EM 2000 True Diversity Receiver

FEATURES

- 20 fixed frequency banks with up to 64 compatible presets in up to 75 MHz switching bandwidth and 6 user banks
- Integrated antenna splitter for cascading up to 8 devices without using additional splitters
- Rugged 19'' all-metal housing with integrated power supply unit
- Ethernet for monitoring and control using Sennheiser WSM Mac or PC software
- Transmitters can be configured in the receiver menu and can be synchronized via the infrared interface
- Enhanced AF frequency response (25....18000 Hz)

Hiding underneath the sturdy 19-inch metal housing of the stationary receiver is highly advanced professional transmission technology. As with all components of the 2000 series, with the EM 2000 you can use five windows of up to 75 MHz in the UHF range. 20 channel bands with up to 64 presets and 6 channel bands each with up to 64 user-programmable channels are available. Each transmitter can be synchronized quickly and easily using infrared. The transmitter can be connected to networks via its Ethernet socket and can be monitored and controlled remotely from the Mac or PC using the Sennheiser Wireless System Manager software.

ARCHITECT'S SPECIFICATIONS

The device shall be a single channel, true diversity (two tuners per receiver channel) stationary receiver for use with a companion transmitter as part of a high reliability true diversity wireless radio frequency transmission system. The stationary receiver shall operate within a RF frequency range of 516 – 865 MHz in 20 fixed frequency banks and 6 user banks, each with a maximum of 64 presets with a switching bandwidth of maximum 75 MHz tunable in 25 kHz steps; carrier frequencies shall be maximum 3000. Squelch threshold shall be defeatable (off) or adjustable from 5 – 25 dBµV in 2dB steps. Nominal/peak deviation shall be ±24 kHz/±48 kHz. Intermodulation spacing shall be ≥75dB. A compander feature shall be included and shall be Sennheiser HDX system with pilot-tone squelch (switchable). Sensitivity shall be < 2.0 µV for 52 dBArms S/N with HDX engaged at peak deviation. Adjacent channel rejection shall be ≥80dB (typical); blocking shall be ≥80dB. Audio frequency response shall be 25 – 18,000 Hz; total harmonic distortion (THD) shall be <0.9%.

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TECHNICAL DATA

RF frequency range	516 – 865 MHz
Carrier frequencies	max. 3000
Presets	max. 64
Switching bandwidth	max. 75 MHz, tuneable in 25 kHz steps
Nominal / Peak deviation	±24 kHz / ±48 kHz
Squelch threshold	Off, 5 – 25 dBµV : Can be set in 2 dB steps
Intermodulation spacing	≥ 75 dB
Sensitivity (with HDX, peak deviation)	≤ 2 µV for 52 dBArms S/N
Adjacent channel rejection	typ. ≥ 80 dB
Blocking	≥ 80 dB
Antenna connector	2 BNC (50 OHM)
Cascadable	2 BNC (50 OHM)
Gain	0 dB ±0,5 dB : Based on antenna inputs
Compander	HDX
Frequency response	25 – 18000 Hz
Signal-to-noise ratio	> 120 dB(A)
THD, total harmonic distortion	< 0,9 %
Audio-XLR connector	XLR-3 + 2 x 6,3 mm : Jack
Audio output level (balanced)	+18 dBu max : Setting range: 49 dB in 1 dB steps + 6 dB gain reserve

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ARCHITECT'S SPECIFICATIONS

Audio frequency output level shall be adjustable within a 49 dB range in 1 dB steps to a maximum of level of +18 dBu (balanced). Signal-to-noise ratio shall be > 120 dB(A). The audio output shall utilize a transformer-balanced male XLR-3 audio socket along with a transformer-balanced ¼'' (6.3 mm) audio socket; a stereo headphone output with local level control shall be provided on the front panel and shall utilize a ¼'' (6.3 mm) stereo audio socket. Menu-based software adjustments shall be made using a backlit LCD user display; associated transmitters shall be configured in the receiver menu and synchronized with the receiver via an integrated infrared interface. Four selectable equalizer presets shall be provided. An integrated guitar tuner shall be provided. Two 50Ω BNC connectors shall provide attachment points for the main receiver antennae and two additional 50Ω BNC connectors with an integrated antenna splitter shall provide for cascading the antennae for up to 8 receivers without the use of external splitters; gain shall be 0 dB ±0.5 dB (based on antenna inputs). To supply active antennas or an antenna booster, a direct voltage of 12 Vdc (200 mA with short circuit protection) shall be provided via the antenna sockets. An Ethernet port (RJ45) shall be provided to allow remote network-based monitoring and control of the receiver using Sennheiser Wireless System Manager Mac or PC software. The receiver shall be fully compatible with all Sennheiser 2000 series and G3 transmitters; partial compatibility shall be provided for Sennheiser ew G2 and G1 transmitters. Power shall be supplied to the receiver by the internal power supply with auto-switching mains voltage of 100 – 240 VAC at 50/60 Hz. Current draw shall be maximum 0.2 A. The receiver chassis shall be fabricated from metal and shall be capable of mounting in a standard 19'' equipment rack without additional hardware; case dimensions shall be approximately 8.54'' x 19.02'' x 1.69'' (217 x 483 x 43 mm). Weight shall be 91.71 oz (2600 grams). Operating conditions shall be ambient temperature +14°F to +131°F (-10°C to +55°C). The receiver shall be Sennheiser model EM 2000.

