

User manual

# Setup. Operation. Troubleshooting.

User manual for Live 6™, Live 12™, Tour 6™ and Tour 12™.

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# 1 User Interface Overview

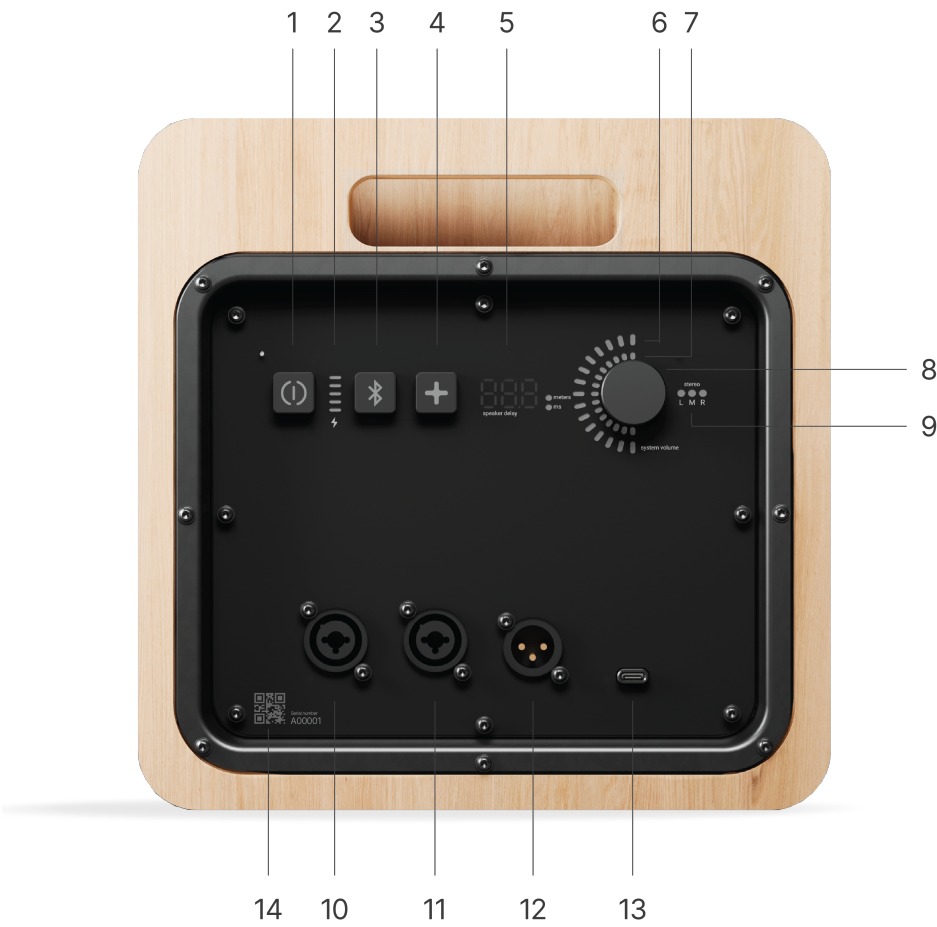


Figure 1: User interface overview

| #  | Note              |                                                                                                                                                                 |
|----|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | ①Power Button     | Manages power on/off and sleep mode.                                                                                                                            |
| 2  | Battery indicator | Indicates battery level on this speaker.                                                                                                                        |
| 3  | Bluetooth button  | Manages  Bluetooth connections.                                                                                                                                 |
| 4  | ④Thyra™ button    | Manages Thyra™ connections.                                                                                                                                     |
| 5  | Display           | Shows delay of the speaker in meters or ms, based on unit LED to the right of the display. When operating menus, it shows the value of the menu setting.        |
| 6  | Global volume     | Controls the overall volume of all Thyra™ connected speakers.                                                                                                   |
| 7  | Local volume      | Press ⑧ knob once to access. Controls the volume of this individual speaker (offset from the ⑥ global volume). Turning this all the way down mutes the speaker. |
| 8  | ⑧ knob            | Defaults to controlling ⑥ global volume. Press to control ⑦ local volume, speaker delay, and ⑨ stereo channel.                                                  |
| 9  | Stereo            | Shows stereo channel of spaker: left, mono, or right (change using ⑧ knob).                                                                                     |
| 10 | Analog in 1       | Balanced XLR or TRRS jack (combo).                                                                                                                              |
| 11 | Analog in 2       | Balanced XLR or TRRS jack (combo).                                                                                                                              |
| 12 | Analog out        | Balanced mono.                                                                                                                                                  |
| 13 | USB C             | USB C PD 65W power input.                                                                                                                                       |
| 14 | Serial number     | Supply this if your device requires.                                                                                                                            |

Table 1: UI elements



## 2 Introduction

Welcome to the user manual for **SOWA Speaker**. We hope that you will enjoy using this product for many years to come. This manual will guide you through the features and usage of your new product. If you have any unanswered questions after reading this manual, or you find any of the explanations here to be unclear, please do not hesitate to reach out to our support team at [support@sowasound.com](mailto:support@sowasound.com).

The intention of this manual is to provide a thorough overview of all the features of the product. If you are looking to get started quickly, please refer to the quick start guide: Quickstart: Connecting Multiple SOWA Speakers with Thyra™ Fixed (3.1), or visit <https://sowasound.com/support> for video tutorials and other resources.

