

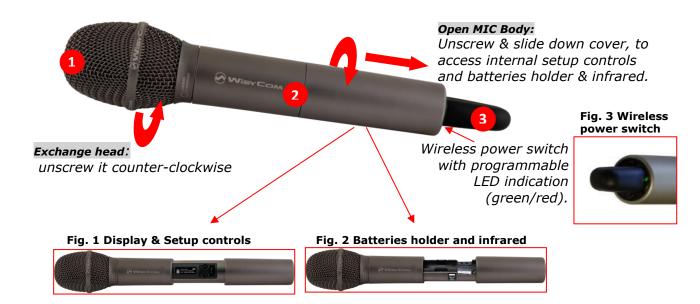
### **Main Features**

- Up to 232 MHz bandwidth in 470/952 MHz range<sup>(\*)</sup>
- Enhanced robustness against intermodulation and antenna performances thanks to special "intermodulation cancellation" circuit and additional circulator (optional)
- Thin and ergonomics body design
- Ultra-light and tough aluminum alloy body
- Software switchable companding systems:
  - ENR (noise optimized)
  - ENC (voice optimized)
- Battery:
  - 2 AA Alkaline, rechargeable NiMH or Lithium with quick release system
- Autonomy: about 11h (50mW with Alk. batteries) more 14h (10mW with Alk. batteries)
- Infrared interface
- Easy and quick to setup thru an OLED display
- 1 joggle selectors and 4 quick setup buttons (level/channel adjustment)
- Available also with MCM type premium head (DPA/Schoeps/Milab/Audio-technica)



# **General Description**

MTH400 is a handheld transmitter especially designed for professional wireless microphone applications. It is very easy and quick to use thanks to OLED display and 1 joggle selector and 2 buttons for straight setup of gain and channel. MTH400 benefits also of the latest Wisycom RF technology, it has been especially designed for robustness against noise and self-interference thanks to a special "intermodulation cancellation" circuit.





# **TECHNICAL SPECIFICATIONS**

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Switchable channels	2400 allocated by 40 groups of 60 channels (in specific frequency range), quickly selectable with dedicated buttons		
Switching window	Up to 232 MHz, depending on band (see <i>Variants</i> below)		
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)		
Frequency stability	• ± 2,5 ppm (in the rated temperature range)		
Temperature range	-10 ÷ +55 °C		
Max RF power	<ul> <li>10mW (ERP) (to respect some local norm)</li> <li>50 mW (ERP) (note: in some countries middle power can be disabled, for local norm!)</li> <li>100 mW (ERP) (note: in some countries high power can be disabled, for local norm!)</li> </ul>		
Spurious emissions	< 2 nW		
Modulation	wideband FM, with pre-emphasis		
Nominal deviation	±40 kHz (Peak deviation = ±56 kHz)		
Telemetry feature	MTH300 transmits also a digitally modulated s  • tone-squelch operating  • remote bat	sub-carrier, suital ttery monitoring	ble for: • optional PTT (push to talk) operation
AF input connection	Directly interchangeable microphone-heads		
AF input level	60 dBu adjustable range from -54 to +6 dBu at peak deviation (1 kHz), adjustable in 1 dB steps		
Max. input level	+6 dBu		
Max sound pressure	150 dB SPL (0,5% THD), with MCM301/MCM302/MCM303/MCM304/MCM305 condenserheads		
Noise-Reduction	ENR (Wisycom Extended-NR), with independent Attack- and Recovery-time, noise optimized ENC (Wisycom Extended-NC), with independent Attack- and Recovery-time, voice optimized & with reduced pre-emphasys		
AF bandwidth	45 Hz ÷ 21 KHz (3dB) 55 Hz ÷ 20 KHz (1dB)		
Distortion	< 0.3 % (0.15 % typ.)		
Signal-to-noise ratio	typ. 115 dB (A) <sub>rms</sub> with 40kHz deviation typ. 121 dB (A) <sub>rms</sub> with 56kHz deviation		
	Led indication with bicolor led (red & green) or	n wireless power	switch:
Led	• Wireless transmission status: GREEN on/off	•	ne status: <i>GREEN</i> - <u>steady</u> (> 25%) (< 25%) - <u>quickly blinking</u> (<12%)
_	<ul> <li>Modulation peek (if activated): RED</li> </ul>	<ul><li>Ptt status: RE</li></ul>	D if active
Display	High contrast OLED (Organic light-emitting diode) white display (128 x 32 pixels) 8 step battery lifetime indication: 7 <u>bars</u> (100%-87%-75%-63-50%-38%-25%) and " <u>empty bar"</u> quickly blinking (12% remaining)		
	2 AA size cell (Alkaline, rechargeable NiMH or Lithium)		
Power supply	2 AA size cell (Alkaline, rechargeable NiMH or	Lithium)	
Power supply Battery life (alkaline)	2 AA size cell (Alkaline, rechargeable NiMH or approx. 10 hours @ 50mW continuous working	,	s @ 10mW
,	, ,	g; up to 14 hours	s @ 10mW

Note: The above technical specifications refer to the MTH 400 "transmitter" section. The acoustic specs are relevant to the microphone-head used.

For the commercial code, see in the Variants area of the Products on our website

# **POWER PROFILE & COUNTRY FREQUENCY RANGE:**

EU max power 50mW (Europe)

0W1 / EUX max power 100Mw\* (Europe)

max power 50mW, limited to 698MHz (USA & Canada)

IP max power 10mW, limited to 714MHz (Japan)

NZ max power 100mW, limited to the range 502÷698MHz (New Zealand)

CN max power 50mW (China)

#### \* MTH400-0W1/MTH400-EUX is not an SRD device, it requires specific authorization by your local frequency authority! The MTH 400 transmitter complies with ETSI 300 422.

## **VARIANTS:**

COLOR

body color titanium gray (ceramic coating)
body color black (powder coating)

### FREQUENCY RANGE

B5 470-654 MHz

**B2** 566-798 MHz

B**3** 510-698 MHz



Before putting the device into operation, please observe the respective country-specific regulations!

