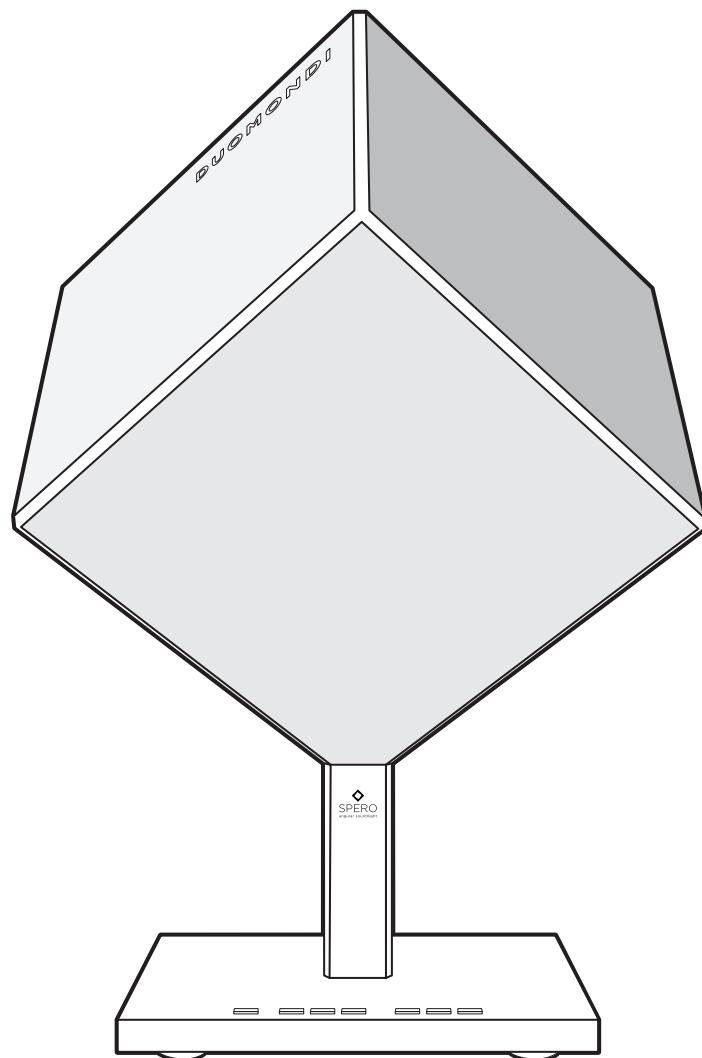


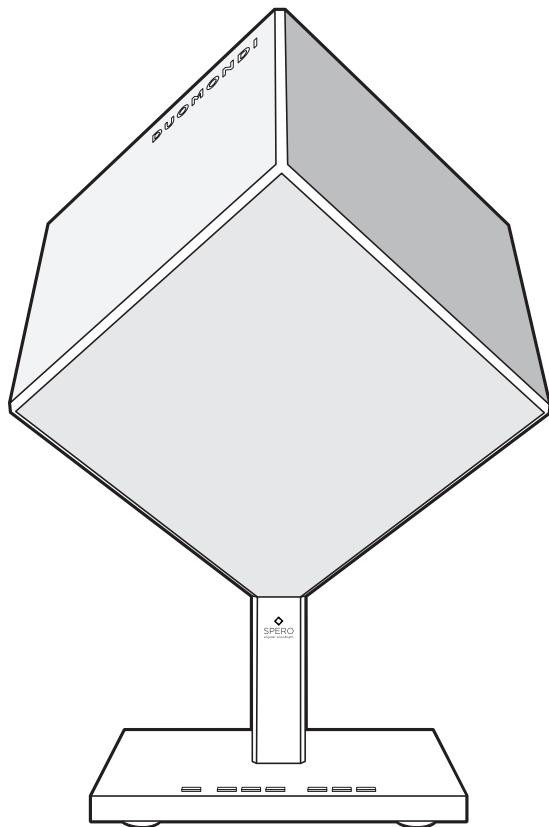
SPERO 24

angular soundlight



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Thank you for choosing DUOMONDI!

To ensure proper operation, please carefully read this owner's manual and safety instruction before using the product. After reading this manual, be sure to keep it for future reference.

Should you have any questions about your new device please contact support at:
<https://www.duomondi.com/support>

The Spero 24 angular soundlight is a exciting wireless loudspeaker system including stunning lighting effects allowing you to enjoy music from any Bluetooth audio source or external analog audio sources.

The Spero 24 suits your mood with fantastic audio quality complemented with exciting lighting effects.

The Spero family of products have advanced Bluetooth functions such as Truewireless Stereo Pairing and Dual phone pairing to enhance the sound stage and make the product useful to more then one Bluetooth source.

Complimentary Android & iOS mobile phone applications allow easy customization of the Spero's audio tonality and visual effects.

Trademark Notice



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by DUOMONDI is under license.

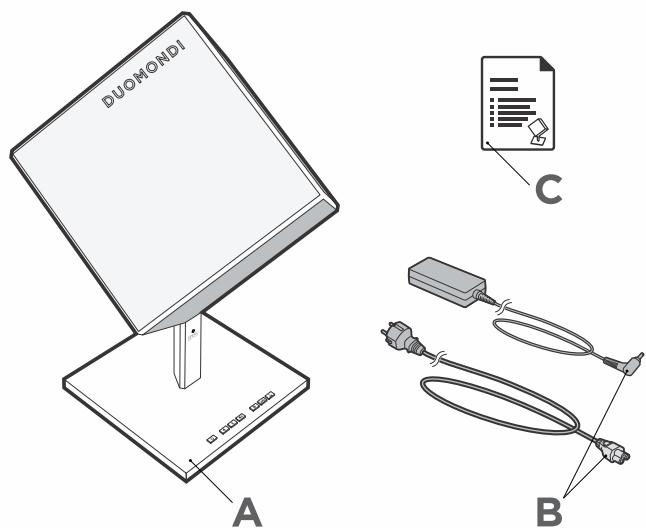
DUOMONDI®

The DUOMONDI® word mark and logos are registered trademarks owned by Duomondi International Development Co. Ltd. Other trademarks and trade names are those of their respective owners.