### 2.1 Unboxing

In the box, you should find the following items. Please check that all items are present and undamaged. If any items are missing or damaged, please contact your vendor or our support team at [support@sowasound.com](mailto:support@sowasound.com). :

- ✓ The SOWA Speaker
- ✓ USB C Power adapter
- ✓ Quick start guide

### 2.2 Support

Further information and quickstart guides, tips and tricks can be found at <https://sowasound.com/support>. If you need further assistance, please contact your vendor, or send an email to our support team at [support@sowasound.com](mailto:support@sowasound.com). When reaching out, please include your product serial number and a detailed description of the issue. Your product serial number can be found as six digits (0-9 A-F) on the back of the product, in the bottom left corner of the user interface, next to a qr code.

### 2.3 Warranty

The SOWA Speaker comes with limited warranty. Please consult the vendor in your region regarding coverage. The warranty covers defects in materials and workmanship under normal use. The warranty does not cover damage caused by accidents, misuse, unauthorized repairs or modifications, or normal wear and tear. If you believe your product is defective and within the warranty period, please contact your vendor for assistance. Please have your proof of purchase and serial number ready when contacting support.

If your product has surpassed the warranty period, we still recommend reaching out to our support team if you have defects or missing parts, as we may be able to offer repair services or spare parts at a reasonable cost. Write us an email on [support@sowasound.com](mailto:support@sowasound.com)

### 3 Quick Start Guides

#### Thyra™ general rule-of-thumb

- No Thyra™ system enabled? → press ④Thyra™ button once to start a system.
- Want to change roles? → press ④Thyra™ button twice.
- Want to start over? → hold ④Thyra™ button .

#### 3.1 Quickstart: Connecting Multiple SOWA Speakers with Thyra™ Fixed

##### On all speakers you wish to connect

- ☑ Power on the speakers by pressing the ①Power Button .

##### On the speaker you wish to connect audio inputs to

- ☑ press the Thyra™ ④Thyra™ button . It turns blue, to indicate that the speaker is now **Hosting** a Thyra™ system.
- ☑ Connect an audio source, and start playing.
- ☑ All other nearby speakers on the same channel will automatically **Join** the **Hosting** speaker. Their ④Thyra™ button will turn green to indicate that they are **Joined** to a system.

##### To release and start over

- ☑ Press and hold the ④Thyra™ button on all speakers in the system, until the light turns off. This releases the speaker from the system, and returns it to stand-alone mode.

💡 If your **Joining** speaker is not playing the same as the **Host**, verify that they are on the same Thyra™ channel (CH1, CH2, CH3 or CH4), see Changing Thyra™ Modes and Channels (4.1.1).

💡 To change which speaker is **Host**, double press the ④Thyra™ button on the **Host** to make it **Join**, and double press the ④Thyra™ button on the speaker you want to **Host** instead.

#### 3.2 Quickstart: Connecting Speakers with Thyra™ Link (Beta)

⚠ The dynamic pairing of Thyra™ is currently in beta, and may not work as expected. Therefore we recommend using Thyra™ Fixed mode for critical applications, until the functionality has been fully implemented. Thyra™ Fixed is enabled as default on Channel 1 (CH1) on your new SOWA loudspeaker. If you want to receive a notification when the the update is ready, please join our newsletter here: <https://sowa-sound.com/newsletter>

##### Power on speakers

- ☑ Press the ①Power Button on each speaker you wish to connect.

##### On one speaker

- ☑ Press the ④Thyra™ button .
- ☑ The button turns blue and starts pulsing gently, indicating the speaker is in **Host** mode and looking for speakers to join with.

**On the rest of the speakers**

- ✓ Notice the ④Thyra™ button lights up solid white, indicating a nearby system is available to join.
- ✓ Press the ④Thyra™ button once.
- ✓ After a moment, it turns green, indicating the speaker has **Joined** the **Hosting** speaker.

💡 pairing sequence stops automatically after 1 minute (Thyra button stops blinking). You can always end the pairing sequence early by pressing once on the Thyra button on any speaker in the system.

💡 To change which speaker is **Hosting** the system, doublepress the ④Thyra™ button on the speaker you want to be the new **Host** for the system. The old **Host** will become a **Joined** speaker.

💡 To release a **Joined** speaker from the system, press and hold the ④Thyra™ button on that speaker for a few seconds. The speaker will leave the system and return to stand-alone mode. To release the whole system, press and hold the ④Thyra™ button on the **Hosting** speaker for a few seconds. All speakers will return to stand-alone mode.

## 4 Pairing Up: Understanding Thyra™

In a Thyra™ system, there is always only one **Host**, and one or more **Joining** devices. When a device acts as **Host**, it acts as the central node of the system. Audio enters the system through the **Host**, and the joining devices play whatever the **Host** is transmitting. The signal strength of **Joining** devices depends on their distance from the **Host** and whether there are obstacles in between.

### Thyra™ general rule-of-thumb

- No Thyra™ system enabled? → press (4)Thyra™ button once to start a system.
- Want to change roles? → press (4)Thyra™ button twice.
- Want to start over? → hold (4)Thyra™ button .

