.825	680.325	682.825	685.325	687.825	690.325	692.825	695.325
Ch 34	672.850	675.350	677.850	680.350	682.850	685.350	687.850	690.350	692.850	695.350
Ch 35	672.875	675.375	677.875	680.375	682.875	685.375	687.875	690.375	692.875	695.375
Ch 36	672.900	675.400	677.900	680.400	682.900	685.400	687.900	690.400	692.900	695.400
Ch 37	672.925	675.425	677.925	680.425	682.925	685.425	687.925	690.425	692.925	695.425
Ch 38	672.950	675.450	677.950	680.450	682.950	685.450	687.950	690.450	692.950	695.450
Ch 39	672.975	675.475	677.975	680.475	682.975	685.475	687.975	690.475	692.975	695.475
Ch 40	673.000	675.500	678.000	680.500	683.000	685.500	688.000	690.500	693.000	695.500
Ch 41	673.025	675.525	678.025	680.525	683.025	685.525	688.025	690.525	693.025	695.525
Ch 42	673.050	675.550	678.050	680.550	683.050	685.550	688.050	690.550	693.050	695.550
Ch 43	673.075	675.575	678.075	680.575	683.075	685.575	688.075	690.575	693.075	695.575
Ch 44	673.100	675.600	678.100	680.600	683.100	685.600	688.100	690.600	693.100	695.600
Ch 45	673.125	675.625	678.125	680.625	683.125	685.625	688.125	690.625	693.125	695.625
Ch 46	673.150	675.650	678.150	680.650	683.150	685.650	688.150	690.650	693.150	695.650
Ch 47	673.175	675.675	678.175	680.675	683.175	685.675	688.175	690.675	693.175	695.675
Ch 48	673.200	675.700	678.200	680.700	683.200	685.700	688.200	690.700	693.200	695.700





Ch 49	673.225	675.725	678.225	680.725	683.225	685.725	688.225	690.725	693.225	695.725
Ch 50	673.250	675.750	678.250	680.750	683.250	685.750	688.250	690.750	693.250	695.750
Ch 51	673.275	675.775	678.275	680.775	683.275	685.775	688.275	690.775	693.275	695.775
Ch 52	673.300	675.800	678.300	680.800	683.300	685.800	688.300	690.800	693.300	695.800
Ch 53	673.325	675.825	678.325	680.825	683.325	685.825	688.325	690.825	693.325	695.825
Ch 54	673.350	675.850	678.350	680.850	683.350	685.850	688.350	690.850	693.350	695.850
Ch 55	673.375	675.875	678.375	680.875	683.375	685.875	688.375	690.875	693.375	695.875
Ch 56	673.400	675.900	678.400	680.900	683.400	685.900	688.400	690.900	693.400	695.900
Ch 57	673.425	675.925	678.425	680.925	683.425	685.925	688.425	690.925	693.425	695.925
Ch 58	673.450	675.950	678.450	680.950	683.450	685.950	688.450	690.950	693.450	695.950
Ch 59	673.475	675.975	678.475	680.975	683.475	685.975	688.475	690.975	693.475	695.975
Ch 60	673.500	676.000	678.500	681.000	683.500	686.000	688.500	691.000	693.500	696.000
Ch 61	673.525	676.025	678.525	681.025	683.525	686.025	688.525	691.025	693.525	696.025
Ch 62	673.550	676.050	678.550	681.050	683.550	686.050	688.550	691.050	693.550	696.050
Ch 63	673.575	676.075	678.575	681.075	683.575	686.075	688.575	691.075	693.575	696.075
Ch 64	673.600	676.100	678.600	681.100	683.600	686.100	688.600	691.100	693.600	696.100
Ch 65	673.625	676.125	678.625	681.125	683.625	686.125	688.625	691.125	693.625	696.125
Ch 66	673.650	676.150	678.650	681.150	683.650	686.150	688.650	691.150	693.650	696.150
Ch 67	673.675	676.175	678.675	681.175	683.675	686.175	688.675	691.175	693.675	696.175
Ch 68	673.700	676.200	678.700	681.200	683.700	686.200	688.700	691.200	693.700	696.200
Ch 69	673.725	676.225	678.725	681.225	683.725	686.225	688.725	691.225	693.725	696.225
Ch 70	673.750	676.250	678.750	681.250	683.750	686.250	688.750	691.250	693.750	696.250
Ch 71	673.775	676.275	678.775	681.275	683.775	686.275	688.775	691.275	693.775	696.275
Ch 72	673.800	676.300	678.800	681.300	683.800	686.300	688.800	691.300	693.800	696.300
Ch 73	673.825	676.325	678.825	681.325	683.825	686.325	688.825	691.325	693.825	696.325
Ch 74	673.850	676.350	678.850	681.350	683.850	686.350	688.850	691.350	693.850	696.350
Ch 75	673.875	676.375	678.875	681.375	683.875	686.375	688.875	691.375	693.875	696.375
Ch 76	673.900	676.400	678.900	681.400	683.900	686.400	688.900	691.400	693.900	696.400
Ch 77	673.925	676.425	678.925	681.425	683.925	686.425	688.925	691.425	693.925	696.425
Ch 78	673.950	676.450	678.950	681.450	683.950	686.450	688.950	691.450	693.950	696.450
Ch 79	673.975	676.475	678.975	681.475	683.975	686.475	688.975	691.475	693.975	696.475
Ch 80	674.000	676.500	679.000	681.500	684.000	686.500	689.000	691.500	694.000	696.500
Ch 81	674.025	676.525	679.025	681.525	684.025	686.525	689.025	691.525	694.025	696.525
Ch 82	674.050	676.550	679.050	681.550	684.050	686.550	689.050	691.550	694.050	696.550
Ch 83	674.075	676.575	679.075	681.575	684.075	686.575	689.075	691.575	694.075	696.575
Ch 84	674.100	676.600	679.100	681.600	684.100	686.600	689.100	691.600	694.100	696.600
Ch 85	674.125	676.625	679.125	681.625	684.125	686.625	689.125	691.625	694.125	696.625
Ch 86	674.150	676.650	679.150	681.650	684.150	686.650	689.150	691.650	694.150	696.650
Ch 87	674.175	676.675	679.175	681.675	684.175	686.675	689.175	691.675	694.175	696.675
Ch 88	674.200	676.700	679.200	681.700	684.200	686.700	689.200	691.700	694.200	696.700
Ch 89	674.225	676.725	679.225	681.725	684.225	686.725	689.225	691.725	694.225	696.725



