

## SPECIFICATIONS

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FCC ID: UJW-6000  
IC: 6695A-6000  
Model: Yapalong6000

Radio Frequency	Unlicensed ISM band 900 MHz
Group Size	7 Open-MIC Units / 5 Open-MIC Units + Unlimited PTT Units
Wireless Network	Peer-to-Peer No master/ No base station
Digital Modulation	FSK
Bluetooth Type	Version 4.0
Anti-Interference	Yapalong Proprietary
No. of Channels	10
Channel Selection	Auto Scan
Range	Up to 1,200 meters line-of-sight
Overall Latency	50 ms
Size	90mm x 55mm x 18mm
Weight	77 grams
Power Rating	500 mW/ 27 dBm
Power Source	Lithium polymer, 3.7 V, 1700 mAh
Power Duration	8+ hours when fully charged
Operating Temp Range	-20 °C ~ 50 °C
Safety	Lead free, RoHS compliant
Encryption	Yapalong Proprietary
IP Rating	IP65

Full-Duplex Radio

**YAPALONG6000**

Used with  **Bluetooth®** Headset

**User's Manual**

*Please activate your warranty  
@  
yapalong.com/pages/warranty*



Yapalong Inc.  
7895 Tranmere Dr., Unit 13  
Mississauga, Ontario L5S 1V9  
Canada

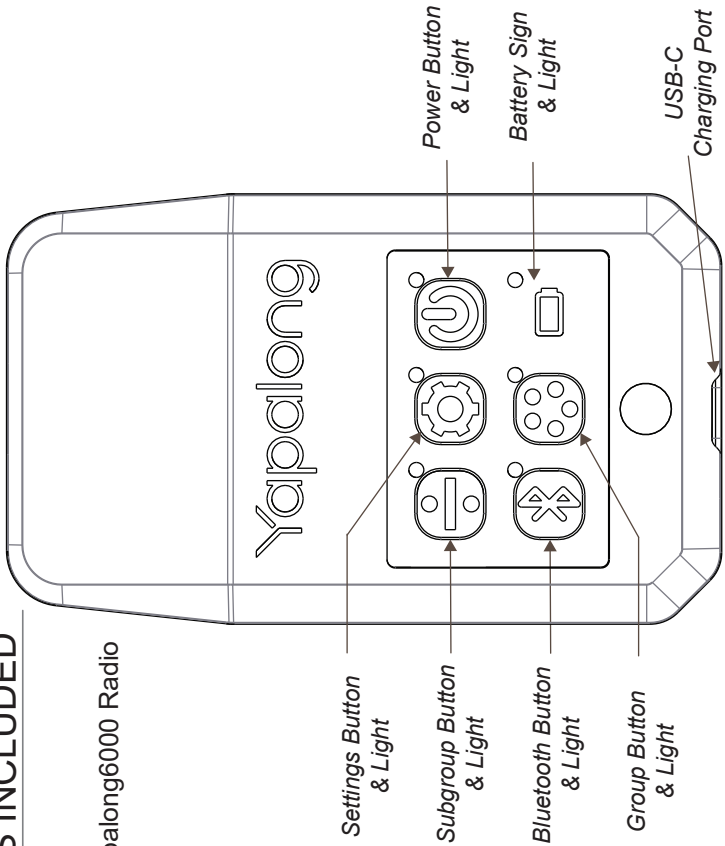
info@yapalong.com  
1-(905)-405-0300



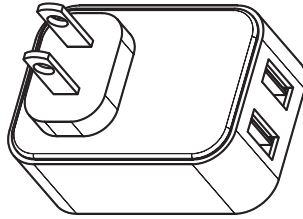
V5

## ITEMS INCLUDED

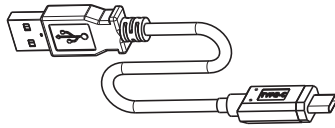
### Yapalong6000 Radio



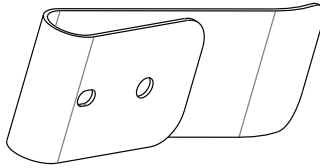
### Charger



### Cable USB A-C



### Belt Clip



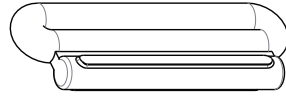
### Screw M3X5 (for Belt Clip)



### Arm Band



### Armband Loop 2X



## SAFETY WARNING!

Don't hold Yapalong too close to your head when in use.

### INDUSTRY CANADA COMPLIANCE STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### FCC INFORMATION TO USERS

This equipment has been tested and found to comply with the limits for Class B digital devices, 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 instruction manual, 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.

**WARNING:** Changes or modifications not expressly approved by Yapalong Inc. could void the user's authority to operate the equipment.

