

MTP40S User Manual

Wideband Wireless
Professional Pocket
Transmitter

SN: _____

Rev.08 (ref. FW 1.30.OP)

Date: 17 May 2018



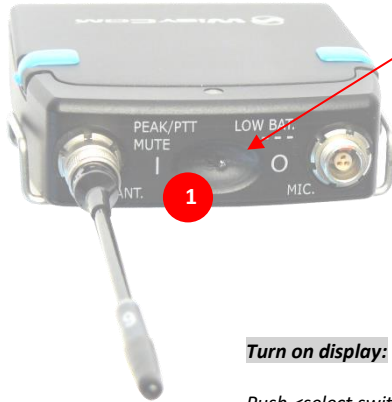
INTRODUCTION

"MTP40S is an extremely small and light pocket transmitter especially designed for professional wireless microphone applications"

Very easy and quick to use thanks to OLED display, dedicated buttons and a joggle selector.

MTP40S benefits also of the latest Wisycom RF technology along with an enhanced robustness against noise and inter-modulation.

Fig. 1



Turn on wireless:

Move the Wireless **power switch** in "1" position.

Turn on display:

Push <select switch> and hold it.

Front LED RGB.

Open MIC Body:

Push the side buttons and flip down the cover, to access internal setup controls and batteries.

- 1 Switch to enable wireless transmission, it also indicates the battery status and peak/mute operation (with PTT)
- 2 In order to allow front visibility same colour information on (1) is replicated with this LED
- 3 Oled display for transmitter setup
- 4 <ch>, <gain> and 3 positions <selector>
- 5 Battery holder
- 6 Cover (to open push side buttons)

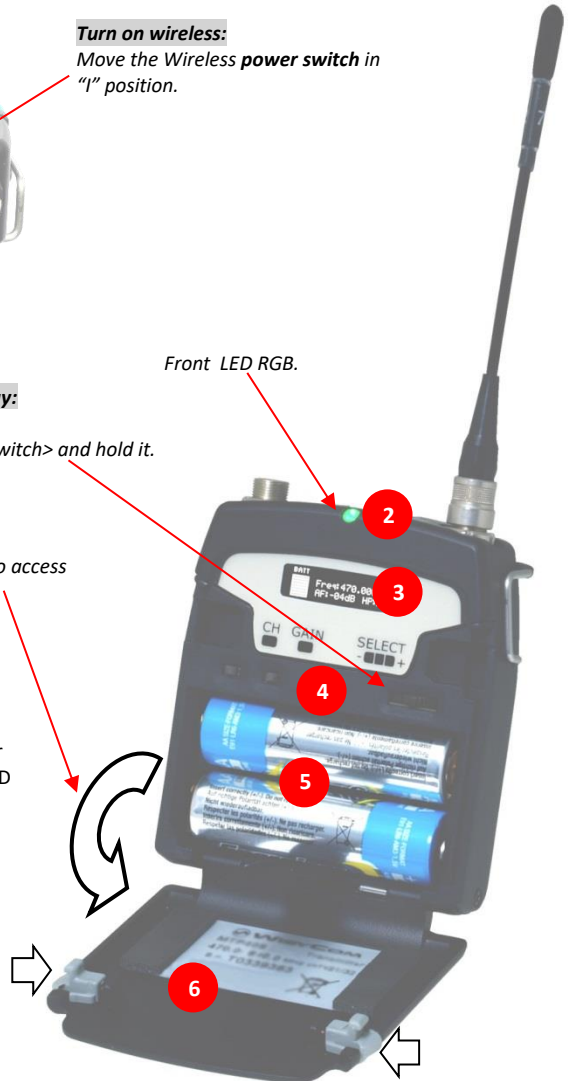


Fig. 2

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 INDICATIONS

Led indication with LED RGB (**red**, **green**, **blue**) in front led (**2**):

- 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 peek (if activated and the limiter is disabled): **red**.
- Ptt status: **red** if active (push to talk “pushed”).
- Limiter in action (if activated): **blue**.

BATTERIES

MTP40S 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 the LED status on front **2**.

BATTERY SUBSTITUTION

Open transmitter cover and insert batteries following polarity indicated.

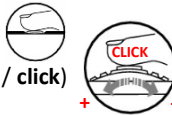
Attention: always replace both the batteries

POWERING UP

Move the wireless power switch (see Fig. 1) in “I” position to activate wireless transmission: the front LED ② lights up red and then green when the RF transmission power is on (blinking when battery is low!)

