telecom®

MABT-2PTT

BLUETOOTH EARPHONE MICROPHONE

PTT DUAL PTT

STEREO MUSIC

DUAL LINK CONNECTION

GPS NAVIGATION

DUAL WATCH SEPARATE TALK

USB UPDATE

PHONE CALLS

CE RoHS Compliant

Waste electrical and electronic equipment (WEEE):
This device complies with Directive 2012/19 / EU on waste electrical and electronic equipment (WEEE). This symbol means that according to local laws and regulations, the equipment, accessories and / or its battery will not be disposed of with household waste. When this device reaches the end of its useful life, deliver it to a selective collection point designated by local authorities. Proper recycling will protect health and the environment.

RoHS Compliant
This device complies with EU Directive 2011/65 / about restrictions on the use of certain hazardous substances in electrical and electronic equipment.

Hearing loss prevention.
To avoid possible hearing damage, do not listen at high volume levels for prolonged periods.

This device is free to use and can be used in any state member of the European Union

Please read the content carefully before using

Thank you very much for purchasing our MABT-2PTT Bluetooth PTT headset.
In this user manual, we introduce how to use MABT-2PTT product, you can know more about our product according to this user guide.
You will love our MABT-2PTT after you read through and get to use it.

• Please read "Cautions and notes" before using the product for safe and correct use.
• All the following points contain important safety instructions and must be strictly followed.
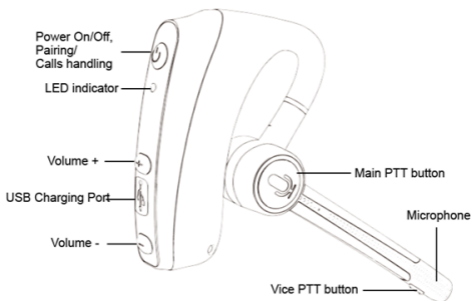
Cautions
• Do not immerse in water to avoid damaging the product as well as shortening its lifetime.
• Do not drop or apply shock to the product. Such act may cause irreparable damage to the product.
• Do not expose the product to open flame or under the direct sunlight for a prolonged period of the time. Such environment may cause malfunction or fire.
• Please do not change the setting or talk on the cell phone while driving. It may cause an accident. Please note: in no event our product shall be liable for any special, indirect, punitive, incidental, exemplary or consequential damages, or any damages whatsoever resulting from the usage of this product.
• Conversation on the cell phone when driving is extremely dangerous. Please go out of the road for doing the telephone call.
• If anything unusual such as smoke, heat or bad smell is detected, please disconnect immediately the power and stop the usage. Continuing the use may cause electric shock or fire.
• Do not lick, bite or put the product into the mouth. Such act may result in serious injuries/accidents. Take utmost caution around children.
• Do not change the device when it gets wet. With water exposure, it may cause fire, electrification or failure.
• Temperature range of use:-15°C-50°C
• Please use only qualified accessories which have been authenticated by us, in order to guarantee the product correct functioning.

Notes about battery charge
• For battery charge, use USB terminal or USB adaptor at normal temperature.
• Use regulation USB terminal only. Otherwise it may cause smoke generation or fire.
• When charging the battery, if any strange odor or high heat should broken out, please immediately pull the plug from the body. It may cause smoke generation or fire.
• Do not leave the product in a state of charge long after the charging is completed. Such condition may cause smoking/ignition.
• Charge battery at least once every six months even if the product is not use for an extended period of time. Over discharge may require battery replacement.

