# UP305/ UP405 DMR Two-way Radio

# **Quick User Guide**

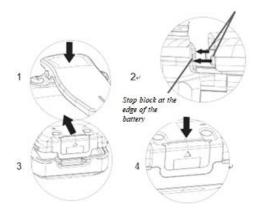
Please read carefully the Safety Information and Warranty Card before using the product.

## Caution for Using the Battery

- Explosion may be incurred by using a battery of a non-supplied model, or by shorting the anode and cathode of the battery.
- Charge the battery using the attached charger, and dispose it as instructed.
- Do not strike, squeeze, short out or disassemble the battery.
- Do not put the battery in a high temperature or throw it into a fire.
- Stop using the battery if it is seriously bulged or immersed in water.

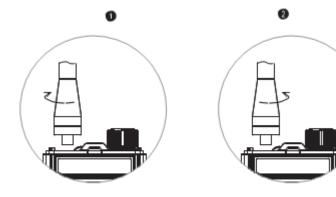
# Installing the Battery

- 1. Press the upper part of the belt clip gently so that it goes up. (Figure ①)
- 2. Align the battery with the battery holder at the back of the radio, and then insert the battery. (Figure ②)
- 3. Push the battery in the direction indicated until the latch is in position. (Figure ③)
- 4. Press the upper part of the battery until it is latched. (Figure ④)



# Installing/Uninstalling the Antenna

Insert the threaded end of the antenna into the antenna interface, and rotate the antenna tight clockwise. (Figure 1) To uninstall the antenna, rotate it counterclockwise. (Figure 2)

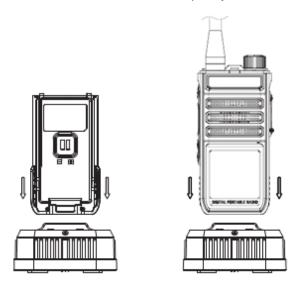


## Charging the Battery

- 1. Plug the power adapter into a qualified AC power socket.
- 2. Connect the USB cable of the power adapter to the USB port at the back of the desktop charger. Green indicator light is on.
- 3. Insert the battery only or together with the radio into the charger.
- 4. Make sure the battery contacts the charging terminals properly and red indicator light is on.
- 5. When the indicator light turns from red to green, charging is finished.
- 6. After this, wait 1 to 2 hours before taking out the battery to achieve the best performance.

# Note:

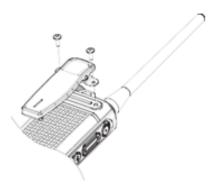
- 1. The radio is delivered uncharged. Before using it for the first time, please charge the battery.
- 2. Always use the supplied lithium battery and desktop charger.
- 3. A new battery or one that has been stored for more than 2 months after charging needs to be charged for several times to achieve its normal capacity.



# Installing/Uninstalling Belt Clip

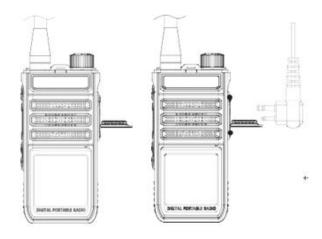
Align the two screw holes of the belt clip with the screws holes at the back of the radio, and screw up the screws using a screwdriver.

To uninstall the belt clip, unscrew the screws and take off the belt clip.



# Installing an Earphone (Optional)

To use an earphone, open the earphone cover at the upper part of the right side of the radio, and then plug the earphone connector into the jack.



## **Basic Operation**

# 1. Powering On/Off

- When the radio is off, hold down the Power/Channel knob for 3 seconds to power on the radio. You will hear a tone "di di".
- When the radio is on, hold down the Power/Channel knob for 3 seconds to power off the radio. You will hear a tone "di di".

# 2 Selecting a Channel

In standby state, rotate the Power/Channel knob to select a channel.

#### 3. Adjusting the Volume

In standby state, press the Volume + key to increase the volume, or the Volume - key to decrease it.

## 4. Initiating a Call to Default Group

Hold down the PTT key to initiate a call and talk, and release it to quit the call.

# 5. Receiving a Call

Green indicator light is on when signals are received.

While working on a digital channel, the radio outputs voice when it receives an individual call, group call or all call. While working on an analog channel, the radio outputs voice when it receives signals, and the CTCSS code is the preset one for the channel or analog signaling is disabled for the radio.

## 6. Answering a Call

On a digital channel, you can answer a call by holding down the PTT key within the call duration. After this duration is up, you need to initiate a new call.

(Note: You may have the call duration set by your dealer.)

On an analog channel, you can answer a call by holding down the PTT key and speaking to the microphone.

# 7. Digital/Analog Switching

After configuring the mode of each channel as analog or digital, you can switch to either mode by selecting a channel using the Power/Channel knob.

