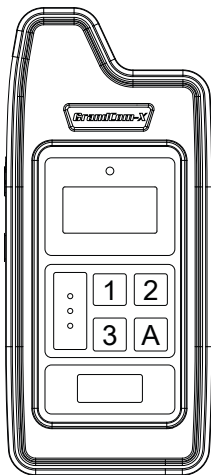


USER'S MANUAL FOR GrandCom-X

ver.60608MST



A wireless intercom specialized for OUTDOOR ACTIVITIES,
Designed with advanced technology to be versatile and user-friendly
Model ; GCX-2.4

Maytel Co., Ltd

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1. General Information

1.1 Introduction

GrandCom-X is an ultra-compact wireless intercom designed with cutting-edge technology that allows up to 10 people to communicate without any central stations or hubs.

With its user-friendly features and reliable performance, it will support your group's needs for all outdoor activities, including sports referees, safety guards, construction sites, firefighting, helicopter rescue teams, road maintenance, hazardous materials production plants, miners, broadcast cameramen, skiers, rock climbers, hang gliders, and more.

In addition, it offers three selectable operating modes that can be easily configured on-site, allowing users to optimize performance according to specific working conditions and environments.

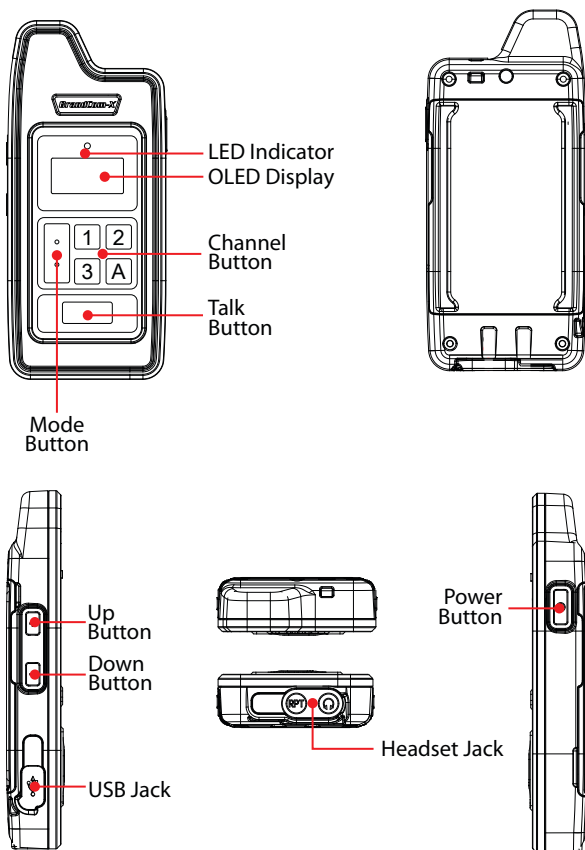
1.2 Main Features

- Realize 9 fixed users + Any one out of unlimited participants directly talking together with hands-free simultaneously while rest members are listening
- Support 3 professional operating modes and directly select the optimized mode according to the environment in the field to ensure the maximum talk performance
- Supports allocation of up to three sub-channels belonging to a single communication group, allowing the master to make separate calls for each channel or to make calls to all channel members within the group
- In 6U mode, GCX is designed to enable communication even in areas with full-band Wi-Fi interference by applying the most advanced proprietary protocol
- Clear sound quality and loud enough audio output through application of optimized compandor technology
- Optimized long talk range through support for three professional operational modes that can be directly selected in the field according to the user's environment
- Completely secured conversation with individual PIN encryption settings for each group directly set by the user
- Effectively suppresses peak noise levels above 115dBm, minimizing stress and fatigue on the user's hearing
- IP54 water resistance and excellent performance of internal antenna allows for outdoor activities without snag hazards