Unpacking

Each SPERO 24 is built to the highest standard and thoroughly inspected before leaving the factory. Upon arrival, carefully inspect the packaging. If you find any damage, immediately notify the retailer or shipping company. Check that the following parts are supplied within the package:

- A. SPERO 24 angular soundlight
- B. power adapter with AC power cord*
- C. quick start guide



*The power plug and adapter figures may differ from the actual products.

Connectivity

The SPERO 24 features wireless Bluetooth connectivity. Physical audio and power connections can be made via ports located on the rear face of the base.



Firmware Upgrade



24VDC@4.16A

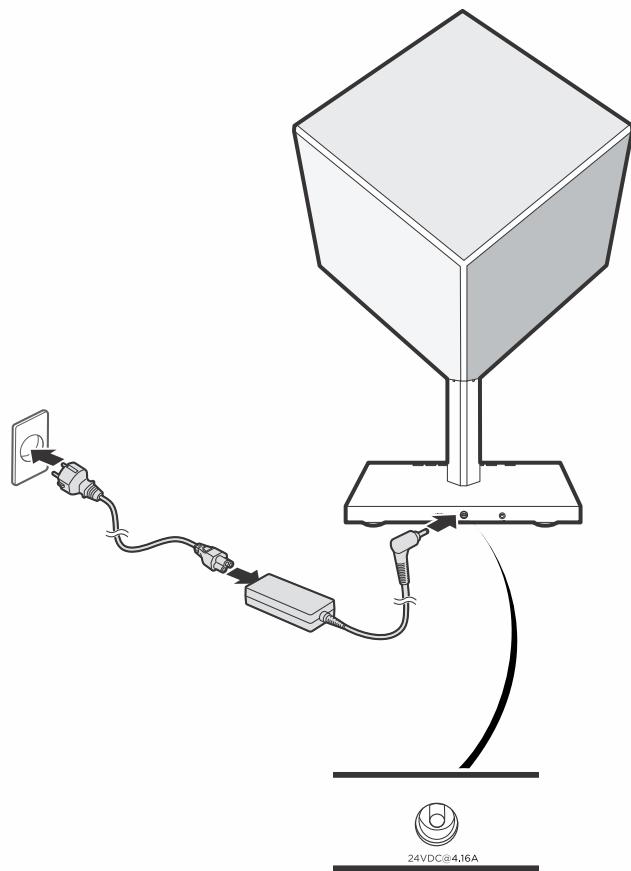


AUX-In

Getting Started

Connecting the Power

- (1) Connect the power adapter to the power cord
- (2) Connect the power plug to a mains socket outlet
- (3) Connect the power adapter to the SPERO angular soundlight



24VDC@4.16A



The SPERO 24 requires a 24V_{DC} @ 4.16A power adapter. Use only the approved power supply for this device:



Shenzhen Yinghui Yuan Electronics Co. Ltd,
Model YHY-24004160

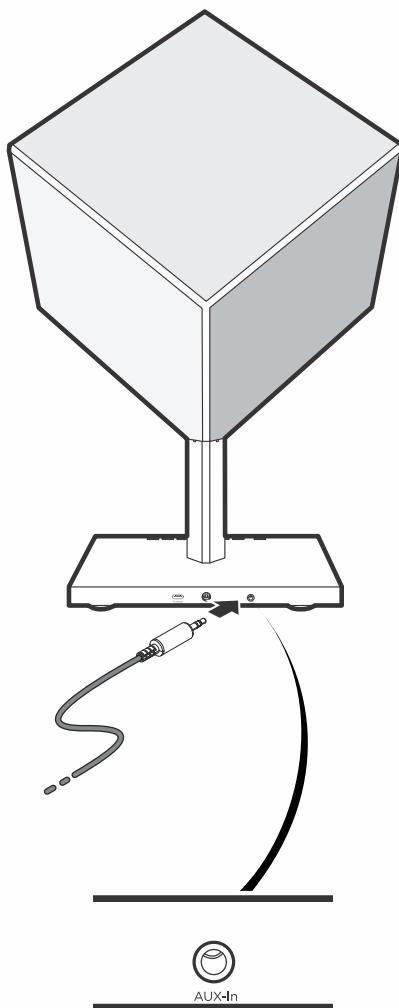
Power Control

Press and Hold the power button for 3 seconds to power ON/OFF the product



AUX Line-In Mode

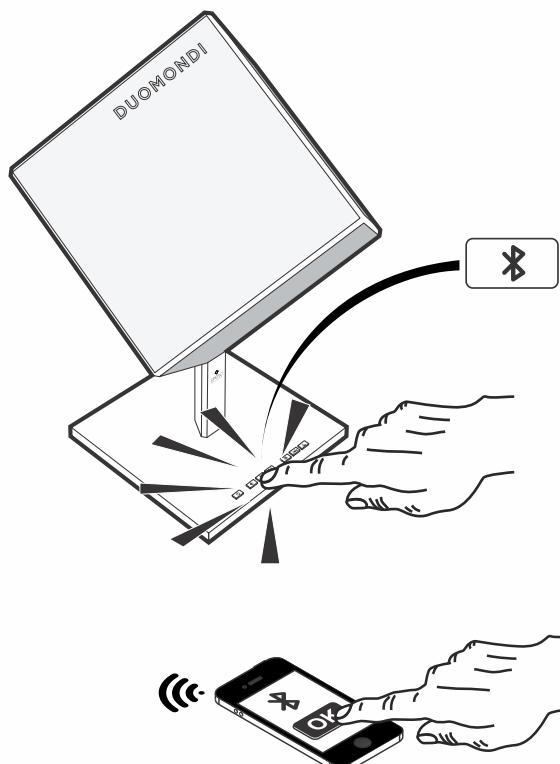
To use the SPERO 24 as an active loudspeaker, simply connect the 3.5mm audio cable from your music source to the Aux input connection and start playing music



Bluetooth Mode for Music Streaming

To use the Bluetooth speaker, please follow these simple steps:

1. Make sure the speaker and your Bluetooth-enabled device such as a smartphone or tablet are no more than 1 meter (3ft) away
2. To initiate the pairing process:
 - press the Bluetooth button on the SPERO 24 base
 - Enable your mobile device's Bluetooth function and set the device to search for nearby Bluetooth devices
 - After the search is completed, select the SPERO 24 from the Bluetooth device list

