

STARNEX

S1-V

User Guide

Contents

1	Checklist before using the device			6
	1.1	N	lotice	6
		1.1.1	Liability for illegal acts	6
		1.1.2	FCC licensing information	6
		1.1.3	Important notice	7
	1.2	In	nportant safeguards	9
	1.3	C	omponent	12
	1.4	C	omponent names	13
		1.4.1	Main body	13
		1.4.2	Earset	13
		1.4.3	LCD (default setup)	14
	1.5	Cl	harge	14
	1.6	Cl	hecking the battery life	16
2	Use	·		17
	2.1	Τι	urn on/off	17
		2.1.1	Turn on	17
		2.1.2	Turn off	18
	2.2	Vo	olume up/down (10 levels)	18
		2.2.1	Up	18
		2.2.2	Down	19
	2.3	Ві	utton lock	19

		2.3.1	Enable button lock	19
		2.3.2	Disable button lock	19
	2.4	Ea	arset connection	20
		2.4.1	Connecting to the device	20
		2.4.2	Earset adapter	20
	2.5	U:	sing the speaker system	22
	2.6	Se	elect how to wear device	23
		2.6.1	Clip	23
		2.6.2	Necklace	24
	2.7	Co	ommunication	26
	2.8	Vi	bration callbration call	27
		2.8.1	Sending call signal	27
		2.8.2	Receiving call signal	27
3	Che	ecklist f	or setting up the menu	28
	3.1	N	otice	28
		3.1.1	Enter the menu	28
		3.1.2	Move to a menu item	28
		3.1.3	Select an item	28
		3.1.4	Adjust and Move to a value	28
		3.1.5	Complete	29
		3.1.6	Save and Leave the menu	29
	3.2	М	enu items	30

Menu setu	ıp in detail	31
4.1 CI	HANNEL	31
4.1.1	What is a 'CHANNEL'?	31
4.1.2	'CHANNEL' setup	31
4.2 ID)	33
4.2.1	What is a 'ID'?	33
4.2.2	'ID' setup	33
4.4 PTT/V0	OX	34
4.3.1	What is a 'PTT/VOX'?	34
4.3.2	PTT/VOX setup	35
4.4 V	OX LEVEL	35
4.4.1	What is a 'VOX LEVEL'?	36
4.4.2	VOX LEVEL setup	36
4.5 D	EPT	37
4.5.1	About DEPT	37
4.5.2	DEPT setup	37
4.6 TI	ER	38
4.6.1	About TIER	38
4.6.2	TIER setup	38
4.6.3	TIER display	39
4.6.4	Usage of Function	39
4.7 D	EPT Rx	42

	4.7.1	About DEPT Rx	42
	4.7.2	How to Set DEPT Rx	43
4.8	ΕM	MERGENCY	43
	4.8.1	What is an 'EMERGENCY CALL'?	43
	4.8.2	How to make an 'EMERGENCY CALL'	43
	4.8.3	'EMERGENCY' setup	46
4.9	МІ	IC GAIN	47
	4.9.1	What is a 'MIC GAIN'?	47
	4.9.2	'MIC GAIN' setup	47
4.10) RF	POWER	49
	4.10.1	What is a 'RF POWER'?	49
	4.10.2	'RF POWER' setup	49
4.11	CL	ONE SET	50
	4.11.1	What is a 'CLONE SET'?	50
	4.11.2	'CLONE SET' setup	50
4.12	2 AC	DVANCED SET	52
4.13	B DE	FAULT SET	52
	4.13.1	What is a 'DEFAULT SET'?	52
	4.13.2	'DEFAULT SET' setup	52
4.14	ł VE	RSION	53
	4.14.1	What is a 'VERSION'?	53
	4.14.2	Checking the 'VERSION'	53

5	Other	information	54
	5.1	Connecting external devices	54
	5.2	Features and copyright	55
	5.	2.1 Features	55
	5.7	2.2 Patents, Trademarks or Designs Pending	55
	5.3	Checklist before reporting a problem	56
	5.4	Warranty	58

1 Checklist before using the device

1.1 Notice

1.1.1 Liability for illegal acts

 Anyone who uses this product for illegal purposes shall be liable and he or she shall be held responsible for all and any consequences.

1.1.2 FCC licensing information

• Federal Communications Commission statement

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

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.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

NOTE: Exposure to Radio Frequency Radiation. Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation.

The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

NOTE: This device complies with part 15 of the FCC Rules.

NOTE: 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 appliance and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter.

1.1.3 Important notice

• This User Guide can be revised without prior notice.

- Manufacturer or seller are not be liable for damage caused by accidents, natural disasters or defects caused by consumer failure while in use.
- Manufacturer or seller are not be liable for any problems that might be caused by a third party as he or she uses the product.
- Manufacturer or seller are not be liable for any problems caused by consumer carelessness as he or she uses the product.
- Images in the User Guide might differ from the actual product.
- Specifications can be changed to improve performance without prior notice.

1.2 Important safeguards

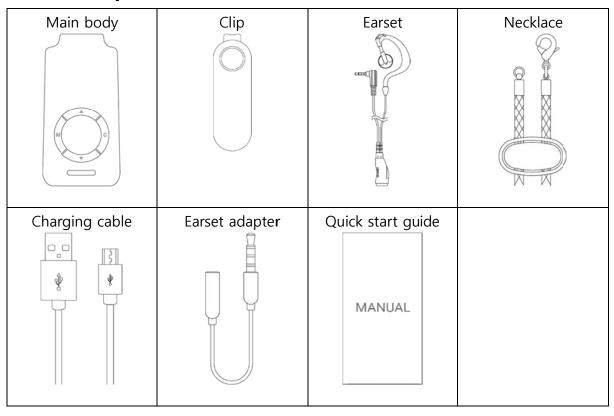
- Note the following when you use the product.
- Even if your warranty is valid, you bear the cost for fixing a problem if it is found to be caused by you.

