MTH410 User Manual

Wideband Wireless

Professional Handheld

Transmitter

Rev.02 (rif. FW 1.30.0V)

Date: 03 January 2020

INTRODUCTION

MTH410 is a professional radio microphone especially designed for broadcast/high quality applications.

MTH410 is composed by 3 detachable parts:

- ***MIC Head*** (available with cardioid/hyper-cardioid polar pattern).
- ***MIC Body*** (the below part can be open to access "Display & Setup controls" area (fig.1) and on the back the "Batteries holder & Infrared" area (fig. 2).
- ***MIC Antenna***, made with fibreglass reinforced housing and with a "Wireless power switch" (fig. 3). "MIC Antenna" is fastened to body with 2 anvils and a micro-connector.

Open MIC Body:
Unscrew & slide down cover,
To access internal setup controls and batteries holder & infrared.

Exchange head:
unscrew it counter-clockwise

Wireless power switch with programmable LED indication (green/red).

Fig. 3 Wireless power switch

Fig. 1 Display & Setup controls

Fig. 2 Batteries holder and infrared

SAFETY INSTRUCTION

- Read this safety instruction and the manual first
- Follow all instructions and information.
- Do not lose this manual.
- Do not use this apparatus under the rain or near the water.
- Do not install the apparatus near heaters or in hot environments, do not use outside the operating temperature range.
- Do not open the apparatus, only qualified service technician are enabled to operate on it. The apparatus needs servicing when it is not properly working or is damaged by liquids, moisture or other objects are fallen in the apparatus.
- Use only accessories or replacement parts authorized or specified by the manufacturer.
- Clean the apparatus only with dry cloths, do not use liquids.
- Report the serial number and the purchasing date in front of the manual. It is needed to have proper replacement parts or accessories from the manufacturer.
- When replacement parts are needed, use only replacement parts authorized from the manufacturer. Substitution with not authorized parts could result in electric shock, hazards or fire.
- Keep attention on all the labels with warnings or hazards on the apparatus.

LED INDICATION (POWER SWITCH)

Led indication with bicolor led (**red** & **green**) on wireless power switch (fig. 3):

- Wireless transmission status: **green** when RF transmission power is on (on power on the device, this LED is **red** and become green when the RF transmission power is on).
- Battery status: **green** steady, slowly blinking (< 25%), quickly blinking (<12%)
- Modulation peak (if activated): **red**
- PTT status: **red** if active

BATTERIES

MTH410 is working with 2 AA alkaline, NiMH or Lithium batteries (select correct type on setup controls). Battery status can be checked on internal OLED display or looking to LED status on power switch (see LED INDICATION section) ❸.

Battery substitution:

- Open MIC body: unscrew counter-clockwise the below cover to access batteries holder;
- Take out below battery to release upper battery leverage;
- 2nd battery falls down and can be remove

Attention: always replace both the batteries

POWERING UP

Move the wireless power switch (fig. 3) in upper position (towards MIC body) to activate wireless transmission: the front LED 3 lights up red and then green when the RF transmission power is on (blinking when battery is low!)

SETUP CONTROL

Open MIC Body to access the “display and controls” area (fig. 1):

A. Graphics Display (**OLED**)
B. Channel selection buttons (**ch**)
C. MIC gain setup buttons (**gain**)
D. 3 position selector (**up** / **down** / **click**)

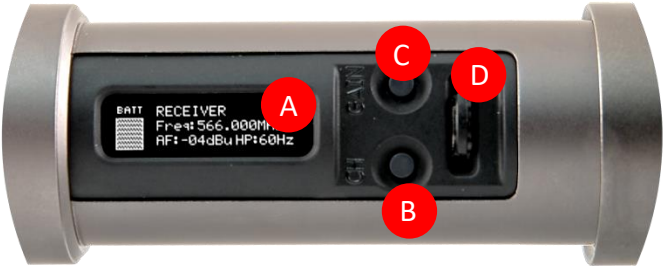


Fig. 4

OLED POWER UP (OLED IS IN OFF CONDITION)