#### 8. TOT

TOT (Time-out Timer) is to prevent a user from occupying a channel for too long. If the radio transmits continuously for a duration longer than that set by dealer, transmission stops and there is an alert tone, and you may cancel the tone by releasing the PTT key. After a period, you may resume transmission by holding down the key. (Note: You may have this period set by your dealer.)

If a pre-alarm is enabled, you hear pre-alarm alert tone before TOT time is up.

#### 9. Scan

The radio scans to search for active channels. After finding an active channel, the radio dwells on it for communication.

To start/stop scan, press the Function key programmed to scan.

# 10. Initiating a Call during Scan

During scan, you can press the PTT key to transmit on a preset channel.

Note: This channel is set by your dealer.

#### 11. Stun/Revive

The radio receives and decodes Kill and Revive signals from another radio, and performs accordingly.

When the radio is killed, it receives no signals but Revive.

When the radio is revived, it transmits and receives signals normally.

Note: This function is available in digital mode only, and is enabled by your dealer.

#### 12. Emergency Alarm

Under emergency, you may send an emergency alarm by pressing the Function key programmed to send alarms. To cancel an alarm, press the Function key programmed to exit emergency alarm.

You need to set an alarm mode and an alarm type.

#### Alarm Mode

Emergency Alarm: The radio sends an alarm and then exit alarm state automatically.

Emergency Alarm + Emergency Call: After the radio sends an emergency alarm, press the PTT key to initiate an emergency call.

Emergency Alarm + Auto Background Tone: The radio sends an emergency alarm and then background tone.

#### Alarm Type

None: Alarm is disabled. You cannot send an alarm by pressing the Function key programmed to perform this function.

Siren Only: In alarm state, siren plays locally and the control center cannot receive alarm signals.

Conventional: In alarm state, there is light and sound alert, and the radio can receive response from other members.

Secret: In alarm state, there is no light or sound alert, and the radio cannot receive response from other members.

Secret with Voice: In alarm state, there is no light or sound alert, but the radio can receive response from other members.

#### Note:

An emergency alarm is a non-speech signal the radio sends to trigger another radio to give off an alarm.

You may set the above parameters using the programming software.

To guarantee emergent communication, an emergency call is prior to a common call.

## Programmable Keys

You may have the Function key be programmed by your dealer to perform a specific function as needed.

Note:

Press: Press down and release quickly.

Hold down: Press down and hold for a period set through the CPS.

NO.	Function	Description
1	(Undefined)	Press the key, and the radio does not act.
2	High/Low Power	Switch to the high/low power.

NO.	Function	Description	
		If CTCSS is enabled on the current analog channel, press the key to switch to	
3	Monitoring	carrier squelch mode (i.e. cancel CTCSS), and the radio outputs voice if	
		carriers are matched.	
4	Emergency Alarm	Send an emergency alarm.	
5	Exit Emergency	Quit emergency alarm state.	
J	Alarm	Quit emergency alarm state.	
6	Squelch On/Off	Enable/disable squelch. You may enable this function to receive week signals	
O		on an analog channel.	
7	Battery Level	Press the key to announce the battery level.	
′	Indication	1 1655 the key to announce the battery level.	
8	Scan	Enable/disable scan. Listen to the communication on other channels.	
9	Alert Tone On/Off	Enable/disable alert tones.	
10	Zone Selection	Switch to another zone. Zones are programmed using the CPS.	
11	Repeater/Talk Around	Enable/disable repeater function for the channel.	
12	Nuisance Delete	Press the key to delete an unwanted channel from the scan list.	
13	Broadcast Call	Make a broadcast call.	

# LED Indicator

Indicator State	Device State
Red Light on	Transmission in progress.
Green Light on	Reception in progress.
Red Light Flashing	Low battery. Charging is required.
Green Light Flashing	Scan in progress.
Yellow Light Flashing	In call hold state in digital mode. Exit when hold time is up.
Yellow Light on	The channel is not configured. Switch to another channel.

# Icons (UP405S only)

.000	(3. 1333 3)
lcon	Description
	Current channel. (16 channels in total)
	Volume level. (14 levels in total)
	Mute state.
	Low-battery alarm. (Remaining capacity <
	5%)
	Remaining battery capacity. (High, medium
	or low)
	The zone of the current channel. (16 zones
	in total)
	Calling in progress.

# Troubleshooting

No.	Problem	Reason and Solution
	Power-on failure	1. Battery out
		Solution: Charge or replace the battery.
1		2. Faulty volume switch
		Solution: Get it repaired at the authorized service
		station.
2	Low voice during call	1. Speak too far from the microphone

		Solution: Keep a distance of 3~10 cm from the
		microphone.
		2. Wrong volume setting
		Solution: Rotate the volume knob clockwise to
		increase the volume.
		Wrong channel parameters
		Solution: Set the parameters properly and try
		again.
3	Failed to transmit or receive	2. Wrong group identity for default contact
		Solution: Select a right group.
		3. Beyond communication scope
		Solution: Reduce the distance.