### 4.1 Differences Between Thyra™ Fixed and Thyra™ Link (Beta)

**⚠** The dynamic pairing of Thyra™ is currently in beta, and may not work as expected. Therefore we recommend using Thyra™ Fixed mode for critical applications, until the functionality has been fully implemented. Thyra™ Fixed is enabled as default on Channel 1 (CH1) on your new SOWA loudspeaker. If you want to receive a notification when the the update is ready, please join our newsletter here: <https://sowa-sound.com/newsletter>

Your SOWA loudspeaker supports two different wireless modes: Thyra™ Fixed and Thyra™ Link (Beta). The default mode is Thyra™ Fixed, which is the original SOWA 1 mode that works with all SOWA devices, and has a simple and robust connection protocol (see Thyra™ Fixed Mode (4.2) and Thyra™ Link (Beta) Mode (4.3)). The newer Thyra™ Link (Beta) mode allows for automatic channel selection, pairing, and a full feature set for SOWA 2 devices.

The (4)Thyra™ button or indicator can be found on any device that works with Thyra™. With this single button, you can join Thyra™ devices together, and select the **Host** or **Join** role of a device. See User interface overview (1) and UI elements (1) for reference on where to find the (4)Thyra™ button on your device.

#### 4.1.1 Changing Thyra™ Modes and Channels

To change between the two Thyra™ modes, press the (8) knob until the display shows CH followed by a number (i.e. CH1), see User interface overview (1). This number indicates which thyra mode, or Thyra™ Fixed channel the device is using. Your new SOWA loudspeaker comes with the default setting of Thyra™ Fixed on channel 1 (CH1). You can change the mode and channel by turning the (8) knob while on the CH# setting, to cycle through the available channels. The available channels are in:

Table 2: Thyra channel modes

|     |                                                                                       |                   |
|-----|---------------------------------------------------------------------------------------|-------------------|
| CH0 | Thyra™ Link (Beta) mode with automatic channel selection and full SOWA 2 feature set. |                   |
| CH1 | Thyra™ Fixed channel 1.                                                               | ← default setting |
| CH2 | Thyra™ Fixed channel 2.                                                               |                   |
| CH3 | Thyra™ Fixed channel 3.                                                               |                   |
| CH4 | Thyra™ Fixed channel 4.                                                               |                   |

### 4.2 Thyra™ Fixed Mode

In this mode (CH1-4), the wireless channels are fixed channel number, from 1 to 4. This mode has very long range and connection stability at 15 ms latency. You can control system volume from the **Hosting** device only. In Thyra™ Fixed mode, only one **Hosting** speaker can operate on a channel, within the range of the system. This means you cannot have two **Hosting** speakers operating on CH1, if the speakers are within range of eachother – if they are, audio will stutter, or dropout entirely. To operate two systems in

near vicinity of each other, use the separate channels 1-4. If you have a very large event space it might be possible to operate two systems on the same channel. This requires a long distance between the systems of up to 500 meters. The distance depends on the environment (terrain, buildings, line-of-sight etc.). The SOWA Microphone will not work directly with a system operating in Thyra™ Fixed mode. In Thyra™ Fixed mode, you may experience a slightly longer operational range of your loudspeakers than in Thyra™ Link (Beta) mode. In some situations where ultra long range is required, Thyra™ Fixed mode may be the better choice. See Thyra™ Fixed reference table (3) for a reference on the usage of Thyra™ Fixed.

Table 3: Thyra™ Fixed reference table

|  ④ Thyra™ button lights blue | <b>Mode</b><br><b>Host mode.</b>                                                                                                                                                                                                                                         | <b>Explanation</b><br><b>To start Hosting:</b>                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                               | Audio enters the system through the <b>Host</b> , and the <b>Joining</b> devices play whatever the <b>Host</b> is transmitting. The signal strength of <b>Joining</b> devices depends on their distance from the <b>Host</b> and whether there are obstacles in between. | on a reset speaker, press the ④ Thyra™ button to start Thyra™ and start <b>Hosting</b> (see Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4)). |
|  lights green                | <b>Join</b> mode.                                                                                                                                                                                                                                                        | Connected to a <b>Hosting</b> device, and plays the audio that the <b>Hosting</b> unit is transmitting.                                                                 |
|  flashes green               | <b>Host</b> offline.<br><br>The device is <b>Joined</b> to a system, but the connected <b>Host</b> device is currently out of reach.                                                                                                                                     | To fix:<br><br>Take over <b>Host</b> role by double pressing the ④ Thyra™ button, or bring the <b>Host</b> back online or within range.                                 |

**⚠** For the following section, Thyra™ Fixed mode must be enabled by selecting one of the channels CH1-4 on the display. See Changing Thyra™ Modes and Channels (4.1.1) for more information.

#### 4.2.1 Thyra™ Fixed: Initiate a New System and Make a Loudspeaker **Host**

On a new (or reset) speaker, press the ④ Thyra™ button once to **Host** a new system. The ④ Thyra™ button will turn blue to indicate host status (to reset a speaker, see Thyra™ Fixed: Reset, or Remove, a Loudspeaker from a System (4.2.3)).

#### 4.2.2 Thyra™ Fixed: **Join** a Loudspeaker to **Host**

If a speaker is reset, and on the same channel as a **Hosting** speaker, it will automatically **Join** the system when the system is initiated. There is no need to press the ④ Thyra™ button on the **Joining** devices. The ④ Thyra™ button will turn green to indicate that the device is **Joined** to a system.

If you already have an existing system setup, and want to add more devices to it, you only need to set their channel to the same as the **Hosting** device using the CH# menu (see Changing Thyra™ Modes and Channels (4.1.1)).