Power On/Off, Pairing/ Calls handling

LED indicator

Volume +

USB Charging Port

Volume -

Main PTT button

Microphone

Vice PTT button

Especificaciones

Operating frequency	ISM 2.4 GHz Band
Modulation	GFSK, π/4-DQPSK, 8DPSK
Type of equipment	Class III
Max. transmission power (P.I.R.E.)	0.03 dBm
Bluetooth version	V 4.1. Class 2
Bluetooth profile	HSP, HFP, A2DP, SPP
Coverage	10 m.
Charging time	3 h. approx.
Working time	12 h. approx.
Standby time	100 h. approx
Microphone type	Dual with DSP and echo cancelling
Working temperature	-15°C ~ 45°C
Storage temperature	-25°C ~ 45°C
Battery	Li-Polymer 190 mAh, 3.7 V
Battery charge	Alimentador USB 230 Vca/5 Vcc

LED indicatpr

LED	Status
LED Off	Power Off
Blue lights short flashing every 3 second	Standby
Blue lights long flashing every 3 seconds	Connected
Fixed Blue light	Call audio actived
Blue lights and Red lights flashing alternately	Pairing state
Red lights flashing 2 times every 60 seconds	Low battery
Red light flashing	Charging battery
Fixed red light	Charging complete

Main features

1. Phone calls

1) Bluetooth Hands-free. Dual hands free with mixed dual audio supported.
2) Support voice dial.
3) Support the last number redial.
4) Call answer, reject and hang up functions supported.
5) Hands-free Volume Control.

2. POC Intercom (PTT Over Cellphone)

1) Support brand PoC software such as: Zello, Azetti, Eschat, Kodiak, etc.
2) Using DSP noise reduction technology to ensure clear sound quality in noisy environments.
Note: some PoC app may need special firmware upgrade.

3. PTT Function (Push-to-talk)

1) Connect with Bluetooth adapter/dongle.
2) Dual PTT function, can control two radio phone separately.
3) Primary PTT and secondary PTT switchable.
4) Dual PTT and mix talk when connect to two radio phone at the same time.
5) Mix listen and talk with two phones or two radios, or one phone and one radio.
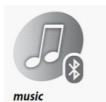
4. Dual Audio Merge Listen and Separate Talk Function

1) Can listen the merged audio from both connected devices or talk group at the same time.
2) Can listen and speak to walkie-talkie radio even during active call
3) Can listen to GPS message even during active call
4) High security and privacy level. Only the user can hear the conversation from both far ends, the audio from two other far ends are completely blocked, and can not listen to each other to prevent information leakage to unwanted person.

5. Dual Link Connect Function

1) Two mobile phones
2) One mobile phone and one radio phone with Bluetooth adapter/dongle device
3) One cell phone and one GPS navigator with Bluetooth HFP/HSP profile
4) One radio device with BT Adapter/Dongle and one GPS navigator with Bluetooth HFP/HSP profile

6. Stereo Music playing

1) Listen the music form the mobile phone or other music sources with A2DP.
2) Support music play, pause, playback and forward control with AVRCP
3) Independent volume control
4) Soft music volume restore function
5) Can remember the user favorite volume

7. GPS Navigation

1) Support connecting with the GPS Navigation
2) Listen to GPS and phone call at same time
3) Independent volume control
Note: Point 3 mix listen function need the GPS use HFP/HSP profile to broadcast voice prompt

8. Firmware update

1) Firmware can be upgraded
2) No need for any other hardware, just a USB cable
3) Easy-to-use PC user guide interface with 12 languages

9. Supports Wireless Control

1) One button remote control supported
2) Remote controller also supports firmware update

Operation

Power ON
In power OFF state, press Power ON/OFF button and hold it for about 3 seconds, until hear a note. Release the button. Blue indicator will flash to indicate power on.

Power OFF
In power ON state, press Power ON/OFF and hold it for about 8 seconds, until hear a long tone. All LED indicators will be off to indicate power OFF.

Battery charge
In order to recharge the battery inside the MABT-2PTT headset connect the proper USB cable to the wall charger or to a PC USB port.