Kirisun reserves the right to the final interpretation of this document. This document is only for reference, and the actual product prevails.

## Notice to user

# Regulatory

Kirisun directive (EU) No 2014/53 of the European Parliament and of the Council of 16 April 2014 on harmonisation of the laws of the Member States relating to the making available on the market of radio equipment (RED) and that any applicable Essential Test Suits measurement have been performed.

# Restrictions Frequencies are valid for the European country

Country	Frequency Range(MHz)	Max. transmit power (W)
Germany(DE)	406.1-430 ,440-470	4
France (FR)	406.1-430,444.5-447, 451.5-460, 461.5-470	4
United Kingdom (UK)	410-430 ,440-470	4
Italy(IT)	440-443,445-470	4
Greece(EL)	406.1-430 ,440-470	4
Spain(ES)	406.1-430 ,440-470	4
Ireland (IE)	410 - 430,440 - 455, 456 - 459,460 - 470	4
Belgium(BE)	406.1-430 ,440-470	4

406.1-430 ,440-470	4
400 4 400 440 4==	Î.
406.1-430 ,440-470	
440-470	
406.1-430 ,440-470	4
hbourg (LU) 410-430,440- 470	
410 -430,440-470	4
406.1-430,440-450,456 -470	4
406.1-430 ,440-470	4
448 - 451.3,457.38 - 461.3,467.38 - 470	4
406.1-430,450 - 470	4
406.1 - 410,412.5 - 420, 422.5-430,440 - 442.5, 443 - 450,446 -446.2,450 -453,457.575 - 463,467.575 -470	4
406.1 - 410 , 413 - 418.6 ,423- 428.6 ,440 - 450 , 450 - 452.9875 ,458.1125 - 462.9875 ,467.4875 - 467.5875	4
417 - 420,442 - 445,456 - 460, 461.3 - 470	4
410 -430,440-470	4
444.9 - 444.900001, 450 - 456, 457.33 - 457.330001, 457.45 - 458.3,460 -470	4
448 - 449.5,457 - 460,467 - 470	4
408 - 410.8,415 - 420.8,425 - 429.8, 440 - 450.55, 457.5 - 458.2, 460 - 460.55,467.5 - 468.2	4
441.025 - 451.31,455.73 - 461.31,465.73- 470	4
407.525 - 408.55,410.0125 - 410.8875,417.525 - 417.9, 419.15 - 419.525,419.55625 - 419.71875,420.0125 - 420.8875,426.35 - 427.5,427.525 - 427.9, 429.15 - 429.525,429.55625 - 429.71875,440.0125 - 440.5875, 440.60625 - 440.89375,442.775 - 443, 443.025 - 444,	4
	406.1-430,440-470  410-430,440-470  406.1-430,440-470  406.1-430,440-470  448 - 451.3,457.38 - 461.3,467.38 - 470  406.1 - 410,412.5 - 420, 422.5-430,440 - 442.5, 443 - 450,446 - 446.2,450 - 453,457.575 - 463,467.575 - 470  406.1 - 410, 413 - 418.6, 423 - 428.6, 440 - 450, 450 - 452.9875 ,458.1125 - 462.9875 ,458.1125 - 462.9875,467.4875 - 460, 461.3 - 470  410 - 430,440-470  444.9 - 444.900001, 450 - 456, 457.33 - 457.330001, 457.45 - 458.3,460 - 470  408 - 410.8,415 - 420.8,425 - 429.8, 440 - 450.55, 457.5 - 458.2, 460 - 460.55,467.5 - 468.2  441.025 - 451.31,455.73 - 461.31,465.73 - 470  407.525 - 408.55,410.0125 - 410.8875,417.525 - 417.9, 419.15 - 419.525,419.55625 - 419.71875,420.0125 - 420.8875,426.35 - 427.5,427.525 - 427.9, 429.15 - 429.525,429.55625 - 429.71875,440.0125 - 440.5875, 440.60625 - 440.89375,442.775 - 443, 443.025 - 444,

	447.00625 - 447.29375,447.30625 - 447.70625, 449.025 - 449.525,449.55 - 449.975, 450.325 - 452.475, 452.525 - 452.975,453.0125 - 453.6625,469.725 - 469.975	
Sweden(SE)	406.1 -430, 442 - 444,444.5875 - 452.5, 457.5 - 462.5,467.5 - 470	4

# Restrictions are valid for the European country

Restrictions are valid for the following countries:

France (FR), United Kingdom (UK), Italy(IT), Ireland (IE), Portugal (PT), Luxembourg (LU), Bulgaria(BG), Latvia (LV), Czech Republic (CZ), Denmark(DK), Estonia(EE), Lithuania(LT), Hungary(HU), Netherlands(NL), Austria(AT), Poland(PL), Romania (RO), Slovakia(SK), Finland(FI), Sweden(SE)

# Waste Electrical and Electronic Equipment recycling

This symbol on the product or its packaging indicates that this product must not be disposed of as household or commercial waste. Some countries have set up collection and recycling systems for waste electrical and electronic products. By ensuring that this product and its packaging is disposed of correctly, you will help prevent potentially negative consequences for the environment and human health, and help conserve natural resources. Please dispose of your waste product according to your national and local regulations. Contact your service provider or Kirisun for information about disposing of this product in your region of the world.