Do not knock or drop the product. Any rough handling can damage the unit.
Do not use the charger if the product has been hit or dropped in order to avoid any possible damage or electric shock.
Do not put anything heavy on the product. This may cause damage.
Keep the product away from children. It can harm their safety or they may damage the device.
Do not use anything too sharp, like a pencil or a needle when you push a button. It can damage the product.
Do not expose the product to excessive dirt or humidity. It may cause damage or electric shock.
Clean the product on a regular basis to prevent it from being clogged with dirt. If the unit is not cleaned it can damage the performance or cause malfunctions.
Do not expose the product to water, alcohol or benzene. They can cause damage or electric shock.
Do not spray insecticide or flammable liquids on the product. It can cause a malfunction or fire.
Do not put the product nearby flammables or have it touched by them. They can melt the product and cause an electric shock or fire.
Do not expose the product to direct sunlight, high humidity or extreme hot or cold temperatures (including inside a car in summer). Such

	environments can damage the product.
X	Do not put the product where an airbag has been located nearby. It can hurt someone when it is deployed.
	Do not charge or discharge the product in an explosive. Such environments can trigger a short-circuit, which may cause burns or death in some cases.
	After lowering the volume to the minimum, wear the earset, then adjust the volume. High volume can cause hearing loss or heart attack. Higher volume can place more burden on your ears and thus damage your hearing.
	Check the law about radio usage before driving and using the product.
	When you are on airplane, follow the safety rules and directions of the flight attendants.
(X)	Do not try to dismantle or fix the product on your own. For any problem to be fixed, bring the product to a seller or customer service center.
	Do not attach unauthorized accessories to the product and then use it. They can damage the product or cause an accident.
	Do not tune to any other frequencies other than the allocated ones. It can be punishable by law.
	Holding or covering the antenna with hands may deteriorate the performance.
(!)	Do not use any other chargers other than the officially authorized one. Otherwise, they can damage the device or cause an accident.
(!)	Do not use the product for any purpose other than for communication. Otherwise, it can be punishable by law.

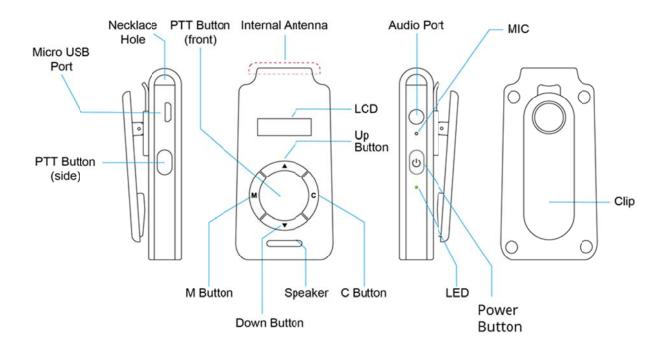
(!)	Do not use the product with any medical equipment or other devices nearby. It can cause unwanted effects or unpleasant noises if you use a hearing aid.	
(!)	Do not use the product near electronics. Electronic waves from the radio can have adverse effects on other devices or cause them to malfunction.	
(!)	Communication quality may get worse when you communicate either on the move at a rapid pace or while charging the device.	
(!)	The battery is consumable, so it is possible for it to diminish over time. If it is kept in too low or too high temperatures, its life span can be shortened dramatically.	

1.3 Component

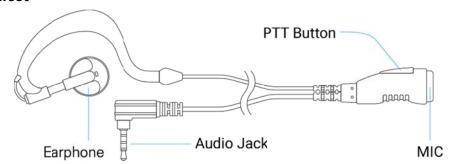


1.4 Component names

1.4.1 Main body



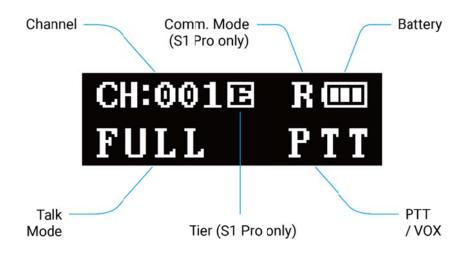
1.4.2 Earset





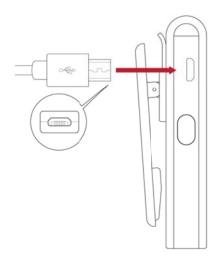
The PTT button on the earset works the same as the PTT button(front) on the main body.

1.4.3 LCD (default setup)



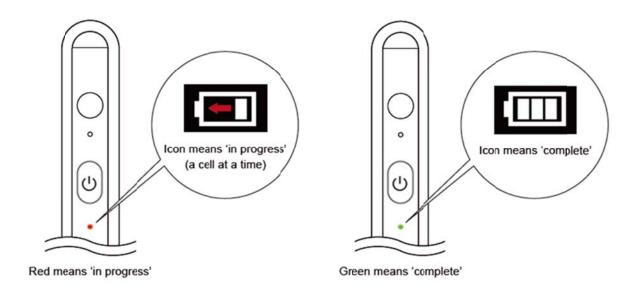
1.5 Charge

- Charge the device before use.
- Connect the charger to the micro USB port.
- Only use the officially authorized charger.

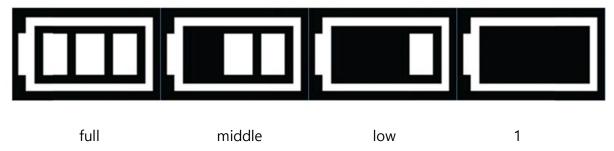


• The device begins to charge and you can check it by looking at the LED or LCD.

Туре	LED	LCD
When charging is in	Red	Each one of three white
progress		cells pops up over time.
When charging is complete	Green	Full with three white cells.



1.6 Checking the battery life



1

If remaining battery power is very low, the warning icon flashes with a beep and transmit & receive is not available.

Charge the device immediately if the warning icon starts to flash with a beep.





The battery is consumable, so it is possible for it to diminish over time. If it is kept in too low or too high temperatures, its life span can be shortened dramatically.

