

## SPECIFICATIONS

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

Radio Frequency	Unlicensed ISM band 900 MHz	Full-Duplex Radio
Group Size	7 Base Units + Unlimited Listener Units/ 5 Base Units + Unlimited Expansion Units	YAPALONG6000
Wireless Network	Peer-to-Peer No master/ No base station	Used with Bluetooth Headset
Digital Modulation	FSK	User's Manual
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	<i>Please activate your warranty @ <a href="http://yapalong.com/pages/warranty">yapalong.com/pages/warranty</a></i>
Weight	77 grams	
Power Rating	447 mW/ 26.5 dBm	
Power Source	Lithium polymer, 3.7 V, 1700 mAh	
Power Duration	8+ hours when fully charged	
Operating Temp Range	-20 °C ~ 50 °C	Yapalong Inc. 7895 Tranmere Dr., Unit 13 Mississauga, Ontario L5S 1V9
Safety	Lead free, RoHS compliant	Canada <a href="mailto:info@yapalong.com">info@yapalong.com</a> 1-(905)-405-0300
Encryption	Yapalong Proprietary	
IP Rating	IP65	  

## ITEMS INCLUDED

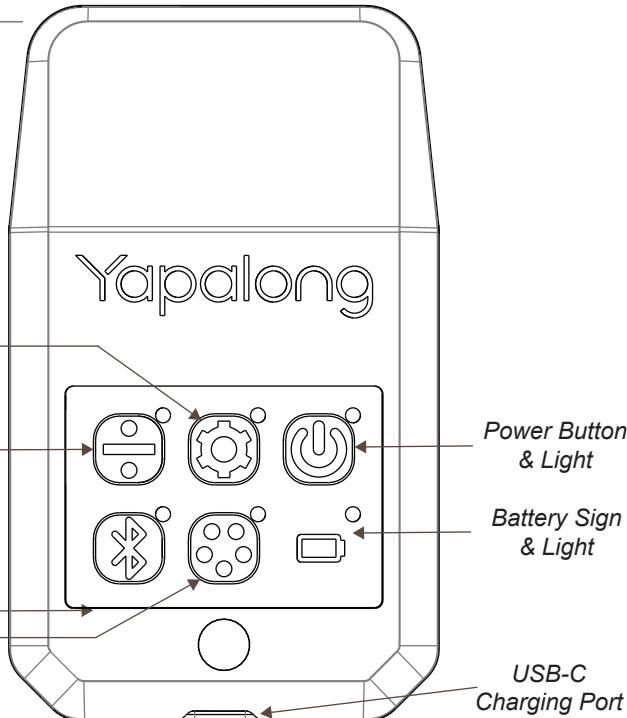
Yapalong-6000 Radio

Settings Button & Light

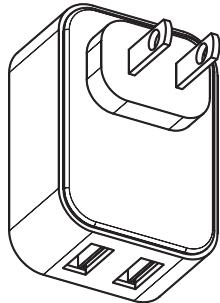
Subgroup Button & Light

Bluetooth Button & Light

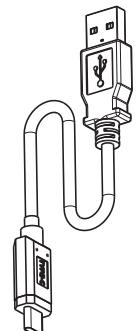
Group Button & Light



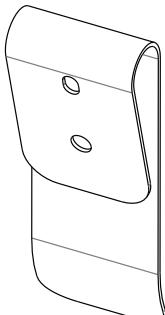
Charger



Cable USB A-C



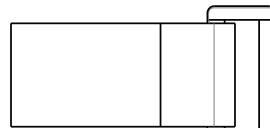
Belt Clip



Screw M3X5 (for Belt Clip)



Arm Band



## 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 complies with FCC/ISED SAR limits.  
 L'appareil a été testé et est conforme aux restrictions FCC/ISED SAR.

## FOR CLASS B – UNINTENTIONAL RADIATORS

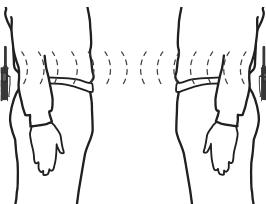
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operations.