Pairing with mobile phone, BT adapter/dongle or GPS
• Place the MABT-2PTT headset and the mobile phone (BT adapter/dongle or GPS) in a visible area within 1 meter range.
• Make sure the MABT-2PTT headset is in power off state.
• Press and hold Power Button for about 8 seconds. When the Blue LED and the Red LED alternately flash, release the button: the MABT-2PTT headset enters in pairing state.
• By following the mobile phone, BT Adapter/Dongle or GPS navigator instructions, turn on the Bluetooth® function, search and pair the headset devices.
• From the found devices in your mobile phone, select the device named: "Telecom/MABT-"PTT" and try to pair it by entering, if required on mobile phone, the pin code <0000>. Once paired successful, LED indicator will change from Blue/Red alternately to Blue flashing, indicating that the MABT-2PTT headset has been connected with your mobile phone.
• Now it is possible to use the MABT-2PTT to answer calls or to enjoy the music from mobile phone.
• To pair a second cell phone, BT Adapter/Dangle or GPS device just repeat all steps above.

Super Priority Pairing
The MABT-2PTT headset can handle devices by assigning them the "super priority" property for overriding all other devices. The super priority device will transmit PTT commands by SPP profile.
NOTE: Only one device can be defined as super priority device; the latest super priority paired device will replace the previous one. Only a mobile phone, BT Adapter/Dongle or a GPS navigator (i.e. the HFP/HSP links) can be assigned as super priority.
To assign the super priority property to a mobile phone or adaptor/dangle, follow the normal pairing procedure (steps 1 to 4) and press the Primary PTT button before to turn on Bluetooth® on the device to pair.

- Place the MABT-2PTT headset and the mobile phone (BT adapter/dongle or GPS) in a visible area within 1 meter range.
- Make sure the MABT-2PTT headset is in power off state.
- Press and hold Power Button for about 8 seconds, when the Blue LED and the Red LED alternately flash, release the button; the MABT-2PTT headset enters in pairing state.
- If you want to assign to the phone, BT Adapter/Dongle, Radio Phone or GPS the super priority property, just short press the PTT (Primary PTT button) once at this time, then the LED indicator flash pattern will be changed to red two times and blue two times quick flashing. Super priority pairing is ready.
- By following the mobile phone or GPS navigator instructions, turn on the Bluetooth® function, and search the headset devices.
- From the found devices in your mobile phone, select the device named: "Telecom/MABT-2PTT." and try to pair it by entering, if required on mobile phone, the pin code <0000>. Once paired successful, LED indicator will change from Blue/Red alternately to Blue flashing and a "di" tone indicates that the MABT-2PTT headset has been connected with your mobile phone.

Stop Pairing Procedure
To stop an initiated pairing procedure there are three possibilities:
- Wait until the pairing procedure automatically timeouts
- Switch off the MABT-2PTT headset by long pressing the Power ON/OFF button.
- USB charge to reset the headset
NOTE: If the connection with a previously paired device doesn't take effect, it can be due to several reasons, including a breakdown of the Bluetooth® function on the device to be connected. To solve this issue, there are several actions to apply:
- Switch off and on the MABT-2PTT headset
- Switch off and on the Bluetooth® on the device to be connected
- Repeat the pairing procedure
- Clear all pairing list on the device to be connected and repeat the pairing procedure

Clear All Pairing Devices
In power on and without any active phone call, press and hold both PTT (Primary PTT button) and —(MINUS button) together for 6 seconds. When RED LED flash 2 times release buttons and, after all paring devices have been cleared, the MABT-2PTT headset will automatically power off.

Volume Up or Down
In any audio active state, press and hold + (PLUS button) to increase the volume of corresponding audio source; press and hold —(MINUS button) to decrease the volume of corresponding audio source. Release the button when the volume reaches the desired level.
When the max or min volume level is reached, a limit tone note will be played.
The volume of each audio source (two phones, two music, intercom) can be individually tuned, i.e. 5 different volume parameters can be used.

Volume Levels Automatic Save
All favorite volume levels for each audio source are saved by the MABT-2PTT headset at power off, so at next power on, the MABT-2PTT headset can automatically set the last user favorite volume level, without any operation required for the user.