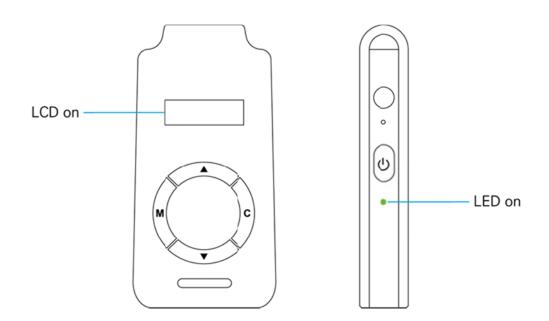
2 Use

2.1 Turn on/off

2.1.1 Turn on



- ① As shown in the figure above, you can push and hold the button to turn the power on as the arrow indicates.
- ② Once the power is on, the LED and LCD will turn on.



2.1.2 Turn off



① As shown in the figure above, you can push and hold the button to turn the power off.

2.2 Volume up/down (10 levels)



The volume of the earset (When connect the earset)



The volume of the speaker(When disconnect the earset)







The lowest volume

The highest volume

2.2.1 Up

- ① The volume goes up by one notch as you push the 'Up' button one time.
- ② The longer you keep pushing the 'Up' button, the faster the volume goes up.

2.2.2 Down

① The volume goes down by one notch as you push the Down' button one time.

② The longer you keep pushing the ODown' button, the faster the volume goes down.

2.3 Button lock

The button lock feature disables all of the buttons, except for the power button, in order to prevent any malfunctioning of the device and any other inconveniences that may be caused by unintentionally pressing the buttons.

2.3.1 Enable button lock

Push the 'Up' button and the 'Down' button simultaneously for more than 2 seconds.

The following icon appears on the screen, a beep is generated, and the button lock is enabled.



If you push a button when the button lock is enabled, a beep is generated, the button lock icon appears on the screen, and the button will not operate.

2.3.2 Disable button lock

While the button lock feature is enabled, push the 'Up' button and the 'Down' button simultaneously for more than 2 seconds.

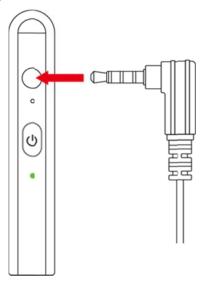
The following icon appears on the screen, a beep is generated, and the button lock is disabled.



When the button lock feature is disabled, you can use all of the buttons.

2.4 Earset connection

2.4.1 Connecting to the device



Connect the earset to the Audio port in the device.

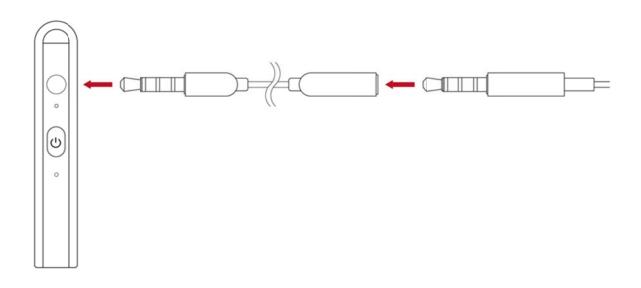


If you do not insert the plug of the earset all the way in the device, it causes malfunctions.

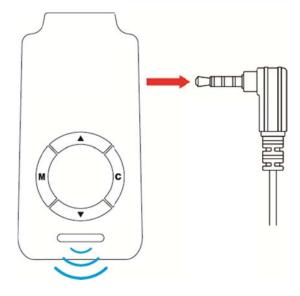
2.4.2 Earset adapter

It is recommended use the earset included in the package for stable operation of the product.

When you use a common earphones on the market, you should use the earset adapter included in the package.



2.5 Using the speaker system



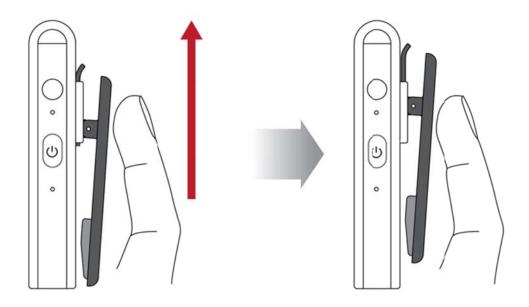
Removing the earset from the device makes the speaker produce sound.

2.6 Select how to wear device

2.6.1 Clip

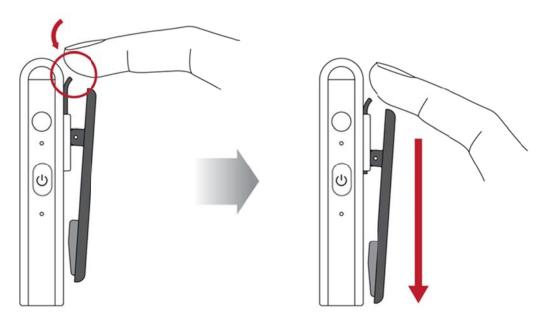
• How to put the clip onto the device

Fit the clip into the fixing holder on the device and then push the clip upwards until you hear a 'click' as the arrow indicates.



• How to detach it

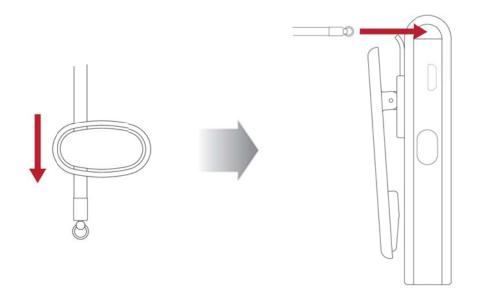
Pull it as the arrow indicates below by lifting up the upper clip at the fixing holder in the device.