#### 4.2.3 Thyra™ Fixed: Reset, or Remove, a Loudspeaker from a System

As long as a Thyra™ Fixed device is **Joined** to a system, it will always try to find the same system again, after power down other obstructions. It will not attempt to join a new system, until it has been manually released from its old **Host**. To release a loudspeaker device from its previous Thyra™ connection, long press the ④ Thyra™ button until it turns dark. The speaker is now in Stand-Alone Playback Mode (5.2). You can now use the device on its own, or join the device to a new system, following the steps above.



#### 4.2.4 Thyra™ Fixed: Changing Which Speaker is **Host** in a Thyra™ Fixed System

You may want to change which speaker is the **Hosting** speaker in your Thyra™ Link (Beta) system. Each Thyra™ Link (Beta) system supports only one host. If you double-press the (4)Thyra™ button to switch a speaker's role while another **Host** host is already active on the same channel, the switch will fail, because the channel is already occupied by the **Host**. To change hosts, first disable the existing host by double-clicking the (4)Thyra™ button, then make another speaker **Host** by double-clicking its (4)Thyra™ button. This prevents interference from multiple hosts on a single Thyra Fixed channel.

#### 4.2.5 Why Is My **Hosting** Speaker Playing Louder Than My **Joining** Speakers in Thyra™ Fixed Mode?

When using Thyra™ Fixed mode, you may experience a slight drift in stereo synchronisation between the **Hosting** speaker, and the **Joining** speakers, corresponding to 1-2 ms. This will be experienced as a slight volume offset of the stereo image to the side of the **Hosting** device, if it is used in a stereo image. If you experience this, it can be countered by increasing the latency of the **Hosting** device by 1-3 ms, using the speakers local delay offset setting. The left and right stereo synchronisation will be aligned between **Joining** speakers set to the left or right channels. This means that if you don't need the **Hosting** speaker to take part of the stereo image, it is advised not to do so.

### 4.3 Thyra™ Link (Beta) Mode

In this mode (CH0), the system uses a more advanced protocol, that allows for simple automatic pairing, and a richer feature set for SOWA 2 devices. In this mode, you can control the system volume from any speaker in the system, and view the operational status of the individual devices in the system from the SOWA App. The system also allows connecting SOWA Microphone devices as input. See Thyra™ Link (Beta) reference table (4) for a reference on the usage of Thyra™ Link (Beta).

**⚠** The dynamic pairing of Thyra™ is currently in beta, and may not work as expected. Therefore we recommend using Thyra™ Fixed mode for critical applications, until the functionality has been fully implemented. Thyra™ Fixed is enabled as default on Channel 1 (CH1) on your new SOWA loud-speaker. If you want to receive a notification when the update is ready, please join our newsletter here: <https://sowasound.com/newsletter>

**⚠** For the following section, Thyra™ Link (Beta) mode must be enabled by selecting channel CH0 on the display. See Changing Thyra™ Modes and Channels (4.1.1) for more information.

#### 4.3.1 Thyra™ Link (Beta): Initiate a New System and Make a Loudspeaker **Host**

On a new (or reset) speaker, press the (4)Thyra™ button to **Host** a new system. The (4)Thyra™ button will turn blue to indicate host status, and will start flashing for one minute, to indicate that it is searching for devices to **Join** to it (see Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4))

#### 4.3.2 Thyra™ Link (Beta): **Join** a Loudspeaker to **Host**

On a new or reset speaker, the (4)Thyra™ button will be solid white if there is a nearby system searching. Simply tap the push button to join the system. (see Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4))

#### 4.3.3 Thyra™ Link (Beta): Search for More Joiners in an Existing System

If you already have an existing system setup, and want to add more devices to it, you can tap the (4)Thyra™ button on any of the main devices in the system, to start searching for nearby devices to add. Devices that are free to join the system will light up white in the (4)Thyra™ button. Press it to join the system.

Table 4: Thyra™ Link (Beta) reference table

| Thyra™  Thyra™ button | mode                                                                                                                                                                                                               | explanation                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  has no light         | <b>Stand-alone mode.</b><br><br>The speaker operates alone, as an ordinary active loudspeaker, without wireless Thyra™ functionality. It will play audio coming in on XLR ports and ⌘ Bluetooth.                   | This is the default mode, and serves as the starting point to setting up Thyra™ systems (see Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4))                                                                                                                                                                                                   |
|  lights blue          | <b>Host mode.</b><br><br>The device acts as the central node of the system. Audio enters the system here, and all <b>Joined</b> devices' signal strength relates to the distance and line of sight of this device. | <b>To start Hosting:</b><br><br>Press the  Thyra™ button on non-linked device (stand-alone).                                                                                                                                                                                             |
|  lights solid white | <b>Ready to join.</b><br><br>A nearby system is available to be <b>Joined</b> .                                                                                                                                    | <b>To Join the system:</b><br><br>press the  Thyra™ button .<br><br> the device must be in stand-alone mode to do this Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4) |
|  lights green       | <b>Join mode.</b>                                                                                                                                                                                                  | Connected to a device in <b>Host</b> mode, and plays the audio that the hosting unit is transmitting.                                                                                                                                                                                                                                                                     |
|  pulses             | Search mode.                                                                                                                                                                                                       | The system is available to be joined by new devices. This search lasts for 1 minute.                                                                                                                                                                                                                                                                                      |
|  flashes green      | <b>Host</b> offline.<br><br>The device is <b>Joined</b> to a system, but the connected <b>Host</b> device is currently not available, or out of reach.                                                             | See also Thyra™ Link (Beta): Change Which Speaker is <b>Hosting</b> (4.3.5).                                                                                                                                                                                                                                                                                              |

#### 4.3.4 Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System

As long as a Thyra™ device is **Joined** to a system, it will always try to find the same system again, after power down other obstructions. It will not attempt to join a new system, until it has been manually released from its old **Host**. To release a loudspeaker device from its previous Thyra™ connection, long press the (4)Thyra™ button until it turns dark. The speaker is now in Stand-Alone Playback Mode (5.2). You can now use the device on its own, or join the device to a new system, following the steps above.