### Radiation Exposure Statement:

The device has been tested and comply with FCC/ISED SAR limits.  
L'appareil a été testé et est conforme aux restrictions FCC/ISED SAR.

### FOR CLASS B – UNINTENTIONAL RADIATORS

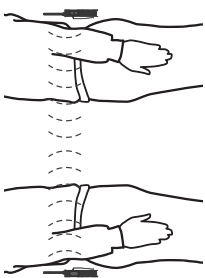
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operations.

## 8 MAXIMIZE RANGE



When worn, always keep the top of the radio upwards and the front outwards for the best range.

To obtain maximum range is to eliminate blocking obstacles at line of sight. The range is greatly reduced when the obstacle is very close to the antenna. We need to avoid the following scenarios:



### Close Body Blocking

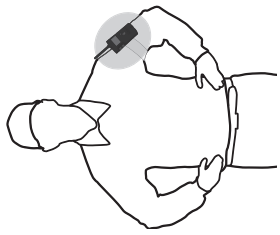
Placing bodies in between antennas causes communication signs being blocked



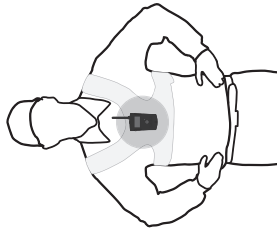
### Antenna Touching Body

Human body consists mainly of water and water absorbs RF (radio frequency) wave.

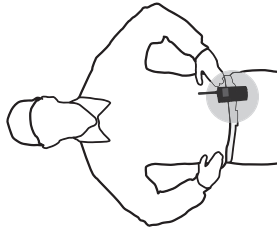
## Wearing Position Analyses



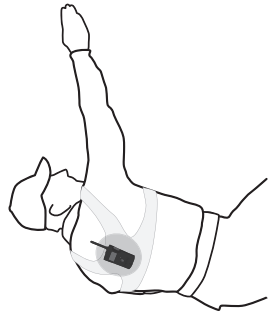
★★★  
No close body blocking  
No RF absorption



★★★  
No close body blocking  
Partial RF absorption

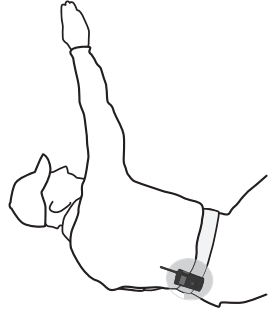


★★★  
Partial close body blocking  
due to low position  
Partial RF absorption



☆☆☆

Total close body blocking  
Partial RF absorption



☆☆☆

Total close body blocking  
Partial RF absorption

## 1 GET STARTED

Welcome, Dear User!

### Power Up A Unit

Press Power button on Yapaalong6000 radio for 2 seconds, and Power light (red) is turned on solid at normal intensity. After 3 seconds, you will notice:



#### 1. Power light (red)

- i) Normal intensity => Other radio(s) of the same group is detected.
- ii) High intensity => No radio of the same group is detected. (Refer to Section 3 BINDING.)



#### 2. Battery light (amber)

- i) Off => Normal battery level
  - ii) Flashing => Low battery
- #### 3. Bluetooth light (green)
- i) Off => Paired headset is detected.
  - ii) Flashing => No paired headset is detected. (Refer to Section 5 HEADSET.)



#### 4. Settings light (green)

- i) Off => Radio is in Open-MIC mode.
- ii) Solid => Radio is in PTT mode. (Refer to Section 2 Open-MIC/PTT.)

### Power Up A Group

Power on the FIRST radio/headset pair, which should be used by the MAJOR user of the group, at the location where the radios to be used. Wait until the red light of the radio becomes solid. Once a Yapaalong radio is turned on, it automatically scans the surroundings, picks the cleanest channel, and stays in the channel.

Then power on the rest of the radios/headsets PAIR BY PAIR to avoid the mix up of the radios and the headsets.







It is not recommended to power on all the radios at one location (e.g., locker room), then use them at another (e.g., football field).

## 2 OPEN-MIC / PTT

A YapaLong6000 unit is in either Open-MIC or PTT (push-to-talk) mode. The PTT function is performed by the radio itself not the paired headset.

To toggle between the two modes:

1. Power on the unit
2. Press Subgroup  + Bluetooth  + Group  buttons for 2 seconds.
  - The corresponding 3 lights flash 3 times.
  - The unit is powered off automatically.
3. Restart the radio. When the Settings light  is
  - ON PTT mode
  - OFF Open-MIC mode







### Note for Usage

The first unit powered on in a group must be an Open-MIC unit, not PTT unit.

## 3 BINDING - BINDING MODE

A group is configured by Binding. Binding needs to be performed in an environment with minimal radio interference. It is advisable to keep electronic devices such as cellphones, computers, and Bluetooth devices at least 10 yards away.