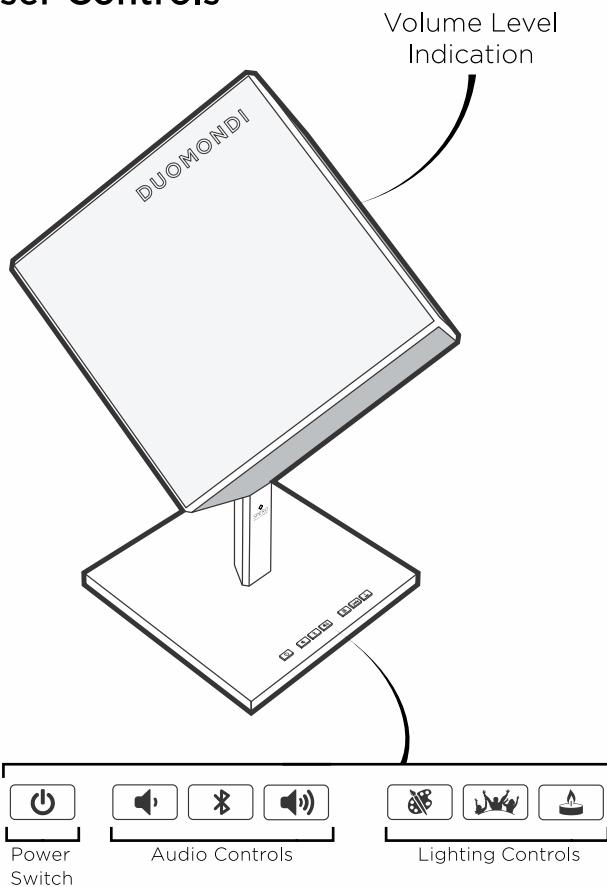


3. Once paired, ensure the SPERO 24 and your Bluetooth-enabled device are always within a 10-meter (30ft) distance to ensure stable connectivity (obstacles could shorten the wireless range)

Overview

The SPERO 24 delivers pristine sound and exciting visual lighting effects. Both sound and lighting controls are accessible on the base of the product and via iOS and Android APP's.

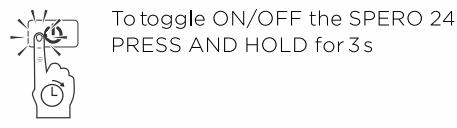
User Controls



Power Switch



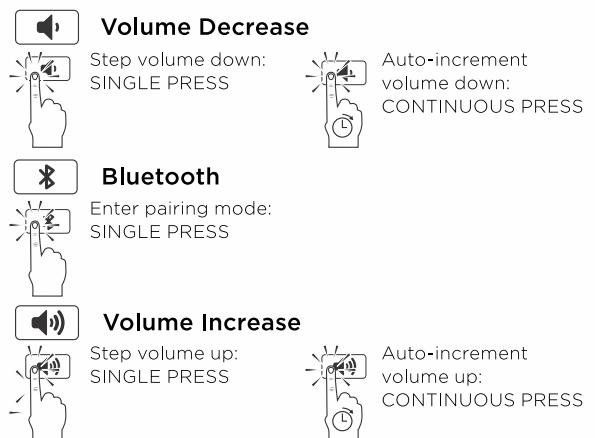
Power Switch



When the SPERO 24 power is turned on, it will announce "Power On"

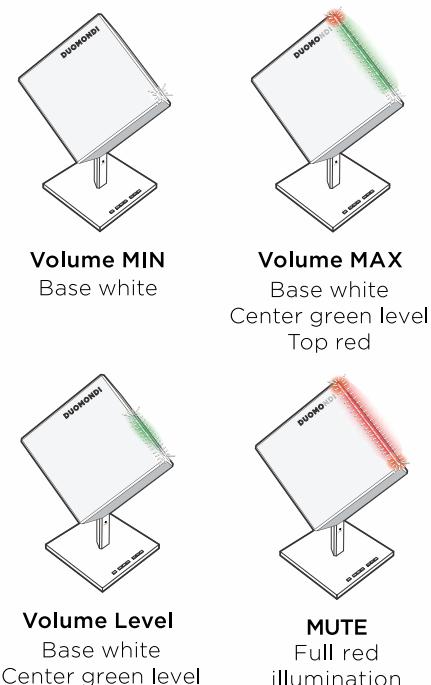
When the SPERO 24 power is turned off, it will announce "Power Off"

Audio Controls

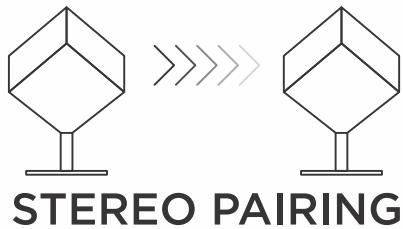


Audio Level Display

The volume level can only be adjusted while the Bluetooth audio is streaming or while an external 3.5mm audio cable is inserted. The volume level is visually displayed as an illuminated volume level indicator on the front-center edge when the volume level had been modified.



True Wireless Stereo Pairing Mode



The True Wireless Stereo (TWS) technology uses Bluetooth signals to enable two individual speakers to operate as a single wireless Stereo Pair.

Stereo Pairing should be initiated after first pairing one of the SPERO 24 speakers with your preferred music device.

During the Stereo Pairing process, the speakers will “beep” every 5 seconds until they connect to one another. The SPERO 24 will continue to attempt the stereo pairing process for 60 seconds.