TECHNICAL DATA

Booster Feed	12 V DC, 2 x 200 mA: Short-circuit proof
Operating temperature	–10 °C – +55 °C
Power supply	100 - 240 V AC, 50/60 Hz
Current consumption	max. 0,2 A
Dimensions	217 x 483 x 43 mm
Weight	2600 g

DELIVERY INCLUDES
1 EM 2000 stationary twin receiver
3 mains cables (EU, UK, and US)
2 rod antennas
4 self-adhesive device feet
1 instruction manual
1 supplementary frequency sheet
1 supplementary RF power sheet

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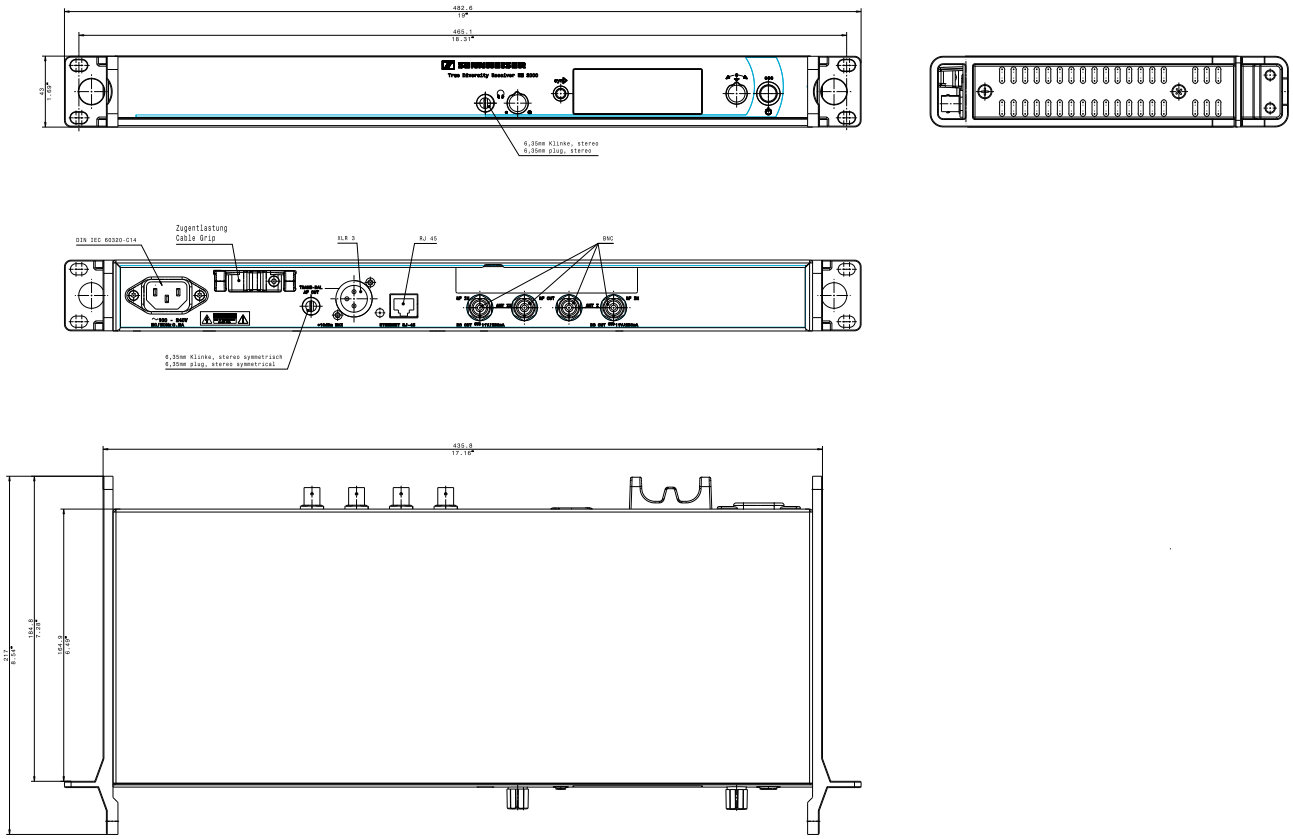
DIMENSIONS



PRODUCT VARIANTS

EM 2050 AW 516 ... 558 MHz	Cat. No. 503144
EM 2050 AW-X 516 ... 558 MHz / Europe	Cat. No. 503739
EM 2050 GW 558 ... 626 MHz	Cat. No. 503742
EM 2050 GW-X 558 ... 626 MHz / Europe	Cat. No. 503743
EM 2050 BW 626 ... 698 MHz	Cat. No. 503746
EM 2050 BW-X 626 ... 698 MHz / Europe	Cat. No. 503747
EM 2050 CW 718 ... 790 MHz	Cat. No. 503750
EM 2050 CW-X 718 ... 790 MHz / Europe	Cat. No. 503751
EM 2050 DW 790 ... 865 MHz	Cat. No. 503754
EM 2050 DW-X 790 ... 865 MHz / Europe	Cat. No. 503755

RECOMMENDED ACCESSORIES

AB 3700 broadband antenna booster	Cat. No. 502196
AD 3700 directional antenna	Cat. No. 502197
A 3700 omni-directional antenna	Cat. No. 502195
GA 3030-AM antenna mount	Cat. No. 4368
A 2003-UHF directional antenna	Cat. No. 3658

Contact your local Service Partner:

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