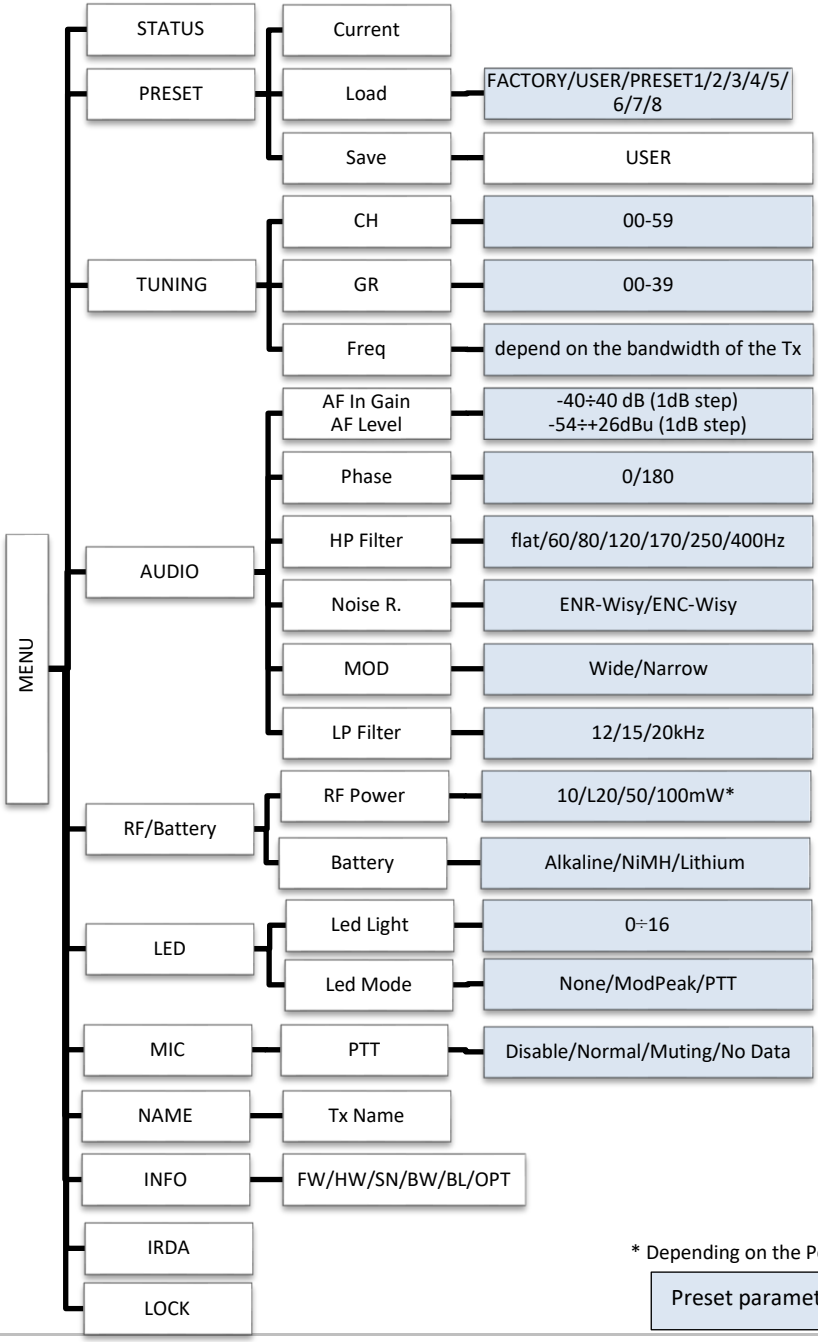
Pushing down selector (**click**), the graphic display oled turns on.
At the beginning a <START UP> menu is displayed, then <STATUS> menu enters automatically. In order to keep the <START UP> menu active, it is necessary to push and hold selector (click) for at least 2 sec.

OLED POWER DOWN (OLED IS IN ON CONDITION)

Display turns off automatically after 15 sec, unless in <AUDIO> menu (with audio level < 5% from nominal).

DISPLAY MENU

Using **up/down** selector all menus can be accessed in sequence.



* Depending on the Power Profile

Preset parameters

Using <up/down> selector all menus can be accessed in sequence, push <click> to enter edit mode (on the left side of the display appear "EDIT" and the selected parameter starts blinking):

<**up/down**> to setup field
<**click**> again to confirm changes and exit.
If no button is pressed, the device exits the EDIT mode and returns the parameter as it was previously set.

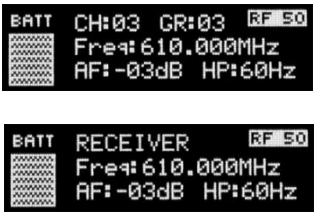
<START UP> menu

These menus are displayed during power up for few seconds.

	This menu gives indication on product: - product id (MTH410), - the firmware release (ex. *1.30.0A*), - the band in extended format and - the serial number. ***Keep selector pushed to hold this menu!***

<STATUS> menu

This is the first menu displayed after power up.