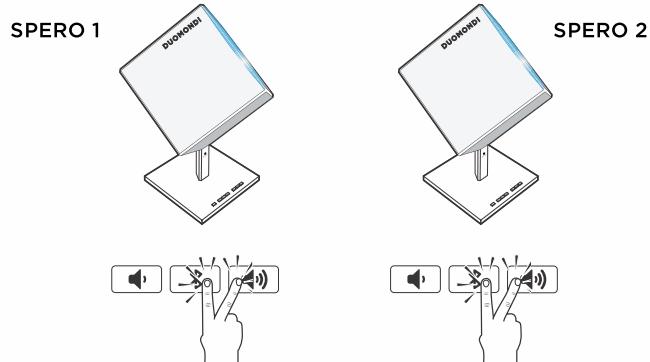
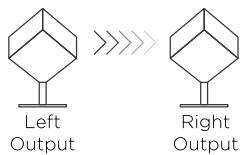
When the two SPERO 24’s successfully pair with each other, they will announce “TWS Connected”

If the SPERO 24’s are unable to connect with the companion speaker, it will exit the Stereo Pairing automatically and announce “Pairing Failed”

Enter Stereo Pairing Mode

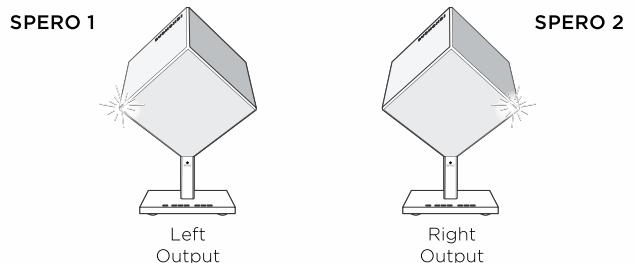
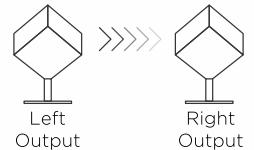
Simultaneously Press and Hold the Bluetooth and Volume Increase buttons together for 3 seconds until a Blue-Wave pattern is illuminated on the SPERO 24

Do this process on both speakers



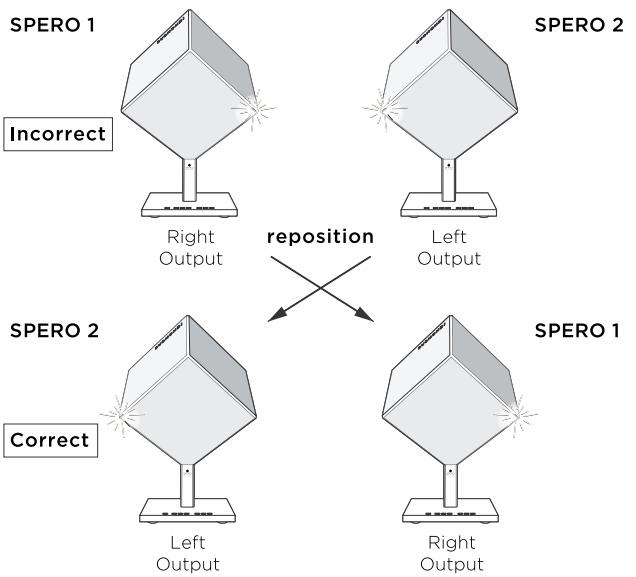
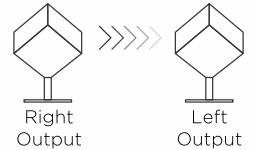
Successful Stereo Pairing

Once each of the SPERO 24’s have successfully connected to one another, they will indicate their connection status of either a left or right audio signal by illuminating the appropriate corner White color



If Wrong Indication

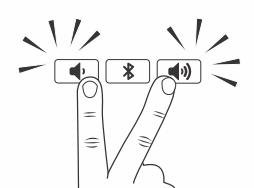
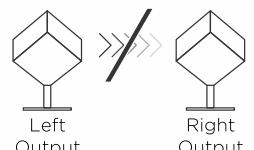
If after successful pairing you notice the SPERO 24’s have the wrong lighting indication, this means you need to physically swap their position



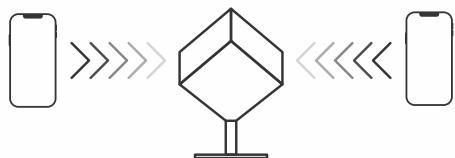
Stereo Pairing Removal

If you would like the Stereo Paired SPERO 24’s to become independent again, you can perform the disconnection process by simultaneously pressing the Volume Increase and Volume Decrease buttons together at the same time.

The speakers are successfully disconnected from one another when you hear the announcement “TWS Disconnected”



Bluetooth Dual Pairing



DUAL PAIRING

The SPERO 24 supports Bluetooth multipoint technology allowing to pair up to two different Bluetooth sources to the SPERO 24 at the same time. This allows the user to switch between two connected music sources easily.

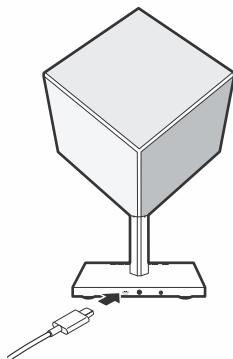
Connect the two Bluetooth sources to the SPERO 24 one at a time.

Then to switch between sources, simply pause the audio stream on one source and start playing on the other. Only one source can stream music at a time.

USB Audio Device

The SPERO 24 supports USB audio streaming through the USB-C port when connected to a Personal Computer.

Connect a USB-C data cable to the USB-C port on the rear face of the base.



Choose the SPERO 24 as the computers audio output source / playback device in the Control Panel to enjoy 48kbps Music Streaming.



Lighting Controls

The SPERO 24 has several entertainment lighting modes with a variety of built-in lighting presets within each mode to suit the users mood.

Lighting presets are categorized into three entertainment modes: Paint Mode, Party Mode and Relax Mode. Within each of these entertainment modes the user can change the desired lighting effect as well as the color pallet for that effect.

Each lighting mode has up to ten predefined presets that can be cycled through by pressing the respective mode buttons.

The last preset of each mode will disable the lighting effects. This is the "lighting off" mode.

For an ultimate lighting control experience download the companion APP for iOS or Android to have complete flexibility and customization of the lighting effects such as; brightness control, custom user defined colors and more!