2.6.2 Necklace

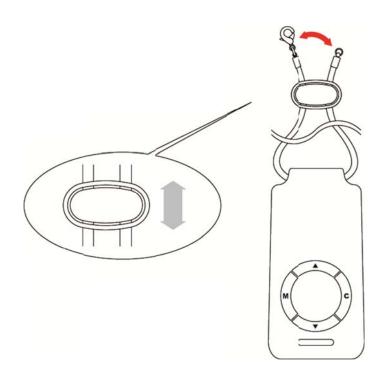
How to hook it onto the device

Hook the necklace into the necklace hole in the device.

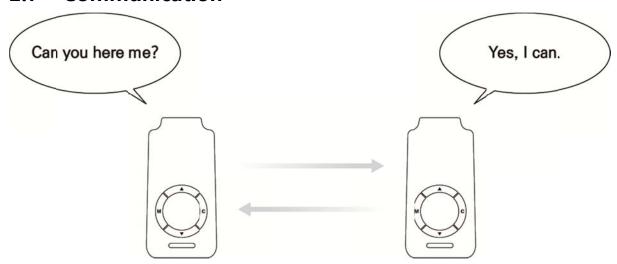


• How to adjust the length

The length is adjustable as shown in the figure below.



2.7 Communication



- Transmit & receive
- ① 'Transmit' means to send your voice to another terminal by pushing a button as configured or by recognizing your voice.
- ② 'Receive' means to hear the someone's voice without any special operation that was sent from another device.
- To communicate (default setup)
- ① Talk to the device while pushing the 'PTT' button to send your voice to a person on the other device. Stop pushing the button when you stop talking.
- ② The earset or the speaker enable you to hear what the other person says if there is a response.

As above, the terminal can make it possible to transmit and receive voice communication or to do those two at the same time.



For more details about how to communicate, refer to 'Menu setups in detail'.

2.8 Vibration call

By sending call signal to the other party to make the call sound and the vibration ring, user can express intention to communicate.

2.8.1 Sending call signal

Sending call signal by pushing the 'C' button for more than 2 seconds.

After call sound and vibration ring, call signal is sent.



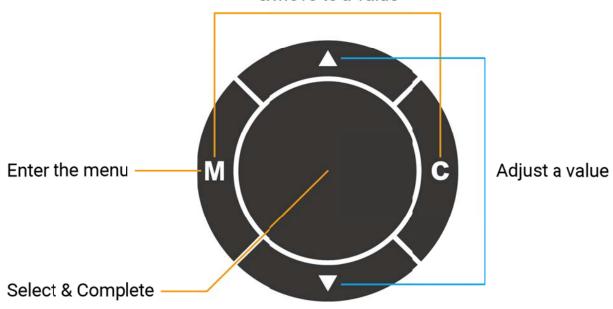
2.8.2 Receiving call signal

An alarm and vibration ring occurs on the terminal receiving the call signal.



3 Checklist for setting up the menu

Move menu items & Move to a value



3.1 Notice

Follow the directions below to set up the menu.

3.1.1 Enter the menu

Enter the menu by pushing the 'M' button for more than 2 seconds.

3.1.2 Move to a menu item

In the menu, move to an item from another item by pushing the 'M' or 'C' buttons.

3.1.3 Select an item

An item in the menu can be selected by pushing the PTT button.

3.1.4 Adjust and Move to a value

Adjust it by pushing the 'Up' or 'Down' buttons.

Move to a value from another value by pushing the 'M' or 'C' buttons

3.1.5 Complete

When the set value blinks, user presses the PTT button the blinking stops and the setting is complete.

3.1.6 Save and Leave the menu

Push the 'M' button for more than 2 seconds to save the changed settings and leave it.



You will automatically leave the menu if you stay there without operation for more than 10 seconds.

In this case, the changed settings are not saved.

3.2 Menu items

• Product consists of the following menus:

Menu items	S1-V
CHANNEL	200
ID	V
ENCRYPTION	Editable
PTT/VOX	V
VOX LEVEL	V
DEPT	V
TIER	V
DEPT Rx	V
EMERGENCY	V
MIC GAIN	V
RF POWER	V
CLONE SET	V
ADVANCED SET	V
DEFAULT SET	V
VERSION	V

The following information describes each item's purpose and how to set it up.

4 Menu setup in detail

4.1 CHANNEL

4.1.1 What is a 'CHANNEL'?

Change the 'CHANNEL' to ensure that you talk with only your intended people. Just change the 'CHANNEL' if there is too much noise or you get the line crossed with another group.

The number of channels varies depending on the model.

• S1-V: 200 CH

('001' is set as the default.)

4.1.2 'CHANNEL' setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'CHANNEL' by using 'M' or 'C' buttons and then select by pressing PTT button.

CHANNEL →

If the first number flashes, adjust it by using the 'Up' or 'Down' buttons.

When the number flashes Move to the next number by using the 'M' or 'C' buttons.

Once you are done with changing the 'CHANNEL', complete by presses the PTT button

and move to another menu item by using the 'M' or 'C' buttons or go back to the main screen by pushing the 'M' button for more than 2 seconds.

4.2 ID

4.2.1 What is a 'ID'?

If the line is mixed up or the 'CHANNEL' is already taken by other people, set the 'ID'. By doing so, communication becomes viable between devices whose "ID' matches each other. The 'ID' function has 1,000 ID that range from 000 to 999.

('000' is set as the default.)

4.2.2 'ID' setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'ID' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the first number flashes, adjust it by using the \(\triangle \) 'Up' or \(\triangle \) 'Down' buttons.

When the number flashes Move to another number by using the 'M' or 'C' buttons.

Once you are done with changing the 'ID', complete by presses the PTT button and

move to another menu item by using the 'M' or 'C' buttons or go back to the

main screen by pushing the ${}^{\text{M}}$ button for more than 2 seconds.

4.4 PTT/VOX

4.3.1 What is a 'PTT/VOX'?

There are two ways to send voice communication: 'PTT' and 'VOX'.

('PTT' is set as the default.)

PTT

Voice communication can be sent while pushing the PTT button.