Automatic Noise Dependent Volume Control
During phone calls, radio talk, intercom calls or GPS audio messages, if the wind noise or environment noise is very high and the current volume is not at maximum level, the MABT-2PTT headset will automatically increase the volume level according to the noise level, and when the noise disappeared for a while, the volume automatically restores back to the original level.

Phone calls

Manually answer incoming call
When there is an incoming phone call, short press Power ON/OFF button during only cell phone devices connected state or short press Power ON/OFF button during one phone device and one BT Adapter/Dongle device connected state to manual answer the call.

Automatically answer incoming call
The MABT-2PTT headset has the automatically answer function: at the 3rd incoming call ring tone (about 8 seconds) and no reject operations have been done, the MABT-2PTT headset will answer the phone call automatically.

Reject incoming call
Once hear the ring tone, double press Power ON/OFF button, then the call will be rejected.

Hang up call
In call active state, double press Power ON/OFF button, the call will be hang up.

Place a call on hold
In call active state, a short press Power ON/OFF Button to toggle shift the active call to hold and un-hold state.

Last number redial
While the MABT-2PTT headset is connected with the mobile phone and system is idle, quick double press Volume - button then the Mobile phone will dial the last out call number.
If the MABT-2PTT headset is in music mode, fist pause such mode by short pressing the Power ON/OFF button in cell phone connected only state, or pause/stop the music in user mobile phone first in the both cell phone and BT radio dongle connected state. If there are two mobile phones connected at same time with the MABT-2PTT headset, the number of the last outgoing call is dialed on the same call the last outgoing call has been done. If no calls have yet been done, the last number with first connected mobile phone is dialed.

Voice dial
While the MABT-2PTT headset is connected with the mobile phone and system is idle (music), quick double press +(PLUS button) then the mobile will prompt you to speak out your desired voice command.

If the MABT-2PTT headset is in music mode, first pause such mode by short pressing the Power ON/OFF button in cell phone connected only state, or pause/stop the music in user mobile phone first in the both cell phone and BT radio dongle connected state. If the voice dial function has been erroneously activated, double press- (MINUS button) again to cancel it.

If there are two mobile phones connected at same time with the MABT-2PTT headset, the voice dial command is initiated on either the first connected mobile phone or the last phone on which an outgoing call was made.

NOTE: Please make sure your mobile phone supports Voice Dial before activate Voice Dial function. Be careful each mobile phone has a proper voice command to effectively start a new call. Read carefully your mobile phone user manual in order to use the voice call function.

Dual PTT function

This function need to use with Bluetooth Adapter/Dongle or corresponding group talk walkie-talkie app in the the smart phone such as ZELLO, Azetti, Bper, Kodiak, etc.

1) In only one BT Adapter/Dongle or smart phone with group talk app connected state, both PTT(Primary PTT button) and PTT2 (Secondary PTT button) will control the same PTT function of the only connected device.

2) In two BT Adapter/Dongle or smart phone with group talk app connected to MABT-2PTT state, like one link connected to a radio BT dongle, another connected to smart phone with group talk app, the first connected adapter/dongle will occupy the PTT (Primary PTT button), the later connected adapter/dongle will leave to use PTT2 (Secondary PTT button).

3) In two devices with PTT functions connected to MABT-2PTT sate, double press the Power ON/OFF button to shift the PTT (Primary PTT button) and PTT2 (Secondary PTT button) control

Stereo music playing

The MP3 play back function only available when not connected to BT radio Adapter/Dongle state.

Music player start
In phone mode, without any active call, short press power ON/OFF button to start the music player.

Music play/pause control
In music playing mode, short press once the Power ON/OFF button to toggle the music play/pause state.

Music skip forward
In music playing mode, short press once the (PLUS button) to skip the music forward.

Music skip backward

In music playing mode, short press once the "-" (MINUS button) to skip the music backward. Some mobile phone at first short press just restore back to the start of the song, another following short press on the "-" (MINUS button) within 3 seconds skip backward to previous song.