	Major info are displayed: - Current channel/group (i.e. CH:03 GR:03) or Receiver's name (i.e. RECEIVER) if the microphone has already been synchronized with a receiver - Current frequency (i.e. 610 MHz) - Mic gain (i.e. -03dB) and high pass filter (i.e. 60Hz) - If in the top right there is "RF10", "RF 50"or "RF 100", the transmission is active respectively at 10, 50 or 100mW (see RF/BATTERY menu) - On left side, the battery bar is displayed

<PRESET> menu

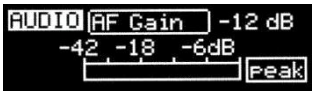
This menu can be entered by scrolling selector.

	MTP41 can recall configuration presets. "FACTORY" recalls the Wisycom factory configuration. "USER" recalls the user configuration (the transmitter configuration is copied into the USER using the "save to" submenu). All "USER" menus are not locked by default, thus this is quick way to unlock features! When the user changes some parameters from the PRESET configuration (for less than frequency) a star appears on the top-right corner until a save command is executed.

The other 8 configuration presets are user programmable thru the infrared and the PC interface (using the programmer UPK 300/UPK Mini or the receiver MRK950/MRK960).
We provide the device with some preset configurations specifically designed for certain types of microphone or applications (it's possible to change these presets in any time using the TX manager). All parameters can be "left unchanged", "changed" or "changed and lock", allowing a very flexible way to pre-program MTH410 configuration.

<TUNING> menu

This menu can be entered by scrolling selector or using *quick channel setup* button (**ch**).

 	In this menu current channel/group and frequencies can be setup. The name of the group is shown on the top right of the display. *Sync* group is a quick self-settable channel synchronized by receiver (with SYNC group, on the top right of the display is shown the name of the synchronized receiver). Use the selector to change values (<**+/-**>) and <**click**> to confirm. Using quick channel setup buttons (<**CH>**), it is possible to enter quickly in the tuning menu. Note that the menu has a different layout (see the side image)
  	The sensitivity of the audio input is settable between "**AF Gain**" (measured in dB) or "**AF Level**" (measured in dBu). To help proper audio gain setting, an audio bar is supplied (with maximum peak indicator) indicating the headroom to audio peak (0 dB , nominal deviation 40KHz). *Set the gain, with the maximum input signal, avoiding the peak on the audio bar.* **TRY TO SETUP TO HAVE A MAX PEAK HOLD BAR CLOSE TO -6dB**. Using quick gain setup buttons (<**GAIN**>), it is possible to enter quickly in the audio gain menu. Note that the menu has a different layout (see the side image)
	The second <AUDIO> menu allows to set: - audio phase (0° or 180°) - High Pass filter (Flat, 60, 80, 120, 170, 250, 400 Hz)
	The third <AUDIO> menu allows to set the noise reduction: • **ENR-Wisy**: designed for maximum noise reduction • **ENC-Wisy:** designed for maximum audio fidelity (use this in case of special vocal application or to remote instruments)
MODULATION / LP FILTER	Use this menu to set the type of modulation and the audio low pass filter. Setting Wideband modulation, FM peak deviation is ±56kHz and the audio filter can be set 12/15/20kHz. Setting Narrowband modulation, FM peak deviation is ±35kHz and the audio filter can be set 12/15kHz. NOTE: MTH410 passes type of modulation (Wide/Narrow) to Wisycom receivers MPR52/MRK980 during the SYNC process. In this way the receiver MPR52/MRK980 automatically adapt the filter setting.

<RF/BATTERY> menu

This menu can be entered by scrolling selector.

	**RF power** can be setup to 10mW, 20mW, 50 mW or 100mW (depending on the Power profile). *If it's selected "10mW", in the top right on the STATUS menu appear "RF10".* *If it's selected "50mW", in the top right on the STATUS menu appear "RF50".* *If it's selected "100mW", in the top right on the STATUS menu appear "RF100".* **Battery** type can be setup in Alkaline, NiMH or Lithium.

<LED> menu

This menu can be entered by scrolling selector.

	Power switch green LED brightness can be setup → **Led light** (from 0 to 16). **Led Mode** setting define when the LED on the power switch (see Fig. 3) have to become RED: - None: never, - ModPeak: when audio get close to saturation) - PTT: when the PTT button is pushed

<MIC> menu

This menu can be entered by scrolling selector.

	4 different **PTT** mode can be selected: Disable, Normal, Muting, No Data.

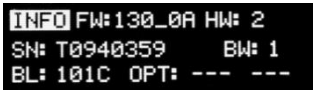
<NAME> menu

This menu can be entered by scrolling selector.