Ch 90	674.250	676.750	679.250	681.750	684.250	686.750	689.250	691.750	694.250	696.750
Ch 91	674.275	676.775	679.275	681.775	684.275	686.775	689.275	691.775	694.275	696.775
Ch 92	674.300	676.800	679.300	681.800	684.300	686.800	689.300	691.800	694.300	696.800
Ch 93	674.325	676.825	679.325	681.825	684.325	686.825	689.325	691.825	694.325	696.825
Ch 94	674.350	676.850	679.350	681.850	684.350	686.850	689.350	691.850	694.350	696.850
Ch 95	674.375	676.875	679.375	681.875	684.375	686.875	689.375	691.875	694.375	696.875
Ch 96	674.400	676.900	679.400	681.900	684.400	686.900	689.400	691.900	694.400	696.900
Ch 97	674.425	676.925	679.425	681.925	684.425	686.925	689.425	691.925	694.425	696.925
Ch 98	674.450	676.950	679.450	681.950	684.450	686.950	689.450	691.950	694.450	696.950
Ch 99	674.475	676.975	679.475	681.975	684.475	686.975	689.475	691.975	694.475	696.975

TXS-811 & TXS-831 Systems

These are 8 channel systems working on frequencies in channel 70 - they are deregulated and license free in the UK & EU

TXS-811 & TXS-831 Channel	Frequency - MHz
Ch 0	863.030
Ch 1	863.230
Ch 2	863.530
Ch 3	863.730
Ch 4	864.030
Ch 5	864.230
Ch 6	864.530
Ch 7	864.720
Ch 8	864.920
Ch 9	864.920 – same as Ch 8
Ch A	864.920 – same as Ch 8
Ch B	864.920 – same as Ch 8
Ch C	864.920 – same as Ch 8
Ch D	864.920 – same as Ch 8
Ch E	864.920 – same as Ch 8
Ch F	864.920 – same as Ch 8

TXS-810 and TXS-830 Systems

These 16 channel systems are no longer available and it is no longer possible to license this equipment for use in the UK

TXS-810 & TXS-830 Channel	Frequency - MHz
Ch 0	790.125
Ch 1	791.725
Ch 2	793.325
Ch 3	794.925
Ch 4	796.525
Ch 5	798.125
Ch 6	799.725
Ch 7	801.325
Ch 8	802.925
Ch 9	804.525
Ch A	806.125
Ch B	807.725
Ch C	809.325

Ch D	810.925
Ch E	812.525
Ch F	813.125

TXS-890 Systems

The TXS-870 series have 193 pre-programmed frequencies between 790.000 MHz and 814.000 MHz. The 16 UHF wireless mic frequencies preset into the IMG Stageline TXS-890 series of equipment allow the user to set the TXS-890 series to be used in conjunction with correctly programmed TXS-870 series equipment - it is not possible to license this equipment for use in the UK

