

CUBO 3.0

Audio Mobile System
-- USER MANUAL --



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1) UNSCREW THE 8 SCREWS OF THE SIDE SUPPORT 2) REMOVE THE SAFETY COVER 3) REMOVE THE BATTERIES AND DISCONNECT THE CONNECTOR 4) INSERT THE CONNECTOR OF THE NEW BATTERY PACK, AND REPLACE THE BATTERIES 5) CLOSE THE SAFETY COVER,12

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1) INTRODUCTION

Thank you for choosing **ROKEP CUBO 3.0** for your ruggedized audio system.
For optimum use of **CUBO 3.0**, please read carefully the information provided in this manual.

CUBO 3.0 is a tool of fundamental importance for sports trainers , youth workers and for any situation where you have to play music or amplify the voice without making any electrical connection. **CUBO 3.0** has been **improved** in later versions starting from the **real experience** of people who use it daily .

CUBO 3.0 is a system assembled in box plywood treated for waterproofing and roofing polyurethane material with high strength, equipped with wheels for easy transport , designed and engineered to withstand the most severe stress , moisture resistant and therefore ideal for be used in the pool as the beach.

The safety standards are met at every opportunity, thanks to the power supplied by two sealed batteries that guarantee a high level of autonomy, or using the safety power supply TAS24S.

2) TECHNICAL SPECIFICATIONS

2.1) Basic Components

CUBO 3.0 consist of:

- 3 inputs mixer (microphone, Wireless Source: MP3player, PC ...)
- A 2x150W @ 4ohm Amplifier
- Built-in high-efficiency loudspeaker,
- Signal and Peak indicator
- External power input connector (Extra low voltage)
- External battery charger AL24/1 or AL24/3

2.2) Optional Components

CUBO 3.0 can be equipped with several optional accessories such as:

- RS12 External loudspeaker
- AQUARMONY Underwater loudspeaker
- TAS24S Safety Power Supply (240Vac to SELV 24Vdc with 10m cable with PowerCon connector)

3) MAIN CONTROLS

3.1) Controls

The diagram shows the front panel of the ROKEP CUBO 3.0 device. It features two main volume sections: 'VOLUME MASTER' and 'VOLUME AUX OUT'. Each section has a 'MUSIC' and a 'MIC' volume knob, and a 'SIGNAL' indicator light. To the right, there is a 'FUSE' compartment, a 'POWER ON' switch, and a power input jack. Red arrows point from numbered circles (1-13) to specific controls: 1 points to the Master Music knob, 2 to Master Music knob, 3 to Master Mic knob, 4 to Master Signal light, 5 to Aux Music knob, 6 to Aux Mic knob, 7 to Aux Signal light, 8 to Aux Signal light, 9 to Bluetooth indicator, 10 to Battery LEDs, 11 to Fuse, 12 to Power On switch, and 13 to Power Input Jack.

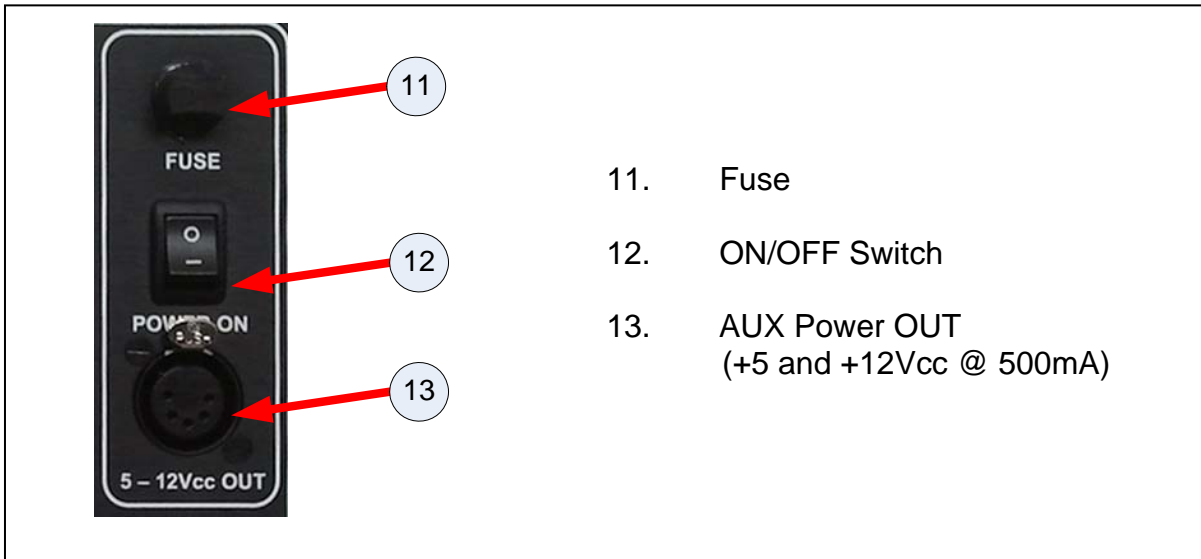
1. Main Volumes section
2. Music Volume
3. Mic. Volume
4. Signal/peak indicator
5. AUX Volumes section
6. Mic. Volume AUX
7. Mic. Volume AUX
8. AUX Signal/Peak indicator

