

# Métronome Technical Review

Product Training for Métronome Partners

## c|AQWO 2

*HYBRID D/A CONVERTER & STREAMER*

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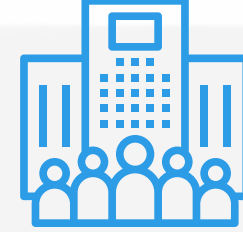




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Technical Specification

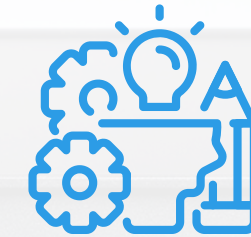
## ***Part 7 :***

Some possible failures

## About Métronome Technologie

- The brand Métronome™ is the property of Métronome Technologie, a French company established in 1987 in South West of France with the aim of manufacturing the best digital sources for a high-end audiophile market. 
- All products are fully designed in-house office, under the responsibility of Jean Marie Clauzel, Owner and Chief Designer. 
- Our objective is to make digital sources which sound as much analogic as possible, using the appropriate technologies and overall using well-trained ears of our experts for listening. 
- 100 % of the components are made in France, including the housings, and all the electronics are hand-made in our workshop. 
- Our greatest satisfaction is to comply with the requirements of the most discerning music lovers and to get approval from international reviewers. 

## Design Specificities

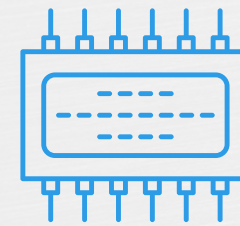
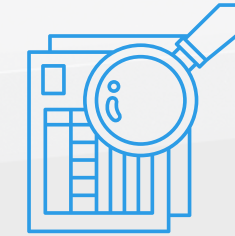


- The c|AQWO 2 perpetuates the classic design of legendary Metronome devices being produced in our workshop since more than 30 years.
- The c|AQWO 2 is made exclusively from high quality materials.
  - The front is made of aluminium.
  - The chassis and the cover are made of steel.
- Available in black and silver finishes.



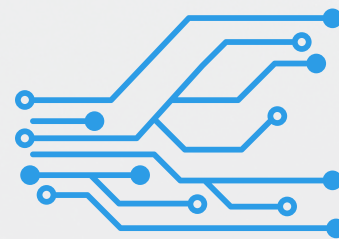
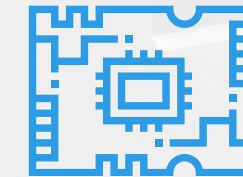
## Métronome Sound Profile

- 30 years experience in designing exceptional circuits providing the best digital reproduction resulting in high-end audio performance.

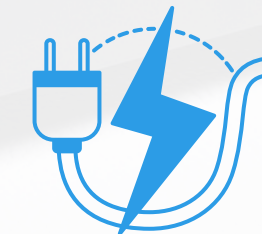


- Selection of premium quality electronic components.

- Manually soldered PCBs in our atelier by Métronome technicians.



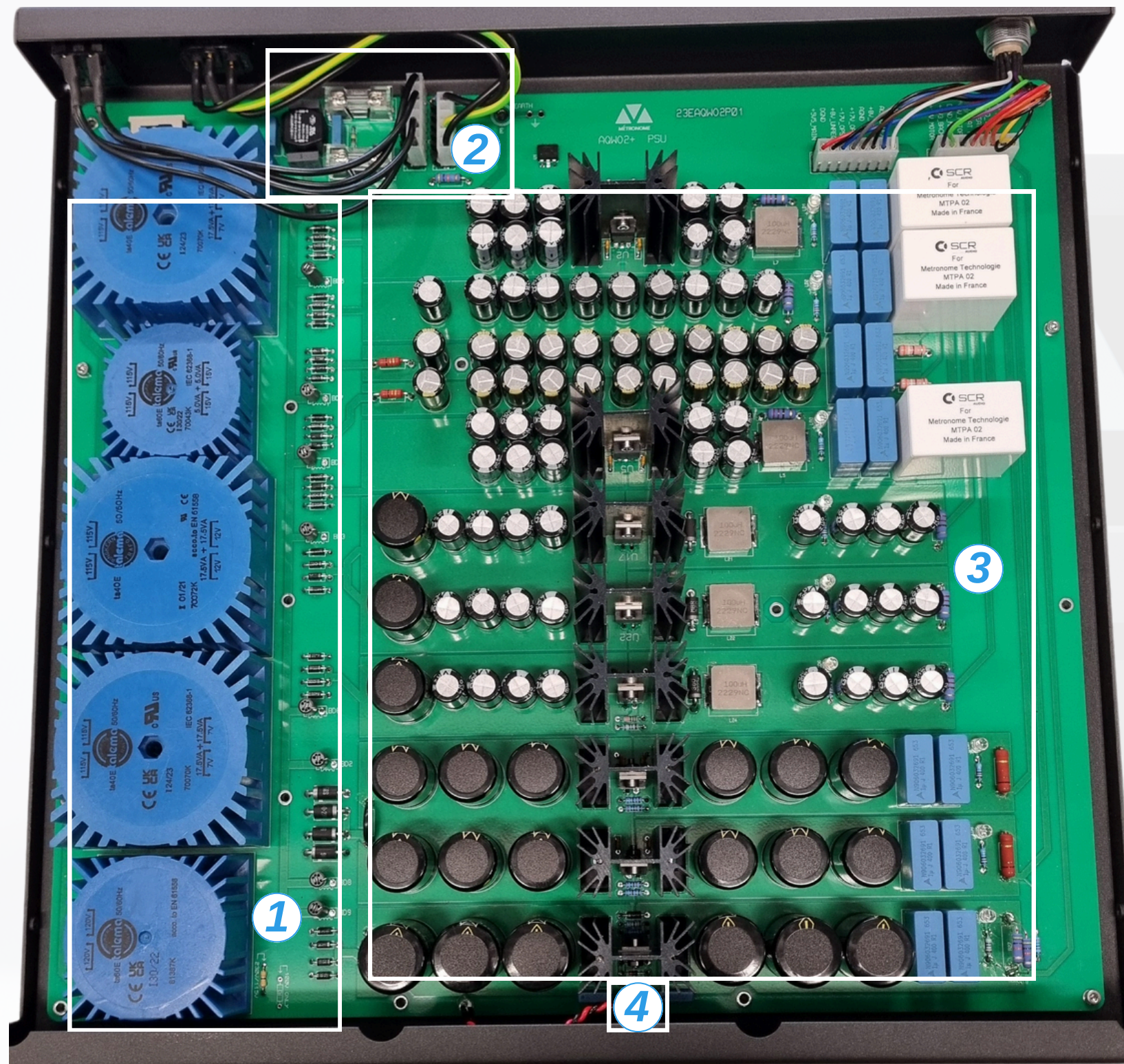
- Cleverly designed ground planes, strict discipline in routing and component placement.



- Power supply section separation providing an inter-stage EMI/RFI protection.