### Set a Unit into Binding Mode

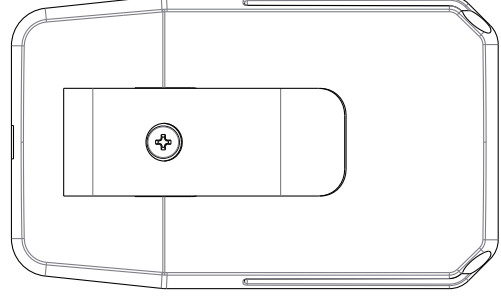
- 1 Press both Settings  and Group  buttons for 2 seconds.
- 2 Both Group light  and Battery light  are flashing alternately and stop flashing after 5 seconds.
  - Both lights are solid if the unit is the 1st binding unit.
  - Only Group light is solid if the unit is a subsequent unit. When both lights are solid on a subsequent unit, please restart the radio then reactivate the binding mode.



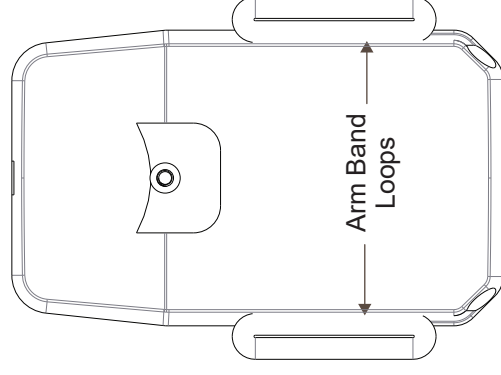
### Notes for Usage

1. The radios in Binding mode cannot communicate. Restart the radio to exit Binding mode after binding.
2. After binding, there is NO need to do binding again next time for the same group, unless the group needs to be reconfigured.

## 6 WEARING



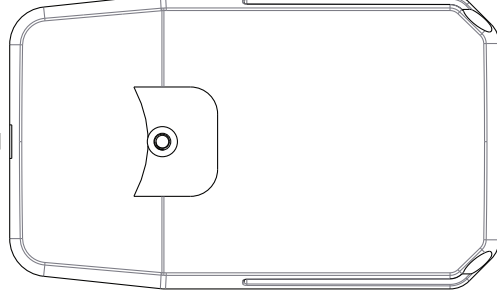
By Belt Clip



By Arm Band  
(Recommended for  
the best signal reception)

## 7 BATTERY REPLACEMENT

1. Get a slotted screwdriver. Insert the tip of the screwdriver into the slot of the Back Cover. With a little twist, pry the Back Cover open.






Face of no font  
is facing outside

2. Replace the old battery with the new battery gently. Then push the Back Cover back until all 3 tabs are inserted securely.

## 5 HEADSET

### Headset Pairing

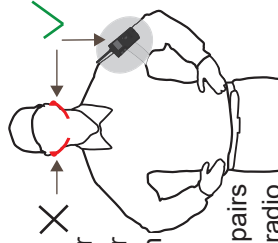
1. Before starting, turn off all the Bluetooth devices in the surroundings.
2. Power on both the headset and Yapalong6000 radio to be paired, within 10-cm range. Check Bluetooth light  on the radio:
  - If it is off, both devices are paired already.
  - If it is flashing, and the headset reports "Pairing..." with the light flashing red and blue, please proceed with pairing.
3. Press both Settings  and Bluetooth  buttons for 1 second, the Bluetooth light is flashing rapidly. The light on the headset keeps flashing red and blue alternately. 5 or more seconds later, Bluetooth light on the radio is off, the headset reports "Connected". Pairing is done.
4. If pairing is failed, power off both devices and restart the procedure.

*Note: In order to avoid confusion during the group use, a Yapalong6000 radio can ONLY be paired with one headset.*



#### Notes for Usage

1. Wear the headset/radio pair on the same side of your body to avoid body blocking of Bluetooth signals. For example, if you wear the headset on your left ear, then wear the radio on your left arm as well.
2. It is recommended to turn on the radios/headsets in pairs when powering up a group. Bluetooth light on each radio indicates the pairing status. (Off: paired. Flashing: not paired.)
3. Label each headset/radio pair to avoid mix up.





#### Non-Yapalong Headset

It is advisable to use Yapalong headsets. However, you may use your own when the following requirements are met:

1. Only Open MIC function is required.
2. The headset is compatible with Yapalong6000. Normally the headsets with less features have less compatibility issues.
3. Auto shutdown function is disabled.  
Some headsets shut down automatically after a period of silence.