- ① Push the 'PTT' button to send a voice.
- 2) Talk while holding the 'PTT' button. This is when your voice will be sent.
- 3 Stop holding the 'PTT' button when you want to stop sending your voice.

VOX

The device will recognize your voice and then send it automatically.

'VOX' sends all of the voices that it recognizes. The process can be stopped by pushing the 'PTT' button (front) for more than 2 seconds. (It means that 'VOX' is turned off.) 'VOX' will turn on again when you push the PTT button (front) for more than 2 seconds and then begin sending again.

When 'VOX' is turned on, it can send a voice message automatically without any extra controls.

- ① Push the 'PTT' button (front) for more than 2 seconds to stop sending and then 'VOX' will be turned off.
- ② When 'VOX' is turned off, it can be turned on by pushing the 'PTT' button (front) for more than 2 seconds.



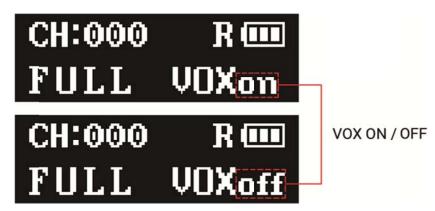
The PTT button on the earset works the same as the PTT button (front) on the main body.



The PTT button (side) always operates as PTT, regardless of whether the VOX is on or off.



If 'VOX' is turned on, the battery may be exhausted more quickly.



4.3.2 PTT/VOX setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'PTT/VOX' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the O'Up' or O'Down' buttons.



Once you are done with changing the 'PTT/VOX', complete by presses the PTT button

and move to another menu item by using the 'M' or 'C' buttons or go back to

the main screen by pushing the 'M' button for more than 2 seconds.

4.4 VOX LEVEL

4.4.1 What is a 'VOX LEVEL'?

The 'VOX LEVEL' enables you to control the sensitivity levels of recognized voices when the 'VOX' function is turned on. If the 'VOX LEVEL' goes up, it can even recognize a lower voice and send. If the 'VOX LEVEL' goes down, it is less likely to catch a lower voice and will only recognize louder voices and send. For example, if noise and unintended sounds are caught and sent via 'VOX', then it is necessary to lower the 'VOX LEVEL'. However, if it i0s quiet, then raise the 'VOX LEVEL' to catch and send quieter sounds, even whispering.

There are nine VOX LEVEL from 1 to 9.

('5' is set as the default.)

4.4.2 VOX LEVEL setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'VOX LEVEL' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the 'Up' or 'Down' buttons.



'1' is Low sensitivity (When the surroundings are noisy)~'9' is High sensitivity (When the surroundings are quiet)

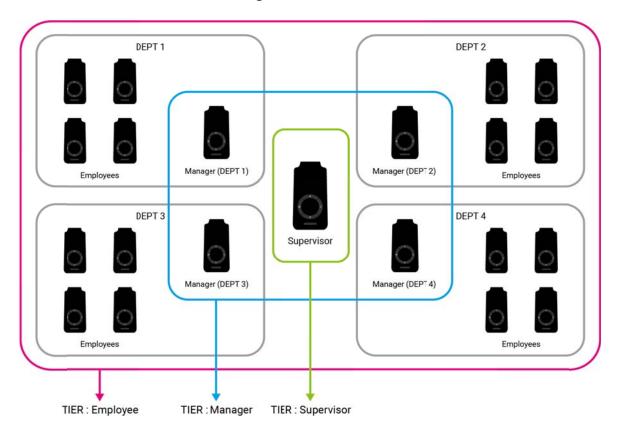
Once you are done with changing the 'VOX LEVEL', complete by presses the PTT button and move to another menu item by using the 'M' or 'C' buttons or go back to the main screen by pushing the 'M' button for more than 2 seconds.

4.5 DEPT

4.5.1 About DEPT

You can divides a user into up to 4Departments (DEPT) and classifies the user into 3 tiers (Employee, Manager, Supervisor). Each user calls in different ways depending on own authority.

(Refer to "TIER" for details on calling to each tier.)



To use this function, Employee and Manager shall set their DEPT.

('1' is set as the default.)

4.5.2 DEPT setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'DEPT' using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the 'Up' or 'Down' buttons.

Once you are done with changing the 'DEPT', complete by presses the PTT button and

move to another menu item by using the 'M' or 'C' buttons or go back to the

4.6 TIER

4.6.1 About TIER

After setting "DEPT" as explained before, TIER is divided in to 3 TIERS including Employee, Manager, and Supervisor based on each role. Before using the function, the TIER should be selected for the each role.

4.6.2 TIER setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'TIER' using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the ODO 'Up' or ODOWN' buttons.



Once you are done with changing the 'TIER', complete by presses the PTT button and

move to another menu item by using the 'M' or 'C' buttons or go back to the main screen by pushing the 'M' button for more than 2 seconds.

4.6.3 TIER display

The display differs as follows depending on the TIER.

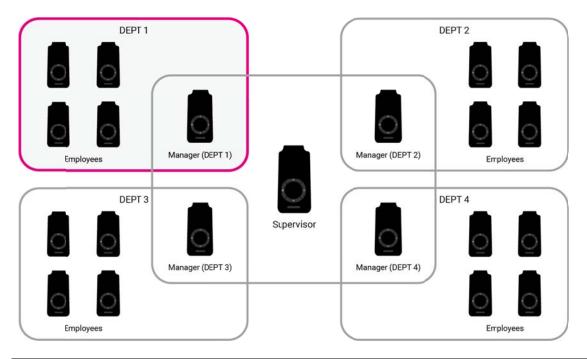


4.6.4 Usage of Function

After setting DEPT and TIER, a user may use up to four DEPTS and three TIERS as follows.