# Métronome Sound Profile

## PCB of c|AQWO 2



(1). Power supply

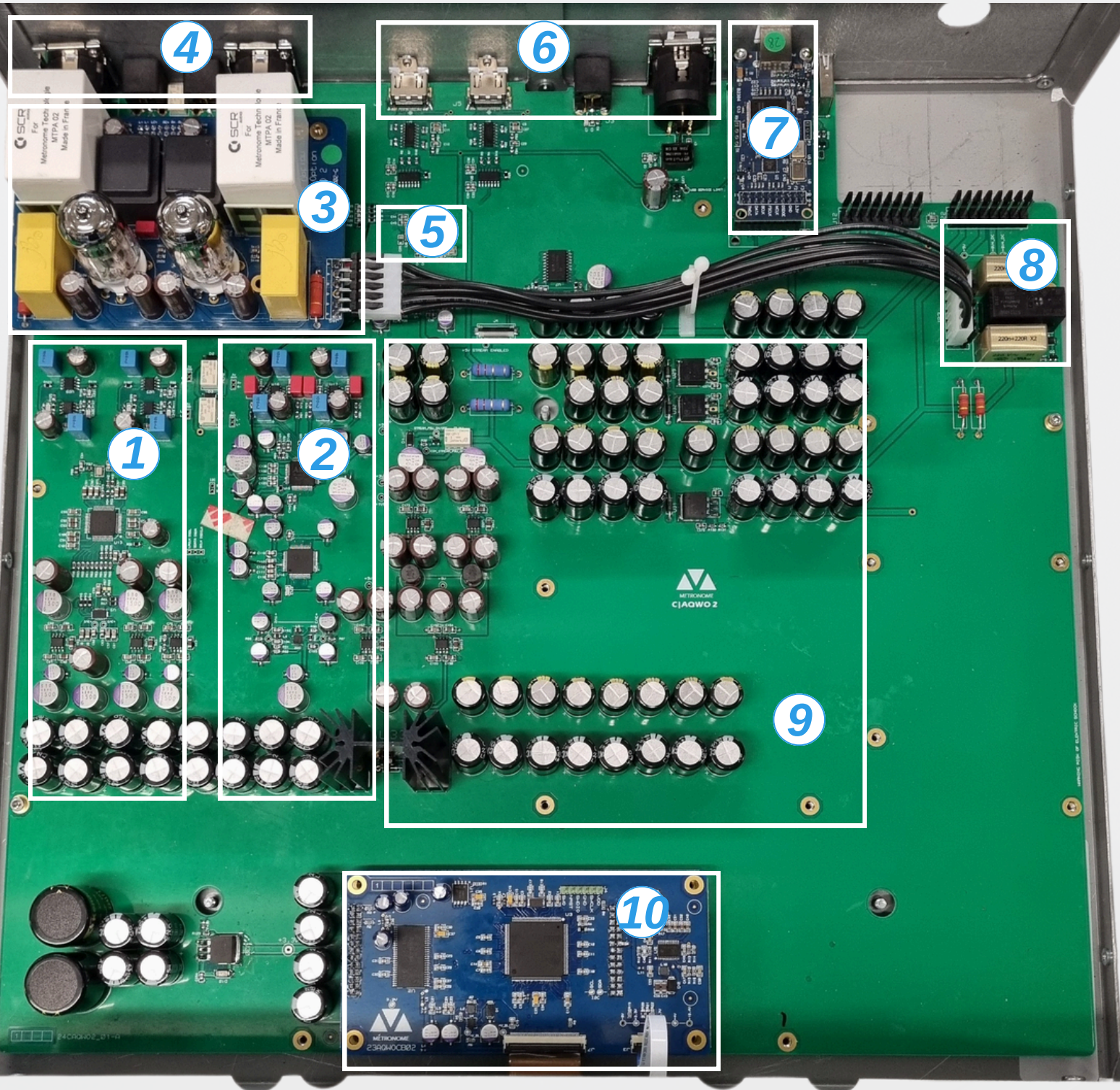
(2). Mains filter

(3). Regulation stage

(4). Power LED

# Métronome Sound Profile

## PCB (2) of c|AQWO 2



(1) DAC ESS + Power stage

(2) DAC AKM + Power stage

(3) Option Tubes

(4) Analog outputs

(5) Digital output management

- Generates digital output

(6) Digital inputs

(7) USB Amanero

- USB audio inputs module

(8) Standby for tubes

(9) Regulation stage

(10) Screen and device management

## Using and Connecting

### Information on the front panel

#### Step 1

Place the c|AQWO 2 on a hard, flat surface

#### Step 2

Plug your device

#### Step 3

Switch on the unit by pushing the main power switch on the back on upper position

#### ① Display

7 inch touch screen to control the device

#### ② Infrared sensor

Establish a connection with the remote control

#### ③ Power LED

Indicates that the device is switched on



# Using and Connecting

## Information on the screen interface



DAC Menu

### 1 Input logo

- Info : Selected input

### 2 DAC Stage

- Touch : Change DAC mode
- Info : ESS = Use the ESS DAC, AKM = Use the AKM DAC

### 3 Tube Output (Tube option only)

- Touch : ON / OFF
- Info : White = ON, Grey = OFF

### 4 Settings button

- Touch : Go to menu settings

### 5 Sample Rate

- Info : Actual playback sample rate

# Using and Connecting

## Information on the screen interface



### Network Menu\*

#### 1 Input logo

- Info : Filled White = Network connected  
Animated logo = Connecting to network