💡 On a Thyra™ Link (Beta) system, if release a **Joining** speaker, only that speaker will release from the system. If you do this on a **Hosting** speaker, all **Joining** speakers will also release from the system (in other words, disbanding the whole system). In a Thyra™ Fixed system, speakers release individually.

#### 4.3.5 Thyra™ Link (Beta): Change Which Speaker is **Hosting**

You may want to change which speaker is the **Hosting** speaker in a Thyra™ system. This is convenient, if you currently don't have the **Hosting** speaker around, or if you want to change the audio entry point into the system. The way to do this differs slightly depending on which version of Thyra™ you are using see Differences Between Thyra™ Fixed and Thyra™ Link (Beta) (4.1)).

👉 On a Thyra™ Fixed system, double press the (4)Thyra™ button on the currently **Hosting** speaker, to make switch it to **Join**. Then, **double press** the (4)Thyra™ button on the speaker you want to become the new **Host**. ⚠️ Each Thyra™ Fixed system supports only one host. If you double-press the Plush button to switch a speaker's role while another host is already active on the same channel, the two **Hosting** devices will interfere with each other. To change hosts, first disable the existing host. This prevents interference from multiple hosts on a single Thyra Fixed channel.

👉 On a Thyra™ Link (Beta) system, double press the (4)Thyra™ button on the speaker you want to be the new **Host**. The previous **Host** will automatically become a **Join** device. Note that if you have 10 speakers **Joined** to the same **Host**, and the **Host** is offline, you can still take over **Host** by double pressing the (4)Thyra™ button on any of the **Joined** speakers.

💡 On Thyra™ Link (Beta), You can use this functionality for a few things: you can set up an event with several "stages" during showtime. For example you could have a hosting device set up with microphone inputs on the stage for talks during the day, and then swap to **Host** from a device at the other end of the room for a DJ later. The functionality also allows you to set up a system after having been in storage, without worrying about which device is tagged as host. You can simply set it up, and swap the **Host** status to the device that needs it.

## 5 Operating the SOWA Speaker User Interface

### 5.1 Power Management

#### 5.1.1 Power Off a Single Speaker

to power on or off a single speaker, press the ①Power Button button once. This only powers off the device on which the button was pressed. If a **Hosting** device is powered off, the **Joining** devices will not receive any audio to play, until the **Host** comes back online, or a new **Host** is assigned.

#### 5.1.2 Sleeping a System

 This is only available in Thyra™ Link (Beta) mode, see Thyra™ Link (Beta) Mode (4.3)

To sleep the entire system of connected devices, hold the ①Power Button on any device in the system for five seconds. While in sleep mode, the whole system can be awoken instantly by pressing the ①Power Button from any device. While in sleep mode, the system sacrifices a small amount of power, to be able to wake up with one button press when needed. In this mode, a SOWA loudspeaker will last for about 10 days before battery is depleted.

 If the SOWA Speaker for some reason does not respond to user input, or for some other reason is not working, at any time hold the ①Power Button for about 10 seconds. This will force the loudspeaker to shutdown immediately. It will not damage the loudspeaker.

### 5.2 Stand-Alone Playback Mode

In this mode, a SOWA Speaker may play audio like a simple active loudspeaker, and not transmit using Thyra™. The first time you power on your SOWA Speaker, it starts in this mode. If you have previously been connected using Thyra™, you need to release the device from its paired system, by holding the ④Thyra™ button until the light turns off, see Thyra™ Link (Beta): Reset, or Remove, a Loudspeaker from a System (4.3.4).

### 5.3 Connecting a Bluetooth Device

#### 5.3.1 Audio Playback Using Bluetooth

Make sure that the SOWA Speaker is in either Stand-Alone Playback Mode (5.2) or is currently **Hosting**. Press the ③Bluetooth: button, to advertise the loudspeaker. On the smartphone or other Bluetooth device, select the device that shows up with a name similar to SOWA A00001. You can check the name of your speaker on the back of the device, printed on the bottom left of the ui plate (see ⑭ serial number).

### 5.4 Local Speaker Settings Menu

This menu allows tweaking parameters specific to the "local" loudspeaker, and the options found here only affect this local speaker, not the entire Thyra™ system. This allows you to make adjustments to the individual speaker's audio playback in relation to the wider system. The local speaker settings menu can be used to adjust the following parameters, listed in Local Speaker Settings for SOWA loudspeakers (5).

 To access the Local Speaker Settings Menu, press the button action on the ⑧ knob once.

 To access the next parameter, press the ⑧ knob again.

 To reset all local speaker settings for the speaker in front of you, push and hold the ⑧ knob for a few seconds, until the user interface starts blinking.