Employee

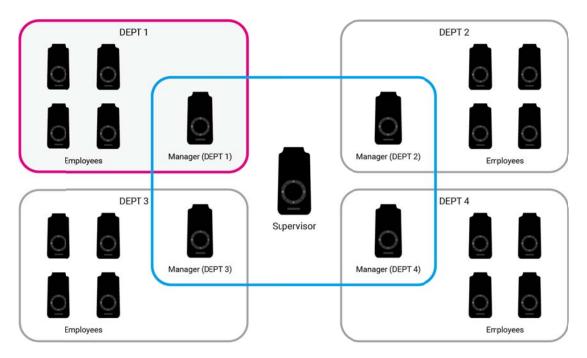
Able to communicate with each belonging DEPT (Employee and Manager).



Button	Motion		
PTT Button (Front)	① Communicate employee or manager of the belonging DEPT.		
PTT Button (Side)	② Same as PTT button (front)		

Manager

Able to communicate with belonging DEPT's employee or communicate between managers (other manager and supervisor).



Button	Motion		
PTT Button (Front)	Communicate with employee or manager of the belonging		
	DEPT.		
PTT Button (Side)	Communicate with manager (other manager and supervisor)		

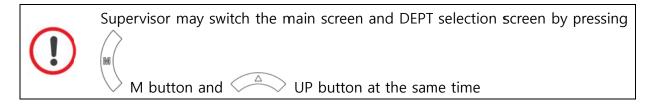
Supervisor

Able to communicate by selecting Department (DEPT) easily or communicate between managers (other manager and supervisor)

How to Select DEPT

DEPT selection screen appears on the terminal set to Supervisor.

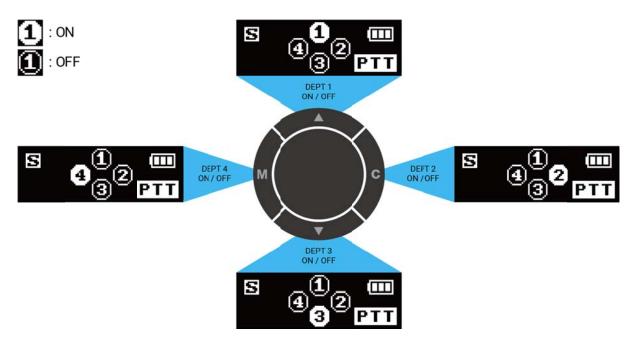






Each number on up, down, left, and right side indicates the DEPT number.

Supervisor may select DEPT for a transmission.



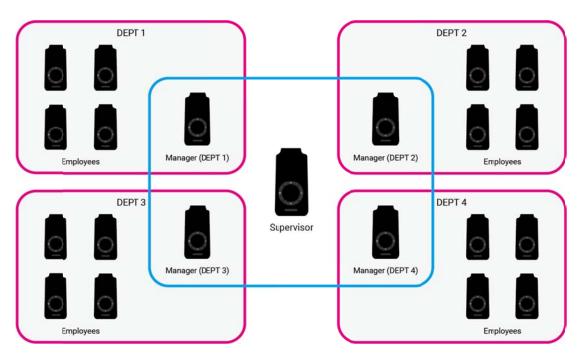
Use 4 buttons (UP/C/DOWN/M) to turn DEPT number on the same direction on or off.



Supervisor may select multiple DEPTS.

(2) Transmission to Selected DEPT

Turn on the desired DEPT number and press PTT button (front) to transmit to the selected DEPT.



Button	Motion		
PTT Button (Front)	⑤ Communicate with employee or manager of selected DEPT		
PTT Button (Side)	6 Communicate with manager (Other manager and supervisor)		



When PTT / VOX is set to VOX, it is sent by the VOX to the group corresponding to the PTT button (front), and the PTT button (side) does not operate as VOX and always operates as PTT.

The PTT button (front) operates VOX on / off.



One channel is used at multiple DEPTS at the same time. When a user presses PTT button while other DEPT is currently calling, transmission is unavailable. In this case, the screen displays "Busy" and makes a warning sound. Screen Displaying "Busy"



4.7 DEPT Rx

4.7.1 About DEPT Rx



DEPT RX appears when "Supervisor" is set on TIER.

• After setting "Supervisor" in "TIER", a user may hear the voice transmitted from all DEPTS. Receiving of voice from DEPT is adjustable as follows.

4.7.2 How to Set DEPT Rx

Select DEPT to adjust the receiving of voice as follows.



After selecting the desired DEPT, a user may adjust the voice from the select DEPT as follows.

- ON: Receive voice from the selected DEPT.
- OFF: Do not receive voice from the selected DEPT.
- KEY: Receive voice from DEPT selected in DEPT selection screen.



4.8 EMERGENCY

4.8.1 What is an 'EMERGENCY CALL'?

'EMERGENCY CALL' is a function to make a call in an emergency. For example, if you are in an emergency, this function helps you send an emergency call to others on a regular basis, no matter which channel is being used. Those who receive the signal can respond to you through the terminal.

4.8.2 How to make an 'EMERGENCY CALL'

- Sending an emergency call
- ① A person in an emergency pushes PTT button (front) repeatedly at a fast speed (5 times within one second) to send an emergency call to other devices.
- ② The terminal will start to send emergency calls to other terminals. It will be displayed on the LCD as shown below.



- Receive an emergency call
- ③ An alarm and vibration ring occurs on the terminals receiving the call. It is displayed on LCD as shown below.





Emergency calls are sent to terminals with the COMM. MODE set to 'Radio' Emergency call can be received regardless of which TALKMODE, CHANNEL, ID functions are being used.

- Communicating during an 'EMERGENCY CALL'
- ④ To talk with the person in an emergency, push PTT button (front) repeatedly at a fast speed (5 times within one second) while the alarm is activated on the terminal.



During an emergency call, "SOS" will appear in the channel display section of the standby screen.





