




YAPALONG-4000 EU 4-User Full-Duplex Radio User Manual

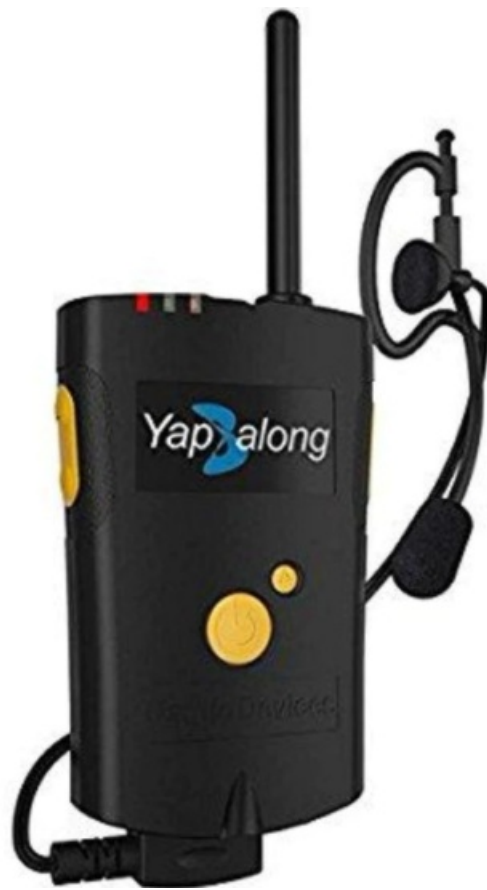
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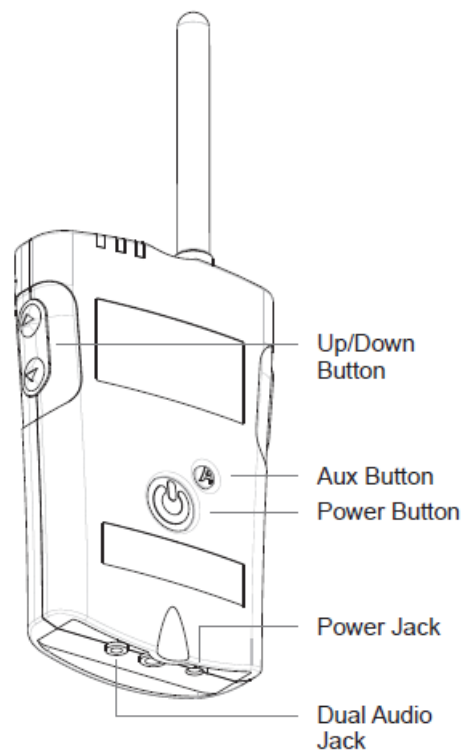