## 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

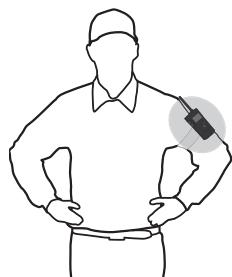
1. placing bodies in between antennas causes communication signs being blocked



### ANTENNA TOUCHING BODY

2. Human body is mainly water so it absorbs RF wave. Water absorbs RF (radio frequency) wave.

## WEARING POSITION ANALYSES:



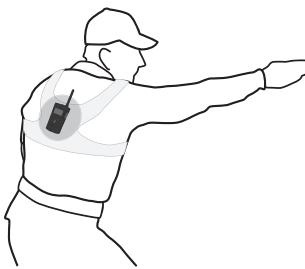
★★★  
No close body blocking  
No RF absorption



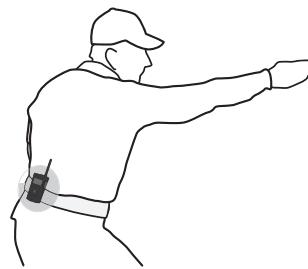
★★★  
No close body blocking  
Partial RF absorption



★★★  
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

## GET STARTED

Welcome, our Dear User!

### POWER UP A UNIT

Press the Power button on the Yapalong-6000 radio for 2 seconds, and you will notice:

1. The Power light (red) is turned on solid with normal brightness. After 3 seconds,

i) If the light remains at normal brightness, it indicates it has detected other radio(s) of the group.

ii) If the light gets brighter, it indicates that it cannot detect any other unit of the group for various reasons:

- Other radio of the group is not powered on.
- Other radio of the group is out of range.
- This radio belongs to a different group.
- This radio is not bond with any other radio (Refer to the BINDING section).

2. The Battery light (amber) is off. If it is blinking, it indicates that the battery needs to be charged.

3. The Bluetooth light (green) is blinking, which indicates that the paired Bluetooth headset is off. Turn on the paired Bluetooth headset, and the Bluetooth light will turn off. If the light keeps blinking, it indicates that the Bluetooth headset is not paired.

(Refer to the HEADSET section.)

4. The Settings light (green) is off if the current radio is a Base Unit. Or it is solid if the current radio is an Expansion Unit.

(Refer to the BASE UNIT and EXPANSION UNIT section.)

### POWER UP A GROUP

Power on one of the radios at the location where the radios to be used. Wait until the red light of the radio becomes solid, then power on the rest radios.



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). Once a Yapalong radio is turned on, it automatically scans the surrounding, picks the cleanest channel, and stays in the channel.

## BASE UNIT AND EXPANSION UNIT

There are two types of Yapalong-6000 units: Base Unit and Expansion Unit. A Base Unit has its own talking slot, while an Expansion Unit must share the two talking slots of the group with other Expansion Units.

A Yapalong-6000 group can consist of purely Base Units (up to 7), or mixed Units: Base Units (up to 5) plus Expansion Units (unlimited). A group cannot consist of only Expansion Units. The binding methods are slightly different for the two types of groups.

A Base Unit can be used with either an open MIC or PTT (push-to-talk) headset, while an Expansion Unit must be used with a PTT headset.

The user needs to select the Base/Expansion type when placing the order.

### PTT State of A Base Unit

The Open MIC or PTT state of a Base Unit is controlled by the Unit itself not by the paired headset. Open MIC is the default state.

Press the Bluetooth button once to activate the PTT state, and the Settings light is turned on.

Press the Bluetooth button again to deactivate the PTT state, and the Settings light is turned off.

