



# evolution wireless G4

## EK 500 G4 | Pro Camera Receiver



### FEATURES

- Professional sound and excellent construction quality
- Easy to use and fast setup time
- Easy and flexible wireless synchronisation between transmitter and receiver via infrared
- Up to 88 MHz bandwidth, up to 32 channels
- Range: up to 100 meters / 330 feet
- Increased RF output power (10/30/50 mW)
- Up to 8 hours of operation time

Powerful black camera receiver with increased bandwidth and transmission power for evolution wireless G4 500P Series systems. For professional film productions, easily mounted on any kind of camera.

### DELIVERY INCLUDES

- EK 500 G4 camera receiver
- 2 AA batteries
- CA 2 camera adapter
- CL 1 3.5 mm jack cable
- CL 500 XLR to 3.5 mm jack adapter cable
- quick guide
- safety guide
- manufacturer declaration sheet

### ACCESSORIES

<b>BA 2015</b>	rechargeable battery	Art. no. 009950
<b>L 2015</b>	charger	Art. no. 009828
		Art. no. 5

### PRODUCT VARIANTS

#### Made in Germany

<b>EK 500 G4-K+</b>	925 - 937.5 MHz	Art. no. 507822
<b>EK 500 G4-GBw</b>	606 - 678 MHz	Art. no. 507823
<b>EK 500 G4-Gw</b>	558 - 626 MHz	Art. no. 507824
<b>EK 500 G4-Bw</b>	626 - 698 MHz	Art. no. 507825
<b>EK 500 G4-Cw</b>	718 - 790 MHz	Art. no. 507826
<b>EK 500 G4-Dw</b>	790 - 865 MHz	Art. no. 507827
<b>EK 500 G4-Aw+</b>	470 - 558 MHz	Art. no. 508419

#### Assembled in USA

<b>EK 500 G4-AS</b>	520 - 558 MHz	Art. no. 508161
<b>EK 500 G4-JB</b>	806 - 810 MHz	Art. no. 508162
<b>EK 500 G4-Gw</b>	558 - 626 MHz	Art. no. 508163
<b>EK 500 G4-Bw</b>	626 - 698 MHz	Art. no. 508164
<b>EK 500 G4-Cw</b>	718 - 790 MHz	Art. no. 508165
<b>EK 500 G4-Dw</b>	790 - 865 MHz	Art. no. 508166
<b>EK 500 G4-Aw+</b>	470 - 558 MHz	Art. no. 508440
<b>EK 500 G4-Gw1</b>	558 - 608 MHz	Art. no. 508461



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### SPECIFICATIONS

<b>RF characteristics</b>	
Modulation	Wideband FM
Frequency ranges	Aw+: 470 - 558 MHz AS: 520 - 558 MHz Gw1: 558 - 608 MHz Gw: 558 - 626 MHz GBw: 606 - 678 MHz Bw: 526 - 698 MHz Cw: 718 - 790 MHz Dw: 790 - 865 MHz JB: 806 - 810 MHz K+: 925 - 937.5 MHz
Receiving frequencies	Max. 3520 receiving frequencies, adjustable in 25 kHz steps  20 frequency banks, each with up to 32 factory-pre-set channels, no intermodulation  6 frequency banks with up to 32 programmable channels
Switching bandwidth	up to 88 MHz
Nominal/peak deviation	$\pm 24$ kHz / $\pm 48$ kHz
Receiver principle	Adaptive diversity
Sensitivity (with HDX, peak deviation)	$< 1.6 \mu\text{V}$ for 52 dBA <sub>eff S/N</sub>
Adjacent channel selection	Typically $\geq 65$ dB
Intermodulation attenuation	Typically $\geq 65$ dB
Blocking	$\geq 70$ dB
Squelch	low: 5 dB $\mu\text{V}$ middle: 15 dB $\mu\text{V}$ high: 25 dB $\mu\text{V}$