3.2) Function indicator LEDs

The diagram shows a close-up of the function indicator LEDs. On the left, there is a blue LED labeled 'Bluetooth'. On the right, there are three LEDs labeled 'BATTERY' with '10%' and '100%' markings. Red arrows point from numbered circles (9 and 10) to these LEDs: 9 points to the Bluetooth indicator, and 10 points to the Battery LEDs.

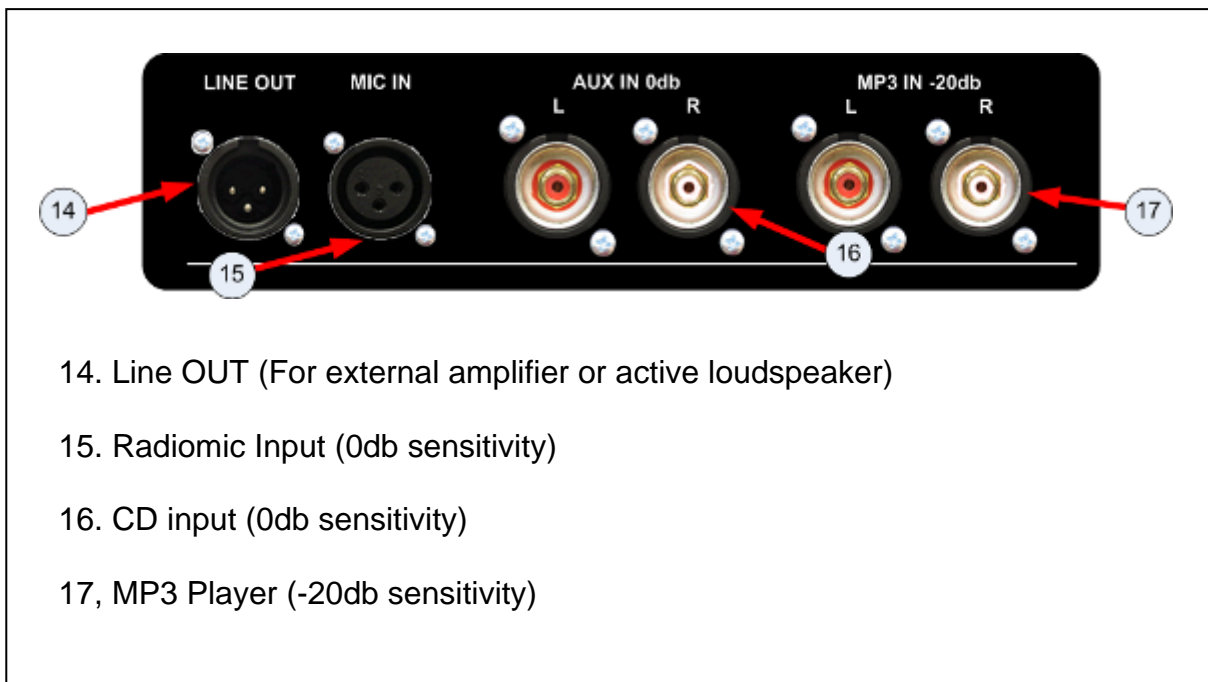
9. Bluetooth indicator, (fixed lit if device connected)
10. Battery charge indicators (all lit = Battery full Charge)