#### 2 Metadata Information

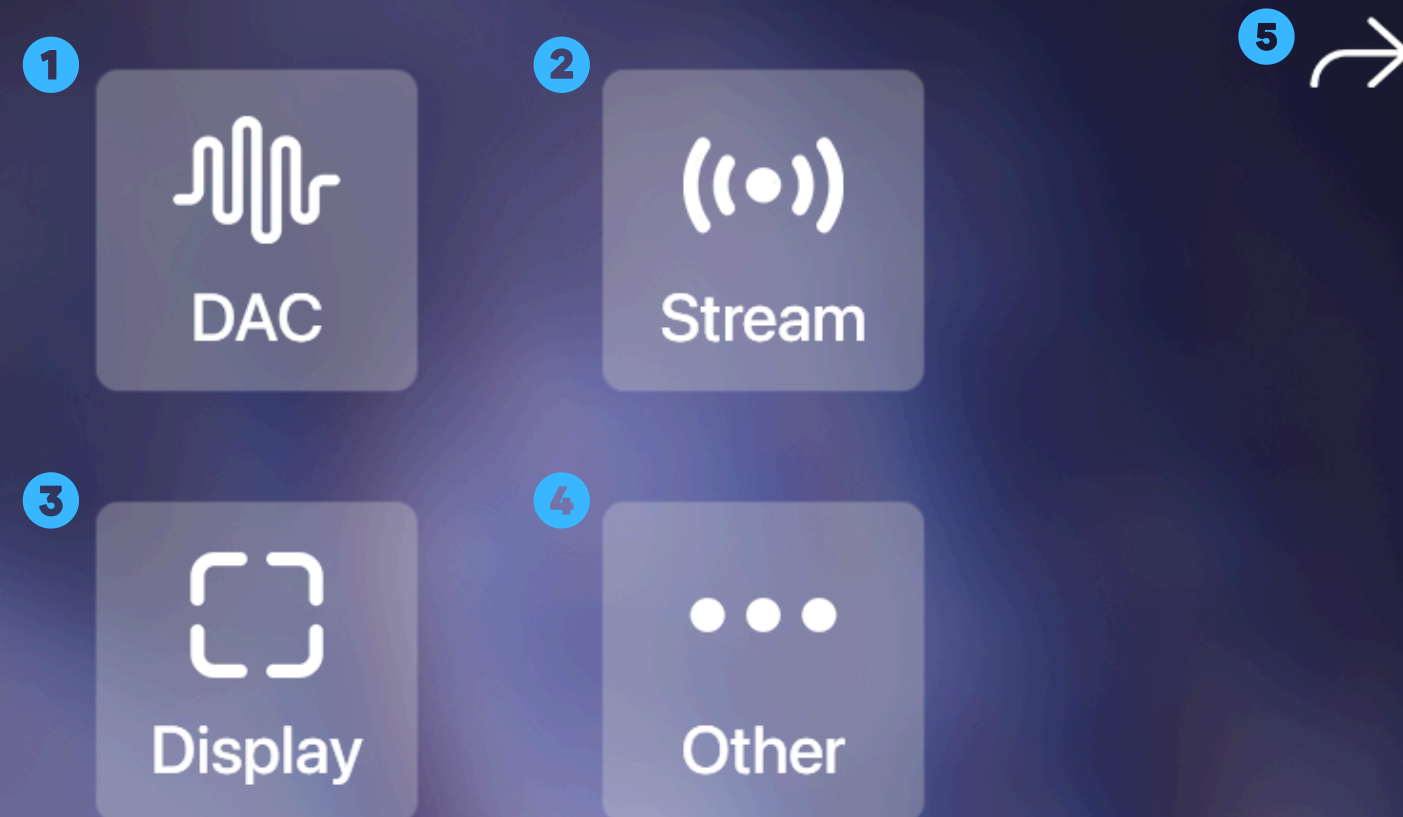
- Info : Title, Track, Album, Cover Art, Format & Source

#### 3 Time Information

- Info : Current track time info

# Using and Connecting

## Information on the screen interface



Settings - Main Menu

### 1 DAC Menu

- Info : Internal digital filter, Analog output level, DAC stage & Tube output

### 2 Stream Menu\*

- Info : Display metadata, Wifi enable, Gapless mode & Streaming option

### 3 Display Menu

- Info : Screen brightness cursor & Background

### 4 Other Menu

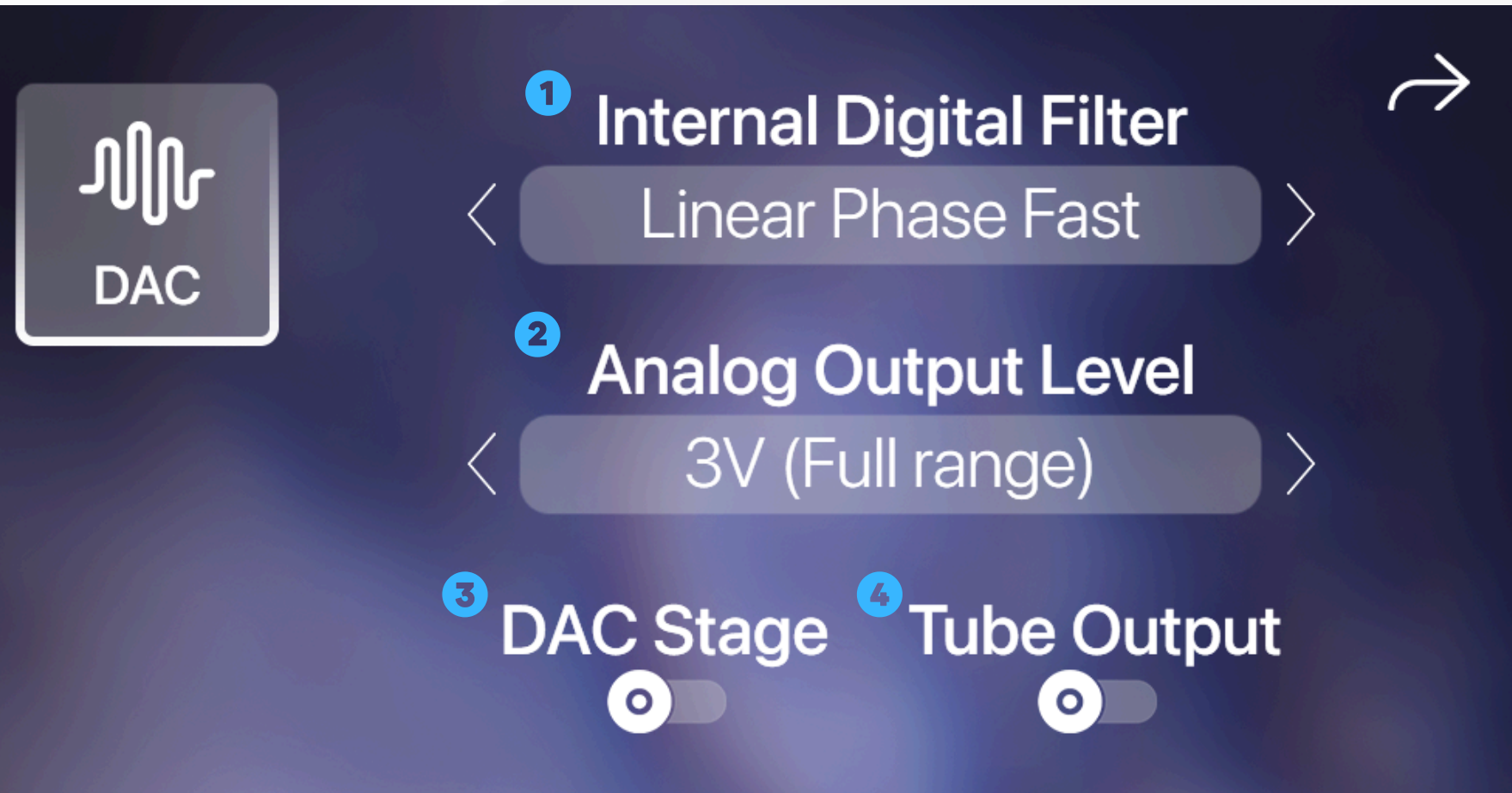
- Info : Device information & Restore default settings

### 5 Return

- Touch : Exit the settings menu.