Paint Mode

Static color palettes (no lighting motion)
Press once to activate the paint mode



Select next color
paint effect:
SINGLE PRESS



Change color of
selected effect:
PRESS AND HOLD
for 3s



Party Mode

Exciting audio synchronized lighting effects
Press once to activate the party mode



Next party effect:
SINGLE PRESS



Change color of
selected effect:
PRESS AND HOLD
for 3s



Relax Mode

Smooth lighting effects (motion lighting)
Press once to activate the relax mode



Next relax effect:
SHORT PRESS



Change color of
selected effect:
PRESS AND HOLD
for 3s

Firmware Update

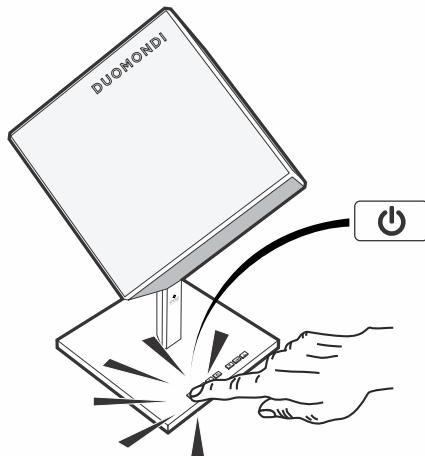
The SPERO 24's User Experience may be updated via software updates from DUOMONDI.

In order to update your SPERO 24 you will need a USB-C data cable to be connected to a personal computer running Windows 10 (or higher version) and the USB Updater Program which can be downloaded from the product support page.

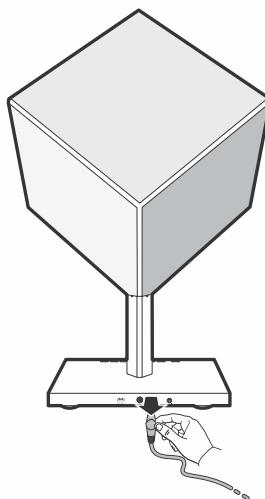
<https://www.duomondi.com/support>

1

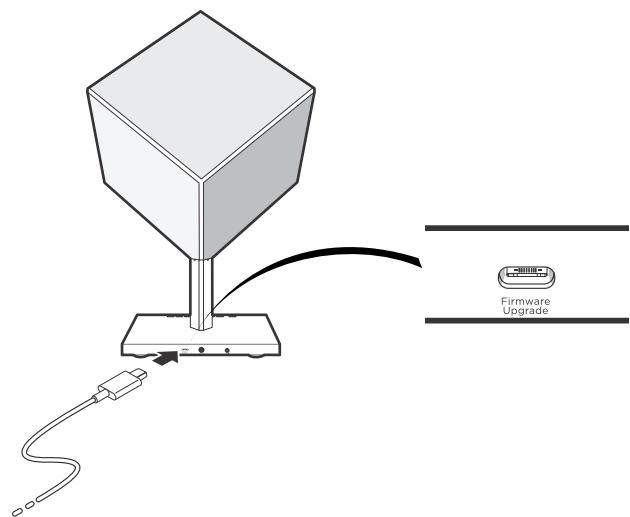
Switch off the SPERO 24 by pressing and holding the Power button for 3 seconds

**2**

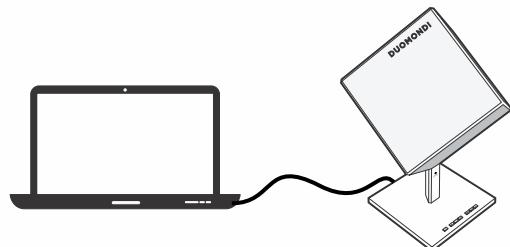
Remove the input power by disconnecting the power supply plug from the rear of the SPERO 24 base

**3**

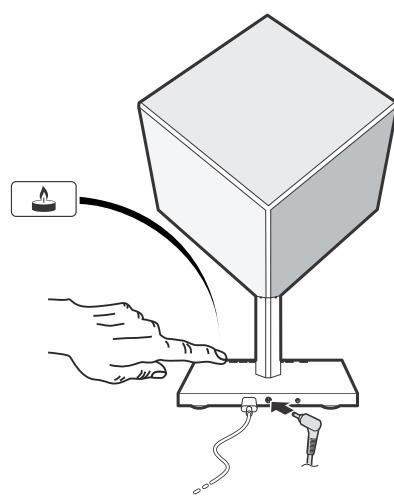
Connect the USB-C cable to the Firmware Update port on the rear face of the SPERO 24 base

**4**

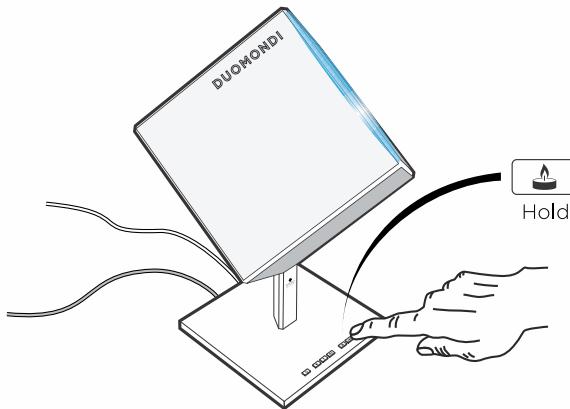
Connect the USB cable to your Windows 10 or higher personal computer

**5**

Press and continue to hold the Relax button on the SPERO 24 base while at the same time reconnecting the DC power cable. DO NOT release the relax button



6 Continue pressing the relax button until the front center edge of the SPERO 24 displays a Blue Wave lighting effect. It is then okay to release the Relax button



7 Now you can run the User Experience Windows Updater Application. During the update process the front edge LED light shows different lighting effects according to the updating progress:



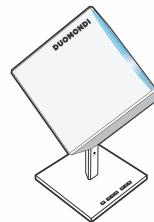
- A. Exit Application Button
- B. Updater Version
- C. Connected Product Information
- D. Registered Serial Number
- E. USB Connection Status
- F. Updating Preferences
- G. Update Status Bars
- H. Execute Update Button

8 Using the User Experience Windows Updater Application, select the specific features you wish to update then press the UPDATE Button. The Updating Process takes approximately;

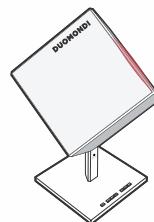
- MCU Program Update ~10 Seconds
- FLASH Lighting Effects Update ~90 Seconds
- Bluetooth Update ~90 Seconds