TXS890 channel numbers relate to the following frequencies on TXS870 systems

TXS-890 Channel	Frequency - MHz
Ch 1	790.875
Ch 2	792.265
Ch 3	794.250
Ch 4	795.625
Ch 5	797.125
Ch 6	798.875
Ch 7	801.125
Ch 8	802.250
Ch 9	803.625
Ch 10	805.250
Ch 11	805.750
Ch 12	808.625
Ch 13	809.125
Ch 14	810.000
Ch 15	813.250
Ch 16	813.750

TXS-871, TXS-871HT & TXS-871HSE Systems

The TXS-871 series have 15 pre-programmed frequencies between 863.000 MHz and 865.000 MHz. These 15 channel systems work on frequencies in channel 70 - they are deregulated and license free in the UK & EU

TXS-871 Channel	Frequency - MHz
Ch 1	863.125
Ch 2	863.250
Ch 3	863.375
Ch 4	863.500
Ch 5	863.625
Ch 6	863.750
Ch 7	863.875
Ch 8	864.000
Ch 9	864.125
Ch 10	864.250
Ch 11	864.375
Ch 12	864.500
Ch 13	864.625
Ch 14	864.750
Ch 15	864.875

TXS-800, TXS-802, TXS-840 & TXS-842 Systems

These are fixed frequency systems working on 863.050 MHz and 864.800 MHz frequencies in Ch 70 which are deregulated and license free in the UK & EU

TXA-800, TXA-802, ATS-10 & ATS-16 Systems

These are fixed frequency systems working on 863.100 MHz and 864.900 MHz frequencies in Ch 70 which are deregulated and license free in the UK & EU

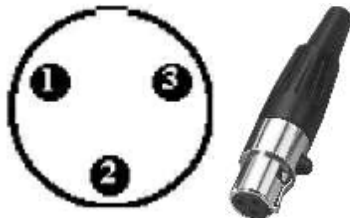
Radio Channel and Frequency

- Ch 1 - 863.100 MHz
- Ch 2 - 864.100 MHz
- Ch 3 - 863.600 MHz
- Ch 4 - 864.600 MHz
- Ch 5 - 863.300 MHz
- Ch 6 - 864.300 MHz
- Ch 7 - 863.800 MHz
- Ch 8 - 864.800 MHz
- Ch 9 - 863.200 MHz
- Ch 10 - 864.200 MHz
- Ch 11 - 863.700 MHz
- Ch 12 - 864.700 MHz
- Ch 13 - 863.400 MHz
- Ch 14 - 864.400 MHz
- Ch 15 - 863.900 MHz
- Ch 16 - 864.900 MHz

IMG Stageline 3 Pin Mini XLR Connectors

IMG Stageline have traditionally used 3 pin mini XLR connectors on their wireless microphone transmitters - IMG Stageline also use various versions of locking 3.5mm jack connectors on some of their range

Gemini, AKG, Nady & Samson use the same 3 pin mini XLR connectors wired the same as IMG Stageline
 Pin layout of the 3 pin mini XLR connector used on many IMG Stageline belt-pack wireless mic transmitters



- Pin 1 - ground
- Pin 2 - mic signal
- Pin 3 - bias voltage +Ve

How to wire different audio sources to IMG Stageline belt-pack wireless mic transmitters using 3 pin mini XLR connectors

To wire a dynamic microphone use:

Pin 1 - ground, pin 2 - signal, pin 3 not used

To wire a 3-wire condenser microphone use:

Pin 1 - ground, pin 2 - signal, pin 3 - bias +Ve

To wire a 2-wire condenser microphone use:

Pin 1 - ground, Pin 2 - signal & bias +Ve, link pins 2 to 3 with 3K3 to 6K8 resistor

To wire a line level input such as a guitar use:

Pin 1 - ground, pin 2 - signal, pin 3 not used - reduce transmitter gain

TXS-xxxLT and TXS-xxxSX Sensitivity Switches

IMG Stageline TXSxxxLT & TXSxxxSX range of bodyworn radiomic transmitters with integral input selection switches and 3.5mm jack socket inputs

The SENS (sensitivity) switch in the battery compartment selects the input sensitivity and whether a 5v DC bias voltage is present for condenser headworn (headmic) and tie-clip mics etc.