SETUP CONTROL

Open transmitter Body to access the “display and controls” area (Fig. 3):

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

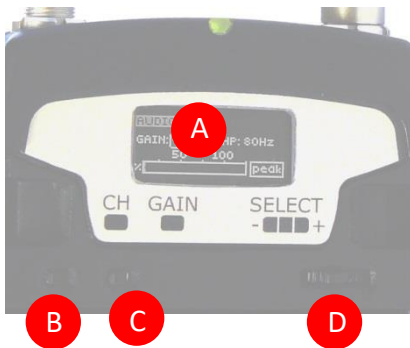


Fig. 3

OLED POWER UP (OLED IS IN OFF CONDITION)

Pushing down selector (**click**), oled turns on. A first menu with serial NO and brand logo is displayed, then <status> menu enters automatically.

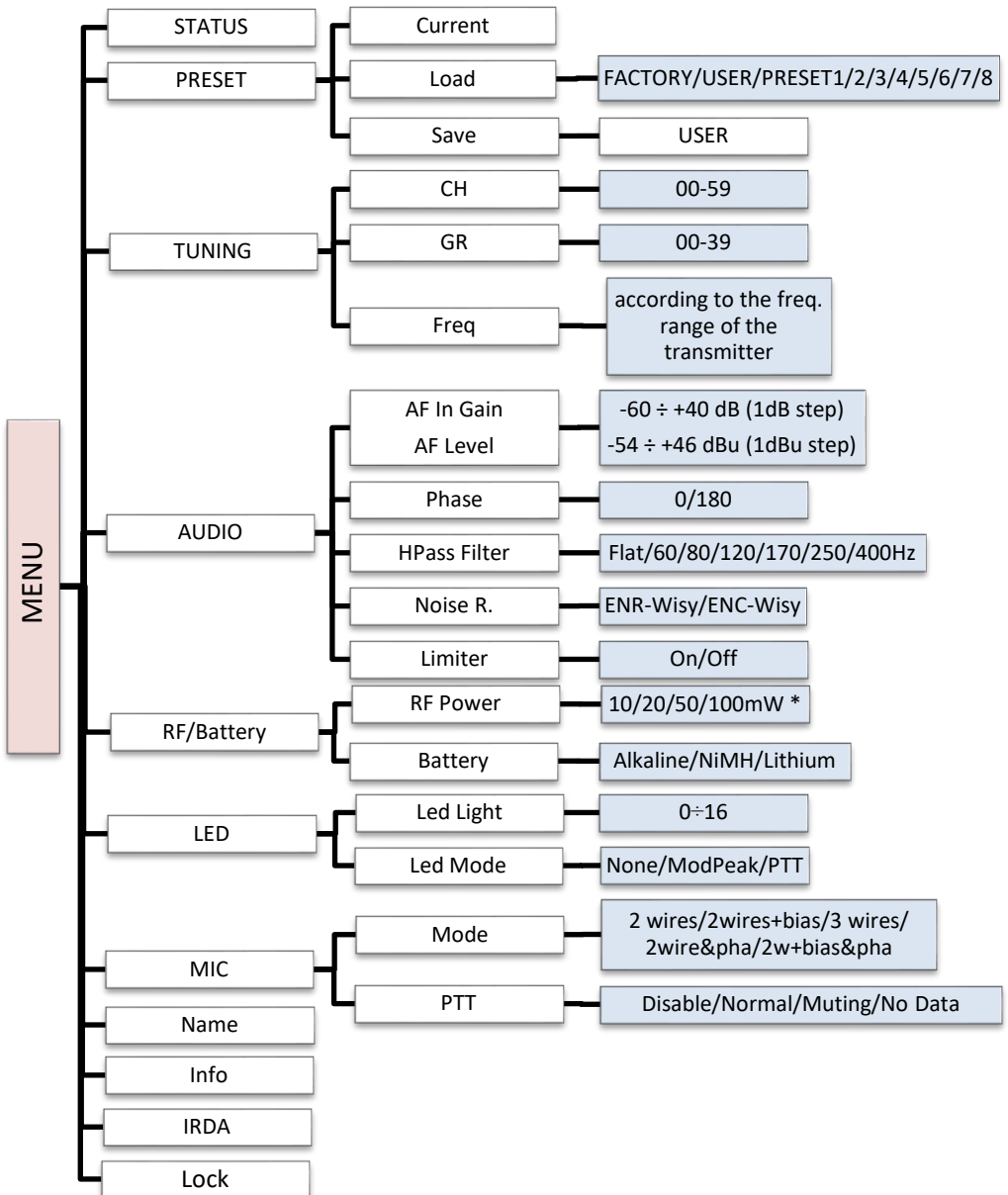
Pushing and holding selector, serial NO menu is displayed.