Pilot tone squelch	Can be switched off
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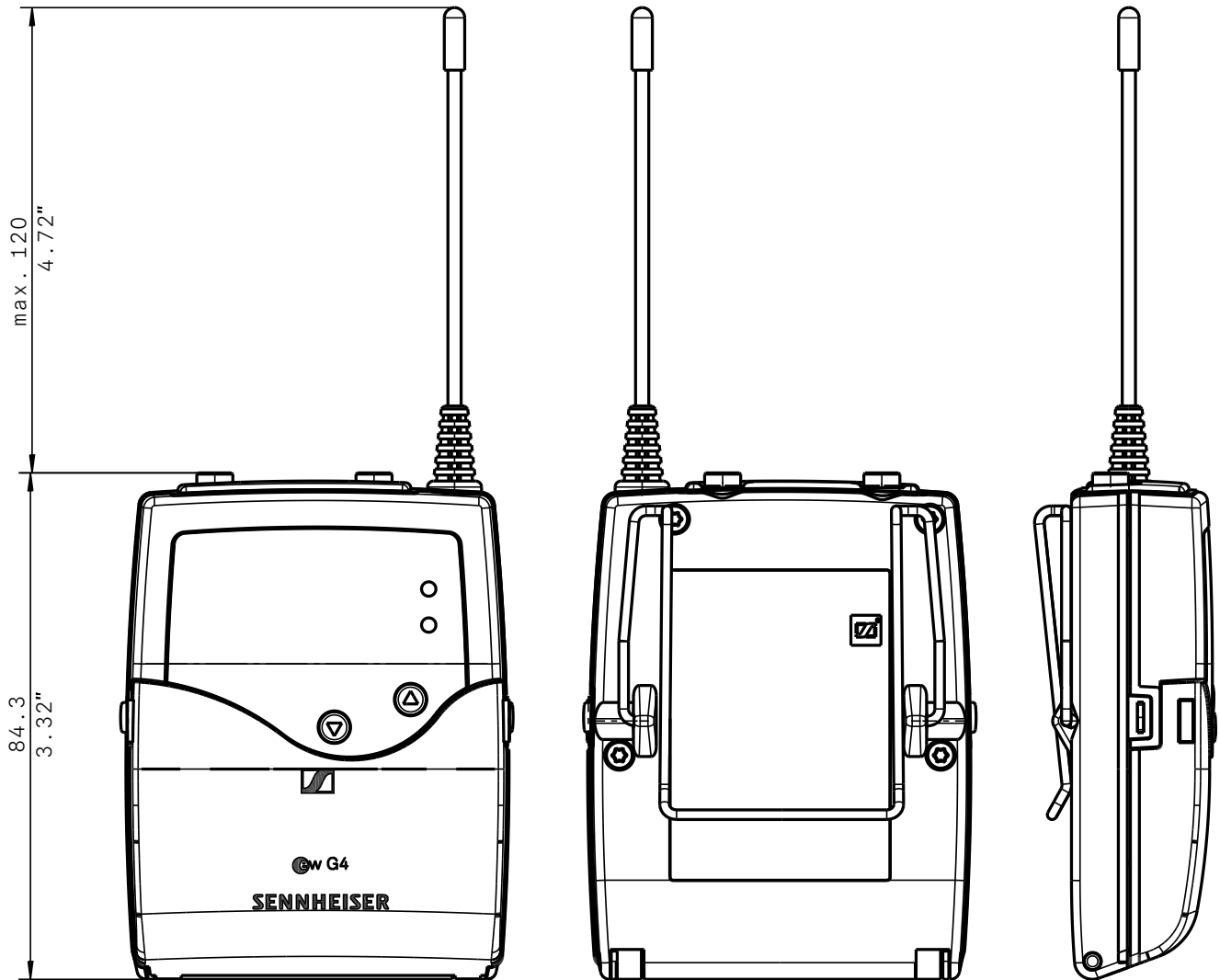
**AF characteristics**	
Compander system	Sennheiser HDX
Signal-to-noise ratio (1 mV, peak deviation)	Line:  $\geq 110$  dBA Phones: approx. 90 dBA
Total harmonic distortion (THD)	$\leq 0.9$  %
AF output voltage (at peak deviation, 1 kHz AF)	3.5 mm jack socket: +17 dBu (mono, balanced)
Adjustment range of audio output level	42 dB, adjustable in steps of 6 dB
**Overall device**	
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Temperature range	-10 °C to +55 °C
Power supply	2 AA batteries, 1.5 V or BA 2015 accupack
Nominal voltage	3 V battery / 2.4 V rechargeable battery
Current consumption	at nominal voltage: typ. 140 mA with receiver switched off:  $\leq 25 \mu\text{A}$
Operating time	Typically 8 h
Dimensions	Approx. 82 x 64 x 24 mm
Weight (incl. batteries)	approx. 130 g