Total Time ~4.5 to 5 Minutes

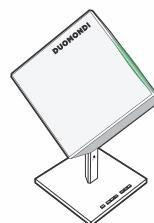
9 Watch the Updating Progress on the SPERO 24. The color and pattern indicates the progress of each step



Blue Waving Pattern
Firmware Update Mode Ready



Red Progress Bar
MCU Program Updating Progress



Green Progress Bar
Flash Memory Updating Progress



Blue Progress Bar
Bluetooth Updating Progress

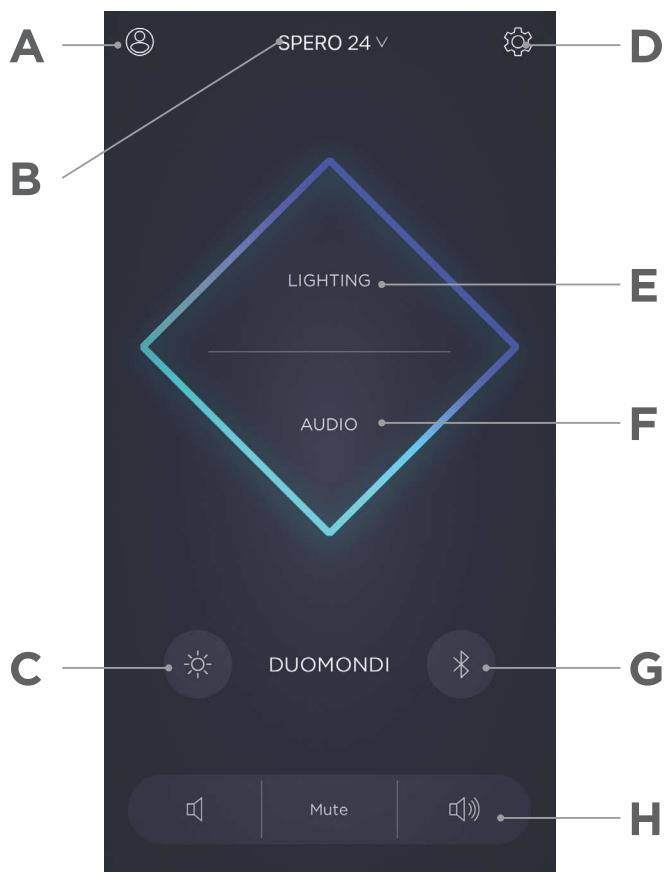
10 Once the Updating has completed the Application will indicate the successful upgrade and the SPERO 24 will automatically power off

Spero Mobile Phone App

The SPERO Mobile Phone APP gives you ultimate control and flexibility of the SPERO angular sound light system. The App Consists of convenient lighting controls, audio tonality adjustment and user customization of all entertainment features.

Main Menu

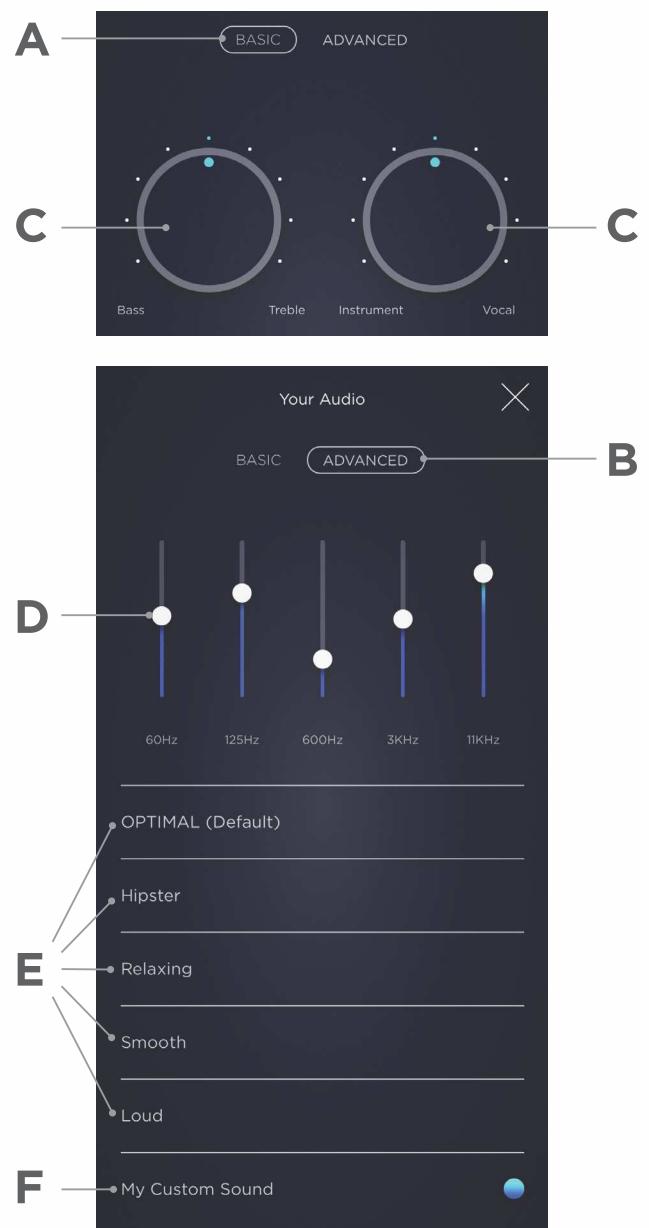
The Main Menu gives you quick access to switch between different products, see device information and have access to basic controls on the SPERO entertainment system



- A. User Profile & App Preferences
- B. Independent Speaker Selector
- C. Brightness Control
- D. Device Information
- E. Lighting Effects Control Menu
- F. Audio Effects Control Menu
- G. Source Selection Control
- H. Volume Controls

Audio Effects Adjustment Menu

The Audio Effects Menu offers basic tonality selectors for simple audio effects adjustment and precise adjustments for those advanced audio users



- A. Basic Audio Mode
- B. Advanced Audio Mode
- C. Simple Tonality Control
- D. Advanced EQ Control
- E. Audio Presets
- F. User Defined Preset