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

Setup menu are accessed in sequence:



* Depending on the Power Profile

Preset parameters

Using <+/-> selector all menus can be accessed in sequence, push <click> to enter edit mode (in the left side of the display appear the word EDIT and the parameter start blinking):



<+/-> to setup field

<click> again to confirm changes and exit.

exit without confirmation if no button is pressed after a few seconds time out.

<START UP> menu

These menus are displayed during power up for few seconds.

	<p>First one gives information of antenna to be used. The number displayed is the center-band of the antenna to be used.</p>
	<p>The second menu gives indication on product:</p> <ul style="list-style-type: none"> - product id (MTP40S), - the firmware release (ex. 1.30.0A), - the band in extended format and - the serial number. <p>Keep selector pushed to hold this menu!</p>

<STATUS> menu

This is the first menu displayed after power up.

	<p>Major info are displayed:</p> <ul style="list-style-type: none"> - Current channel/group (i.e. CH:00 GR:39) - Current frequency (i.e. 566.000 MHz) - Mic gain (i.e. AF: +00 dB) and high pass filter (i.e. HP:60 Hz) - “RF 100” or RF 50” or “RF 10” on top right if RF transmission is active respectively at 100mW or 50mW or 10mW - On left, battery bar is displayed
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<PRESET> menu

This menu can be entered by scrolling selector, or pushing **at the same time** both quick channel setup buttons (<ch> & <gain>).

	<p>MTP40S 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.</p>
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The other 8 configuration presets are user programmable thru the infrared and the PC interface (using the programmer UPK 300/UPKMini or the receiver MRK950/MRK960).

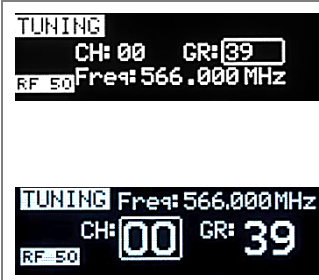
We provide the device with some preset configurations specifically designed for certain types of microphone or applications (it’s possible to change these presets in any time using the TX manager).

All parameters can be “left unchanged”, “changed” or “changed and lock”, allowing a very flexible way to pre-program MTP40S configuration.





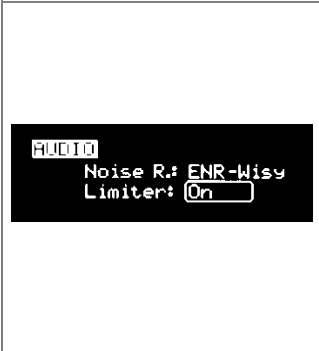
<TUNING> menu

This menu can be entered by scrolling selector or using quick channel setup buttons (<ch>).

 <p>TUNING CH: 00 GR: 39 RF 50 Freq: 566.000 MHz</p> <p>TUNING Freq: 566.000 MHz CH: 00 GR: 39 RF 50</p>	<p>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.</p> <p>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)</p>
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<AUDIO> menu

This menu can be entered by scrolling selector or using quick gain setup buttons (<gain>).