# Using and Connecting

## Information on the screen interface



Settings - DAC Menu

### 1 Internal Digital Filter

- Touch : Arrows = UP / DOWN
- Info : 
 

	Linear Phase Fast		Linear Phase Slow		Minimum Phase Fast
	Minimum Phase Slow		Apodizing Fast		Minimum Phase
	Brick Wall		Corr. Min Phase Fast		

### 2 Analog Output Level

- Touch : Arrows = UP / DOWN
- Info : 1V4, 2V2 & 3V  
Output level 1V4 and 2V2 are fixed by the DAC volume control  
3V = Full range = no volume control

### 3 DAC Stage

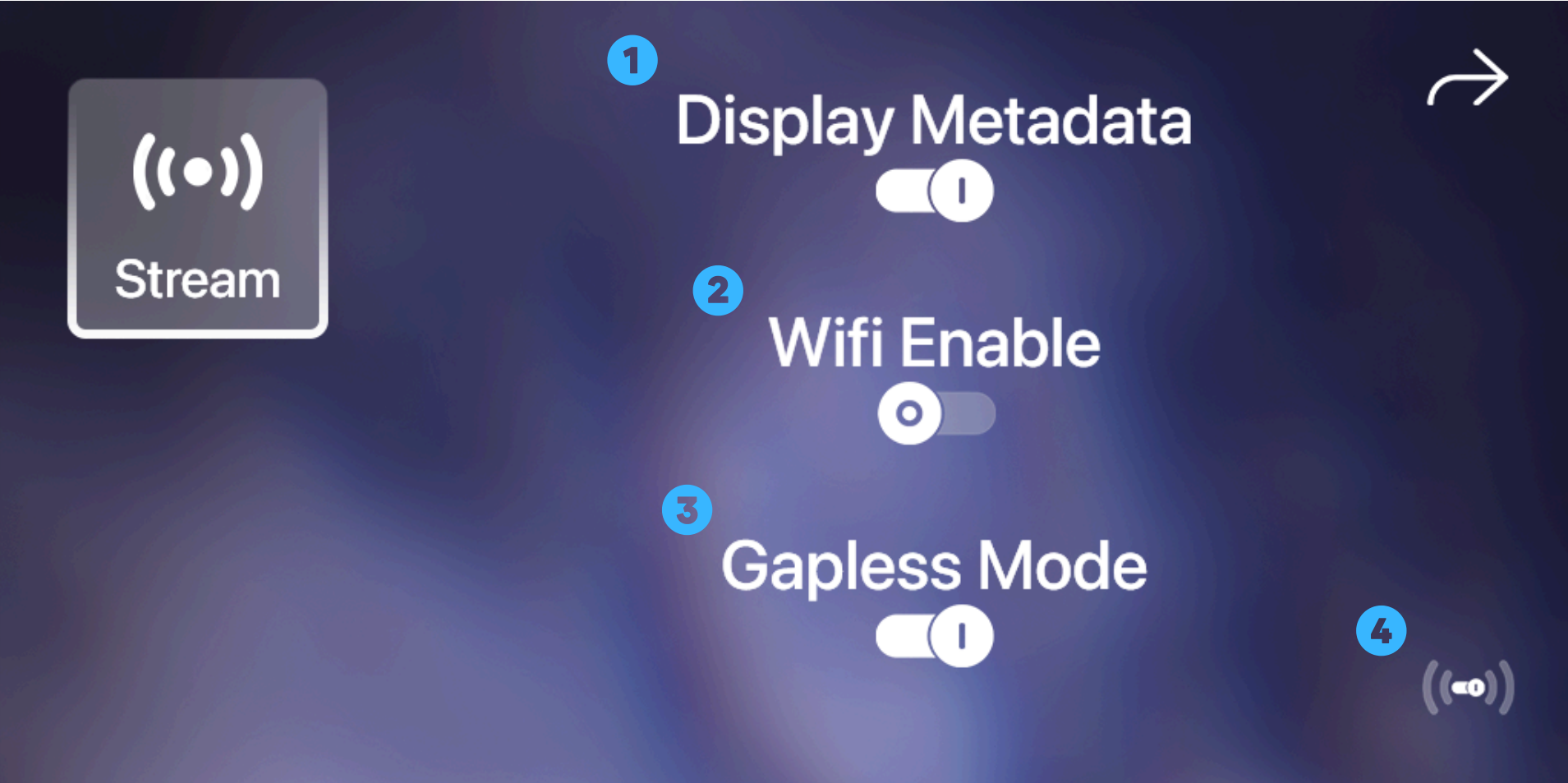
- Touch : ON / OFF
- Info : When ON, use the ESS DAC, When OFF, use the AKM DAC

### 4 Tube Output (Tube option only)

- Touch : ON / OFF
- Info : When ON, analog output stage is Tube. When OFF, analog output stage is AOP

# Using and Connecting

## Information on the screen interface



The screenshot shows the 'Stream' menu interface. On the left is a 'Stream' button with a speaker icon. The main area contains four settings, each with a numbered callout (1-4) and a toggle switch:

- 1 Display Metadata**: A toggle switch currently in the 'ON' position.
- 2 Wifi Enable**: A toggle switch currently in the 'OFF' position.
- 3 Gapless Mode**: A toggle switch currently in the 'ON' position.
- 4**: A speaker icon with a small '0' inside, located at the bottom right of the settings area.

Background text visible in the screenshot includes 'RONOME', 'MADE IN FRANCE', 'C', 'S/No:', 'RIGHT CHANNEL', 'ANALOG OUTPUTS', 'LEFT CHANNEL', 'BALANCED', 'UNBALANCED', and 'BPS'.

**1 Display Metada (Network menu)\***

- Touch : ON / OFF
- Info : When ON, display network metadata  
When OFF, display classic sample rate info