	In this menu it's possible to see the frequency set on the device and the name of the transmitter. It's possible to enter on this menu also pressing at the same time the CH/GAIN buttons (B+C)

<INFO> menu

This menu can be entered by scrolling selector.

	In this menu it's possible to see: - FW version - HW version - Serial number - Bandwidth - Bootloader version - Option

<IRDA> menu

This menu can be entered by scrolling selector.

	While there is this menu, the device can be connected to IRDA for setup or firmware upgrades. Note: if the IRDA interface is enabled and there's no communication for around 10 seconds, the IRDA interface is automatically turned off.

On power on the device, the IRDA interface is enabled for 14 seconds.

<LOCK> menu

This menu can be entered by scrolling selector.

	Long pressing (2 sec.) selector button (**click**) it locks MTH410 in transmission mode. To unlock, long pressing (2 sec.) selector button again.

<BOOTLOAD> menu

This menu can be entered by turning on the transmitter while pushing **at the same time** the quick channel setup button <**CH**> or connecting the device via IRDA using the IR Programmer for FW update

	Device is forced in bootloader mode to allow **FIRMWARE UPDATE**.

The following table sums up which parameters can be set and the related range settings.

MENU	PARAMETER	MEANING	RANGE SETTINGS
TUNING	CH	Channel	0 ÷ 59
	GR	Group	0 ÷ 39 + SYNC GROUP
	Freq	Frequency	It depends on the MTH410 Model: See technical spec. and variants for further details
AUDIO	AF Gain AF Level	Gain of the audio signal	-40dB ÷ +40dB step of 1dB -54dBu ÷ +26dBu step of 1dBu
	Phase	Audio signal phase	0° or 180°
	HP	High Pass filter	Flat/60/80/120/170/250/400 Hz
	Noise R.	Noise reduction	ENR: Wisycom Extended-NR, noise optimized ENC: Wisycom Extended-NC, voice optimized
	MOD	Modulation	WB wideband / NB narrowband
	LP Filter	Audio Low Pass Filter	12/15/20kHz
RF/BATTERY	RF Power	RF Power	10mW or 20mW or 50mW or 100mW (depending on the power profile)
	Battery	Battery type	Alkaline, NiMH or Lithium
LED	Led Light	Power switch green brightness	0 ÷ 16
	Led Mode	It defines when the power switch led (see Fig. 3) has to become RED	None: never ModPeak: when audio get close to saturation PTT: when the PTT button is pushed
MIC	PTT Mode	It defines how and what information the transmitter has to send	**Disable**: when the PTT button is pushed, nothing happen. (the transmitter sends AF+Tone squelch) **Normal**: when the PTT button is pushed, the transmitter send a different RF signal. According to the receiver configuration the audio can be enabled/disable on LINE (and/or COM). **Muting**: the transmitter doesn't send the audio. The voice is cut, it doesn't enter to the microphone **No Data**: the transmitter sends neither tone squelch nor battery data.

HOW TO USE WISYCOM TX MANAGER (V.1.1.15 OR ABOVE)

Wisycom TX Manager allows to read, modify and update the configuration of Wisycom transmitters. It is necessary to

- connected the programmer UPK300E/UPKMini or the receiver MRK950/MRK960 to the PC thru **USB connection**
- run the Wisycom TX Manager
- enable the IRDA communication on the transmitter (see IRDA menu)

NOTE: Wisycom IR Programmer doesn't work whit MRK950/MRK960 if it is connected to the PC using an Ethernet cable.

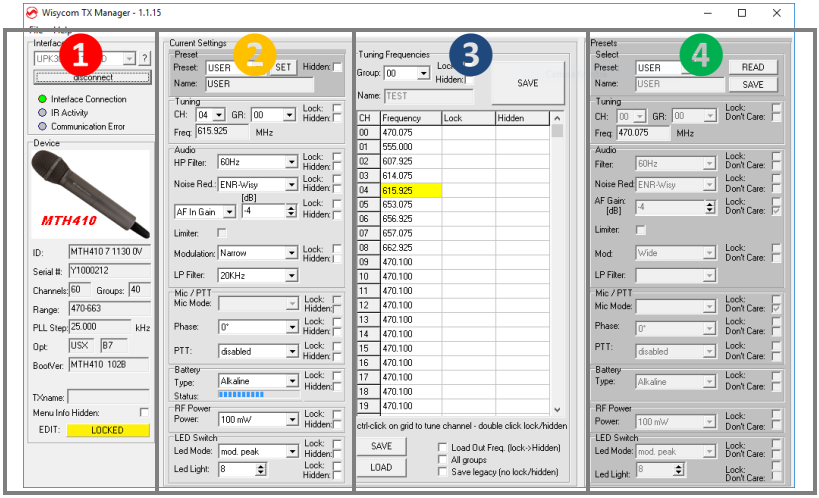
The Wisycom IR Programmer's window is divided in 4 parts (see the image below):

1 **Interface** and **Device** panel contains all the major information of the connected device

2 **Current Settings** panel shows the current configuration. Thanks the PRESET panel, a previous saved configuration can be chosen and loaded like current setting.