 <p>AUDIO AF Gain -12 dB -42 -18 -6dB Peak</p> <p>AUDIO AF Level -02 dB -42 -18 -6dB Peak</p> <p>AUDIO +00 dB Peak</p>	<p>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). <i>Set the gain, with the maximum input signal, avoiding the peak on the audio bar.</i></p> <p>TRY TO SETUP TO HAVE A MAX PEAK HOLD BAR CLOSE TO -6dB.</p> <p>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)</p>
 <p>AUDIO Phase: 0° HP Filt.: Flat</p>	<p>The second <AUDIO> menu allows to set:</p> <ul style="list-style-type: none"> - Audio phase: 0° or 180° <p>Note: <i>Since common "2-wires + bias" microphones invert the phase, when the MIC mode of the transmitter is set to "2wires+ bias", the phase is automatically inverted and so the complete system (MTP4x+MIC) has 0° phase (an asterisk appear on the display near the phase to indicate that the phase was inverted).</i></p> <ul style="list-style-type: none"> -High Pass Filter: applies different audio HP filter: Flat/ 60Hz/ 80Hz/ 120Hz/ 170Hz/ 250Hz/ 400Hz.
 <p>AUDIO Noise R.: ENR-Wisy Limiter: On</p>	<p>The third <AUDIO> menu allows to set:</p> <ul style="list-style-type: none"> -Noise reduction: <ul style="list-style-type: none"> • 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) -Limiter: <ul style="list-style-type: none"> if is set “On”, an input audio signal above the peak threshold (<i>up to 30 dB above peak</i>) is not cut but attenuate, <u>without lost quality</u>. The limiter acts as a variable attenuator (thanks to the feedback system), maintaining a distortion <3%. When the limiter intervene, the front led turns blue. If this parameter is set “Off”, the limiter is disable.


<RF/BATTERY> menu

This menu can be entered by scrolling selector.

	<p>RF power can be setup to 10mW, 20mW, 50mW or 100mW (depending on the Power profile). Use the Battery menu to select the type of battery used. MTP40S support Alkaline/NiMH/Lithium battery type. Use the selector to change values (<+/->) and <click> to confirm.</p>
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<LED> menu

This menu can be entered by scrolling selector.

	<p>Led Light allows to change the brightness of the front led (0÷16) . Led Mode: <ul style="list-style-type: none"> - <u>None</u>: allows to disable modulation peak LED on front led (the red light) - <u>ModPeak</u>: allows to enable modulation peak LED on front led (become RED when audio get close to saturation when the limiter is not enable) - <u>PTT</u>: allows to enable RED color on front led when PTT button is pushed. </p>
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<MIC> menu

This menu can be entered by scrolling selector.

	<p>Mode: Following Mic mode can be setup (for LEMO option) <ul style="list-style-type: none"> - 2 wires: (PTT is possible) for external audio input - 2 wires + bias: (PTT is possible) for most 2 wires MIC - 3 wires: (no PTT) for most 3 wires MIC - 2 wires & pha: to connect a wired mic thru a 48V adapter (PHA48) - 2 wires+bias & pha: Allow to connect a '2 wires + bias' MIC or a '2 wires & phantom' MIC (with PHA48) </p>
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PTT setting defines how and what information the transmitter has to send in normal use or when the PTT button is pushed.

- **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.
- Use the selector to change values (<+/->) and <click> to confirm.

NOTE: For DPA option (2 pin microdot audio connector), even if the MIC mode menu allows to set one of the 5 MIC modes, only 2 wires or 2 wires+bias mode are possible.

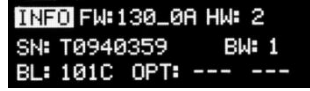
<NAME> menu

This menu can be entered by scrolling selector.

	<p>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)</p>
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<INFO> menu

This menu can be entered by scrolling selector.

	<p>In this menu it's possible to see:</p> <ul style="list-style-type: none"> - FW version - HW version - Serial number - Bandwidth - Bootloader version - Option
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<IRDA> menu


This menu can be entered by scrolling selector.

	<p>While there is this menu, the device can be connected to IRDA for setup or firmware upgrades.</p> <p><u>Note: if the IRDA interface is enabled and there's no communication for around 10 seconds, the IRDA interface is automatically turned off.</u></p>
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On power on the device, the IRDA interface is enabled for 14 seconds.


<LOCK> menu

This menu can be entered by scrolling selector.

	<p>Long pressing (2 sec.) selector button (click) it locks MTP40S in transmission mode.</p> <p>To unlock, long pressing (2 sec.) selector button again.</p>
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<BOOTLOAD> menu

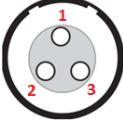
This menu can be entered by turning on the transmitter while pushing **at the same time** both quick channel setup buttons (<ch> & <gain>) or connecting the device via IRDA using the IR Programmer for FW update

	<p>Device is forced in bootloader mode to allow FIRMWARE UPDATE.</p>
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The following table sums up which parameters can be set and the related range settings.