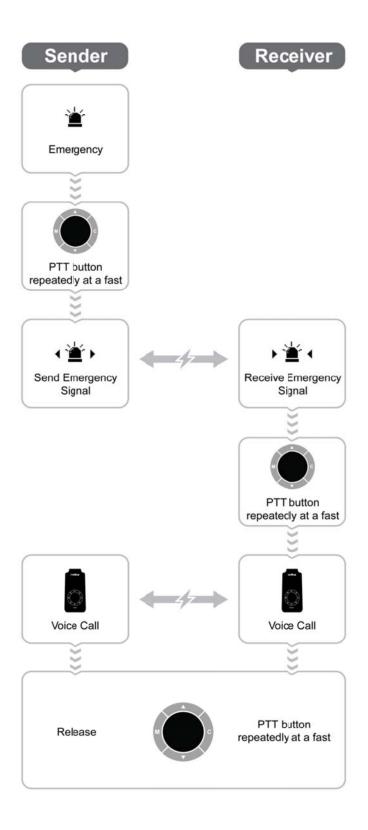
Multiple people can communicate in an emergency.

- How to communicate in an 'EMERGENCY'
 Once EMERGENCY CALL is connected, you can make calls in the same way as usual.
- Release an 'EMERGENCY CALL'

While connected to an emergency call, push PTT button (front) repeatedly at a fast speed (5 times within one second) to release the emergency call. (It is the same process as when you respond to an emergency call.)



Once released from the emergency call, the setup on the terminal will go back to the settings before the emergency call was received.



If you do not want to receive an emergency call from other groups, you can do so by setting the emergency function to off. But, for an emergency call from within your own CHANNEL and ID, you will always receive it no matter if your emergency function is set

to on or off.

('On' is set as the default.)

4.8.3 'EMERGENCY' setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'EMERGENCY' by using 'M' or 'C' buttons and then select by pressing PTT button.

← EMERGENCY → On

If the value flashes, adjust it by using the 'Up' or 'Down' buttons.



Once you are done with changing the 'EMERGENCY', complete by presses the PTT button

and move to another menu item by using the 'M' or 'C' buttons or go back to

the main screen by pushing the \(\sqrt{M'}\) button for more than 2 seconds.



The 'EMERGENCY' function is designed to help somebody who is in trouble. Make sure that you do not play with it or use it carelessly. Otherwise, it could cause unwanted consequences to other people.

4.9 MIC GAIN

4.9.1 What is a 'MIC GAIN'?

The MIC GAIN allows you to adjust the microphone volume. "INT MIC GAIN" is MIC GAIN on the device and "EXT MIC GAIN" is MIC GAIN on the earset. It is displayed on LCD as shown below



"INT MIC GAIN" and "EXT MIC GAIN" will automatically change by earset connection.

Increasing the MIC GAIN raises the loudness of your voice, while decreasing the MIC GAIN decreases the loudness of your voice during the transmission. There are five settings: very low, low, middle, high and very high.

('Middle' is set as the default.)

4.9.2 'MIC GAIN' setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'MIC GAIN' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the O'Up' or O'Down' buttons



Once you are done with changing the 'MIC GAIN', complete by presses the PTT button

move to another menu item by using the 'M' or 'C' buttons or go back to the main screen by pushing the 'M' button for more than 2 seconds.

4.10 RF POWER

4.10.1 What is a 'RF POWER'?

The RF POWER allows you to adjust the strength of the transmission signal. The RF POWER can be set to High, Middle, and Low. The range and available talk time vary depending on the RF POWER setting, as shown below.

RF POWER		Range	Talk time
High	\rightarrow	Long	Short
Middle	\rightarrow	Middle	Middle
Low	\rightarrow	Short	Long

Adjust the setting according to your usage environment and needs.

('Middle' is set as the default.)

4.10.2 'RF POWER' setup

Enter the menu by pushing the 'M' button for more than 2 seconds

Move to 'RF POWER' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the O'Up' or O'Down' buttons.



Once you are done with changing the 'RF POWER', complete by presses the PTT button

and move to another menu item by using the 'M' or 'C' buttons or go back to

the main screen by pushing the $\stackrel{\text{\tiny M}}{\smile}$ 'M' button for more than 2 seconds.

4.11 CLONE SET

4.11.1 What is a 'CLONE SET'?

Clone Set is a function that automatically synchronizes the required settings for a call between user devices without the users' manual setting action.

By utilizing the Clone Set function, multiple devices within a range (2~3 m) are synchronized wirelessly to the settings of a single device.

The values transmitted via the Clone Set function include Channel, ID and Encryption. Devices are automatically synchronized to the received settings for call, requiring no setting actions of the users.

('No' is set as the default.)

4.11.2 'CLONE SET' setup

Send the settings from the base device according to the following steps:

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'CLONE SET' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the 'Up' or 'Down' buttons.



Select 'Yes' to send the settings to other devices and then push the 'PTT' button. A new

screen will pop up to confirm it.

SEND DATA? SEND DATA?

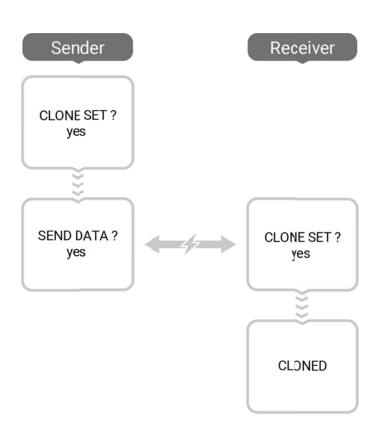
Again, select 'yes' and then push the 'PTT' button. the settings (Channel, ID and Encryption) are transmitted to the other devices.

On the device that has received the settings, the following screen will pop up to accept applying the settings.

CLONE SET ?
no CLONE SET ?
yes

select 'Yes' and then push the 'PTT' button. the following screen will pop up and synchronizing all of the values to the received settings.

CLONED





If the receiver device synchronized already, CLONED message will pop up without confirm screen.

4.12 ADVANCED SET



This feature is for repair technicians and engineers.

For stable use of the product, general users should not change the settings as much as possible.

4.13 DEFAULT SET

4.13.1 What is a 'DEFAULT SET'?

All of the values that have been tuned or changed to meet the needs of the user will be returned to their default settings.