3 **Tuning Frequencies** panel allows to handle Groups, Channels and Frequencies

4 **Presets** panel allows to read, change and save different configurations



10 different configurations are available:

- FACTORY configuration is a locked configuration: no parameter can be changed.
- USER configuration is the only configuration that can be saved using the OLED display (see <PRESET> menu). Note: It is not possible to change the name of this configuration.
- Other 8 configurations where the user can change both the name and the values of all parameters.

INTERFACE AND DEVICE PANEL (1)

At the beginning, the program checks which IR devices are detected and they appears on the **Interface** panel.

The user has to select the device and push <connect> button in order to open the communication with the IR device. A picture on the top in the Interface panel help the user in this selection showing the type of devices detected. During this process the "IR activity" led blinks to indicate that the program wait connection's answer from the IR device.

A successful connection is signaled with the "interface connection" green led, while a failed connection is signaled with the "communication error" led.

Once a supported device is found, the software automatically reads all the data related to the remote configuration, as well as the frequencies that are pre-programmed.

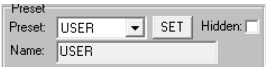
Firstly, in order to avoid unwanted operation, no parameters can be changes and the EDIT button, presents on the bottom of **Device** panel, is yellow and set to LOCKED state. Pushing the EDIT button, it becomes grey and sets to UNLOCKED state to indicate that the configurations can be modified.

In this panel it's possible to assign a name to the TX (not available for FW v.1.22.0F or previous). Under this parameter, there is a flag to hide the info menu on the TX (not available for FW v.1.22.0F or previous)

CURRENT SETTINGS PANEL (2)

In the Current Settings panel the user can

- with Preset panel → load one of the 10 available configurations



- with other panels → modify all the configuration's parameters (the same that are changeable in the OLED display). Each parameter can be locked or hidden clicking the related lock/hidden button, so the set value cannot be changed next or cannot be visible on the OLED display.

ATTENTION: All the modifies applied to the Current Settings panel are instantaneous: they are

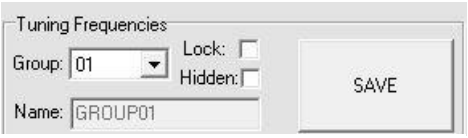
applied directly to the device and save in its memory but no saved in the preset configuration.

TUNING FREQUENCIES PANEL (3)

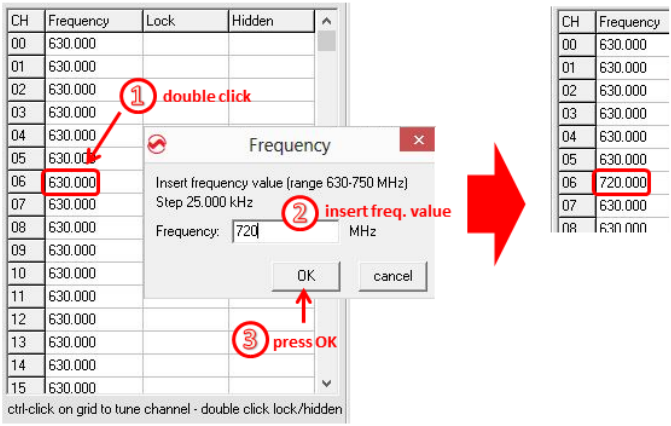
With the Tuning Frequencies panel the user can select a frequencies group (0÷39) and for each one execute the following operations:

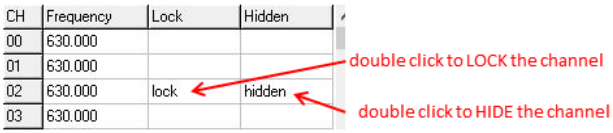
- modify the Group's Name
- lock and/or hidden the group
- for each channel (0 ÷59) of the selected group: change the frequency value and the related status (locked/hidden) (in the center grid frequency)

The SAVE button, at the top of the panel, save the changes of the group selected (name group, lock/hidden group).