YAPALONG-4000 EU 4-User Full-Duplex Radio

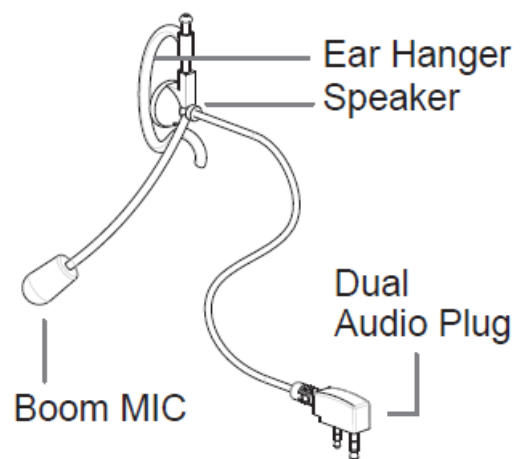


User's Manual

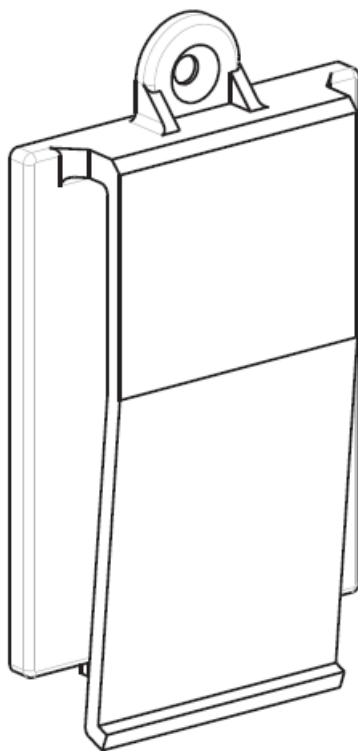
Main Unit



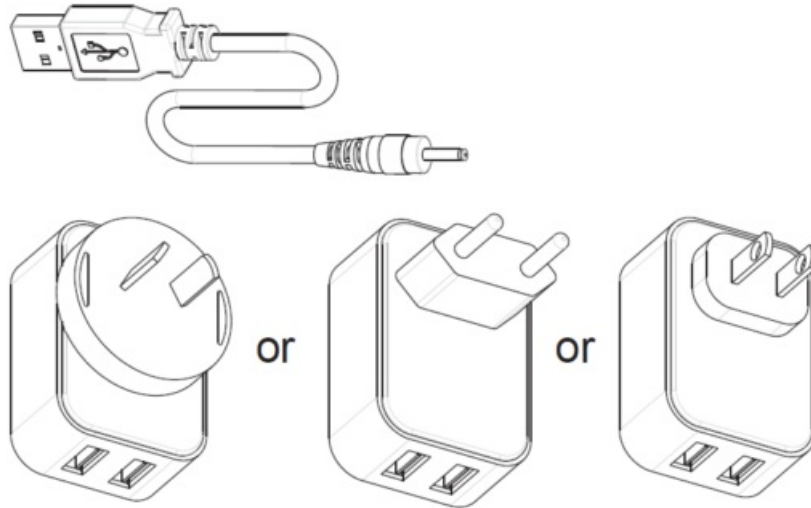
Headset



Belt Clip



Charger



SPECIFICATIONS

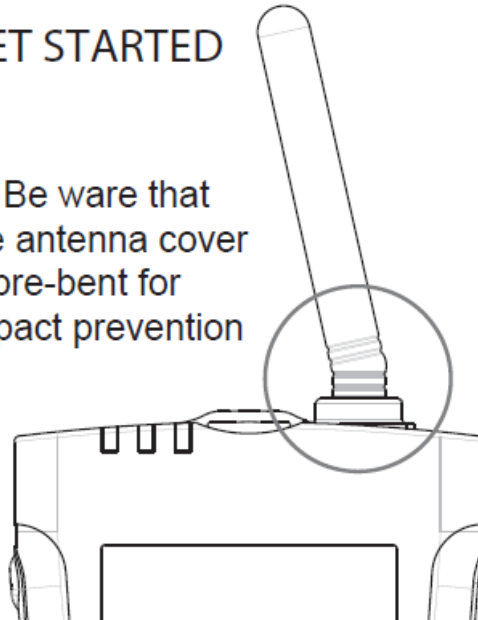
- **Radio Frequency:** Unlicensed ISM band 900 MHz (Yapalong4000 AM) 800 MHz (Yapalong4000 EU)
- **Group Size:** 8 talkers (Yapalong4000 AM) 4 talkers (Yapalong4000 EU) Unlimited listeners
- **Wireless Network:** Auto channel selection no-master TDMA/peer-to-peer
- **Digital Modulation:** FSK
- **No. of Channels:** 8
- **Range:** up to 900 meters line-of-sight
- **Size:** 164mm x 64mm x 22mm
- **Weight:** 125 grams
- **Power Rating:** 27 dBm/ 500 mW
- **Power Source:** Lithium polymer, 3.7 V, 1700 mAh
- **Power Durability:** 8 hours or more after being fully charged
- **Operating Temp Range:** -20 °C ~ 50 °C
- **Sensitivity Adjustment:** 5-level
- **Safety Rating:** Lead free, RoHS compliance
- **IP Rating:** IP54, splash proof

GET STARTED

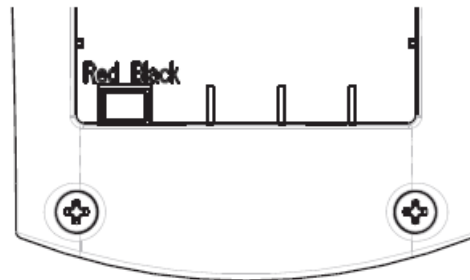
1. Be ware that the antenna cover is pre-bent for impact prevention

GET STARTED

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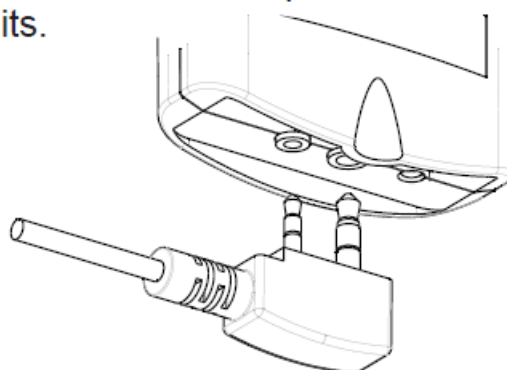


2. The rechargeable Lithium polymer battery is pre-installed. For future battery replacement, make sure the battery connector is plugged into the socket with the color of the cables matching the polarity "Red Black" shown on the case. For your safety, use only battery provided by Yapalong.