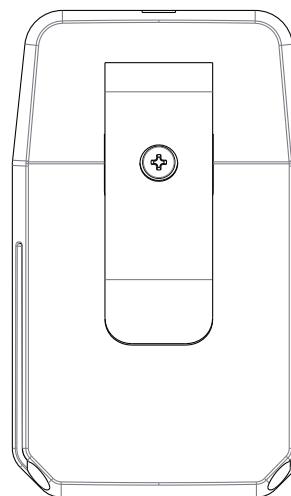
## BINDING

Binding needs to be done under a minimal radio interference environment, which means no cellphone, no computer, no Bluetooth, and no electrical control panel nearby. After binding, there is NO need to do binding again next time for the same group, until new radio(s) are added to the group.

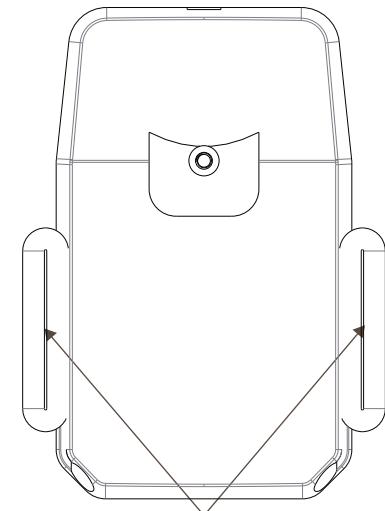
To bind a group, each unit of the group needs to be set into Binding mode. To set a unit into Binding mode, press the Group button while holding down the Settings button for 3 seconds, the Group light and the Battery light begin to flash alternatively. After 5 or more seconds, both lights stop blinking. Both Group light and Battery light will be solid, or only Group light will be solid depending on the sequence of Binding. The radios in Binding mode cannot communicate.

## WEARING

### By Belt Clip

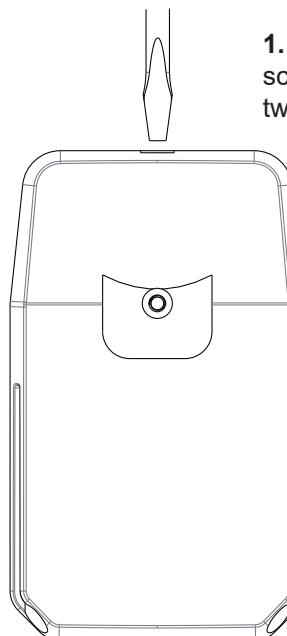


### By Arm Band (Recommended)



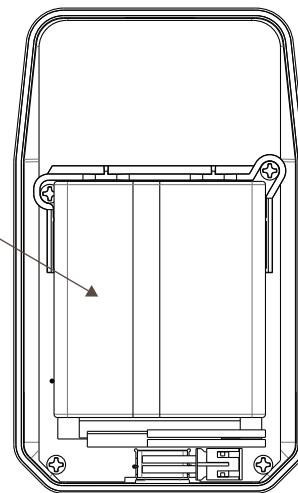
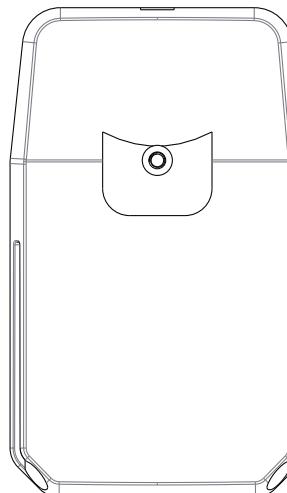
Arm Band Pass through the Arm Band Loops

## 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.

# HEADSET

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Yapalong Wireless Boom MIC Headset is designed specifically for Yapalong-6000 radio. (Refer to “User’s Manual for Yapalong Wireless Boom MIC Headset”) It can be used either as open MIC or PTT depending on the setting of the radio.

The off-the-shelf Bluetooth headset perhaps could work with Yapalong-6000 radio if the user only uses the open MIC function. Normally the headsets with less features have less compatibility issues.

A Yapalong-6000 radio can ONLY be paired with one headset to avoid confusion during the group use.

