

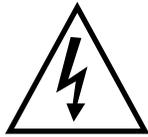


User manual Davone WISA  
loudspeakers, Studio DSP,  
Twist DSP, Meander DSP, Solo  
DSP

# WELCOME

and thank you for choosing Davone to bring music to your home. Davone stands for combining traditional Danish hand craftsmanship with sound quality of the highest calibre. Therefore it is worth taking care with the set up of your system. In this manual you will find instructions for how to connect, position, maintain and warrant this loudspeaker. Should you have any questions that you feel have not been answered, feel free to contact your dealer, your local Davone distributor or the Davone staff in Denmark.

## Important safety instructions



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK; DO NOT OPEN THE SPEAKER HOUSING. NO USER-SERVICABLE PARTS INSIDE: REFER TO QUALIFIED SERVICE PERSONNEL



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's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

Read these instructions  
Keep these instructions  
Heed all warnings  
Follow all instructions

- Do not use this apparatus near water.
- Clean only with dry cloth
- Install in accordance with manufacturer's instructions
- Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Keep candles or other items with open flames away from this product at all times.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Use only with the stand sold with the apparatus.
- Use caution when moving the apparatus to avoid injury from tip-over.
- Place your product on a firm surface where you want it placed permanently. Do not place on top of other objects, stands or tables.
- Refer all servicing to qualified service 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, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- **WARNING:** To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- If an abnormal smell or smoke is detected from the appliance, turn the power off immediately and unplug the unit from the wall outlet. Contact your dealer immediately.
- Do not attempt to open the product. Leave such operations to qualified service personnel.
- The product is intended for indoor use in dry, domestic environments only. Use within a temperature range of 15–25°C.
- Leave enough space around the product for adequate ventilation. Place 1 meter from wall and flammable objects such as curtains etc.
- Do not cover or place items on the product, such as clothing.
- The product can only be switched off completely by switching the on/off button off on the backside.
- The Safety markings are on the backside of the product
- Be aware that volume suddenly can go up to max when starting music. Always check your sound level before you start playing music.



After unpacking, make sure the system is complete and check the device and all accessories for transport damage. Transport damage may be expected if the packaging is already severely harmed. Do not attempt to start up a damaged device. If the contents are incomplete or damaged, please contact your Davone dealer. Dealer addresses can be found on the Internet at [www.davoneaudio.com](http://www.davoneaudio.com).



This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.



Electrical and electronic equipment, parts and batteries marked with this symbol must not be disposed of with normal household waste, it must be collected and disposed of separately to protect the environment. For more detailed information on recycling this product, please contact your local authority.



Hereby, Davone declares that the radio equipment type Davone DSP is in compliance with Directive 2014/53/EU.

## 1. GENERAL OPERATING DESCRIPTION

WISA speakers operate with their own wireless network consisting of a transmitter and receiver (the loudspeaker). During pairing of transmitter and receiver, a unique code is stored in both for an exclusive connection. As long as the loudspeaker is turned on, it scans for the paired transmitter for 5 seconds, then pauses the scan for 10 seconds to save power. This cycle continues indefinitely. Therefore, powering off the speaker during holidays for example, is recommended. Once the loudspeaker detects a transmitter being switched on, the amplifier and DSP are turned on. When the transmitter is turned off, the loudspeakers will also turn off. But not all transmitters behave in the same way. Therefore it is recommended to make sure the amplifier feels cold to the touch when expected.

### 1.1 CONNECT YOUR SPEAKERS

- Turn on your loudspeakers (large button with 0 and 1 on the back plate). The Meander does not have an On/Off button
- In case you do not hear a repeating beep after start up, press the small button on both speakers on the back plate until you hear a 2 second beep. About 15 seconds later a repeating beep will sound, indicating that the speaker is now ready to pair with a WISA transmitter. At the Meander, this button is located in the middle behind the front grille, about 5cm from the left, push 1 cm deep.
- Turn on the WISA transmitter and start scanning for WISA loudspeakers.
- Follow the pairing instructions of the transmitter. When the beep stops, pairing is begun. The transmitter will indicate when the pairing is completed.
- You are now ready to play music.
- NOTE: not all transmitters have the ability to assign a location to a loudspeaker like "front left" for example. Our stereo loudspeakers are always programmed with a fixed location "front left" and "front right" to enable to function with such a transmitter. Check if the location of the speaker matches the sound channel.
- NOTE: if the pairing beep sound restarts after shutting down the transmitter, the pairing was not performed correctly. Perform the pairing sequence again and make sure any previous pairings in transmitter and loudspeaker are removed before.
- NOTE: in case speakers are added later, it is best to perform the pairing sequence for all speakers simultaneously. Remove all previous pairings.

