

AKG WMS420 Frequency Chart

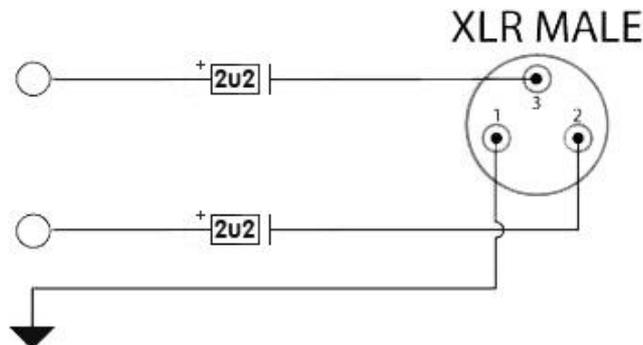
HT420/PT420	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Band A	530,025	532,700	540,000	541,900	546,775	557,500	557,900	559,000
Band U1	606,100	606,600	608,100	610,700	611,450	612,450	613,700	-
Band U2	614,100	614,500	616,900	618,900	620,500	625,900	629,100	629,900
Band B1	748,100	748,500	749,500	751,200	751,900	-	-	-
Band B2	774,100	774,500	775,500	777,200	777,900	-	-	-
Band M	826,300	826,700	828,450	829,050	829,900	831,000	-	-
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Band D	863,100	863,500	864,900	863,100	863,675	864,525	864,900	-
	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Band K	925,100	925,700	928,175	929,075	930,300	931,850	-	-

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



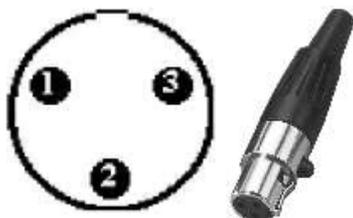
The positive of the capacitor should connect to the receiver and the negative of the capacitor should connect to the mixer or amplifier

Connecting to belt packs

AKG belt pack transmitters use 3 pin mini XLR connectors on their wireless microphone

IMG Stageline, Gemini, Nady & Samson use the same 3 pin mini XLR connectors wired the same as AKG

Pin layout of the 3 pin mini XLR connector used on many AKG belt-pack wireless mic transmitters

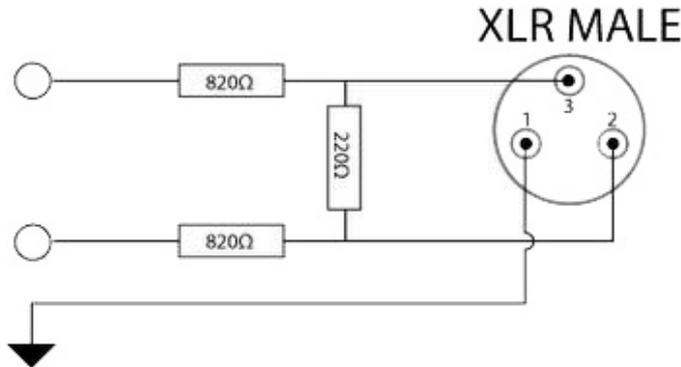


Pin 1 - ground
 Pin 2 - mic signal
 Pin 3 - bias voltage +Ve

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

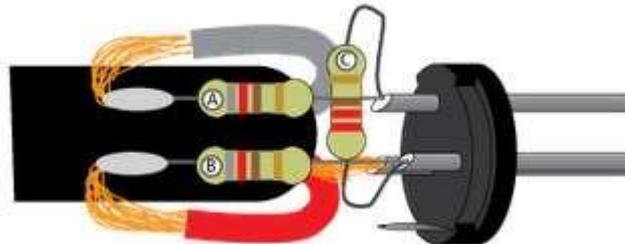
18.5db balanced mic pad attenuator



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



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