3.3) Power Supply



- 11. Fuse
- 12. ON/OFF Switch
- 13. AUX Power OUT (+5 and +12Vcc @ 500mA)

3.4) Inputs



- 14. Line OUT (For external amplifier or active loudspeaker)
- 15. Radiomic Input (0db sensitivity)
- 16. CD input (0db sensitivity)
- 17, MP3 Player (-20db sensitivity)

3.5) Power IN/OUT



- 18. AUX speaker - AQUARMONY Power OUT
- 19. Speaker / AQUARMONY function indicators
- 20 External Power ON indicator
- 21. External Power Input (24Vcc 12A)
- 22. Recharge indicator
- 23 Battery Charge Input

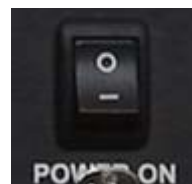
4) FUNCTIONS

4.1) System Power ON and System Recharge

4.1.1) System Start and verification

IMPORTANT NOTICE: Made a complete recharge cycle before power ON

Turn ON the system, with the power switch 12 , verify the correct state of system by battery charge indicators



4.1.2) Battery Status

Indicators 10 show the charge status of the batteries:



● ● ● All lit = Batteries full charge

● ● ○ Red and Yellow lit = Batteries at medium charge

● ○ ○ Only Red lit = Batteries to recharge

○ ○ ○ All off = Batteries too weak. Risk of damage, in this status the audio output is automatically turned off.

4.1.3) Battery Recharge Mode

To charge the batteries using the supplied charger by plugging the connector 23 as shown in figure

The full battery charge takes place in at least 8 hours (for details refer to section 4.5 "Charge Battery") and until you turn off the light "output LED" on the charger.

The batteries have no problems with "memory effect", therefore it is recommended to always put in charge the batteries after each use of the CUBO 3.0



IMPORTANT NOTES FOR THE MAINTENANCE OF BATTERIES.

- 1) Recharge the batteries every time you finish using the Cubo 3.0
- 2) Do not leave batteries discharged for more than a day
- 3) Unplug the charger at the end of charging (Output LED off)

4.1.4) Operation with external power supply TAS24S (optional)

The safety power supply TAS24S must be used in cases where it is not enough battery life, for example in the case of continuous use for more than 8 hours.

Meets the required safety standards for the use of the equipment near the pool, you still need to connect to the network in a location away from the edge of the tub, and bringing power to the CUBO 3.0 using the supplied 10m cable.

The TAS24S must be connect to the CUBO 3.0 through its output cable (10m length) and the PowerCon connector 21.

In the moment when power is supplied to the CUBO 3.0 through TAS24S, the batteries are not connected (will not charge) and all the functionality of the system is ensured by the power supply.



4.2) Main Function

4.2.1) Music control section

When the system is turned on and the batteries are charged, keep the volume low, using the knobs in the figure.

The "MASTER VOLUME" control the music and microphone volume for the local amplifier, while the "VOLUME AUX OUT" controls the volume of the aux OUT 18.



The two sections are completely independent

Next to the volume control knobs are LED 4 and 8 "SIGNAL" that allow you to control the output signal of the amplifier:

- LED off = Signal not present
- LED flashing Green = Signal Present
- LED flashing Red = Sound begins to be distorted
- LED Fixed Red = High distortion (low the volume)

There are 3 inputs for audio signals:

- 1) CD player or PC with sensitivity 0db 16.
- 2) MP3 player or similar with 20db sensitivity-17
- 3) Bluetooth device



Use the RCA AUX IN 0db to connect the CD player via RCA-to-RCA cable. If you connect an MP3 player in 0db input, level will not be sufficient, vice versa if you connect a CD player in -20db input signal will be saturated and completely distorted. Use the input IN MP3 IN -20db for connecting MP3 players with Jack to RCA Cable

It is important to always have a clean and pleasant sound and to do this you must always use sound sources of quality both as a player and as recordings (whether CD or MP3 Files).