**2 Wifi Enable\***

- Touch : ON / OFF
- Info : Enable / disable internal wi-fi module

**3 Gapless Mode\***

- Touch : ON / OFF
- Info : Enable / disable gapless playback fonctionnality

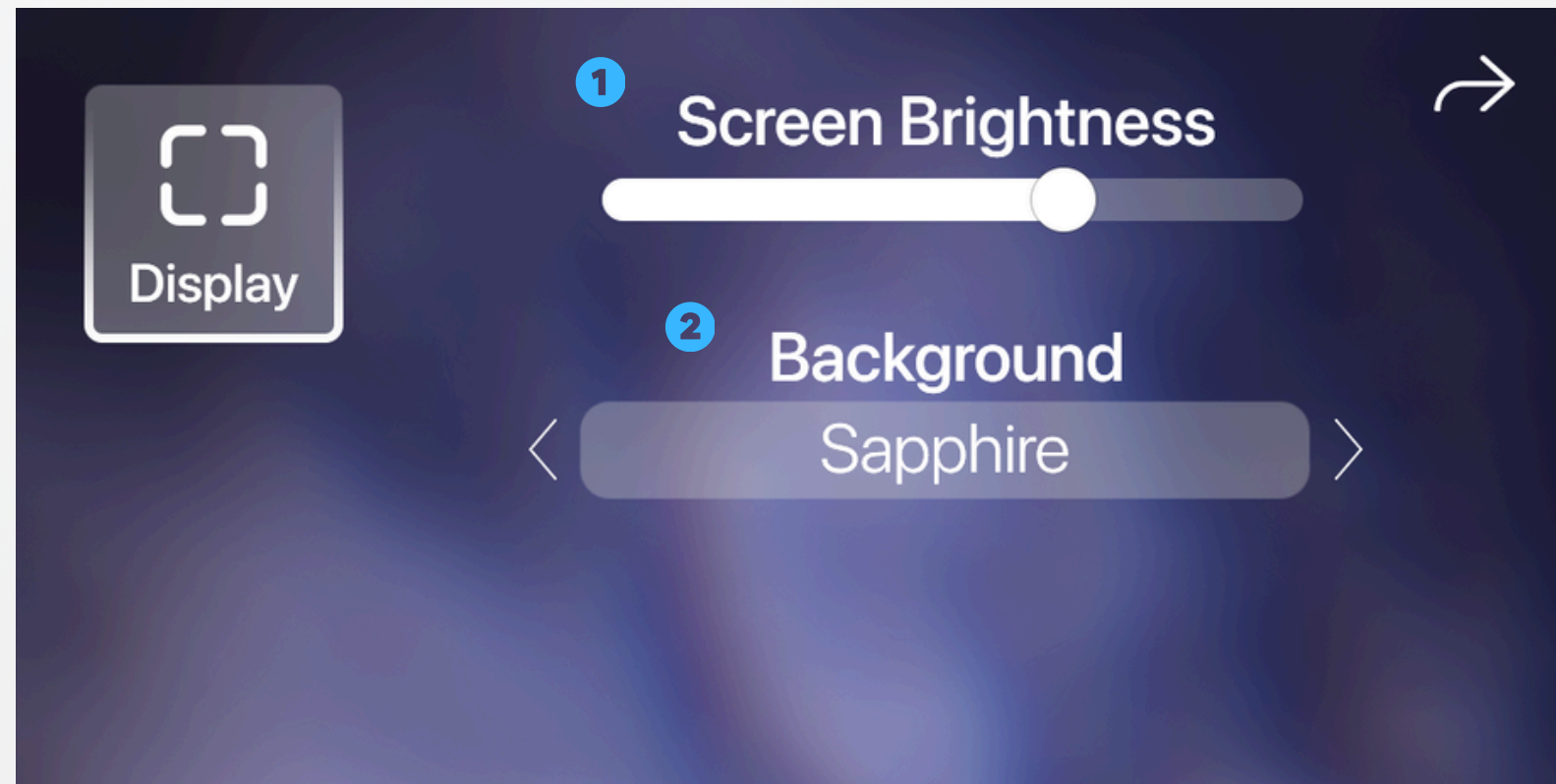
**4 Streaming option\***

- Touch : ON / OFF
- Info : Enable / disable streaming option

Settings - Stream Menu\*

# Using and Connecting

## Information on the screen interface



Settings - Display Menu

### 1 Screen Brightness Cursor

- Touch : Define brightness with cursor

### 2 Background

- Touch : Arrow = UP / DOWN
- Info : Change between 5 different backgrounds



Settings - Other Menu

### 1 Device information

- Info : Serial Number, firmware version and streaming board version.

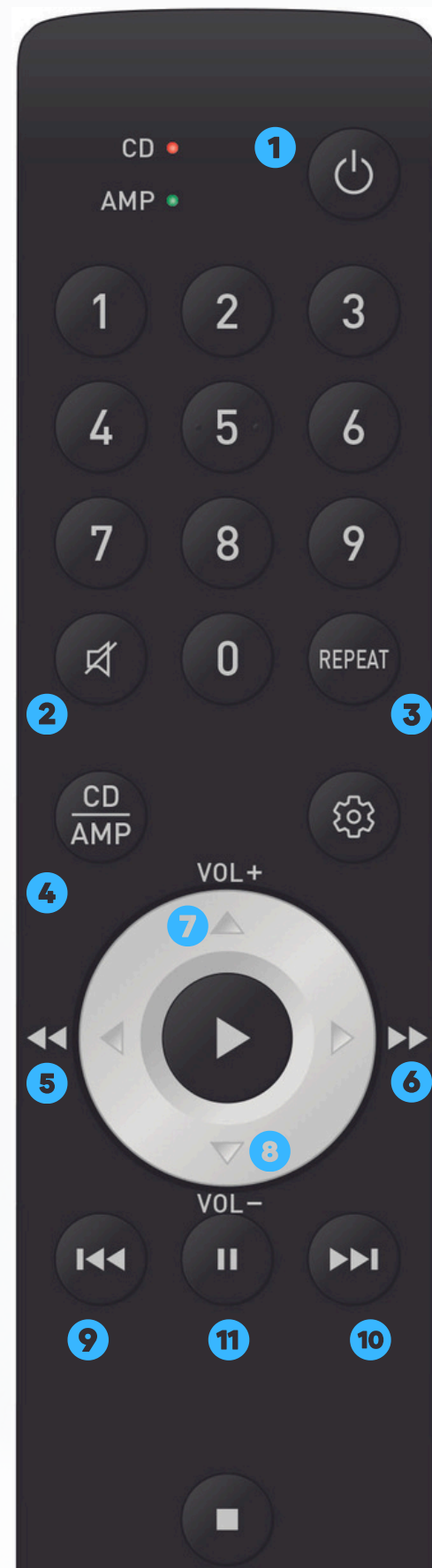
### 2 Restore Default Settings

- Touch : Will ask confirmation before restoring device settings to default.

# Using and Connecting

## Information on the remote control

### SETTINGS MODE



#### 1 Standby

- Switch to standby

#### 2 Number 7\*

- Acces / Exit Settings

#### 3 Number 0\*\*

- Tubes ON / OFF (Available only if device has Tubes option)

#### 4 CD / AMP mode

- Switching to CD and AMP mode

#### 5 Left / Rewind

- Input -

#### 6 Right / Forward

- Input +

#### 7 UP / VOL +

- Increase the brightness

#### 8 DOWN / VOL -

- Decrease the brightness

#### 9 Stop

- DAC ESS / AKM

*\*Settings menu IR control (in SETTINGS mode)  
IR control commands will be different if you are in the settings menu*

- 2, 4, 6, 8 : navigation in the settings menu
- 5 : toggle selected parameter (if possible)
- 7 : return to previous menu (or enter settings menu if used in main menu)

*\*\*Available only if device has Tube Option*

## Using and Connecting Information on the rear panel

### ① Switch

Switches the device ON and OFF

### ② Mains socket

Device power supply

### ③ ODU socket

Connexion to power supply

### ④ USB service

For device update

### ⑤ Digital inputs

Toslink, AES/EBU, USB, S/PDIF

### ⑥ RJ45 socket\*

Connexion for LAN Network

### ⑦ USB device\*

For an external USB storage

### ⑧ Antenna\*

Connexion for a Wi-Fi antenna

### ⑨ Analog outputs

RCA / XLR



\*Streaming option only

# mConnect\*

## Download mConnect

- We recommend you use the mConnect Control application to enjoy your c|AQWO 2.