3. Turn Yapalong unit on by holding down POWER button for 2 seconds until RED LED turns on.
4. If the AMBER LED blinks every 2 or 5 seconds or there is no LED light at all, battery needs to be charged. Plug the adaptor to the wall outlet. Then plug the barrel connector of the cable into the power charging jack. Turn off the unit during battery charging will speed up the charge time. AMBER LED turns on during charging and GREEN LED turns on when battery is fully charged.
5. If RED LED remains on with high intensity, it means it cannot detect other group unit due to various reasons: no group unit powered on; group unit out of range; unit in different group (refer to "Binding Procedure" to do grouping).
6. If RED LED remains on with normal intensity, it means it has detected group unit(s). Plug in the headset as show in the figure. The unit is now ready to be used with other powered-on group units.

units.



7. To adjust the sound volume, press UP or DOWN button, repeatedly if necessary, until desired volume is reached. To adjust the microphone sensitivity, while holding down AUX button, press UP or DOWN button, repeatedly if necessary until desired sensitivity is reached. Now every member in the group can talk freely and

listen at the same time.

8. To turn Yapalong unit off, hold POWER button 2 seconds until RED LED flashes 3 times. Then the unit powers down.

INDUSTRY CANADA COMPLIANCE STATEMENT

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power(e.i.r.p.)is not more than that necessary for successful communication.

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 Nautic Devices Inc. could void the user's authority to operate the equipment.

FOR CLASS B – UNINTENTIONAL RADIATORS

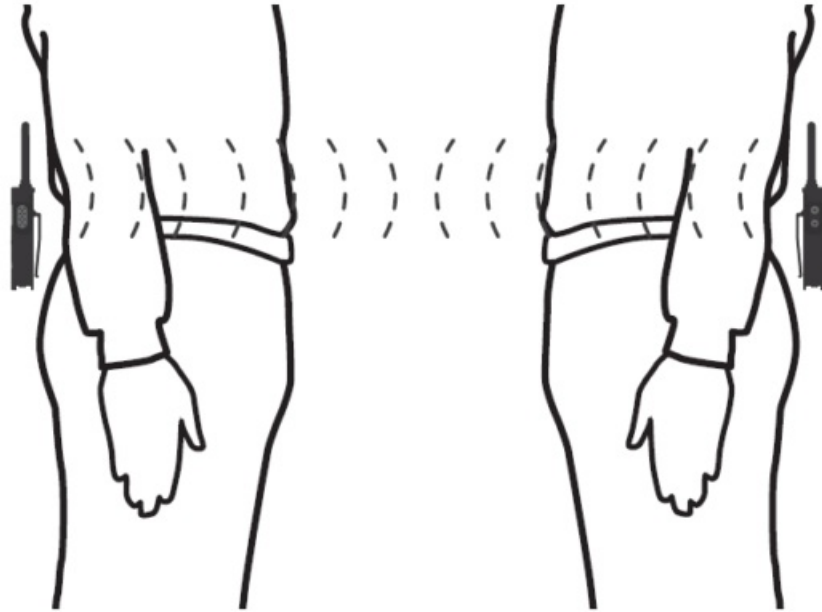
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference and
2. this device must accept any interference received, including interference that may cause undesired operations.

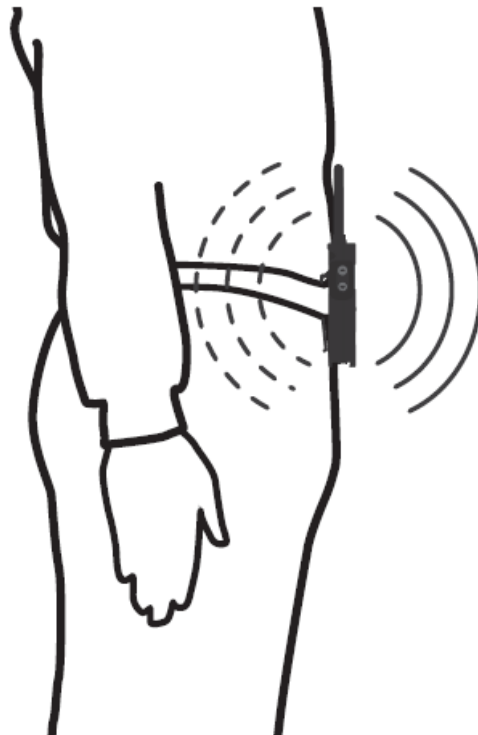
HOW TO MAXIMIZE RANGE

When worn, always point the antenna upwards 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:

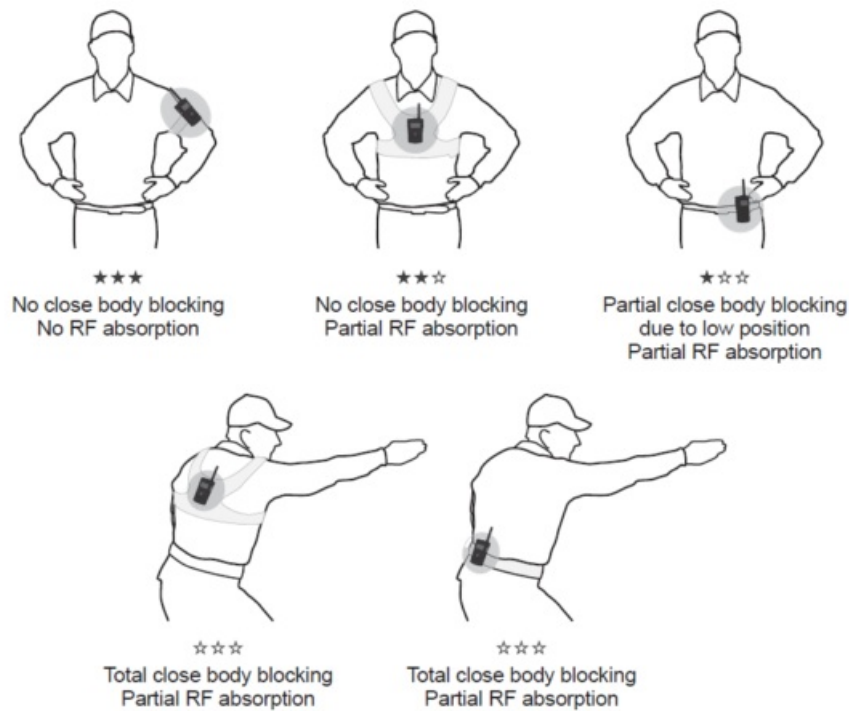
1. **CLOSE BODY BLOCKING:** placing bodies in between antennas causes communication signals being blocked



2. **ANTENNA TOUCHING BODY:** Human body is mainly water so it absorbs RF wave. Water absorbs RF (radio frequency) wave.



WEARING POSITION ANALYSES



BINDING PROCEDURE

Note: Binding needs to be done under minimum 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) being added to the group.

BINDING PROCEDURE FOR REGULAR UNITS

1. Power down all units with good batteries installed.
2. Power up 1st unit until RED LED is solid on. Hold down UP and DOWN buttons simultaneously for 3 seconds until GREEN and AMBER LEDs begin to flash alternatively. Release buttons for 5 or more seconds, both LEDs stop blinking and all 3 LEDs remain solid on.
3. Power up 2nd unit until RED LED is solid on. Hold down UP and DOWN buttons simultaneously for 3 seconds until GREEN and AMBER LEDs begin to flash alternatively. Release buttons for 5 or more seconds, both LEDs stop blinking and only RED and GREEN remain solid on. If AMBER is also on, restart Binding from Step1.
4. Repeat Step3 for the rest units until the binding for all the units is done. If in doubt, repeat the entire procedure.

Power off all the units to exit binding mode. The radios in binding mode cannot communicate.

ORDER FOR BINDING LISTENER UNITS

LISTENER units can be added to existing Yapalong group as listen-only units. Regardless of the previous grouping state, the entire group has to be bound again. The binding procedure is the same as the one for REGULAR units.

In addition we need to follow the order below to bind:

1. Set 1st REGULAR into Binding mode.
2. Set 2nd REGULAR into Binding mode.
3. Set all LISTENERS into Binding mode one by one.
4. Set the rest REGULARS into Binding mode one by one.

INSTRUCTION FOR USE

TURN ON

Hold down POWER button approx. 2 seconds until RED LED turns on. Then release button
RED LED will remain on at a lower intensity if your unit hears other unit(s) in the same group; otherwise the RED LED will be extra bright.