To change a frequency value for a specific channel: double click on the grid frequency panel (row=channel's number), insert the new frequency value and press OK button.

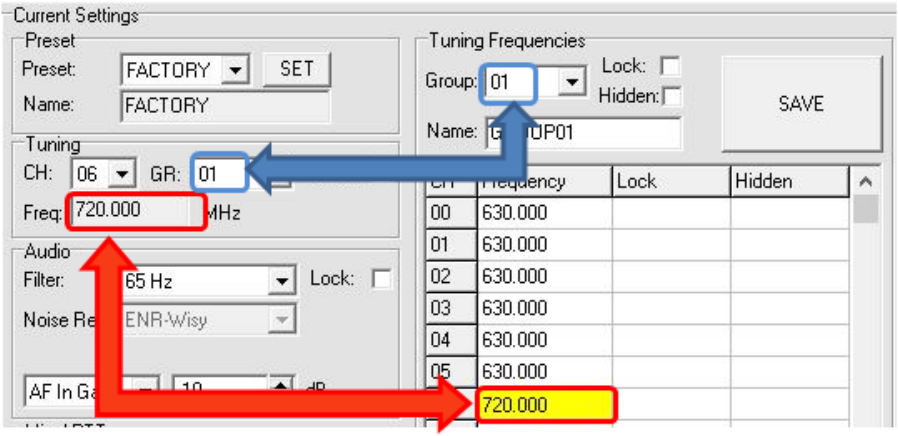




To lock/hide a specific channel, double click on the grid frequency panel.

NOTE: keeping pressed the CTRL button on the keyboard and clicking the wanted channel/group shown on the frequencies grid, the tuning process is executed. It is equivalent to configure the Tuning in the Current Settings panel but it is easier. The device is re-tuned immediately, so be sure that the RF power is turned off while changing frequencies with other RF systems in use around you!

If the currently tuned channel is on the same group that is listed on the grid, the background color of the related cell (channel) on the grid becomes yellow.



Using the LOAD/SAVE button, at the bottom of the panel, it is possible to **load/save** the frequencies for the selected group from/to a .wdf file. To save the frequencies of all the groups click to the related button above. The legacy option save the channels without the hidden/lock info.

PRESETS PANEL (4)

The Preset panel allows to manage all the 10s available configurations. For each configuration it is possible to set the name and all the parameters value except for FACTORY and USER configurations (see table below).

PRESETS:	NAME*	LOCK/DON'T CARE	PARAMETERS VALUE
FACTORY			
USER			√
OTHERS	√	√	√

√=change is allowed

* Be careful to write a meaningful name for the preset because the name will appear on the settings list of the device menu! Please, avoid empty names.

If a parameter is "locked", it cannot be modified by device menu (using OLED display), while if "don't care" propriety is active, when the user load the configuration, the parameter's value doesn't changed.

ATTENTION: Changes are applied only after a "save" action.

NOTE: *"a trick"* In case of the user have a locked parameter and he is in great need for modify it, he can save the configuration to USER configuration by OLED (see PRESET menu) and then load the USER configuration (in this way all the parameters have the lock propriety disable and the user can modify all the parameters).

FILE MENU

Using a file menu at the top left of the panel it is possible to **load/save all the configuration** values of the device to/from a .wcf file (Wisycom Configuration File).

Save a .wcf file

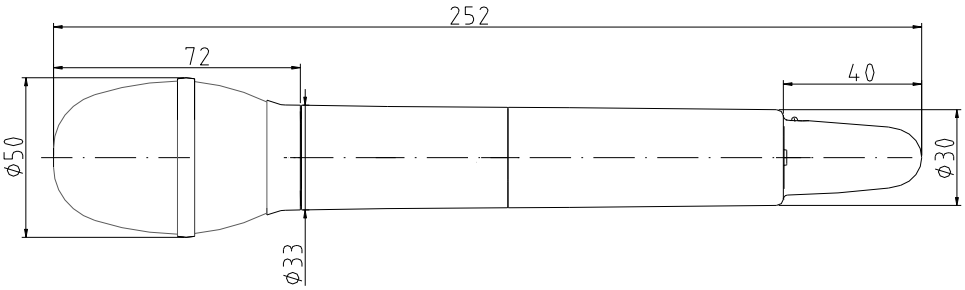
With an infrared device correctly connected, select File->Save User Configuration and select the destination file.

Load a .wcf file

To load a user configuration select File->Load User Configuration and select a previously saved data file; a form will be shown, where it's possible to select which data has to be restored and which skipped. This allow the user to load a particular configuration while keeping other data.