## 2. PLACEMENT

### INTRODUCTION

By doing 2 quick experiments you can learn the basics of room acoustics and you will be able to get the best sound from your loudspeaker. We hope you are up for it. Just pressing an automatic room correction button (if available) might lead to disappointing results.

### LISTENING TO A STANDING WAVE

When a loudspeaker plays music in a room, the sound is reflected back and forth between the walls, floor and ceiling. In the low frequencies this will lead to so called standing waves. You can hear these yourself. Search for "sinewave 100 Hz" at Spotify. Play and walk through the room. You will hear that the loudness varies a lot depending on where you are. Loudest in the corner and hardly audible in other places away from the walls. Sitting and standing will also give different loudness.

### LISTENING TO ROOM AMPLIFICATION

Place the loudspeaker in a corner. Play some music and pay attention to the bass. Now place the loudspeaker in the middle of the room and play the same music. You will hear the bass has become a lot less. The amount of sound the loudspeaker produces is spread in all directions now and therefore the bass output seems to be less compared to the corner position, even though it is the same.

### ROOM ABSORPTION

Sound is reflects against walls, floor and ceiling and spread throughout the room. The harder the surfaces, the more powerful the reflections. Carpets, curtains and furniture absorb the high frequencies more than the low frequencies. The sound becomes unbalanced and might need a correction.

## PLACEMENT, continued

### ROOM CORRECTION LIMITATIONS

We have learned standing waves cause the low frequencies to be of different loudness throughout the room. No room correction system in the world can correct for this effect. All it can do is optimize the sound level in a small listening area. However, standing waves are most audible with continuous bass tones. Then the standing wave gets time to build up by bouncing back and forth between the walls. Luckily, most music does not have many continuous bass tones so the effect might not be very prominent with music.

### 3. ROOM CORRECTION

Now you have become a room acoustics expert, you are ready to put the loudspeakers in your preferred position. We have done our best to give our loudspeaker a neutral character that is not very room critical. So hopefully it sounds all good to your ears. If not, no worries. In case your transmitter supports room correction (Platin StereoHub), download the room correction app from the Google Play or Apple App Store. Then go to the equalizer menu and make corrections while listening where you would do normally and then;

- If you have placed the loudspeakers in a corner or close to a wall, the bass possibly needs to be adjusted downwards. Adjust the equalizer accordingly.
- If your room has many absorbing elements it is beneficial to point the front of the loudspeakers towards your listening area.
- If the above is not sufficient, it is likely that the high frequencies need to be adjusted upwards. Adjust the equalizer accordingly. The sound will become more open and clear.
- If you have a large room, perhaps you lack bass? Move the loudspeakers closer to a wall or corner or adjust the equalizer bass setting upwards. This will limit the maximum output however, so adjust within reason.
- Generally the mid tones do not need adjustment, but there is no harm in playing with the level.
- If still not satisfied, try the automatic room correction if available. This will only function in low frequencies.

## 4. SELECT SOUND MODES

In case your transmitter does not support an equalizer or room correction, you can use the built-in sound modes.

- Turn on your loudspeakers
- Start playing your test music
- Short press the button (less than 3 seconds) on the back to change a sound mode. There are 4 sound modes. The sound mode is indicated by the number of beeps that sound after pressing the button. The sound mode change has to be performed on each loudspeaker. The change can be made while playing music.
- Mode 1: free placement
- Mode 2: wall placement
- Mode 3: corner placement
- Mode 4: Xpert mode, free placement, no driver protection (!), most accurate sound (mode 4 not available in Solo)
- NOTE: for Solo mode 1,2,3 are all in Xpert mode.
- NOTE: the sound mode will be stored in the speaker after a change, but only if the transmitter is shut down before the loudspeaker (normal operation). The new sound mode is not stored if the speaker is powered down by the power button while playing music.