- There are several versions of the application (paid and free), which can be found on the download platforms, Play Store and Apple Store.

Here is the official logo of the application :

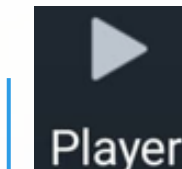
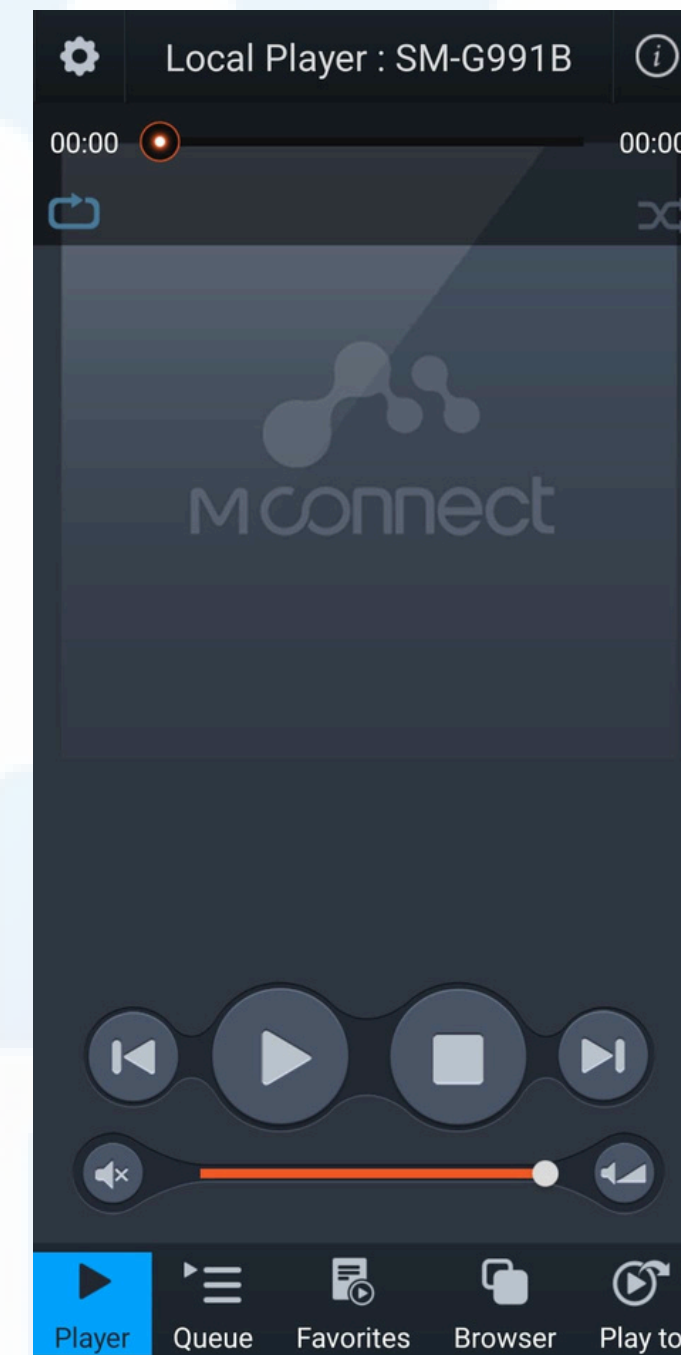


For IPAD

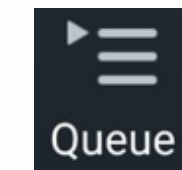


For smartphone

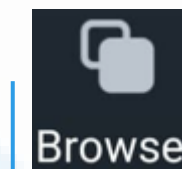
## First use



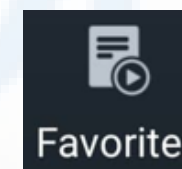
"Player " menu : manage your music (play, pause, rewind, change the volume...).



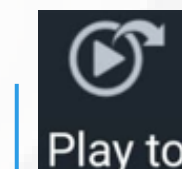
"Queue" menu : see the list of tracks music.



"Browser" menu : launch music via external platforms (Spotify, Deezer, Qobuz...).



"Favorites" menu : find your favorites musics.



"Play to" menu : connect your smartphone to your device.

# mConnect\*

## Connect to network

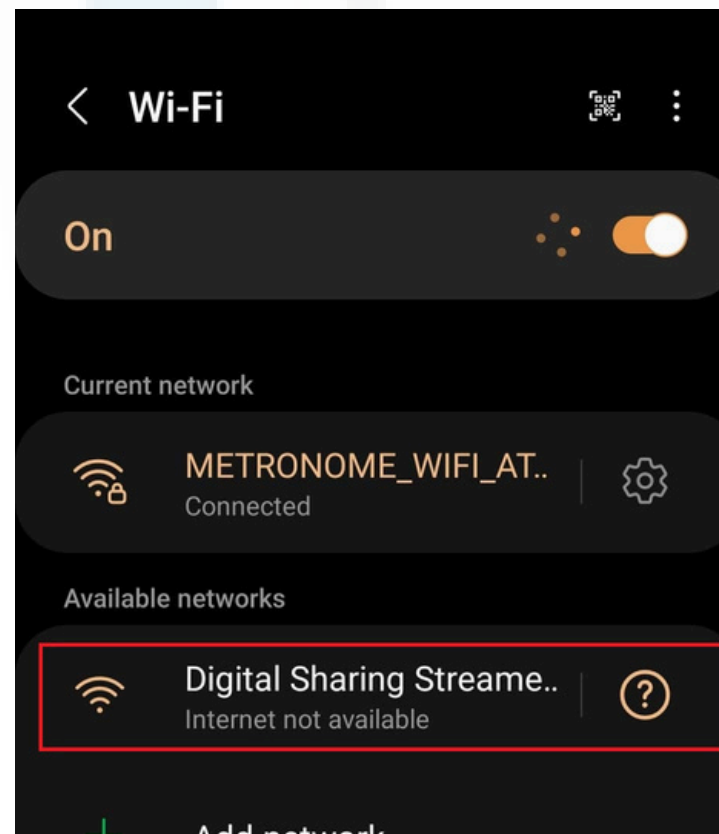
### Via RJ45 socket :

c|AQWO 2 is automatically detected on the application in the "Play to" menu. Just click on the name of your device.