TURN OFF

Hold down POWER button approx. 2 seconds until RED LED flashes 3 times. Then release button.
All LEDs are off in power down mode except battery charging indicator.

VOLUME UP

Press UP button to move up one level at a time until desired level.
GREEN LED flashes once unless maximum level is reached. There are 6 volume levels.

VOLUME DOWN

Press AUX button until GREEN LED flashes 3 times.
Continuous slow blinking of RED LED indicates microphone being muted. When microphone is muted, other Yapalong units cannot hear you but you can hear the others.

MIC REACTIVATE

Press AUX button until GREEN LED flashes 3 times.
RED LED slow blinking stops. Back to normal operation.

INCREASE MIC SENSITIVITY

Hold down AUX button then press UP button to move up one level at a time until desired level.
GREEN LED flashes twice unless maximum level is reached. Increase microphone sensitivity if you want to speak softly in a quiet environment. There are 5 sensitivity levels.

DECREASE MIC SENSITIVITY

Hold down AUX button then press DOWN button to move down one level at a time until desired level.
GREEN LED flashes twice unless minimum level is reached. Decrease microphone sensitivity when background noise is loud. Speak closer to the microphone to compensate.

FORCE SYNC

Press power button momentarily forces the unit to re-establish sync with the rest of the group.

LIGHT INDICATIONS

RED LED

- Solid with extra brightness
- Out of range indicator. Your unit cannot receive RF signal from any unit in the group. Power on other units, or move closer to each other.

GREEN LED

- Solid
- Battery is fully charged.

AMBER LED

- Solid
- Battery is being charged.

AMBER LED

- Flash every 2 seconds

- Battery is low.

AMBER LED

- Flash every 5 seconds
- Battery is very low. Then the unit turns off automatically.

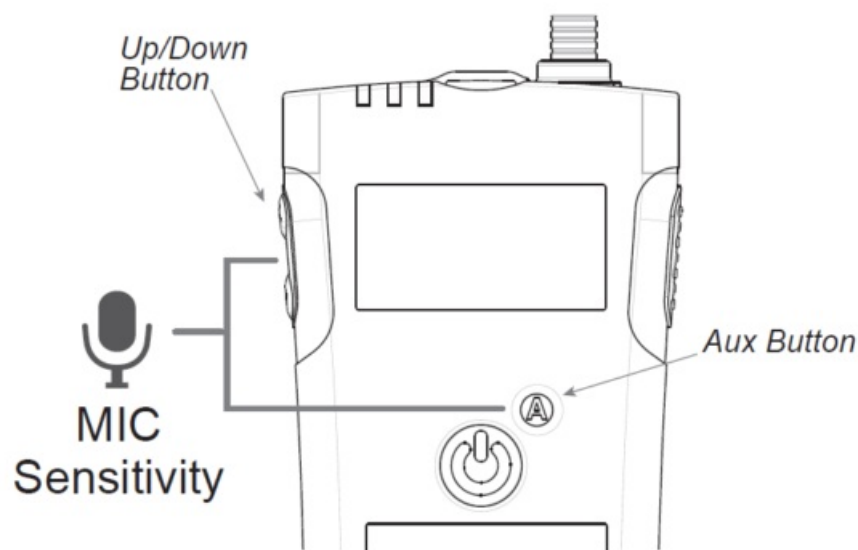
POWER UP A GROUP

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.

Power on all the radios at the place where they will be used. 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). This is needed because the radios auto scan the surroundings for the cleanest channel upon being powered

MIC SENSITIVITY ADJUSTMENT

MIC sensitivity sets the minimum level of sound loudness that the microphone can pick up. The higher MIC sensitivity is, the slighter sound is picked up by the microphone. It is good practice to lower MIC sensitivity in a noisy environment so that other users will not hear so much background noise.




Yapalong4000 MIC sensitivity is divided into 5 levels. The default level is 4. Press Up/Down and AUX buttons simultaneously to adjust MIC sensitivity. Be sure not to press AUX button alone, which will mute the radio.

FORCE SYNC TO RESUME

After the radio is taken out of range and brought back into range, its communication to the group will resume automatically. If the communication is not resumed immediately, as indicated by extra bright red LED light, you may press POWER button 1-3 seconds on this radio to force the sync. Restart the radio is also a good way to resume the communication.

Documents / Resources

	Yapalong YAPALONG-4000 EU 4-User Full-Duplex Radio [pdf] User Manual YAPALONG-4000 EU, 4-User Full-Duplex Radio, YAPALONG-4000 EU 4-User Full-Duplex Rad io
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