1.3 Standard Packaging Components

GCX-2.4 ; GrandCom-X	1 unit
BC-01GC ; Belt Clip Cradle	1 ea
HSB-02G ; Mono Pad Headset Boom Microphone	1 ea
UC-01C ; USB Charging Cable Type-C	1 ea
Battery Cover Opener	1 ea
User's Manual	1 ea
Carrying Bag	1 ea

2. Controls and Indicators



Power Button

Press and hold the “Power” button for 3 seconds to turn the device power On/Off

Mode Button

Select Group number, ID number, Side Tone, Microphone sensitivity level, Operation mode selection and Security Code selection

Channel Button

Select 3 channels within a group

Up Button

Increase volume level, Group number, and ID number etc. in each mode

Down Button

Decrease volume level, Group number, and ID number etc. in each mode

Talk Button

Mute On/Off

OLED Display

Indicate communication status / battery status / group / ID / mute status / selected channel / volume status / operating mode display

Headset Jack

3.5mm 2 plug headset contact

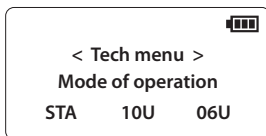
LED Indicator

LED turns on while charging the device and in range of communication status

USB Jack

USB Type-C port for firmware upgrade and battery recharge

3. Tech menu to Select Operational Modes



When the power is On, press and hold the “Mode” button and the “A” button simultaneously for 3 seconds to enter the Tech menu.

At this time, the current operational mode blinks.

Select the mode you desire to apply with the “Up/Down” buttons, and press and hold the “Mode” button again for 3 seconds.

The power turns Off, and the mode is changed.

When power is turned back On, the lately selected operational mode is displayed at the bottom right of the display.

3.1 Standard Mode [10U]

This [10U] mode supports 9 fixed users + any one out of the participants talking together simultaneously.

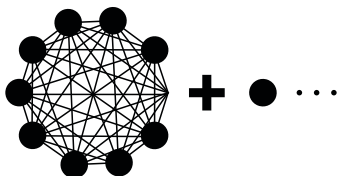


Table 1, ID Setting for [10U] mode

ID	Status	Operation	Description
M	Master	Always TX/RX	Each group must be assigned one master
01	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
02	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
03	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
04	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
05	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
06	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
07	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
08	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
S	Shared	Shared TX	Whoever presses the talk button first becomes the talker. ID; S can be selected indefinitely.
L	Listener	Listen Only	As a user who only receives, it can be selected as unlimited.

3.2 Repeater Mode [STA]

This [STA] mode is an operating mode that allows all members of a group to talk through the Master unit.

When the locations of members are obscured by barriers or other obstacles, applying this [STA] mode can minimize the impact of such obstacles. By installing the Master unit in the most ideal location, communication between the remaining members will be conducted through the Master unit, thereby minimizing the impact of such obstacles.

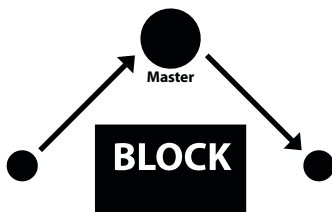


Table 2, ID Setting for [STA] mode

ID	Status	Operation	Description
M	Master	Always TX/RX	Each group must be assigned one master
01	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
02	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
03	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
04	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
05	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
06	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
07	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
S	Shared	Shared TX	Whoever presses the talk button first becomes the talker. ID; S can be selected indefinitely.
L	Listener	Listen Only	As a user who only receives, it can be selected as unlimited.

3.3 Minimize Wi-Fi Interference Mode [6U]

This [6U] operating mode applies its own specialized solution to maintain communication while minimizing the influence of Wi-Fi even in special environments such as exhibition halls or stadiums with large crowds where Wi-Fi is radiating in full band.

This mode supports up to 6 simultaneous talk users.