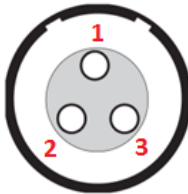
MENU	PARAMETER	MEANING	RANGE SETTINGS
TUNING	CH	Channel	0 ÷ 59
	GR	Group	0 ÷ 39 + SYNC GROUP
	Freq	Frequency	depends on the MTP40S band see technical spec. and variants for further details
AUDIO	AF In Gain AF Level	Gain of the audio signal	-60dB ÷ +40dB step of 1dB -54dBu ÷ +46dBu step of 1dBu
	Phase	Audio signal phase	0° or 180°
	HP Filt.	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
	Limiter	Limiter	On/Off
RF/BATTERY	RF Power	RF Power	10mW, 20mW, 50mW, 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	Mode	MIC type	'2 wires' '2 wires + bias' '3 wires' '2 wires & phantom' '2 wires + bias & phantom'
	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.

MIC Mode setting (only for LEMO option):

MIC Mode:		Gain	PTT	Led Mode
	Pin out			
'2 wires':	1=GND 3=AF	-60/40 dB	Disable Normal Muting No data	None Mod. Peak PTT
'2 wires + bias':	1=GND 3=AF+5.5V	-60/40 dB	Disable Normal Muting No data	None Mod. peak PTT
'3 wires':	1=GND 2=5.5V 3=AF	-60/40 dB	Disable No data	None Mod. peak
'2 wires & phantom':	1=GND 2=3.1V (power for PHA48) 3=AF	-60/40 dB	Disable No data	None Mod. peak
'2 wires + bias & phantom':	1=GND 2=3. 1V (power for PHA48) 3=AF+5,5V	-60/40 dB	Disable No data	None Mod. peak

3 PIN LEMO CONNECTOR

(use FVB.00.003.NLN on Mic)



ACCESSORIES AND PARTS

AWF30-B1-507

For MTP40S-X-X1
Band 470 ÷ 547 MHz
Antenna Code label **507**

AWF30-B1-590

For MTP40S-X-X1
Band 547 ÷ 640 MHz
Antenna Code label **590**

AWF30-B2-616

For MTP40S-X-X2
Band 566 ÷ 672 MHz
Antenna Code label **616**

AWF30-B2-732

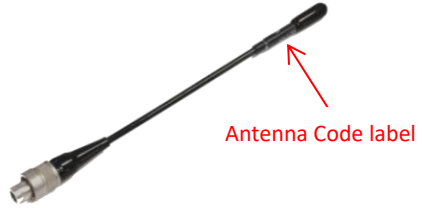
For MTP40S-X-X2
Band 672 ÷ 798 MHz
Antenna Code label **732**

AWF30-B3-552

For MTP40S-X-X3
Band 510 ÷ 595 MHz
Antenna Code label **552**

AWF30-B3-646

For MTP40S-X-X3
Band 595 ÷ 698 MHz
Antenna Code label **646**



CAL48

Cable to connect an MTP30 (with option /PHA) or MTP40/40S to a PHA48 to use microphone with XL3/48V connection



CAL120

AF cable (120cm), LEMO 3pole / XLR-3F connectors



PHA48

Plug-on for XLR3 Mic with 48V Phantom power.
To be used with CAL48 (connected to an MTP30/40/40S)
NEW REV2 with 4mA Phantom current!



ADT40

Power Adapter for MTP30/40/40S.
Power input: 9-18V DC feeding (internal switching regulation).

Variants:

ADT40: without connector (pigtail)
(Shield= GND , **Blue-Red**= Vdc)