TECHNICAL SPECIFICATIONS

Frequency ranges	B7 option: 470 ÷ 663 MHz — B8 option: 940 ÷ 960 MHz B3 option: 510 ÷ 698 MHz — B6 option: 960 ÷ 1160 MHz B2 option: 566 ÷ 798 MHz — B9 option: 1240 ÷ 1260 MHz
Switchable channels	2400 managed in 40 groups of 60 frequencies completely user customizable
Switching-window	Up to 232 MHz, depending on band (see *Variants* below)
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)
Frequency error	± 2.5 ppm, in the rated temperature range
RF Power	switchable typ. 10 or 20 mW / 20**L** mW / 50 mW /100 mW note: in some countries high power can be disabled, for local norm!
Modulation	Wideband/Narrowband FM, with pre-emphasis
Nominal deviation	±40 kHz Wideband, ±25 kHz Narrowband
Peak deviation	±56 kHz Wideband, ±35 kHz Narrowband
Spurious emissions	< 2 nW
Telemetry feature	TX transmits also a digitally modulated sub-carrier, suitable for: ▪ tone-squelch operating ▪ remote battery monitoring ▪ optional PTT (push to talk) operation
Noise Reduction system	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) Wideband with LPF at 20kHz 45 Hz ÷ 17 KHz (3dB), 55 Hz ÷ 15 KHz (1dB) Narrowband with LPF at 15kHz
Distortion	< 0.3 % (0.15 % typ.)
SND/D ratio (Analogue)	typ. 115 dB (A)rms with 40 kHz deviation, typ. 121 dB (A)rms with 56 kHz deviation Wideband typ. 115 dB (A)rms with 25 kHz deviation, typ. 121 dB (A)rms with 35 kHz deviation Narrowband
Audio input connector	directly interchangeable microphone-heads
Audio input level	60 dB adjustable range from -54 to +6 dBu at peak deviation (1 kHz), adj. in 1 dB steps
Max input level	+6 dBu
Max sound pressure	150 dB SPL (0,5% THD), with MCM30x condenser-heads
Managing interface	IrDA
LED	bicolor led (red & green) on wireless power switch: ▪ Wireless transmission status: GREEN on/off ▪ Battery lifetime status: GREEN steady (> 25%), slowly blinking (< 25%), quickly blinking (<12%) ▪ Modulation peek (if activated): RED ▪ Ptt status: RED if active
Battery lifetime indication	8 steps : 7 bars (100%-87%-75%-63-50%-38%-25%) and “empty bar” quickly blinking (12% remaining)
PTT function	with optional PTT accessory
Display	High contrast OLED (Organic light-emitting diode) white display (128 x 32 pixels)
Power supply	2 AA size cell (Alkaline, rechargeable NiMH or Lithium)
Power consumption	230mA@3V average (display off, 100mW power)
Battery life	with Alkaline: up to 14 hours @ 10mW, approx. 12 hours @ 20mW, approx. 10 hours @ 50mW , approx. 7 hours @ 100mW or @ 20mW Intermod Free “20L” level with Lithium: approx. 7 hours @ 100mW
Temperature range	-10 ÷ +55 °C
Dimensions	183 x 33 mm (length x diameter) without microphone-head
Weight	Approx. 150g only body, 280 g with head MCM306, 330g with head MCM306 and batteries



Note: unit is mm

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

VARIANTS:

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

EU max power 50mW (Europe)

EUX max power 100mW***** (Europe)

USX max power 100mW (USA & Canada)

US8 max power 100mW (USA & Canada)

JP max power 10/50mW (Japan)

▪ **COLOR**

BL body color black

PV body color titanium grey

▪ **FREQUENCY RANGE**

B7 470-663 MHz **B8** 940-960 MHz

B3 510-698 MHz **B6** 960-1160 MHz

B2 566-798 MHz **B9** 1240-1260 MHz

Compliance

Model	*In Compliance with*	*Max Power*	*Country*
MTH410-EU	**EN 301 489-1/-9** **EN 600065** **EN 300 422-1/-2**	50mW	Europe CE
MTH410-EUX	**EN 301 489-1/-9** **EN 600065** **EN 300 422-1/-2** **EN 300 454-1/-2**	100mW*	Europe CE
MTH410-USX	FC PART 74 FCC-ID: **POUMTH400USX** **RSS-123, RSS-102** IC: **11967A-MTH400USX** Limited to 663MHz	100mW	USA, Canada
MTH410-US8	FC PART 74 FCC-ID: **POUMTH410US8** **RSS-123, RSS-102** IC: **11967A-MTH410US8** Limited to 941.50-952.00MHz, 952.85-956.25MHz, 956.45-959.85MHz	100mW	USA, Canada
MTH410-NZ	**EN 300 422-1/-2** **EN 300 454-1/-2** Limited to the range 502÷698MHz	100mW	New Zealand

***** MTH410-EUX is not an SRD device, it requires specific authorization by your local frequency authority! **Note**: The above technical specifications refer to the MTH410 "transmitter" section. The acoustic specs are relevant to the microphone-head used. The MTH410 transmitter complies with ETSI 300 422.