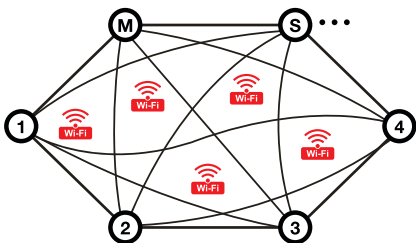


Table 3, ID Setting for [6U] mode

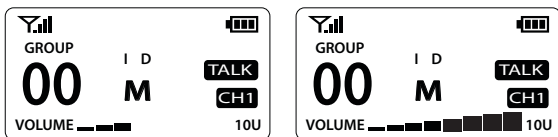
ID	Status	Operation	Description
M	Master	Always TX/RX	Each group must be assigned one master
01	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
02	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
03	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
04	Slave	Always TX/RX	Simultaneous TX and RX with other ID members
S	Shared	Shared TX	Whoever presses the talk button first becomes the talker. ID; S can be selected indefinitely.
L	Listener	Listen Only	As a user who only receives, it can be selected as unlimited.

4. How to Use

4.1 Power On/Off

Press and hold the "Power" button for longer than 3 secs to turn the device power On/Off.

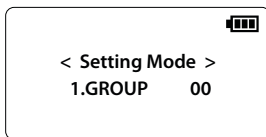
4.2 Volume Up/Down



Press "▲" button to control volume up and "▼" button for volume down after turn the device power On.

It is available to adjust the volume level 0~8.

4.3 Group Selection



Press and hold the "Mode" button till "Setting Mode" is displayed.

Select the Group number "00"~"39" for GCX-2.4 you desire by pressing the "▲" or "▼" button.

Long press the "Mode" button to set the Group number you selected.

All devices should have the same Group number to communicate with each other within the group.

4.4 ID Selection

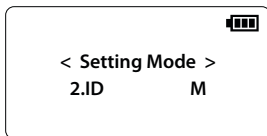
In a group, every device needs to have each different ID per device from "M", "01" to "08", "S", "L".

The ID "M" becomes a master device in a group and every group needs to have the ID "M" device without alternative.

Other IDs except "S" and "L" serve a full hands-free talking at the same time. The ID "S" is operated by anyone pressing "Talk" button and talk as open slot. If you press "Talk" button while someone else among users who have ID "S" is talking, an alert will occur and your "Talk" button will not be activated. You need to wait for the person currently talking to release "Talk" button and then press "Talk" button.

ID "L" is Listen Only and can't speak.

The ID "S" and "L" can be selected indefinitely.

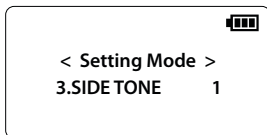


Press and hold the "Mode" button till "Setting Mode" is displayed. Short press the "Mode" button then "ID" is displayed in "Setting Mode". Select each different ID number per device from "M", "01" to "08", "S", "L" in a group by pressing the "▲" or "▼" button. Long press the "Mode" button to set the ID number you selected.

The available IDs are as follows.

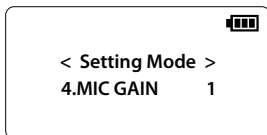
- 10U Mode ; "M", "01" to "08", "S", "L" (Refer to table 1)
- STA Mode ; "M", "01" to "07", "S", "L" (Refer to table 2)
- 6U Mode ; "M", "01" to "04", "S", "L" (Refer to table 3)

4.5 Side Tone (Self-voice feedback) Level Selection



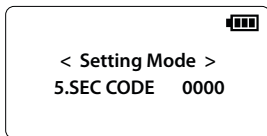
Press and hold the "Mode" button till "Setting Mode" is displayed.
Press the "Mode" button until the "SIDE TONE" menu appears, then adjust the SIDE TONE setting.
Select the Side Tone "OFF" or "1" to "5" by pressing the "▲" or "▼" button.
Long press the "Mode" button to set the Side Tone you selected.

4.6 Microphone Sensitivity Level Selection



Press and hold the "Mode" button till "Setting Mode" is displayed.
Press the "Mode" button until the "MIC GAIN" menu appears, then adjust the MIC GAIN setting.
Select the Microphone Sensitivity Level "1" to "8" by pressing the "▲" or "▼" button.
Long press the "Mode" button to set the Microphone sensitivity level you selected.

