



Sennheiser Wireless Microphone Frequencies

UK models only

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 863.00 MHz to 865.000 MHz in Ch 70 are deregulated and license free in the UK & EU - Ch 69 854.000 MHz to 862.000 MHz are no longer licensable or legal for use in the UK

Older Sennheiser EW G1, EW G2 & pre 2012 EW G3 use channels 69 and 70 UHF in the UK - 863.000 MHz to 865.000 MHz in Ch 70 are deregulated and license free in the UK & EU - Ch 69 854.000 MHz to 862.000 MHz are no longer licensable within the UK - Sennheiser calls this **band E**

Newer Sennheiser EW G3 use channels 38 - 606.000 MHz to 614.000 MHz) - Sennheiser calls this **band GB** (EW G3 on Band E are available to special order)

Note: Do NOT mix banks - select bank then set up to 20 frequencies from that chosen bank

	G2 Bank 1	G2 Bank 2	G2 Bank 3	G2 Bank 4	G2 Bank 5
	Frequency - MHz				
Ch 01	839.100	830.200	838.100	848.900	856.650
Ch 02	840.400	830.800	838.600	849.725	858.575
Ch 03	843.400	832.300	843.250	852.100	861.150
Ch 04	844.300	832.700	845.500	855.200	861.750
Ch 05	849.400	834.500	846.100	855.900	857.150
Ch 06	850.400	835.400	847.575	859.350	838.950
Ch 07	853.000	839.300	848.800	860.575	840.600
Ch 08	853.500	840.500	856.050	838.250	841.975
Ch 09	856.300	841.300	858.425	839.900	843.050
Ch 10	858.800	843.700	859.250	840.325	844.850
Ch 11	859.200	844.700	860.250	840.900	845.300
Ch 12	860.300	845.400	860.950	842.825	849.225
Ch 13	861.100	848.200	857.325		850.150
Ch 14	831.300	851.200	861.900		852.825
Ch 15	831.900	853.500			
Ch 16	833.700	860.800			
Ch 17	835.700	833.450			
Ch 18	836.900	837.050			
Ch 19	845.450	852.150			
Ch 20	856.850	864.800			

	G2 Bank 6 (& G1 Ch69)	G2 Bank 7	G2 Bank 8	G2 Bank U	EW500 G1 Set
	Frequency - MHz				
Ch 01	856.575	857.500	863.100 deregulated	831.300	863.100 deregulated
Ch 02	857.625	847.400	863.500 deregulated	831.900	863.500 deregulated
Ch 03	860.400	839.900	864.300 deregulated	833.700	864.300 deregulated
Ch 04	861.550	832.200	864.900deregulated	835.700	864.900 deregulated
Ch 05	855.275	832.750	854.100	836.900	855.275
Ch 06	856.175	834.600	854.600	839.100	856.175
Ch 07	858.200	836.750	855.300	840.400	858.200
Ch 08	860.900	842.700	856.200	843.400	858.650
Ch 09		850.650	857.300	844.300	860.400





Ch 10	851.300	859.700	849.400	838.100
Ch 11	830.300	861.150	850.400	838.600
Ch 12	833.900	861.600	853.000	839.300
Ch 13	843.300	838.100	853.500	841.875
Ch 14	849.200	839.400	856.300	844.700
Ch 15	859.100	841.100	858.800	849.075
Ch 16	859.525	849.100	859.200	852.250
Ch 17			860.300	
Ch 18			861.100	
Ch 19			845.450	
Ch 20			856.850	

Connecting to Beltpacks

Sennheiser belt pack transmitters use 3 pole 3.5mm locking jack connectors

EW series

Tip mic signal input & +Ve bias voltage

Ring line signal

Sleeve ground

Freeport series

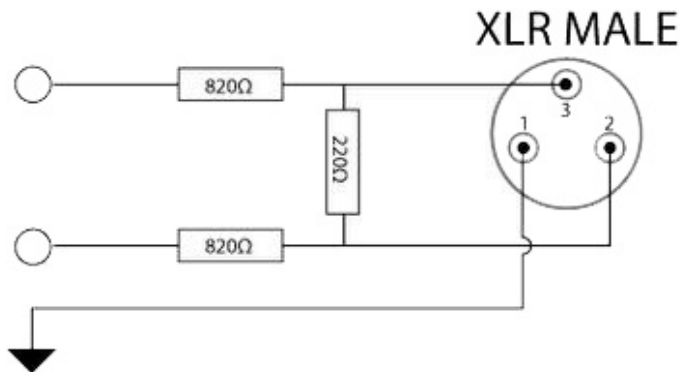
Tip mic signal input & +Ve bias voltage

Ring ground and sleeve ground

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

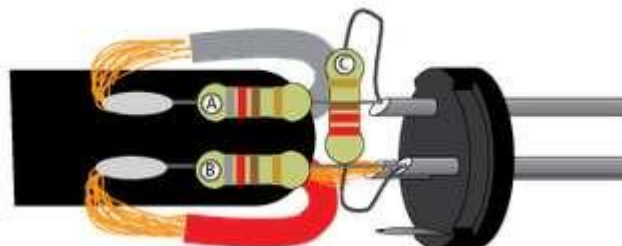
18.5db balanced mic pad attenuator



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

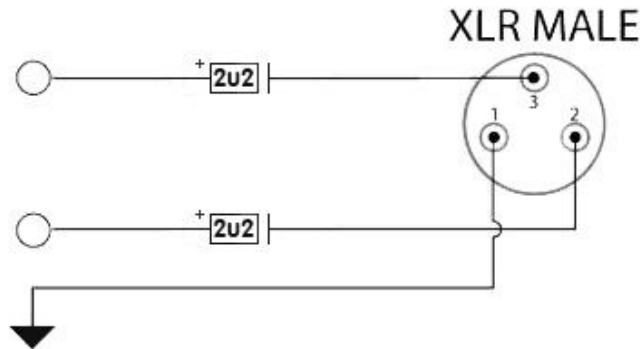


Phantom Power and Wireless Microphone Receivers

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