ADT40X: with XLR-4pin power connector

ADT40H: with Hirose-4pin power connector

NOTE: MTP30/40/40S must have ADT option to pass thru cable



UPK300E / UPKMini

Infrared programming kit
(interface + software) USB interface

UPK300E



UPKMini



HOW TO USE WISYCOM TX MANAGER

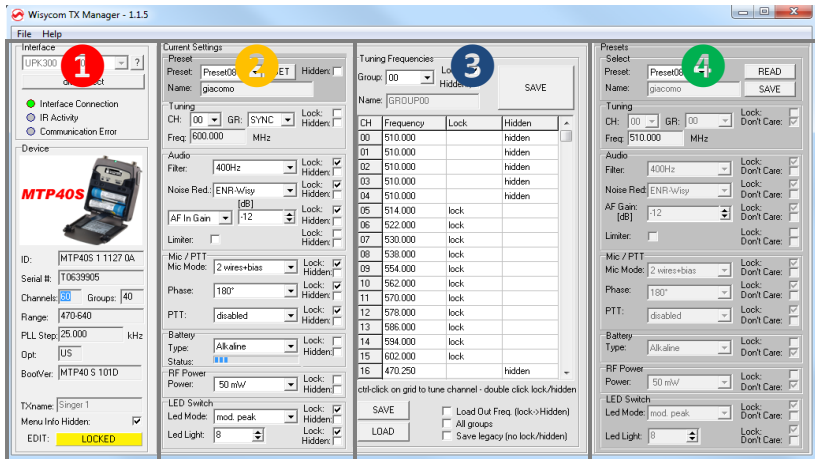
Wisycum TX Manager allows to read, modify and update the configuration of Wisycum transmitters. It is necessary to

- connected the programmer UPK300E/UPK300 or the receiver MRK950/MRK960 to the PC thru **USB connection**
- run the Wisycum TX Manager
- enable the IRDA communication on the transmitter (see IRDA menu)

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

The Wisycum 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)

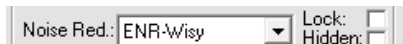
CURRENT SETTINGS PANEL (2)

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.



Preset			
Preset:	USER	SET	Hidden: <input type="checkbox"/>
Name:	USER		



Noise Red.:	ENR-Wisy	Lock: <input type="checkbox"/>
		Hidden: <input type="checkbox"/>

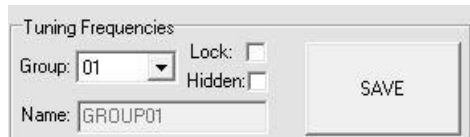
ATTENTION: All the modifies applied to the Current Settings panel are instantaneous: they are applied directly to the device and save in its memory but no saved in the preset configuration.

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.

CH	Frequency	Lock	Hidden
00	630.000		
01	630.000		
02	630.000		
03	630.000		
04	630.000		
05	630.000		
06	630.000		
07	630.000		
08	630.000		
09	630.000		
10	630.000		
11	630.000		
12	630.000		
13	630.000		
14	630.000		
15	630.000		

ctrl-click on grid to tune channel - double click lock/hidden

CH	Frequency	Lock	Hidden
00	630.000		
01	630.000		
02	630.000	lock	
03	630.000		hidden

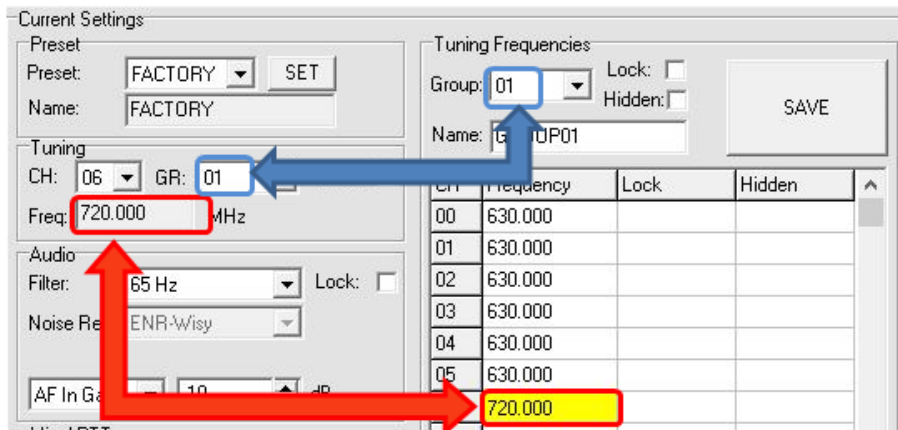
double click to LOCK the channel

double click to HIDE the channel

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

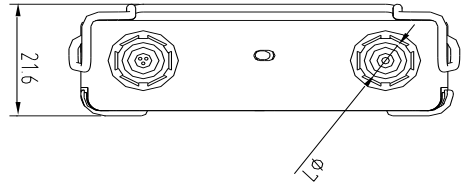
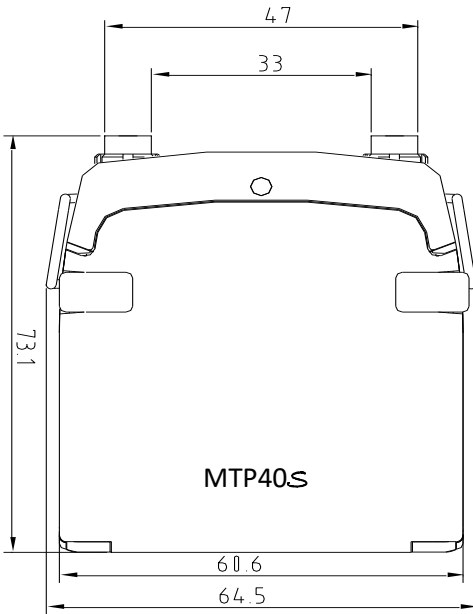
With an infrared device correctly connected, select File->Save User Configuration and select the destination file.