### Via the antenna :

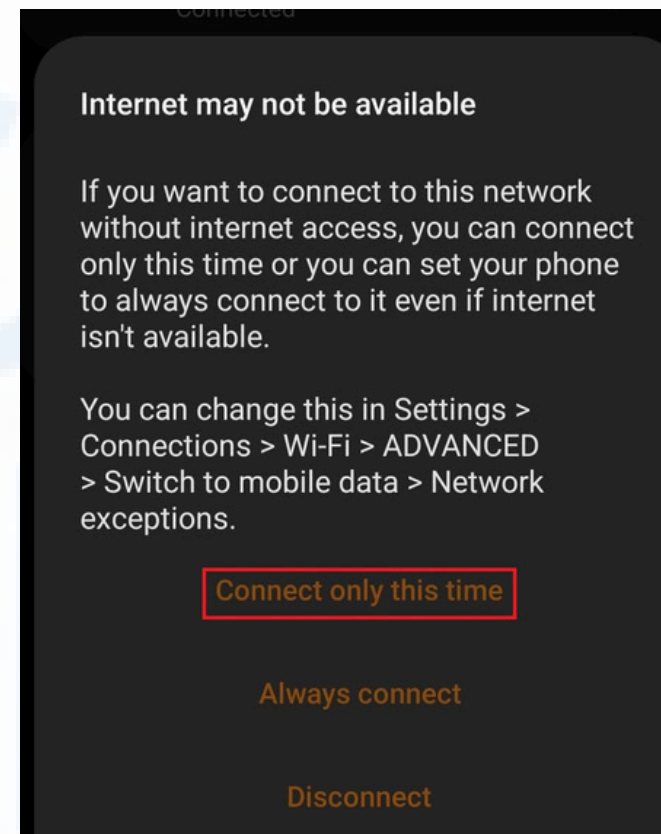
#### Step 1

Once your device is switched on, go to your smartphone's Wi-Fi setting and click on the device's Wi-Fi.



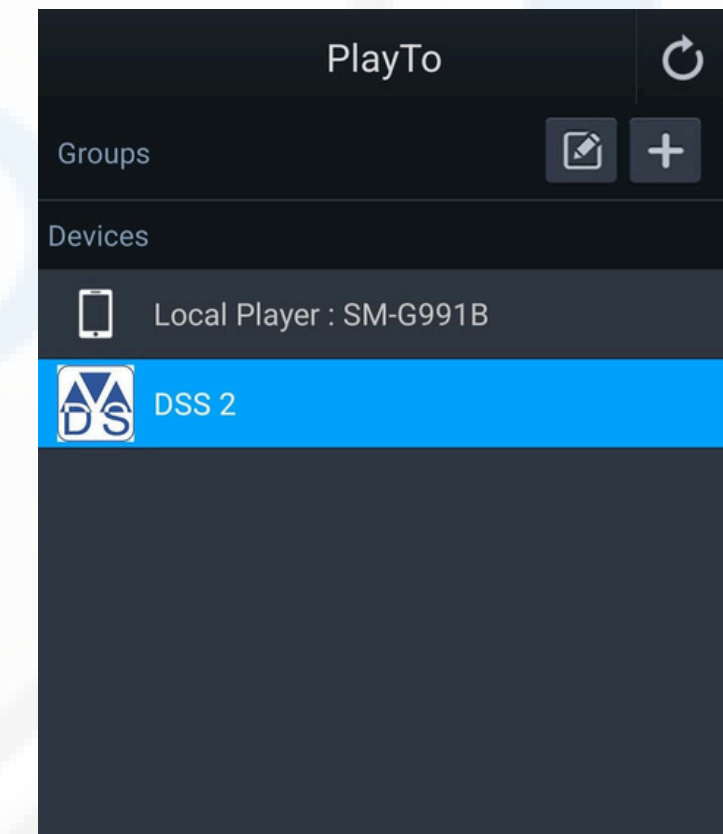
#### Step 2

Select "Connect only this time".



#### Step 3

Open the mConnect Control application. In the "Play to" menu, select your device.



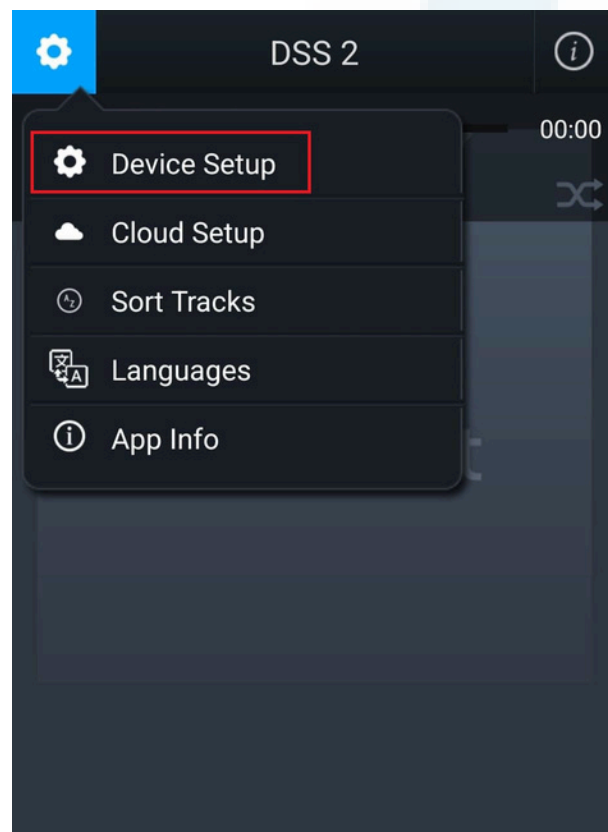
\*Streaming option only

# mConnect\*

## Connect to network Via the antenna (more):

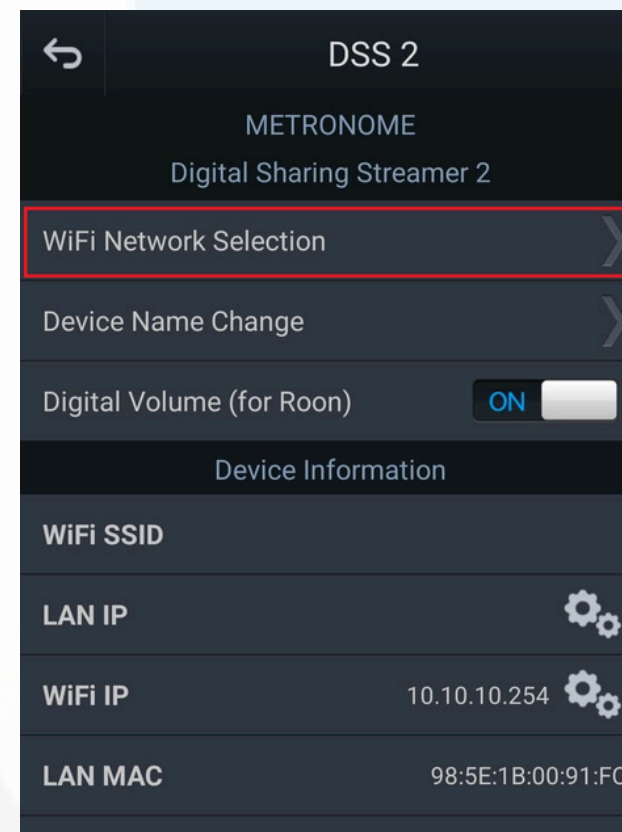
### Step 4

In the "Player" menu, select the gear, then "Device Setup".