# **Disposing of batteries**

Your radio is supplied with a rechargeable lithium-ion battery. This symbol on the battery and its packaging indicates that it must not be disposed of with household or commercial waste. Please dispose of your waste batteries according to your national and local regulations. Contact your service provider or Kirisun about recycling batteries in your region of the world.

**US Markets** 

# FCC& IC radiation exposure statement

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

This device complies with part 15 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 operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential

installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.
- This radio is designed for and classified as "Occupational/Controlled Use Only", meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards; NOT intended for use in an General population /uncontrolled environment.
- DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.
- DO NOT transmit for more than 50% of total radio use time, more than 50% of the time can cause RF exposure compliance requirements to be exceeded.
- This transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. RF exposure compliance is limited to the specific belt-clip and accessory configurations as documented in this filing and the separation distance between user and the device or its antenna shall be at least 25mm and 0mm from your body.

All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration to comply with occupational/controlled Exposure limit and requirements. The highest reported SAR values for Face-held, body-worn are **2.371** W/Kg, **5.337** W/Kg.

Pour contrôler votre exposition et garantir le respect des limites d'exposition en milieu professionnel / contrôlé, respectez toujours les procédures suivantes.

Des lignes directrices:

- Ne retirez pas l'étiquette d'exposition RF de l'appareil.
- Les instructions de sensibilisation de l'utilisateur doivent accompagner l'appareil lorsqu'il est transféré à d'autres utilisateurs.
- N'utilisez pas cet appareil si les exigences opérationnelles décrites ici ne sont pas satisfaites.

#### Mode d'emploi:

- Ne transmettez pas plus que le facteur de service nominal de 50% du temps. Pour transmettre (parler), appuyez sur le bouton Push-To-Talk (PTT). Pour recevoir des appels, relâchez le bouton PTT. La transmission à 50% du temps, ou moins, est importante car cette radio génère une exposition à l'énergie RF mesurable uniquement lors de la transmission (en termes de mesure de conformité aux normes).
- Tenez la radio en position verticale devant le visage avec le microphone (et les autres parties de la radio, y compris l'antenne) à au moins 2,5 cm (2,5 cm) du nez. Il est important de garder la radio à la bonne distance car les expositions aux RF diminuent avec la distance de l'antenne. L'antenne doit être éloignée des yeux.
- Lorsqu'elle est portée sur le corps, placez toujours la radio dans un clip, un support, un étui, un étui ou un harnais de sécurité approuvés pour ce produit. L'utilisation d'accessoires non approuvés peut entraîner des niveaux d'exposition qui dépassent les limites d'exposition aux RF de l'environnement professionnel / contrôlé.
- Utilisez uniquement les antennes, batteries et accessoires fournis ou de remplacement approuvés par le fabricant. L'utilisation d'antennes, de batteries et d'accessoires non approuvés par le fabricant peut dépasser les directives d'exposition RF FCC et IC.
- Pour obtenir une liste des accessoires approuvés, veuillez consulter votre revendeur local pour plus d'informations.

The information listed above provides the user with information needed to make him or her aware of a RF exposure, and what to do to assure that this radio operates within the RSS-102 exposure limits of this radio.

Output power listed is rated conducted. This device must be restricted to work-related operations only in an Occupational/Controlled RF exposure environment and must operate with a duty factor not exceeding 50%. This transmitter may operate with the antenna(s) documented in this filing in Push-to-Talk and body-worn configurations. The device complies with RF specifications when the device used at 25 mm from your front face and 0 mm from your body. All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration to comply with occupational/controlled Exposure limit and requirements. A label, as described in this filing, must be displayed on the device to direct users to specific training information for meeting occupational exposure requirements. This portable radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as "Occupational Use Only," meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment.

All qualified end-users of this device must have the knowledge to control their exposure conditions and/or duration to comply with occupational/controlled Exposure limit and requirements. A label, as described in this filing, must be displayed on the device to direct users to specific training information for meeting occupational exposure requirements. The highest reported SAR values for Face-held, body-worn are 3.529 W/Kg, 6.285 W/Kg.