Table 5: Local Speaker Settings for SOWA loudspeakers

| menu level | parameter      | note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1          | Delay offset   | Delays audio signal relative to the connected Thyra™ system. Default unit is ms. Double click the ⑧ knob while on this menu to switch between meters (m) and milliseconds (ms). On a <b>Hosting</b> speaker, delay value can be turned below zero. As the first speaker in the system, the <b>Hosting</b> speaker is by default delaying itself to stay in sync with <b>Joined</b> speakers. If you need zero latency for a monitor, you can use the <b>Hosting</b> speaker for this by turning the ⑧ knob to the left. |
| 2          | Local Volume   | Offsets the local speakers volume relative to the global system volume. Volume can be increased and decreased, indicated by the blue/orange half ring to the left of the knob. Mutes the speaker at the lowest setting. Defaults to 0 dB.                                                                                                                                                                                                                                                                               |
| 3          | Stereo setting | Sets the local speakers stereo offset, left/mono/right. Defaults to mono.                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 4          | Thyra™ mode    | Indicated by CH0, CH1, CH2, CH3 in the display. See Thyra channel modes (2) for more information.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Hold       | reset          | all local speaker settings to default (1-3), except for the Thyra™ mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## 5.5 Advanced Settings Menu

The advanced setup menu can be used to set advanced parameters on the the speaker, that may affect the local speaker it self, or the connected Thyra™ system. These settings are not intended for everyday use: please use with care, and only after consulting with the SOWA support team. This menu gives access to the controls listed in Advanced settings (6).

👉 To access the Advanced Settings Menu, press the ⑧ knob once, then rotate it as far to the left as possible, pause, then rotate the ⑧ knob very quickly to the left, until the user interface goes black, and only the menu level code is showing in the display.

Table 6: Advanced settings

| menu level | parameter               | note                                                                                                                                            | values                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 55         | Loudness                | add a dynamic equal loudness curve to the audio signal, to compensate for the human ears lower sensitivity to bass and treble at lower volumes. | 1 on (default)<br>0 off                                                                                                                                                                                                                                                                                                                                                                                 |
| H20        | XLR 1 input gain        |                                                                                                                                                 | 0 - 100                                                                                                                                                                                                                                                                                                                                                                                                 |
| H26        | XLR 2 input gain        |                                                                                                                                                 | 0 - 100                                                                                                                                                                                                                                                                                                                                                                                                 |
| U32        | USB Volume              |                                                                                                                                                 | 0 - 100                                                                                                                                                                                                                                                                                                                                                                                                 |
| B38        | BT Volume               |                                                                                                                                                 | 0 - 100                                                                                                                                                                                                                                                                                                                                                                                                 |
| N46        | SOWA Mic 1 gain         |                                                                                                                                                 | 0-100                                                                                                                                                                                                                                                                                                                                                                                                   |
| N47        | SOWA Mic 2 gain         |                                                                                                                                                 | 0 - 100                                                                                                                                                                                                                                                                                                                                                                                                 |
| -54        | speaker voicing         | Selects dsp voicing. Useful if electronics are swapped to a different speaker model                                                             | 0 Live 12<br>1 Live 6<br>2 Tour 12<br>3 Tour 6                                                                                                                                                                                                                                                                                                                                                          |
| L43        | UI Brightness           | Controls the brightness level of the on LEDs in the user interface.                                                                             | 0 - 255                                                                                                                                                                                                                                                                                                                                                                                                 |
| -03        | Battery state of charge | Shows precise battery level of the device in percent                                                                                            | 0 - 100%                                                                                                                                                                                                                                                                                                                                                                                                |
| -41        | Loudspeaker firmware    | (if <b>Hosting</b> ) Allows pushing this devices speaker firmware to speakers connected over Thyra™ Link (Beta)                                 | press the ⑧ knob once enter the menu, then press and hold for 2 seconds to propagate the firmware to all <b>Joining</b> devices that need an upgrade. (Note: propagation will only happen if the firmware on the joining devices is older. If a joining device has a newer firmware, issue a role swap first, see Thyra™ Fixed: Changing Which Speaker is <b>Host</b> in a Thyra™ Fixed System (4.2.4)) |
| -10        | Thyra Link firmware     | on <b>Hosting</b> speaker, push the ⑧ knob to propagate the firmware to all <b>Joining</b> devices.                                             |                                                                                                                                                                                                                                                                                                                                                                                                         |

## 6 App Control

The SOWA App will soon be available for iOS devices. As of the publication of this user manual, the app has not yet been released, but is planned during fall or early winter 2025. This mobile application provides comprehensive control over your SOWA 2 system, offering features such as:

- Remote control of SOWA 2 devices
- Real-time monitoring of battery levels
- Connection status tracking of system components
- Firmware update capabilities for connected devices

This application enhances your SOWA 2 experience by providing convenient control and management of your audio system directly from your iOS device. Note that that most of these functionalities require a Thyra™ Link (Beta) connection. If your **Hosting** speaker runs on Thyra™ Fixed, only the data and controls pertaining to the **Hosting** speaker will be viewable in the app.

💡 To sign up for beta testing of the SOWA App, please reach out to [support@sowasound.com](mailto:support@sowasound.com), or sign up to our newsletter here <https://sowasound.com/newsletter>. Beta testing will be available in the second half of 2025.