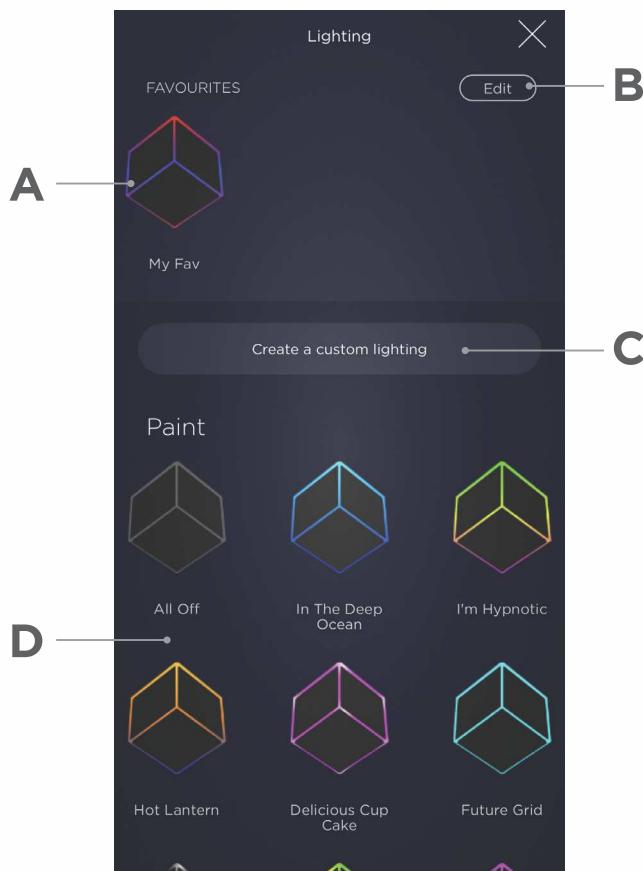
Lighting Effect Preset Menu

The Lighting Effect Preset Menu allows users to preview the buffet of the SPERO 24's built-in visual lighting effects and quickly select their favorite entertainment mode.

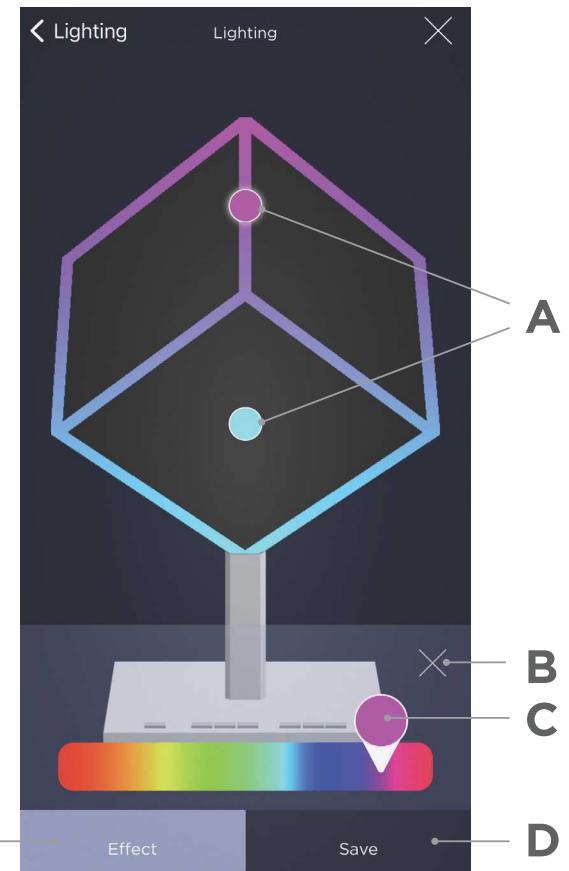
The menu also provides quick access to their own custom lighting presets and save them as favorites at the top of the preset menu

Customizable Lighting Effects Menu

The Customizable Lighting Effects Menu offers users the ability to completely customize the SPERO 24's visual lighting effects, choose their favorite colors, create lighting combinations and save them as quick access presets with a custom nametag



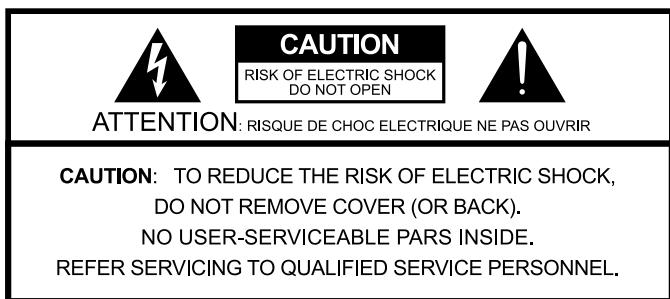
- A. User Created Lighting Presets
- B. Remove / Modify Preset
- C. Customization Menu
- D. Lighting Presets (Scrollable)



- A. Color Effect Location Selector
- B. Exit Color Pallet Picker
- C. Color Pallet Picker
- D. Save User Defined Preset
- E. Lighting Effects Menu

IMPORTANT SAFETY INSTRUCTIONS

General heed and warnings



This symbol alerts the user to the presence of recommendations about the product's use and maintenance.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated, dangerous voltage within the product enclosure that may be of magnitude to constitute a risk of electrical shock.



WARNING! This product contains magnetic material. Contact your physician if you have questions on whether this might affect the operation of your implantable medical device



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this guide.



For indoor use only
This electrical equipment is designed primarily for indoor use.



Operator's manual; operating instructions
This symbol identifies the operator's manual that relates to the operating instructions and indicates that the operating instructions should be considered when operating the device or control close to where the symbol is placed.



WEEE
Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling center for such equipment.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- Clean the product only with a soft and dry fabric. Never use liquid cleaning products, as this may damage the products cosmetic surfaces.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug the apparatus during lightning storms or when unused for long periods of time.

- Avoid placing the product in a location under direct sunlight or near any appliance that generates UV (Ultra Violet) light, as this may change the product surface finishing and cause a change in color.
- Audio vibrations created by the product may cause other objects to move, ensure that loose objects are not at risk of falling onto the product or persons and cause personal or object damage.
- To prevent possible hearing damage, do not listen at high volume levels for long periods.
- Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- For PLUGGABLE EQUIPMENT, the Mains power outlet shall be installed near the equipment and shall be easily accessible.
- Please see the bottom of the product for nameplate, electrical rating & safety instructions.
- **CAUTION:** These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- **WARNING:** Only use attachments/ accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery, etc.)