Switch position 1 – for use with electric guitars or other signal sources, which have a maximum output level of 600mV. Signal to tip of 3.5mm jack connector and screen to sleeve (body) of connector

Switch position 2 – for use with standard unbalanced dynamic microphones with an output of around 2mV. Signal (from pin 2 of XLR on mic) to tip of 3.5mm jack connector and screen (from pins 1 & 3 linked on XLR) to sleeve (body) of connector

Switch position 3 – for use with 2 wire condenser microphones that require a +5v bias voltage with an output of around 2mV. Signal and +5v to tip of 3.5mm jack connector and –5v to sleeve (body) of connector.

Trantec and IMG Stageline 3.5mm Jack Connectors

Trantec S4 systems, Sennheiser, IMG Stageline TXS-600 range and some other wireless mic systems use a locking 3.5mm screw fit jack connector. The lapel microphone usually supplied with these systems is the LP2 - non locking standard 3.5mm connectors will work with these systems



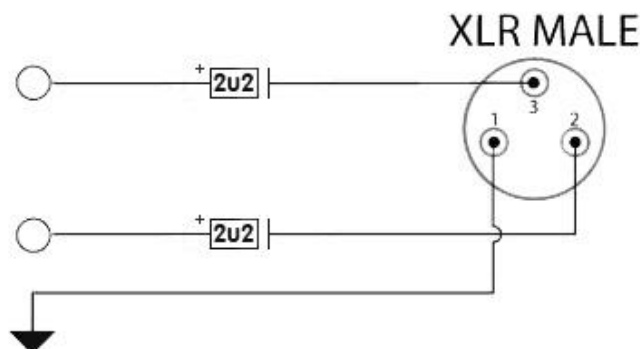
Tip - signal with switchable bias +Ve
 Ring and sleeve - ground

Phantom Power and Wireless Microphone Receivers

Many wireless microphone receivers are not protected from having phantom power connected to their balanced line audio outputs

By connecting a wireless mic receiver to a mixer or amplifier which has phantom power selected can often damage your receiver in moments

You can prevent this damage by having two 2.2mfd (2u2) 63v polarized capacitors in your XLR lead between the receiver and the mixer or amplifier. Taking care to ensure that the capacitors are the correct way round in series with the signals on each of pins 2 and pins 3 of your XLR lead



The positive of the capacitor should connect to the receiver and the negative of the capacitor should connect to the mixer or amplifier

Wireless Mic Aerial Lengths

The length of wireless receiving and transmitting aerials is critical and the following nominal values should be used when replacing broken or missing antenna on wireless mic equipment

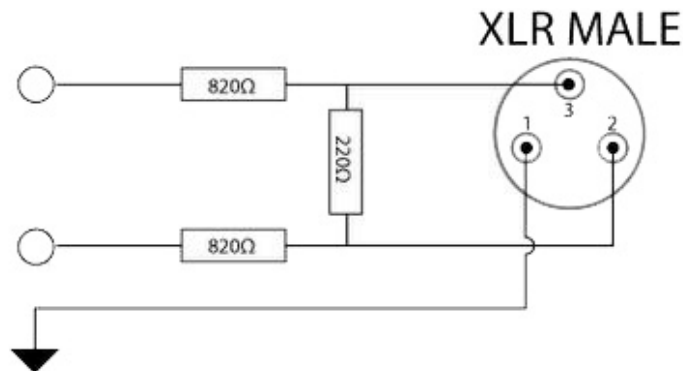
Nominal Frequency	Band - Channel	Frequency Range	1/4 Wavelength Aerial Length
174.0 MHz	VHF	173.800 to 175.000 MHz	16" - 40.75cm
610.0 MHz	UHF - Ch 38	606.000 to 614.000 MHz	4" - 10.25cm
684 MHz	UHF - Ch 46 - 48	672.000 to 696.975 MHz	3.5" - 9cm
858.0 MHz	UHF - Ch 69	854.000 to 862.900 MHz	3.25" - 8.25cm
864.0 MHz	UHF - Ch 70	863.000 to 865.000 MHz	3.25" - 8.25cm

Use double the length for 1/2 wavelength aerials

Attenuator Pads for Mics and Wireless Mic Receivers

Pads or attenuators are often needed to connect a wireless microphone receiver to over sensitive amplifier, PA sound system or mixer inputs. The mic pad will reduce the signal level so that the sound is less distorted and that the operator has more effective control over the volume

18.5db balanced mic pad attenuator



For unbalanced use replace 820 ohm resistor in the signal line with 1600 ohm (1K6) resistor, connect the 220 ohm resistor between signal and earth and do not use a resistor in earth / ground line

If you require less attenuation reduce the 820 ohm resistors to 390 ohms each for a 14db balanced mic pad

For ease, mount the three resistors in the male XLR connector that plugs into the amplifier or mixer