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

MANUFACTURER DECLARATIONS

In compliance with the following requirements

- RoHS Directive (2002/95/EC)

- WEEE Directive (2002/96/EC)
  Please dispose of the diversity transmitter at the end of its operational lifetime by taking it to your local collection point or recycling center for such equipment

- Battery Directive (2006/66/EC)
  The supplier batteries or rechargeable batteries can be recycled. Please dispose of them as special waste or return them to your specialist dealer. In order to protect the environment, only dispose of exhausted batteries.

FCC Conformity

This device complies with Part 74 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operations.

Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID can be found near the battery compartment (unscrew & slide down the cover).

FCC ID: POUMTH400USX option USX

FCC ID: POUMTH400US8 option US8

Industry Canada Conformity

EN

This device operates on a no-protection, no-interference basis. Should the user seek to obtain protection from other radio services operating in the same TV bands, a radio licence is required. For further details, consult Innovation, Science and Economic Development Canada's document Client Procedures Circular CPC-2-1-28, Voluntary Licensing of Licence-Exempt Low-Power Radio Apparatus in the TV Bands.

This device complies with Industry Canada RSS-123.
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

FR

Ce dispositif fonctionne selon un régime de non-brouillage et de non-protection. Si l'utilisateur devait chercher à obtenir une certaine protection contre d'autres services radio fonctionnant dans les mêmes bandes de télévision, une licence radio serait requise. Pour en savoir plus, veuillez consulter la Circulaire des procédures concernant les clients CPC-2-1-28, Délivrance de licences sur une base volontaire pour les appareils radio de faible puissance exempts de licence et exploités dans les bandes de télévision d'Innovation, Sciences et Développement économique Canada.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio RSS-123. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

ITALY ONLY

Obblighi di informazione agli utilizzatori
ai sensi dell'art. 13 del Decreto Legislativo 25 luglio 2005, n. 151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonché allo smaltimento dei rifiuti"

Smaltimento di apparecchiature elettriche ed elettroniche di tipo professionale

Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.
La raccolta differenziata della presente apparecchiatura giunta a fine vita è organizzata e gestita dal produttore. L'utente che vorrà disfarsi della presente apparecchiatura dovrà quindi contattare il produttore e seguire il sistema che questo ha adottato per consentire la raccolta separata dell'apparecchiatura giunta a fine vita.
L'adeguata raccolta differenziata per l'avvio successivo dell'apparecchiatura dismessa al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura.
Lo smaltimento abusivo del prodotto da parte del detentore comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

Smaltimento batterie usate

Questo prodotto può contenere batterie. Questo simbolo apposto sulle batterie significa che non possono essere smaltite insieme a normali rifiuti domestici, bensì devono essere depositate negli appositi punti di raccolta delle batterie.

Iscrizione al Registro A.E.E. n. IT09100000006319

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DECLARATION OF CONFORMITY

WISYCOM

EU DECLARATION OF CONFORMITY

We,

WISYCOM S.r.l.
via Tiepolo , 7/E- 35019
Tombolo (PD) - Italy

declare under our sole responsibility that the product

Model **MTH410**
Description **Wireless Handheld Transmitter**

conforms to the essential requirements of the RADIO Directive 2014/53/EU – Radio Equipment Directive (RED)

Directive	Applicable Standards	Description
Radio	EN 300 422-1 v2.1.2	Wireless Microphones; Audio PMSE up to 3 GHz; Part 1: Class A Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
EMC	EN 301 489-1 v1.9.2	Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
	EN 301 489-9 v1.4.1	Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 34: Specific conditions for External Power Supply (EPS) for mobile phones
Safety	EN 62368-1 2014	Audio/video, information and communication technology equipment — Part 1: Safety requirements (IEC 62368-1:2014, modified)
RoHS	EN 50581 2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Date: 10 June 2019

Franco Maestrelli, Managing director

WISYCOM™
VOX INFRAGILIS

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