### Step 5

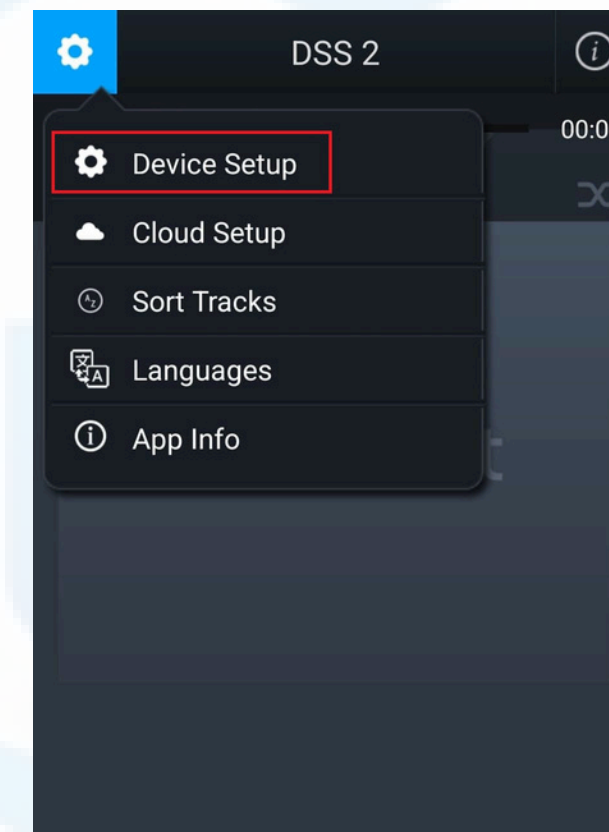
In the settings, click on "Wi-Fi network selection". In this menu, enter the PIN code of your box to connect to the internet.



## Update the device

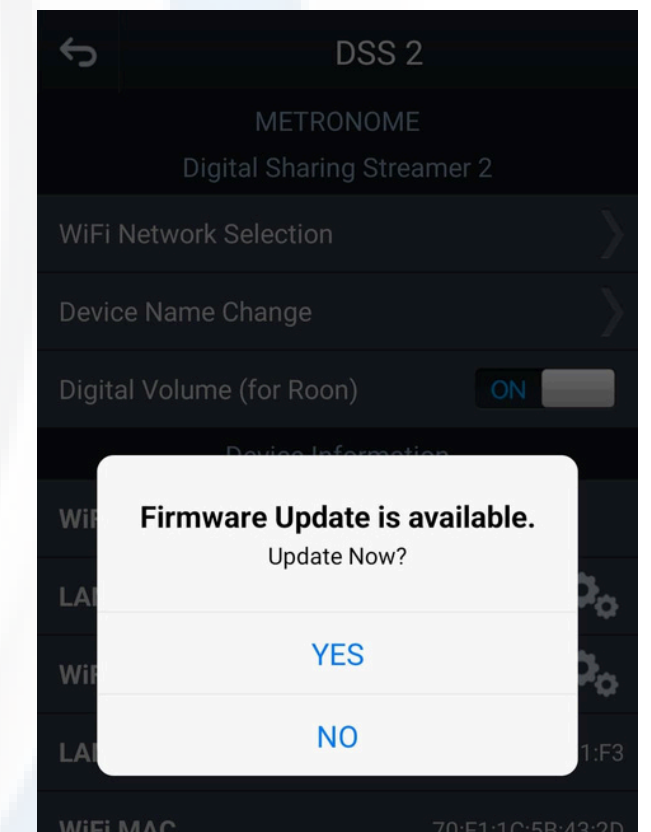
### Step 1

In the "Player" menu, select the gear, then "Device Setup".



### Step 2

If an update is available, a message will open asking you to perform the update.



Once the update is complete, your device is ready for use.



Do not turn off the device while an update is in progress. This may damage the device.

*\*Streaming option only*

# Technical Specification

## General

<u>Power consumption:</u>	65 Watts	<u>Standby power consumption:</u>	45 Watts
<u>Operating temperature:</u>	+5°C to +35°C	<u>Dimensions (L x H x W):</u>	420 x 120 x 425 mm (main unit) 420 x 85 x 425 mm (power supply)
<u>Operating humidity:</u>	5 % to 90 % (fog-free)	<u>Weight:</u>	11,6 kg (main unit) 12,8 kg (power supply)
<u>Storage environment:</u>	-20°C to +65°C	<u>USB:</u>	1x Port USB 2.0 (for updates)

## Analog outputs

	[Output impedance]	[Maximum output level (0 db)]
<u>RCA:</u>	100 Ω	3 V
<u>XLR:</u>	150 Ω	3 V

## Network\*

<u>Wi-Fi:</u>	Dual Band (2,4 & 5 GHz)	
<u>Ethernet:</u>	1x Port Ethernet 10/100/1000	
<u>USB:</u>	1x Port USB 2.0 (for external storage)	<u>Support for protocols:</u> DLNA/UPnP, Spotify Connect, et Roon Ready, Deezer, TIDAL, Qobuz, Bugs, vTuner Internet Radio



\*Streaming option only

# Technical Specification

## Digital inputs

	[PCM]	[DSD]
<u>S/PDIF:</u>	44.1 to 384 KHz / 32 bits	DoP DSD64 to DSD128
<u>AES/EBU:</u>	44.1 to 384 KHz / 32 bits	DoP DSD64 to DSD128
<u>Toslink:</u>	44.1 to 192 KHz / 32 bits	DoP DSD64
<u>USB:</u>	44.1 to 384 KHz / 32 bits	Native DSD64 to DSD512
<u>Streaming:</u>	44.1 to 384 KHz / 32 bits	Native DSD64 to DSD256

## Conversions processors

		
<u>Reference:</u>	AKM 4499EX	ESS ES9039MPRO
<u>Range:</u>	High-End	High-End
<u>THD+N:</u>	-124 dB	-122 dB
<u>Dynamic Range:</u>	S/N: 135 dB	S/N: 137 dB

# Technical Specification

## Display

<u>Size:</u>	7 inches
<u>Resolution:</u>	1024 x 600
<u>Touch screen:</u>	✓

## Fuse

<u>Current range:</u>	1 A
<u>Size:</u>	5 mm x 20 mm
<u>Speed:</u>	Timed (T)
<u>Positionning:</u>	Under the mains socket

## *Some possible failures*

### *The device does not turn on*

- Check the power cable connection.
- Check the connections to the wall socket.
- Check the power switch connections.
- Check the fuse.

### *No sound is emitted*

- Check the connections to all your devices.
- Check the condition of the cables.

### *The mConnect Control application is not working*

- Check for updates to your mConnect Control application.
- Check the status of your internet connection.
- Uninstall and reinstall your mConnect Control application.

### *I can't access the internet with my device*

- If you are using an RJ45 cable, check that your Ethernet port is flashing the back of the device.



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