FCC Statement

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 is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

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 operation.

CAUTION! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canadian Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

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

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

CE Statement

Hereby, Manufacturer (Duomondi International Development Co. Ltd), declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Technical Specifications

DUOMONDI SPERO 24	
System	
Model Number	DS24
Amplifier Rated Power	25 W Left/Right channels 50 W Sub
Frequency Response	45 - 19,000 Hz
Max SPL	106 dB ¹
Drivers	2x 4" transducers 6.5" subwoofer 6.5" passive radiator
Analog input	3.5mm stereo connector
DSP	Kalimba® DSP 24-Bit Audio Processor User Configurable 5-Band Graphic Equalizer Via Mobile Phone App
General	
Bluetooth Version	V5.0 True Wireless for Stereo Wireless Mode & Dual Phone Pairing
Bluetooth Profile	A2DP, AVRCP, SBC, AAC, BLE
Frequency band	2.400GHz - 2.483GHz ISM Band / ≤ 4dBm (Class 2)
Bluetooth Range	10 m / 30 ft (free space)
Power supply	24 V _{DC} @ 4.16 A
Dimensions (WxHxD)	386x513x334 mm
Weight	6.8 kg

¹ Maximum SPL at 1 m calculated using crest factor 4 (12dB).

Service

To obtain service:

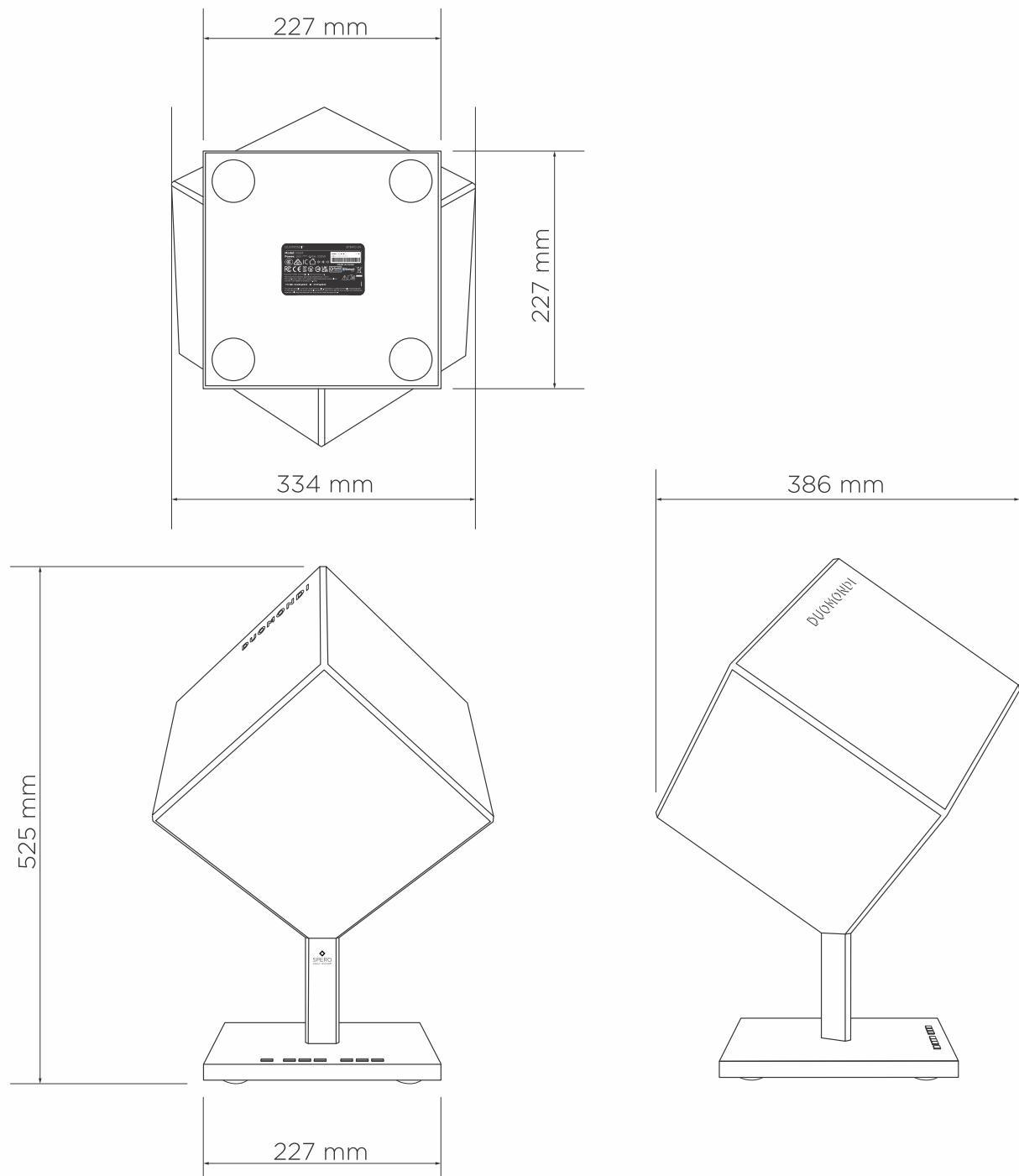
1. Please have the serial number of the unit available for reference.
2. Contact <https://www.duomondi.com/support>
Please describe the problem clearly and completely to the Customer Service.
3. You will be contacted back for online servicing.
4. If the problem cannot be resolved over the phone, you may be required to send the unit in for service. In this instance, you will be provided with an RA (Return Authorization) number which should be included on all shipping documents and correspondence regarding the repair. Shipping charges are the responsibility of the purchaser.

Any attempt to modify or replace components of the device will void your warranty. Service must be performed by an authorized DUOMONDI service center.

Cleaning

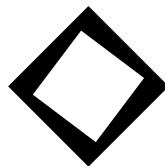
Use only a soft, dry cloth to clean the housing. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

Size & Dimensions



Available Colour Options





SPERO 24

angular soundlight

DUOMONDI INTERNATIONAL
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