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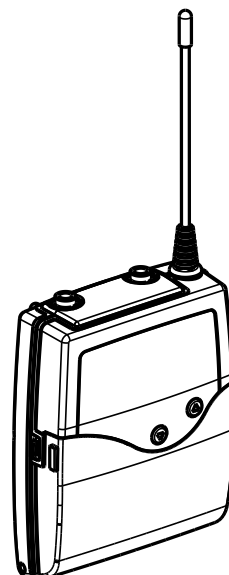
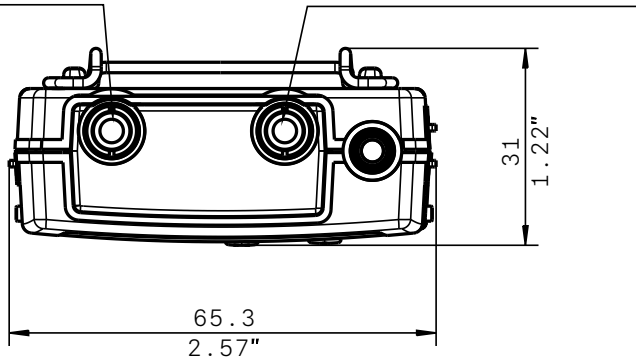
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### DIMENSIONS



3,5mm Klinke  
3,5mm plug

3,5mm Klinke, symmetrisch  
3,5mm plug, symmetrical





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## EK 500 G4 | Pro Camera Receiver

### ARCHITECT'S SPECIFICATION

The compact camera receiver with adaptive diversity technology shall be for use with a companion transmitter as part of a wireless RF monitoring system.

The receiver shall operate within ten UHF frequency ranges, with a switching bandwidth of up to 88 MHz: 470 – 558 MHz, 520 – 558 MHz, 558 – 608 MHz, 558 – 626 MHz, 606 – 678 MHz, 626 – 698 MHz, 718 – 790 MHz, 790 – 865 MHz, 806 – 810 MHz, 925 – 937.5 MHz; transmission frequencies shall be 3520 per range and shall be tunable in 25 kHz steps. The receiver shall feature 20 fixed frequency banks with up to 32 compatible frequency presets and 6 user banks with up to 32 user programmable frequencies.

The receiver shall be menu-driven with a backlit LC display showing the current frequency, frequency bank and channel number, metering of RF level, metering of AF level, lock status, battery status, muting function or line output level, and pilot tone evaluation. An auto-lock feature shall be provided to prevent settings from being accidentally altered.

The receiver parameters shall either be configurable in the associated transmitter's menu and synchronized with the receiver via an integrated infrared interface or shall be programmable in the receiver menu.

The receiver shall feature a 3.5 mm audio output with a maximum output of +17 dBu (mono, balanced) and a 3.5 mm phone output.

Nominal/peak deviation shall be  $\pm 24$  kHz/ $\pm 48$  kHz. Squelch threshold shall be defeatable (off) or adjustable to three levels: Low (5 dB $\mu$ V), Middle (15 dB $\mu$ V) and High (25 dB $\mu$ V).

The receiver shall incorporate the Sennheiser HDX compander system and a defeatable pilot tone squelch. Sensitivity shall be  $< 1.6$   $\mu$ V for 52 dBA eff S/N with HDX engaged at peak deviation. Adjacent channel rejection shall be  $\geq 65$  dB (typical). Intermodulation attenuation shall be  $\geq 65$  dB (typical); blocking shall be  $\geq 70$  dB. Signal-to-noise ratio at 1 mV and peak deviation shall be  $\geq 110$  dBA (line) or approximately 90 dB (phones). Total harmonic distortion (THD) shall be  $\leq 0.9$  %. The audio output level shall be adjustable within a 42 dB range in steps of 6 dB.

Power shall be supplied to the receiver by two 1.5V AA size batteries or by one Sennheiser BA 2015 rechargeable ac-cupack. Nominal voltage shall be 2.4 V, current consumption shall be typical 140 mA at nominal voltage;  $\leq 25$   $\mu$ A when receiver is switched off. Operating time shall be typical 8 hours. The receiver shall have a rugged metal housing; dimensions shall be approximately 82 x 64 x 24 mm (3.23" x 2.52" x 0.94"). Weight including the batteries shall be approximately 130 grams (0.29 lbs). Operating temperature shall range from  $-10$  °C to  $+55$  °C ( $+14$  °F to  $+131$  °F).

The receiver shall be the Sennheiser EK 500 G4.