



# DIGITAL 6000

## EM 6000/EM 6000 Dante



### BENEFITS

- Extremely efficient digital 2-channel receiver with an intuitive, easily configurable user interface and integrated antenna splitter
- Reliable RF performance with equidistant frequency grid and superior audio quality with Long Range mode and proprietary audio codec (SeDAC) from the masterpiece Digital 9000
- Future proof and usable worldwide due to large switching bandwidth, digital and analog interfaces and AES-256 encryption

No compromises, on any stage: With its large 244 MHz switching bandwidth, the EM 6000 2-channel digital receiver can find reliable transmission paths in absolutely any environment. Its renowned LR mode (shared with the masterpiece Digital 9000) ensures superior quality audio signals, even in the most demanding high frequency scenarios. Error correction and audio error masking recognize and fix problems long before they even become audible. This guarantees a reliable connection where other systems fail.

Through its equidistant frequency grid, Digital 6000 assures the simplest frequency configuration and excellent spectral efficiency. Thanks to the high intermodulation resistance, more channels can now be set up than ever before. Up to eight receivers can be cascaded directly from only one pair of antennas.

Maximum overview, quick setup, shortcuts to important functions: The concept for the new user interface on contrast-rich, white OLED displays comes from practical

### SCOPE OF SUPPLY

- 1 receiver EM 6000
- 1 mains cables (EU, UK or US plug)
- 2 antennas
- 2 BNC antenna cables (50 Ω) for daisy-chaining
- 2 Rubber feet
- Quick guide
- Safety guide

experience. All vital parameters are summarized at a glance. Important functions can be reached directly via home screens, without lengthy navigation paths. The auto-setup enables scanning and frequency distribution to all connected devices directly via the receiver. Of course, the Digital 6000 can also be monitored and configured via Wireless Systems Manager (WSM) software.

Digital 6000 seamlessly integrates with existing digital or analog infrastructures. The EM 6000 receiver has a digital AES output with word clock in and outputs, high-quality, transformer balanced analog XLR and 6.3 mm TRS jack outputs as well as a 6.3 mm headphone output. The Dante Version with an Audinate Brooklyn II card offers an additional Amphenol RJ-45 connector for integrating the receiver into a Dante network.

The EM 6000 is compatible with all Sennheiser UHF antennas.



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### Technical Data

Frequency range	470 to 714 MHz	Headphone output	6.3 mm jack, 2 × 100 mW at 32 Ω
Transmission scheme	Digital modulation Long Range Mode Min. frequency spacing for equidistant grid: 600 kHz	Antenna inputs	2 × BNC (50 Ω)
Audio codec	SeDAC (Sennheiser Digital Audio Codec)	Daisy chain outputs	2 × BNC (50 Ω) 0 dB +/- 0.5 dB amplification relative to antenna inputs
Dynamic range	111 dB (A)	Daisy-chained receivers (RF)	Max. 8 EM 6000 units
Encryption	AES 256	Booster supply voltage	12 V DC, max. 200 mA each via antenna sockets, short circuit proof
Latency	Analog audio out: 3 ms Digital audio out: 3 ms (AES/EBU)	Word clock input	BNC, 75 Ω
Total harmonic distortion (THD)	< 0.03% (at 1 kHz)	Word clock output	BNC, 75 Ω
Temperature	Operation: -10 °C to +50 °C Storage: -25 °C to +70 °C	Word clock sampling rates	48 kHz, 96 kHz
Relative air humidity	Operation: max. 85% at 40 °C (non-condensing) Storage: max. 90% at 40 °C (non-condensing)	Network	IEEE 802.3-2002 (10/100 Mbit/s), shielded RJ-45 connection
Dripping and splashing liquids	The product must not be exposed to dripping and splashing (IP2X)	Dante™ (only EM 6000 DANTE)	IEEE 802.3 (1000 Mbit/s), shielded RJ-45 connection
Receiving channels	2	Power supply	100 to 240 V AC, 50/60 Hz
Receiver principle	Double superheterodyne	Power consumption	Max. 35 W
Diversity	True Bit Diversity	Power plug	3-pin, protection class I as per IEC/EN 60320-1
Sensitivity	-100 dBm typical	Dimensions (H × W × D with mounting elements)	44 × 483 × 373 mm
Image rejection	> 100 dB typical	Weight	Approx. 5.2 kg
Blocking	> 80 dB typical		
Audio frequency response	30 Hz to 20 kHz (1.5 dB)		
Analog audio outputs	XLR-3 and 6.3 mm jack per channel (transformer balance), -10 dBu to +18 dBu in steps of 1 dB (2 kΩ)		
Digital audio outputs	AES3-2003, XLR-3: 48 kHz, 96 kHz, 24 bit Dante™, RJ-45: 48 kHz, 96 kHz, 24 bit Can be externally synchronized using WCLK loop-through with BNC sockets		



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### PRODUCT VARIANTS

- EM 6000-US Art. No. 506659
- EM 6000-Dante-US Art. No. 507305
- EM 6000-UK Art. No. 506658
- EM 6000-Dante-UK Art. No. 507304
- EM 6000-EU Art. No. 506657
- EM 6000-Dante-EU Art. No. 507303

### SYSTEM COMPONENTS

- SKM 6000
- SK 6000
- L 6000

### COMPATIBLE WITH

- SKM 9000 in Long Range mode
- SK 9000 in Long Range mode

### RECOMMENDED ACCESSORIES

- A 2003 UHF (passive directional antenna) Art. No. 003658
- AD 3700 (active directional antenna) Art. No. 502197
- A 1031-U (passive omni-directional antenna) Art. No. 004645
- A 3700 (active omni-directional antenna) Art. No. 502195
- AB 3700 (broadband antenna booster) Art. No. 502196
- A 5000-CP (passive circular polarization antenna) Art. No. 500887

## Connections

### EM 6000



### EM 6000 Dante