## **7 Safety and Operating Conditions**

### **7.1 Intended Use and Environment**

#### **7.1.1 Indoor and Protected Outdoor Use**

The SOWA Speaker is designed for indoor use or for protected outdoor use where it will not be exposed to rain, snow, or high humidity. The product is not waterproof and does not carry an IP rating, which means it must not be used in wet or damp environments.

#### **7.1.2 Environmental Conditions**

The loudspeaker should not be placed near heat sources, naked flames, or in direct sunlight for prolonged periods. It is intended for operation in ambient temperatures between 0 °C and 40 °C and at relative humidity levels below 80% (non-condensing).

### **7.2 Mounting and Stability**

#### **7.2.1 Pole Mounting**

The SOWA Speaker can be mounted using a standard 35 mm pole mount.

#### **7.2.2 Ceiling and Bracket Mounting**

The SOWA Speaker can also be mounted using the two M6 threaded inserts located on the bottom of the cabinet. When ceiling or bracket mounting, both threaded inserts must always be used, and the screws must engage at least 10 mm into the inserts. The mounting hardware and screws must be selected to safely support the full weight of the loudspeaker.

#### **7.2.3 Safety Wire**

For all elevated installations, a safety wire must be attached to the handle of the product and secured to an independent certified rigging point. Mounting on ceilings or high structures should only be carried out by competent persons who are familiar with safe rigging practices.

### **7.3 Battery Safety**

#### **7.3.1 Safe Handling**

The SOWA Speaker contains an integrated lithium-ion battery pack. Lithium-ion batteries must always be handled with care.

#### **7.3.2 Abnormal Behaviour**

If the battery shows signs of swelling, leakage, or other abnormal behavior, the loudspeaker must not be used or charged. In such cases, the product must not be transported by air and should be stored in a fireproof location until SOWA Support has been contacted for further guidance.

#### **7.3.3 Prohibited Conditions**

The battery must never be exposed to excessive heat, fire, water, or prolonged direct sunlight, as this may cause fire or explosion.

### **7.4 Acoustic Safety**

#### **7.4.1 Hearing Safety**

The SOWA Speaker is capable of producing high sound pressure levels that can cause permanent hearing damage if listeners are exposed for extended periods of time.

### **7.4.2 Regulations and Precautions**

Users should be mindful of their own hearing safety and the comfort of their audience, and always comply with local regulations regarding maximum sound exposure. The sound level should be reduced when in close proximity to the loudspeaker.

## **7.5 General Safety**

### **7.5.1 Servicing**

The SOWA Speaker must not be opened, disassembled, or modified by the user, as there are no serviceable parts inside. Unauthorized tampering may cause safety hazards and will void the warranty.

### **7.5.2 Fire Hazards**

Open flames such as candles must not be placed on or near the loudspeaker.

### **7.5.3 Damage**

If the product has been dropped or otherwise damaged, it should not be used until it has been inspected and approved for safe operation by SOWA Support.

## 8 Disclaimer

Except as provided by the Limited Warranty and to the extent permitted by law, in no event and under no circumstances can SOWA, its employees, affiliates, its board of directors, its owners, or its third-party suppliers be held accountable for direct, indirect, special, incidental, or consequential damages. This includes, but is not limited to, financial loss, personal injury, loss of assets, or property damage, whether based on contract, tort, or any other legal theory.

Liability is expressly excluded for damages arising from use of the SOWA Speaker in ways other than those described in this manual, or from failure to follow the safety and operating instructions provided.

In connection with the aforementioned, SOWA draws special attention to the fact that the following actions will exempt SOWA from any responsibility:

1. Wrongly plugging in the loudspeaker.
2. Prolonged exposure of the SOWA Speaker to any form of precipitation.
3. Submerging any part of the SOWA Speaker in any form of liquid.
4. Using SOWA products for purposes other than their intended use.
5. Using chargers other than the one delivered with the SOWA Speaker.
6. Using batteries other than those produced and installed by SOWA.
7. Any unsanctioned modification, rebuilding, or repurposing of any parts of the SOWA Speaker.

## 9 Product specifications

### 9.1 Live 6 Product Specification

Table 7: Live 6 specifications

| Feature                 | Details                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound characteristics   | 6" Woofer (40 W)<br>3/4" soft dome tweeter (30 W)<br>SPL Max: 100 dB(A)<br>Dispersion: 120° x 120°<br>Analog Devices DSP<br>Tuned at SoundHub Denmark<br>(Bang & Olufsen facilities)                               |
| Inputs                  | 2x Balanced Neutrik XLR in (1/4" jack combo)<br>1x Balanced XLR out<br>USB-C sound card<br>Bluetooth 5.0                                                                                                           |
| Dimensions & Formfactor | Reconstituted FSC plywood<br>L x W x H: 255 × 255 × 255 mm<br>6 kg                                                                                                                                                 |
| Control options         | System volume<br>Delay (up to 290 ms / 100 m)<br>Mono / Stereo<br>Volume offset (up/down from system volume)                                                                                                       |
| Thyra technology        | Can host/join Thyra™ system<br>Unlimited qty speakers linked<br>Low latency (15 ms)<br>200 m range (line of sight)<br>48 kHz, 16 bit stereo transmission<br>Compatible with SOWA Microphone<br>Pair up to 30 zones |
| Power & playtime        | Battery capacity: 90 Wh (Li-Ion)<br>Battery life: 25 hours<br>Charging: USB-C (PD 3.0)<br>Quick charging: 90% in 2 hours<br>Can be plugged in while playing                                                        |
| Compatibility           | Works with SOWA Microphone<br>Works with SOWA iOS app<br>Can be configured to transmit on legacy SOWA Link channels (1–4), enabling SOWA Pro and SOWA Pro XL compatibility                                         |