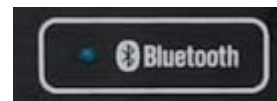
Playback via Bluetooth®

Playback is possible using any device equipped with Bluetooth® interface.

To connect to CUBO 3.0 player or smartphone, you must register and connect your device "ROKEPO BT" appears when perform a device search on your player or smartphone.

The CUBO 3.0 Bluetooth® interface remains in a waiting state until the connection of a device. In the standby state, the light flashes with steady rhythm, when a device is connected, the light stays on permanently.

Playing with Bluetooth® you need to remember that the playback volume is also fixed by the player, and not only by the volume on the panel of CUBO 3.0.



4.2.3) Voice amplifying using wireless microphone

CUBO 3.0 can be supplied with a wireless microphone.
For user operations, check on the manufacturer's manual attached.
The knobs 3 and 6, allow you to adjust the volume of the radio microphone

It is crucial during use, adjust the volume so as to avoid the classic "whistle" from feedback.

You can use an external wireless microphone, connecting it to the MIC input

Warning, this entry is not suitable for wire microphones, the sensitivity is only configured for wireless microphones.



4.2.4) Preamp Out (Line Out)

On the XLR connector 14 is provided the preamplified output signal to use for the connection of other CUBO 3.0 or other types of amplifiers.

The output level is 0dB and is not affected by Volumes



4.2.5) AUX Audio Power Output

External loudspeaker must be connected to the system via the Speakon connector 18.

In the case of use of the underwater speaker AQUARMONY will automatically turn on the yellow light 19 (AQRM 60W), which indicates that the system has identified the speaker and thus equalizing the output according the characteristics of the speaker itself.

In the case of using a standard speaker (Optimal 150W into 4 ohms) will remain lit the lamp 19 AUX.

The output volume is adjusted by knob 6 and 7. The signals coming from the music source are already leveled the main amplifier, so no need to worry about further adjustments.



5) MAINTENANCE

5.1) General information

CUBO 3.0 is designed to operate without problems in humid environments and with aggressive aerosols, so there are no special precautions other than those to avoid direct water splashing, especially on the side where there are connectors.

Two of the transport wheels are fitted with brakes, you need to stop once it reaches the working position, to avoid unwanted movements.

During periods when CUBO 3.0 is not used (such as at night or during periods of closure) is recommended to place it in less aggressive environments (offices and warehouses) and keep the batteries charged

5.2) Battery Pack

CUBO 3.0 is equipped with a Battery Pack can provide a continuous operation of up to 8 hours without the use of an external power supply.

This peculiarity makes CUBO3.0 suitable for all those occasions when you can not use utility power.

In the case of medium usage (4 hours a day of continuous service) the expected life of the batteries without loss of efficiency is at least one year, of course, if you observe all precautions to maintain the cycles of charging and discharging.

How to replace the battery in the CUBO 3.0 is easy to achieve and is exemplified in the following figures:

1) Unscrew the 8 screws of the side support

2) Remove the safety cover

3) Remove the batteries and disconnect the connector



4) Insert the connector of the new battery pack, and replace the batteries

5) Close the safety cover,

5.3) Wireless microphone

To connect an external wireless microphone you can use the MIC IN connector 15 and POWER OUT 13

Measuring out the volume of the radio microphone to avoid troublesome whistles.

It is always advisable to use the "belt" or during use: this precaution certainly extends the life of your transmitter.

At the end of the lesson dry well the headset from sweat.

For the conditions of use please refer to the manufacturer's manual attached.



5.4) Connections

5.4.1) Connect the audio source using a cable

You can use the supplied cable to connect the source to the CUBO 3.0, using the proper RCA jacks on the front panel.

The source can be any player with 3mm jack output "headphone".



5.4.2) Connecting external amplifier via preout

The system also provides a preamp output to any external amplifiers or mixers. The signal is provided at line level and balanced, then the cable must provide the 3-pin female XLR connector.



5.4.3) Connecting regular or underwater loudspeaker

The underwater speaker AQUARMONY, is equipped with its own Speakon connector to connect to the socket on the panel of CUBO 3.0. The equalization is automatically switched to "SUB" and the light comes on to indicate proper operation.