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

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> on the next page)
Frequencies	Quartz PLL frequency synthesizer circuit (25 kHz step)
Frequency stability	$\pm 2,5$ ppm (in the rated temperature range)
Temp. range	$-10 \div +55$ °C
Max RF power	<ul style="list-style-type: none"> ▪ 10mW (ERP) (to respect some local norm) ▪ 20/50/100 mW (ERP) (note: in some countries middle power can be disabled, for local norm!)
Spurious emissions	< 2 nW
Modulation	wideband FM, with pre-emphasis
Nominal deviation	± 40 kHz (Peak deviation = ± 56 kHz)
Telemetry feature	MTP40S transmits also a digitally modulated sub-carrier, suitable for: <ul style="list-style-type: none"> ▪ <i>tone-squelch operating</i> ▪ <i>remote battery monitoring</i> ▪ <i>optional PTT (push to talk) operation</i>
AF input connector LEMO option	Configurable on 'mic' display menu in 5 options: <ul style="list-style-type: none"> ▪ '2 wires': gain selectable $-60 \div +40$ dB (-54 dBu $\div +46$ dBu peak), no bias voltage ▪ '2 wires + bias': gain selectable $-60 \div +40$ dB (-54 dBu $\div +46$ dBu peak), 5.5 V on 4k7 bias supply ▪ '3 wires': gain selectable $-60 \div +40$ dB (-54 dBu $\div +46$ dBu peak) ▪ '2 wires & phantom': gain selectable $-60 \div +40$ dB (-54 dBu $\div +46$ dBu peak), ▪ '2 wires + bias & phantom': gain selectable $-60 \div +40$ dB (-54 dBu $\div +46$ dBu peak), 5.5 V on 4k7 bias supply
AF input level	100 dB adjustable range from -54 dBu (775 μ V) to 46dBu (15.5 V) at peak deviation (1kHz), adjustable in 1 dB steps
Max. input level	$+46$ dBu (15.5 V) at clipping, $+20$ dBu (7.75 V) at nominal level
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-emphasis
AF bandwidth	<ul style="list-style-type: none"> ▪ 45 Hz \div 21 KHz (3dB) ▪ 55 Hz \div 20 KHz (1dB)
Distortion	< 0.3 % (0.15 % typ.)
Signal-to-noise ratio	<ul style="list-style-type: none"> ▪ typ. 115 dB (A)_{rms} with 40 kHz deviation ▪ typ. 121 dB (A)_{rms} with 56 kHz deviation
Led	Led indication with RGB led (red, green, blue) on wireless power switch: <ul style="list-style-type: none"> ▪ Wireless transmission status: <ul style="list-style-type: none"> GREEN on/off Modulation peek (if activated & the limiter is disabled): RED ▪ Battery lifetime status: GREEN - <u>steady</u> (> 25%) - <u>slowly blinking</u> (< 25%) - <u>quickly blinking</u> (<12%) ▪ Ptt status: RED if active ▪ Limiter into action: Blue
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)
PTT function	Pin 3 of the AF connector can be setup to an external push button
Power supply	2 AA size batteries (Alkaline, rechargeable NiMH or Lithium)
MTP40S Battery life (2 AA alkaline)	<ul style="list-style-type: none"> ▪ approx. 14 hours @ 10mW continuous working ▪ approx. 10 hours @ 50mW continuous working ▪ approx. 7 hours @ 100mW continuous working
Dimensions	73 x 61 x 17.5 mm (Height-Width-Depth) without clip
Weight	Approx. 80 g. without batteries (120g with batt.)