## PAIRING PROCEDURE

1. Power on both the headset and the Yapalong6000 radio to be paired. If the Bluetooth light on the radio is off, it indicates that they are paired already. When the Bluetooth light is flashing slowly, the headset reports “Pairing...”, and the headset light is flashing red and blue, please proceed with pairing.
2. Press the Bluetooth button on the radio for 2 seconds while holding down the Settings button, the Bluetooth light will be flashing fast. The light on the headset will keep flashing red and blue alternatively.
3. After 5 or more seconds, the Bluetooth light on the radio will be off, the headset will report “Connected”, and the light on the headset will turn solid blue, which indicates both are paired.

## FORCE SYNC TO RESUME COMMUNICATION

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When a radio is moved out of then back into range, its communication with the group will resume automatically, as indicated by the Power light with normal intensity.

If does not resume immediately, as indicated by the Power light with high intensity, press the Power button for 2 seconds and the Power light is flashing for 2 seconds. It is called Force Sync.

If still does not resume, restart the radio.

## A. BINDING FOR A GROUP OF BASE UNITS (OR WITH LISTENER UNITS)

Please follow the sequence below:

1. Power down all units with good batteries installed.
2. Power up the first Base unit and set it into Binding mode.  
Both Group light and Battery light are solid.
3. Power up the second Base unit and set it into Binding mode.  
The Group light is solid, and the Battery light is off.  
If the Battery light is also on, restart Binding from Step 1.
4. Repeat Step 3 for all the Listener unit(s) if there is any.  
Listener unit is listening only.
5. Repeat Step 3 for the rest of the Base unit(s).
6. Power down all units to exit Binding mode.  
Binding of the group is done.

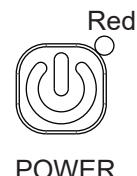
## B. BINDING FOR A GROUP OF BASE UNITS AND EXPANSION UNITS

Please follow the sequence below:

1. Power down all units with good batteries installed.
2. Power up the first Base unit and set it into Binding mode.  
Both Group light and Battery light are solid.
3. Power up the second Base unit and set it into Binding mode.  
The Group light is solid, and the Battery light is off.  
If the Battery light is also on, restart Binding from Step 1.
4. Repeat Step 3 for all the Expansion unit(s).
5. Repeat Step 3 for the rest of the Base unit(s).
6. Power down all units to exit Binding mode.  
Binding of the group is done.

Note: in a group of Base and Expansion units, an Expansion unit can be used as a Listener Unit.

## KEYPAD INSTRUCTIONS



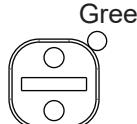
POWER

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



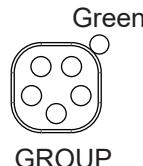
BATTERY

Light Flashing Slowly	15% Battery level
Light Flashing Fast	5% Battery level
Light Solid	Battery is being charged
Light Off & Group Light Solid On	Battery is fully charged



SUBGROUP

(Subgroup feature is only available to custom orders. Please contact your vendor for customization.)



GROUP

Activate Binding Mode (See BINDING section)

Deactivate Binding Mode

Press the Group button while holding down the Settings button for 3 seconds, the Group light and the Battery light begin to flash alternatively. Release buttons for 5 or more seconds, the Group light is solid on.

Power down the radio then power it up.



BLUETOOTH

Activate Pairing Mode (See PAIRING section)

Light Flashing Slowly

Light Flashing Fast

Press the Bluetooth button while holding down the Settings button for 2 seconds, the Bluetooth light will keep flashing until the pairing is done with the light off. There is no extra step to exit Pairing Mode.

No detection of the paired headset

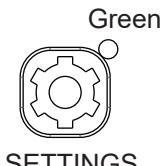
Unit is in pairing state

Activate PTT State

Press the Bluetooth button once. And the Settings light is on (Base Unit only).

Deactivate PTT State

Press the Bluetooth button again. And the Settings light is off (Base Unit only).



SETTINGS

### For Base Unit

Light Solid

Unit in PTT state by pressing Bluetooth button once

Light Off

Unit in open MIC state by pressing Bluetooth button again

### For Expansion Unit

Light Solid

Talking slot(s) are available

Light Flashing

PTT button of the paired headset is being pressed