In the event that this output to connect to a standard speaker, equalization remains flat and do not fill limiter.



5.4.4) Collegamento dell'alimentatore TAS24S alla rete elettrica

CUBO 3.0 is ready for electrical connection with low Voltage in compliance with the strictest safety standards.

POWERCON 21 Connector located on the CUBO 3.0 control panel allows connection to low voltage (24V) power supply TAS24S.



6) References to Standards

Rokepo Systems for underwater and pool sound meet the international regulations in the context of security.

CUBO 3.0 Complies with

CEI 64-8/7 Section 702 (updated 06/2003) - Electrical systems - Pools and Fountains

EN 61558-1 Safety of power transformers

EN 60065 (add 01/2003) Safety Requirements audio-video appliances

EN 61000 - 6-1 2007 Electromagnetic Immunity



7) SPECIFICATIONS

OUTPUT POWER	2x150 Wpeak 2x80Wrms
TYPICAL IMPEDANCE	4 ohm
DISTORTION	0,5 % a 80W
MIC INPUT SENS.	150mV
AUX-CD INPUT SENS	150mV
MP3 INPUT SENS.	75mV
FREQUENCY RESPONSE	100-18.000 Hz
LOUDSPEAKER	12" WIDE RAGE
POWER	24 V
BATTERIES	2 SEALED GEL BATTERIES 12V 18Ah
BATTERY OPERATION TIME	8 HOUR
FUSE	10A
DIMENSIONS	46 x 38 x 77 cm
WEIGHT	43.5 KG

7) SPECIFICATIONS

8) RULES OF WARRANTY

- 1 . ROKEPO srl , manufacturer of which is covered by this certificate guarantees the same free from manufacturing defects , detectable only by ROKEPO slr. in its laboratories , for a period of 24 months (twenty-four) from the date of purchase detectable by the sale invoice; the guarantee entails the obligation of repair of the equipment and, if necessary , at the discretion of the manufacturer , the replacement
- 2 . It is the responsibility of the purchaser having read the instruction manual and use the product as expressly provided in it.
- 3 .The warranty covers all defects in those electrical or mechanical parts due to construction faults declared the warranty coverage of your product is certified only by the Rokepo technical Laboratory. The return of goods takes place only after ascertaining the defects / faults by Rokepo srl. For the procedures for authorization to return , please refer to the website www.rokepo.it (RMA Form)
- 4 . The warranty excludes the electrical and mechanical parts subject to normal wear and batteries
- 5 . The warranty excludes failures due to external causes or resulting from its use and / or improper installation or who does not comply with the warnings provided in the instruction manual ; failure resulting from tampering and / or manipulation of the equipment by unauthorized personnel
- 6 . Devices always travel at the customer's expense and the warranty does not apply to damage caused during transportation
- 7 . ROKEPO srl can not be held responsible for damage to persons or property which may occur from the use or malfunction of the equipment
- 8 . ROKEPO reserves the right to make any changes to the design and construction of its products.

8) DICHIARAZIONE DI CONFORMITÀ

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EUROPEAN DECLARATION OF CONFORMITY



We, **Rokepo Srl** - Via Irma Bandiera 6/B, 40050 Monte San Pietro (BO)

declare under our sole responsibility that the product

CUBO 3.0

to which this declaration relates is in conformity with the following standard(s)
or other normative document(s)

EN 60065/A11 2010

Audio, video and similar electronic apparatus. Safety requirements.

EN 61000 - 6 - 1 2007

Electromagnetic compatibility (EMC)

60364-4-41

Low-voltage electrical installations

IEC 60364-7-702 ed3.0

Low-voltage electrical installations - Part 7-702: Requirements for special
installations or locations - Swimming pools and fountains

The Technical Construction File is maintained at:

Rokepo srl Via Irma Bandiera 6/B Monte San Pietro (BO) Italy

And Conform to following directive:

RoHS 2011/65/UE

LVD 2006/95/CE

R&TTE 1999/05/CE - en 300 328

Monte San Pietro (BO), 12/02/2014

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