4.7 Security Code Selection



Press and hold the "Mode" button till "Setting Mode" is displayed. Press the "Mode" button until the "SEC CODE" menu appears, then adjust the SEC CODE setting.

The security code consists of four digits and it is available for you to select "0" to "9", "A", "B", "C", "D", "E", "F" for each digit by pressing the "▲" or "▼" button.

Short press "Mode" button to change the next digit after setting one. Long press the "Mode" button to set the security code you selected.

4.8 Channel Selection

This feature allows you to assign desired IDs to up to three sub-channels in one group, allowing split talks only between IDs belonging to the corresponding channels.

It can be set separately for "CH1", "CH2", "CH3", and "ALL".



Press and hold each "Channel" button "1", "2", "3", "A" on the front of the device for 3 seconds to set the channel.

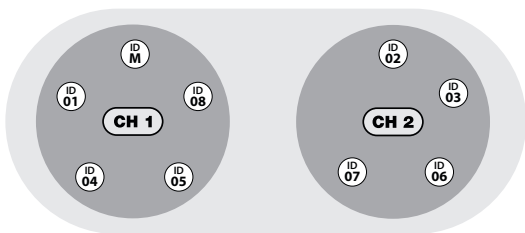
The selected channel number appears on the right side of the display.

If a channel other than "ALL" is selected, communication is only possible between devices on the same channel.

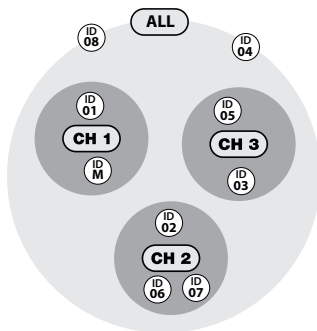
- ; CH1 can only talk to devices assigned to CH1 in the same group number.
- ; CH2 can only talk to devices assigned to CH2 in the same group number.
- ; CH3 can only talk to devices assigned to CH3 in the same group number.
- ; ALL can talk with all devices in the same group number.

Channels can be freely changed at any time by pressing the desired number for 3 seconds as needed.

1) Example of operation by allocating to two – sub channels



2) Example of operation by allocating with three sub – channels and ALL



4.9 Battery Replacement

Step 1 – Prepare GrandCom-X and the Battery Cover Opener which is included in the package box or small coin

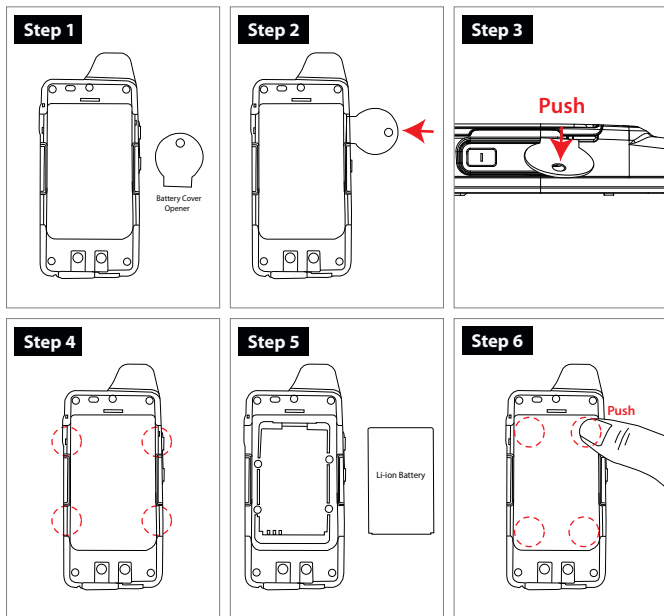
Step 2 – Place the opener or small coin in the gaps behind the GrandCom-X