4.13.2 'DEFAULT SET' setup

Enter the menu by pushing the 'M' button for more than 2 seconds.

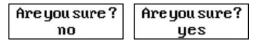
Move to 'DEFAULT SET' by using 'M' or 'C' buttons and then select by pressing PTT button.



If the value flashes, adjust it by using the O'Up' or O'Down' buttons.



First, select 'Yes' to set all of the values back to default and then push the 'PTT' button. A new screen will pop up to confirm it.



Again, select 'Yes' and then push the 'PTT' button. The power will turn off and on again, initializing all of the values to their default settings.



Be careful with this feature. All of the values will return to their default settings.

4.14 VERSION

4.14.1 What is a 'VERSION'?

It is used to check the version of your product.

4.14.2 Checking the 'VERSION'

Enter the menu by pushing the 'M' button for more than 2 seconds.

Move to 'VERSION' by using 'M' or 'C' buttons and then select by pressing PTT button (front).



Once you check the 'VERSION', move to another menu item by using the

'C' button buttons or go back to the main screen by pushing the 'M' button for more than 2 seconds.

5 Other information

5.1 Connecting external devices



When you connect an external device to the audio port, you should use the earset adapter included in the package.

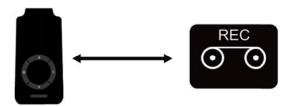
Usage example 1: Connecting action cameras

Use an action camera to record voice communications through the terminal along with the video being recorded.



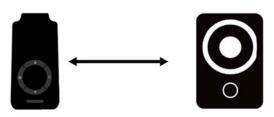
Usage example 2: Connecting voice recorders

Use a voice recorder to record voice communications through the terminal.



Usage example 3: Connecting speakers

Use a speaker to amplify voice communications or voice input received through the terminal.



5.2 Features and copyright

5.2.1 Features

• Dimensions (H x W x D): 3.0 x 1.5 x 0.5 inches (77 x 39 x 13 mm)

• Weight: 1.59 oz. (48g)

• Range (Line of Sight): Up to 2 miles (3.2 km)

• Stand-by: Up to 1 month

• Talk time: Up to 81 hours (5-5-90 duty cycle)

• Encryption: AES-128/AES-256(Pro)

• Frequency hopping: 902~928 MHz ISM band

<NOTE>

- The maximum range is 2 miles with a clear line of sight. The indoor range may be less if there are any obstacles, such as steel or concrete structures.
- The 'Stand-by' features our unique low-power technology. It can remain on standby for the maximum hour.
- The 'Talk time' features our unique low-power technology. Based on the estimated standard usage (5:5:90, i.e., a usage ratio of 5% reception, 5% transmission and 90% standby), it can be used for the maximum hour.
- Frequency hopping applied product ensures clearer and more secure communication by eliminating any frequency interference between systems.

5.2.2 Patents, Trademarks or Designs Pending

This radio has one or more patents, trademarks or designs registered or pending with the United States Patent and Trademark Office or the PCT (Patent Cooperation Treaty) Office.

5.3 Checklist before reporting a problem

When you are unable to	Charge the device before using it. you can push and hold the button to turn the power on.			
get the power to turn on				
	Check if your device or the other devices are on.			
	Make sure the distance between the device is farther			
	away than the radio range.			
	Make sure that your device is set to the same setting as			
When you are unable to	the other devices in the 'CHANNEL' and 'ID' functions.			
communicate	If you still cannot talk, even after following the steps			
	above, check the encryption code to see if the code is			
	the same as the other devices.			
	After all devices run the DEFAULT SET function, try to			
	speak again.			
	Use it again after charging the device. This might			
	happen because of not enough battery power remaining.			
	Turn the volume up. This might happen because the			
	volume is too low.			
When your reception signal	Check where you are. Physical structures, like walls, can			
is too weak	weaken the signal range.			
	Change the channel. There might be frequency			
	interference.			
	After all devices run the DEFAULT SET function, try to			
	speak again.			
When a person on another	Check if the microphone is covered or if it is too far			
device cannot hear you	away from you. Make sure to put it close to your mouth.			
	TVs, computers and other digital devices can interrupt			
When you receive an	your system. You should either turn them off or keep the			
unwanted signal	device at a safe distance from them.			
anwanted signal	It may happen when multiple people use the same			
	channel. Change the channel or set up a separate ID.			
When the reception quality	It may happen when the devices are too far away from			
is bad	each other.			
When you plug the device	If you use a charging cable not provided by			

in to recharge, but is does not charge	manufacturer, it may not work and may damage the system. Always use a manufacturer-recommended cable.
When the battery life is	If the device is exposed to temperatures that are too low or too high, it can possibly happen. If you find it too inconvenient to use, report it to customer service.
shorter than when you purchased the device	As a consumable item, the battery can have a shorter lifespan over time. Contact customer service if you find it too inconvenient to use.

5.4 Warranty

Warrants against defects in materials and workmanship when used normally for a period of 12 months from the date of the original retail purchase by the end-user.

- Those purchasing this product have to review the warranty and fill in the fields below immediately after purchasing the product.
- Contact the seller or distributor after finding a problem with this product.
- Make sure your claim for any repairs, replacement or refund complies with the warranty guidelines.

Product		Model				
Product No.						
Seller						
Purchase date		Store name				
Warranty period	For a period of 12 retail purchase.	2 months from the	e dat	e of	the	original
Purchaser name		Address				

Warranty guidelines

- Warrants against defects while used normally for up to 12 months as the warranty period.
- The cases below are not covered by the warranty
- 1. Damage caused by the use of the consumer.
- 2. Defects or flaws caused by natural disasters.
- 3. Defects or related problems caused by a misguided voltage or frequency.
- 4. Damage caused while tweaking or updating the device by a third party other than a manufacturer's technician.

This warranty does not apply to any damage or technical problems which might occur after the warranty period has expired. If the purchaser still wants to receive service, manufacturer can provide the same level of service, but the purchaser is responsible for any labor costs.