GPS Navigator

Preliminary operations

Pair to MABT-2PTT headset GPS devices and please refer to the GPS navigator User Manual first. MABT-2PTT the audio information from GPS via HFP/HSP link.
Pair the GPS the same way as pairing to a mobile phone. Please refer to the pairing instruction of in the pairing section. GPS navigator will occupy one HSP/HFP link: if one GPS device is connected with the MABT-2PTT headset, then only one mobile phone can be connected to the Bluetooth microphone.

USB Upgrade

PC Connection

The MABT-2PTT headset can be connected to a Windows® PC for the following operations:
• Firmware upgrade
Such operations can be performed by means of the proper wizard software. Such a software must be installed on the PC before to connect it to the MABT-2PTT headset.
First Power OFF the MABT-2PTT, then connect the MABT-2PTT headset to a PC with a proper USB cable.
Once such a cable is inserted into both the MABT-2PTT headset and PC USB port, the MABT-2PTT is put into the battery power off charge state. For enabling its communication with the wizard software, in power off state, press and hold the Power ON/OFF button for more than 20 seconds and until no more LED lights Red and Blue alternatively flash in the LED indicator. At that time the MABT-2PTT headset can be detected by the wizard software.

Remote control Support

Preliminary operations

1) Pairing the remote controller and MABT-2PTT as per both items user manual instructions.
2) After pairing successfully, you can press the remote controller to control MABT-2PTT intercom and calls handling function.
3) Center button mainly used as PTT button, and only the PTT function of PTT (Primary PTT button) can be remote controlled.
4) Short press the center button to answer phone call, double press the center button to reject or hang up phone calls.

Can not power on
It might low battery, please try again after charging for 3 hours, then reset the PTT headset and try again.

No sound
Please check if the speaker mic have connected to the device or the volume too low.

Disconnect with mobile phone, Bt Adapter/dongle or GPS
Make sure if it is low battery. If not, the distance between the headset and mobile phone within 10m or between them exist obstacles that absorb frequency signals like metals or water.

Can not pair with mobile phone
Clear all the pairing information according to user manual, and then put the PTT headset and mobile phone together within 1 m and try to pair again.

Fail to connect with mobile phone
Please make sure the mobile phone support Bluetooth function and Bluetooth HFP related protocols.

Fail to re-connect or automatically re-connect with mobile phone
First make sure your Bluetooth function in your mobile phone have been turned on, then remove all the matching information according to Bluetooth headset manual as well as that of your phone. Then turn off your mobile phone, wait for several seconds, restart mobile phone and pair with Bluetooth PTT headset and set the headset read as "default/trust/test/permit automatically connection/always visible/allow to be found" device, and further ensure that the phone prompt tone is not vibrating mode (because the vibrating impulse wave would interfere with Bluetooth frequency signal sometimes), then repair and connect with your mobile phone. For Android system, please make sure in the Bluetooth PTT headset device option list, you have both "Phone" and "Media" options selected.

System Halted
The system halts when strong radio frequency interference occurs. Like when nearby high power TV transmitting tower, GSM base or airport radar, the PTT headset may die. It can be reseted by charge the headset by USB port.

Abnormal instruction of Charging indicator
1) When the PTT headset has not been used for a long time or overused, it needs to be pre-charged for an hour, then pull out and in the charger, it will indicate normal charging. Please don't count the pre-charging time into normal charging time.
2) Try another charging line or charger.

Whether or not Support using while charging
Use while charging is not recommended.

Compatibility with other chargers
Cigarette charger of the car or motorcycle, emergency battery pack or other type charger might be used for charging as long as their actual output voltage is between 5V to 6V and have the same plug style and power source positive and negative polarities with our initial charger. However the user will be responsible for the risk of using other chargers and we don't guarantee the effects and responsible for the risk.

Wrong operation into factory test or USB upgrade mode
The BT PTT headsets light indicator flashes abnormally and can't power on after wrong operation into factory test or USB upgrade mode. User must use USB cable to charge to reset the device.
Please send back your BT PTT headset to our after-sales service department for help if above suggestions fail to solve your problem.