Step 3 – Push the opener or small coin down to create an opening

Step 4 – Repeat for all 4 gaps

Step 5 – Open the back cover and replace the battery

Step 6 – Close the cover and push down on all 4 corners of the back cover



5. Technical Specification

Dimension – Unit only	120 x 53 x 19.5mm
Dimension w/ Belt Clip Holster	121.8 x 56.6 x 27.2mm
Weight w/ Belt Clip Holster	121g
Radio Frequency Type	ISM 2,407MHz - 2,476MHz
Frequency Response	50Hz - 4KHz
Modulation	GFSK with FHSS; Frequency Hopping
Tx Output Power	About 17 dBm
Rx Sensitivity	- 95dBm
Voice CODEC	16bit / 8KHz
Number of Groups	40
Channel Spacing	500KHz
Environmental Rating	Water resistant, IP54
Power Supply	Li-Ion Battery @3.7V / 1,200mA
Antenna	Internal Type

6. Declaration of Conformity

MayMax hereby declares that MayMax conforms to the major characteristic specifications and other relevant specifications given in the Directive 1999/5/EEC and is made after following specifications;

EN 62368-1

EN 301 489-1, -17

EN 300 328

This product is compliant with the RoHS Directive 2002/95/EC.

MayMax Co., Ltd.

#416 Doosan Venture Digm, Heung An Dae-Ro, Dongan-Gu,

Anyang-Si, Gyeonggi-do, South Korea (Zip; 14059)

www.maymax.co.kr

7. Warranty

MayMax will give 12 months warranty against failure made by the manufacturer from the date of purchase. The warranty will not cover damage made by the user, the user opening the equipment, moist, dirt, heat or cold. The warranty will not cover lightning/overvoltage. Please, contact your dealer if a problem with the equipment arises.

8. Waste Disposal

Electrical and electronic products can contain materials, parts and units that can be dangerous for the environment and human health. Products marked with the WEEE mark (shown below), shall not be disposed together with your normal household waste. Please inform yourself about the local rules and disposal collection system for electrical and electronic products. The correct disposal of your old product will help to prevent negative consequences for the environment and human health.

(WEEE = Waste of Electrical & Electronic Equipment)



Compliance to FCC US/CAN

- This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s).
- 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 of the device.
- 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 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.
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

WARNING !

FCC Radiation Exposure Statement :

This portable equipment with its antenna complies with FCC's RF radiation exposure limit set forth for an uncontrolled environment. To maintain compliance follow the instruction below;

- This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.
- Avoid direct contact to the antenna, or keep it to a minimum while using this equipment.

This device complies with RSS-247 of the Industry Canada 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.

Ce dispositif est conforme à la norme RSS-247 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement

The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Declaration d'exposition aux radiations :

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada etablies pour un environnement non control. Le produit est sur pour un fonctionnement tel que decrit dans ce manuel. La reduction aux expositions RF peut etre augmentee si l'appareil peut etre conserve aussi loin que possible du corps de l'utilisateur ou que le dispositif est regle sur la puissance de sortie la plus faible si une telle fonction est disponible.

This product has been certified with the following antennas, and may only be used with the same or less antenna gain.

Antenna	Max. Gain
Helical Antenna	2.28 dBi

This equipment complies with the essential requirements of EC Directive 2014/35/EU, 2014/30/EC and 2014/53/EU, as applicable. Declarations are available from your local representative.

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.



The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration. You may also contact your supplier for more information on the environmental performance of this product.

Replaceable battery

If an equipment is provided with a replaceable battery, and if replacement by an incorrect type could result in an explosion (for example, with some lithium batteries), the following:

- if the battery is placed in an OPERATOR ACCESS AREA, there shall be a marking close to the battery or a statement in both the operating and the servicing instructions;
- if the battery is placed elsewhere in the equipment, there shall be a marking close to the battery or a statement in the servicing instructions.

This marking or statement shall include the following or similar text:

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