## 9.2 Live 12 Product Specification

Table 8: Live 12 specifications

| Feature                 | Details                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound characteristics   | 12" Woofer (400 W)<br>1" Compression driver (70 W)<br>SPL Max: 112 dB(A)<br>Dispersion (H x V): 120° x 40°<br>Analog Devices DSP<br>Tuned at SoundHub Denmark<br>(Bang & Olufsen facilities)                       |
| Inputs                  | 2x Balanced Neutrik XLR in (1/4" jack combo)<br>1x Balanced XLR out<br>USB-C sound card<br>Bluetooth 5.0                                                                                                           |
| Dimensions & Formfactor | Reconstituted FSC Plywood<br>L x W x H: 333 × 320 × 538 mm<br>15 kg                                                                                                                                                |
| Control options         | System volume<br>Delay (up to 290 ms / 100 m)<br>Mono / Stereo<br>Volume offset (up/down from system volume)                                                                                                       |
| Thyra technology        | Can host/join Thyra™ system<br>Unlimited qty speakers linked<br>Low latency (15 ms)<br>200 m range (line of sight)<br>48 kHz, 16 bit stereo transmission<br>Compatible with SOWA Microphone<br>Pair up to 30 zones |
| Power & playtime        | Battery Capacity: 90 Wh (Li-Ion)<br>Battery life: 15 hours<br>Charging: USB-C (PD 3.0)<br>Quick Charging: 90% in 2 hours<br>Can be plugged in while playing                                                        |
| Compatibility           | Works with SOWA Microphone<br>Works with SOWA iOS app<br>Can be configured to transmit on legacy SOWA Link channels (1–4), enabling<br>SOWA Pro and SOWA Pro XL compatibility                                      |

## 9.3 Tour 6 Product Specification

Table 9: Tour 6 specifications

| Feature                 | Details                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound characteristics   | 6" Woofer (40 W)<br>3/4" soft dome tweeter (30 W)<br>SPL Max: 100 dB(A)<br>Dispersion: 120° x 120°<br>Analog Devices DSP<br>Tuned at SoundHub Denmark<br>(Bang & Olufsen facilities)                               |
| Inputs                  | 2x Balanced Neutrik XLR in (1/4" jack combo)<br>1x Balanced XLR out<br>USB-C sound card<br>Bluetooth 5.0                                                                                                           |
| Dimensions & Formfactor | Hard coated FSC MDF<br>L x W x H: 255 × 255 × 255 mm<br>6 kg                                                                                                                                                       |
| Control options         | System volume<br>Delay (up to 290 ms / 100 m)<br>Mono / Stereo<br>Volume offset (up/down from system volume)                                                                                                       |
| Thyra technology        | Can host/join Thyra™ system<br>Unlimited qty speakers linked<br>Low latency (15 ms)<br>200 m range (line of sight)<br>48 kHz, 16 bit stereo transmission<br>Compatible with SOWA Microphone<br>Pair up to 30 zones |
| Power & playtime        | Battery capacity: 90 Wh (Li-Ion)<br>Battery life: 25 hours<br>Charging: USB-C (PD 3.0)<br>Quick charging: 90% in 2 hours<br>Can be plugged in while playing                                                        |
| Compatibility           | Works with SOWA Microphone<br>Works with SOWA iOS app<br>Can be configured to transmit on legacy SOWA Link channels (1–4), enabling SOWA Pro and SOWA Pro XL compatibility                                         |

## 9.4 Tour 12 Product Specification

Table 10: Tour 12 specifications

| Feature                 | Details                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sound characteristics   | 12" Woofer (400 W)<br>1" Compression driver (70 W)<br>SPL Max: 112 dB(A)<br>Dispersion (H x V): 120° x 40°<br>Analog Devices DSP<br>Tuned at SoundHub Denmark<br>(Bang & Olufsen facilities)                       |
| Inputs                  | 2x Balanced Neutrik XLR in (1/4" jack combo)<br>1x Balanced XLR out<br>USB-C sound card<br>Bluetooth 5.0                                                                                                           |
| Dimensions & Formfactor | Hard coated FSC MDF<br>L x W x H: 333 × 320 × 538 mm<br>15 kg                                                                                                                                                      |
| Control options         | System volume<br>Delay (up to 290 ms / 100 m)<br>Mono / Stereo<br>Volume offset (up/down from system volume)                                                                                                       |
| Thyra technology        | Can host/join Thyra™ system<br>Unlimited qty speakers linked<br>Low latency (15 ms)<br>200 m range (line of sight)<br>48 kHz, 16 bit stereo transmission<br>Compatible with SOWA Microphone<br>Pair up to 30 zones |
| Power & playtime        | Battery Capacity: 90 Wh (Li-Ion)<br>Battery life: 15 hours<br>Charging: USB-C (PD 3.0)<br>Quick Charging: 90% in 2 hours<br>Can be plugged in while playing                                                        |
| Compatibility           | Works with SOWA Microphone<br>Works with SOWA iOS app<br>Can be configured to transmit on legacy SOWA Link channels (1–4), enabling SOWA Pro and SOWA Pro XL compatibility                                         |