## 3 BINDING - PROCEDURES



### A. Group Consisting of Only Open-MIC Units (7 Max)

1. Prepare all units in Open-MIC mode. (See Section 2 Open-MIC/PTT)
2. Power down all units.
3. Power up a unit and then set it into Binding mode.
4. Repeat Step 3 one by one until all units are done.
  - When in Binding mode, the 1st unit has both Group light  and Battery light  ON. All other units should have only Group light ON. Otherwise redo the binding.
  - Battery light on the 1st unit will be off once the units being bound reach 7 maximum.
5. Power down all units to exit Binding mode. <Finish>

### B. Group Containing PTT Units (Group Size ≤ 4)

- 1 - 5. Same as above "A. Group Consisting of Only Open-MIC Units"
6. Based on your group configuration, power up and convert any number of the Open-MIC units into PTT units. <Finish>

### C. Group Containing PTT Units (Group Size > 4)

1. Prepare 4 units in Open-MIC mode and the rest in PTT mode. (See Section 2 Open-MIC/PTT)
2. Power down all units.
3. Power up 1 Open-MIC unit and set it into Binding mode. Both Group light  and Battery light  are solid.
4. Power up 1 PTT unit and set it into Binding mode.
5. Repeat Step 4 one by one until all PTT units are done.  
Only Group light is ON for each unit. Otherwise redo the binding.
6. Power up another Open-MIC unit and set it into Binding mode.
7. Repeat Step 6 one by one until all Open-MIC units are done.
  - Only Group light is ON for each unit. Otherwise redo the binding.
  - Battery light on the 1st unit will be off once Open-MIC units reach the maximum of 4.
8. Power down all units to exit Binding mode.
9. Based on your group configuration,  
Power up and convert any number of the 4 Open-MIC units into PTT units. <Finish>  
OR  
Power up and convert 1 PTT unit into an Open-MIC unit, and the group reaches a maximum of 5 Open-MIC units with a certain number of PTT units. <Finish>

## 4 KEYPAD INSTRUCTIONS

<p>Power Up</p>	<p>Hold down Power button for 3 seconds until the Power light turns on. Then release button.</p>
<p>Power Down</p>	<p>Hold down Power button for 3 seconds until Power light flashes 3 times. Then release button.</p>
<p>Light Solid - Normal Intensity</p>	<p>Has detected other unit(s) of the same group.</p>
<p>Light Solid - High Intensity</p>	<p>No detection of other unit of the same group.</p>
<p>Force Sync</p>	<p>Press Power button for 1 second to resume the communication and the power light is flashing for 2 seconds.</p>



POWER

*Note: Force Sync is used when the communication does not resume automatically in case a radio is moved out of then back into range. If Force Sync still does not work, restart the radio.*

<p>Amber</p>	<p>Light Flashing Slowly</p>	<p>15% Battery level</p>
<p>BATTERY</p>	<p>Light Flashing Fast</p>	<p>5% Battery level</p>
<p>BATTERY</p>	<p>Light Solid</p>	<p>Battery is being charged</p>
<p>BATTERY</p>	<p>Light Off &amp; Group Light Solid On</p>	<p>Battery is fully charged</p>



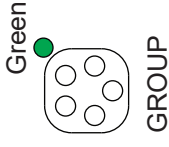
BATTERY

*Note: Charging is slow while the radio is being used.*

<p>Green</p>	<p>Toggle Mute/Unmute</p>	<p>(For Open-MIC units) Press Subgroup button for 2 seconds until Settings light flashes/turns off.</p>
<p>SUBGROUP</p>	<p>Push to talk</p>	<p>(For PTT units) (Subgroup feature is only available to custom orders. Please contact your vendor for customization.)</p>



SUBGROUP



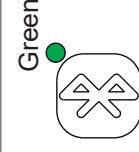
GROUP

Activate Binding Mode (See Section 3 BINDING)

Press both Settings button and Group button for 2 seconds, both Group light and Battery light begin to flash alternately. 5 or more seconds later, the Group light is solid.

Exit Binding Mode

Restart the radio.



BLUETOOTH

Pair (See Section 5 HEADSET)

Press both Settings button and Bluetooth button for 2 seconds, Bluetooth light will keep flashing rapidly until pairing is done with the light off.

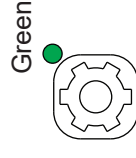
Light Flashing Slowly

No detection of the paired headset

Light Flashing Rapidly

Unit is in pairing mode.

Toggle Open-MIC/PTT (See Section 2 Open-MIC/PTT)



SETTINGS

Press Subgroup+Bluetooth+Group buttons for 2 seconds.

Light Off

Unit is an Open-MIC unit.

Light Solid

Unit is a PTT unit and connected with a Remote PTT Button.

Light Flashing

Unit is an Open-MIC unit and muted.  
Or  
Unit is a PTT unit and not connected with a Remote PTT Button.