WARRANTY CERTIFICATE

FALCON RADIO & A.S., S.L.
CIF: B-60565314 C/ Vallespir, nº 13. Polígono Industrial Fontsanta. 08970 Sant Joan Despí. Barcelona (Spain).
Phone: +34 93 457 97 10. Fax: +34 93 457 88 69 www.falconradio.es

Brand device:	Model:	Serial number:
Buyer's name:		
Address:		Seal and dealer's name:
City:	Postcode:	
Province/State:	Phone:	
Date of purchase:		
WARNING: The warranty is valid only when it's total and duly completed, legibly and clearly, with the seal and dealer's name and have attached the purchase invoce of the device.		

The device described in this Certificate is guaranteed for a period of **TWO YEARS** from the date of sale to the end user according to Law 23/2003 of Guarantees in the Sale of Consumer Goods. This Warranty Certificate is unique and non-transferable and may not be reissued again in either the original or copy. Substitution for product failure or any part thereof shall not imply warranty extension.

The warranty covers the substitution and free replacement of all parts which are defective in materials and components used in manufacturing and / or assembly of the device.

The warranty does not cover any faults caused by accident, improper use and installation, electric shock (eg storms), connecting to a different power than specified, reverse polarity on the power, or claims due to deterioration of the external aspect by normal use, or the quantity or condition of the accessories.

Checking of accessories is responsibility of the purchaser at the time of purchase of the device. The warranty does not cover rechargeable batteries even they are part of the equipment purchased as they are considered consumables; its possible deterioration must be reported no later than FIFTEEN DAYS from the date of purchase of the device.

The warranty will be canceled in the following cases:

    1.- Devices that has been manipulated by third parties or by anyone other than Authorized Service.
    2.- Accessories and equipment on which the serial number has been altered, deleted or it's illegible.
    3.- Usage of device different which is intended for.

To make use of the guarantee is necessary to deliver the damaged device with its accessories to the dealer or any Authorized Service with the following documentation:

    1.- Warranty Certificate duly completed and sealed.
    2.- Original invoice on which the device is clearly identified and the date of purchase.
    3.- Description of damage or defects found.

The warranty terms contained in this Warranty Certificate does not exclude, modify or restrict the rights that the buyer has legally by applying the laws in force at the time of purchase, but are added to the same ones.

FALCON.

EU DECLARATION OF CONFORMITY

FALCON RADIO & ACCESSORIES SUPPLY, S.L. ID no.: B-60565314.
C/ Vallespir, nº 13. Polígono Industrial Fontsanta.
08970 San Joan Despí - Barcelona (SPAIN).
Phone no.: (+34) 934 579 710 - Fax no.: (+34) 934 578 869 - www.telecomfalcon.com

Product description:

Equipment:	BT bluetooth wireless headset with 2 PTT
Brand:	TELECOM
Model:	MABT-2PTT
Manufacturer:	FALCON RADIO & ACCESSORIES SUPPLY, S.L.
Made in:	China

The product complies with the provisions of the European Directives:

- Directive 2012/19/EU of the European Parliament and of the council of 4 July 2012 on waste electrical and electronic equipment (WEEE).
- Directive 2011/65/EU of the European Parliament and of the council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).
- Directive 2014/53/EU of the European Parliament and of the council of 16 April 2014 on the harmonization of the laws of the member States relating to the making available on the market of radio equipment and repealing Directive 1999/05/EC. The standards granting presumption of conformity are:

- EN 62479:2010	- ETSI EN 301 489-1 V2.2.3
- EN 50663:2017	- ETSI EN 301 489-17 V3.2.4
- EN 62368-1:2014+A11:2017	- ETSI EN 300 328 V2.2.2 (2019-07)
- EN 50332-2: 2013	

CE

Sant Joan Despí-Barcelona (Spain), 2019 June 27

Xavier Falcon Vilaplana & Lluís Falcon Vilaplana, Managers
FALCON RADIO & A.S., S.L.