Note: unit is mm

POWER PROFILE & COUNTRY

FREQUENCY RANGE:

- EU** max power 50mW (Europe)
- OW1** / **EUX** max power 100mW (Europe)
- US** max power 50mW (USA)
- USX** max power 100mW (USA & Canada)
- JP** max power 10mW (Japan)
- NZ** max power 100mW (New Zealand)
- CN** max power 50mW (China)
- US8** max power 100mW (USA & Canada)

OPTIONS:

- ADT** hole on battery housing for ADT40

For commercial code, see Variants area of [Wisycom Products on website](#)

VARIANTS:

▪ AUDIO CONNECTOR

- LM** 3 PIN LEMO CONNECTOR
- DP** 2 PIN DPA MICRODOT CONNECTOR






▪ COLOR

- PV** body color titanium gray (ceramic coating)
- BL** body color black (powder coating)

▪ FREQUENCY RANGE

- B5** 470-654 MHz
- B2** 566-798 MHz
- B3** 510-698 MHz
- B8** 940-960 MHz

Compliance

Model	In Compliance with	Max Power	Country
MTP40S MTP40S-EU	EN 301 489-1/-9 EN 600065 EN 300 422-1/-2	50mW	Europe CE
MTP40S-0W1 MTP40S-EUX	EN 301 489-1/-9 EN 600065 EN 300 422-1/-2 EN 300 454-1/-2	100mW* ¹	Europe CE
MTP40S-US	 PART 74 FCC-ID: POUMTP40	50mW	USA
	Limited to 698MHz		
MTP40S-USX	 PART 74 FCC-ID: POUMTP40SUSX RSS-123, RSS-102 IC: 11967A-MTP40SUSX	100mW* ²	USA, Canada
	Limited to 698MHz		
MTP40S-US8	 PART 74 FCC-ID: POUMTP40SUS8 Limited to 941.50-952.00MHz, 952.85-956.25MHz, 956.45-959.85MHz	100mW	USA
MTP40S-JP	  202-LSC057	10mW	Japan
	Limited to 714 MHz		
	MIC marking identifier can be found in the battery compartment.		
MTP40S-NZ	EN 300 422-1/-2 EN 300 454-1/-2	100mW	New Zealand
	Limited to the range 502÷698MHz		

*¹ MTP40S-0W1 / MTP40S-EUX is not an SRD device, thus it requires specific authorization by your local frequency authority!

*² in accordance with KDB 447498 D01 General RF Exposure Guidance v05r02.



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

The Wisycom microphone pocket transmitter model MTP40S complies with the following requirements:

- FCC (Federal Communications Commission) Part 74

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 inside the battery compartment.

FCC-ID: POUMTP40 MTP40S US option

FCC-ID: POUMTP40SUSX MTP40S USX option

FCC-ID: POUMTP40SUS8 MTP40S US8 option

Industry Canada Conformity (MTP40S USX)

EN

This device complies with Industry Canada RSS-123. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FR

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio RSS-123. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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 ambientale 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. IT0910000006319

DECLARATION OF CONFORMITY

DICHIARAZIONE DI CONFORMITA' DECLARATION OF CONFORMITY

Il sottoscritto, rappresentante il seguente costruttore
The undersigned, representative of the following manufacturer

WISYCOM S.r.l.
via Spin, 156 - 36060 Romano d'Ezzelino (VI) - Italy

DICHIARA che l'apparecchiatura descritta in appresso:

DECLARES that the product:

Descrizione Description	Pocket transmitter
Modello Model	MTP40S

è conforme alle disposizioni legislative che traspongono le seguenti direttive:

- direttiva 2004/108 CE (Direttiva EMC)
- direttiva 2006/95 CE (Direttiva Bassa Tensione)
- direttiva 99/5 CEE (Direttiva Apparecchiature Radio)

is in accordance with the following Directives:

- 2004/108 EC Directive (EMC Directive)
- 2006/95 EC Directive (Low Voltage Directive)
- 99/5 EEC (Radio Equipment Directive)

e che sono state applicate tutte le norme e/o specifiche tecniche di seguito indicate
and that all the following standards have been applied

EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011

EN 301 489-1 V1.9.2

EN 301 489-9 V1.4.1

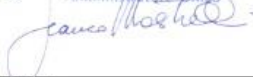
EN 300 422-2 V1.3.1

Luogo Romano D'Ezzelino
Place

Data 13 Jan 2014
Date

Firma Franco Maestrelli
Sign
(nome e funzione)
(name and title)

WISYCOM s.r.l.
Franco Maestrelli
Amministratore Unico





WISYCOM™

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