## 5. DEEP SLEEP MODE

A WiSA transmitter determines the power save character of the Davone speakers. The WiSA standard does not include the standardization of the transmitter settings and the power save modes will therefore depend on your transmitter. To make sure your loudspeakers will always shut down (save power and increase product life time), we have implemented a Deep Sleep mode. This will shut down the amplifiers after 30 hours of active connection with a transmitter without music being played. The speaker can be woken up by a short press on the push button. Normally the Deep Sleep mode can be prevented by shutting down your transmitter via remote or remove of power.

## 6. TROUBLESHOOTING

The sound drops out, is intermittent at both loudspeakers.

First check if the problem is related to your WiFi or WiSA connection by connecting a non streaming source (CD player) to your WiSA transmitter. If the issue remains, follow 2) else follow 1)

1) intermittent WiFi reception:

- This could be due to a weak Wifi signal, for example if your router is set up in a closed cabinet.
- WiFi can be slowed down when a lot of people in the neighbourhood stream TV etc at the same time, typically 6-8 in the evening. Especially when you are at the end of a cable network. This slow operation should also happen on other systems (PC, TV etc) at that time.
- The problem could also be due to a weak WiFi signal from the router in the house. You can measure your Wi-Fi strength at [www.speedtest.net](http://www.speedtest.net). You must have over 10 Mbit and your ping (seen in the upper left corner) must be less than 10 in order for an optimal connection.
- Networks using wireless range extenders can cause problems, we recommend wiring the extended access points to your main router.

2) intermittent WiSA reception:

WiSA operates on the DFS (Dynamic frequency Selection) bands around 5GHz. This means it will find an unused band to operate in. Even though it is unlikely. if many WiFi routers are present in the area (neighbors) or many streaming devices are active at the same time that operate in the DFS band, WiFi may interfere with WiSA. In that case:

- try removing 5GHz Wi-Fi from the router and connect your devices to 2.5GHz.
- Keep as much distance between the WiSA transmitter and receiver (loudspeaker) and other WiFi devices like router, TV, set top boxes, Apple TV etc.
- Decrease the distance between the WiSA transmitter and receiver (loudspeaker).
- In case the intermittence only occurs on one loudspeaker, try moving the transmitter closer to that loudspeaker

## 5. MAINTENANCE

- **Painted metal** usually only requires dusting. If you wish to use an aerosol or other cleaner, first test a small area. Some cleaning products may damage the surfaces. Avoid products that are abrasive, or contain acid, alkali or anti-bacterial agents. Spray aerosols onto the cleaning cloth, not directly onto the paint.
- **Fabric** is best cleaned with an adhesive roller. A clothes brush is not recommended.
- **Laquered wood** usually only requires dusting. If you wish to use an aerosol or other cleaner, first test a small area. Some cleaning products may damage the surfaces. Avoid products that are abrasive, or contain acid, alkali or anti-bacterial

## WARRANTY

In case of warranty inquiries, please contact your dealer. In case of request for service under warranty, please enclose your original receipt. Use the original packaging for transportation.

*This warranty covers Davone loudspeakers. Davone warrants that this product shall be free from production and material defects for:*

**2 years**

*The warranty period begins at the date of sale and is subject to the following requirements and understandings:*

- 1) Neither transportation cost, nor any risk for removal, transportation and installation of products is covered by this warranty.*
- 2) Defects caused by incorrect installation or operation are not covered by this warranty*
- 3) Davone shall not be liable for defects arising from accidents, misuse, normal wear and tear, mis-maintenance, voltage variation, overloading, stroke of lightning and any other force majeure events.*
- 4) Defects arising from modification, repair or attempt to repair by a non authorised service facility are not covered by this warranty.*
- 5) Davone is liable only to repair or replace defective parts or products and is not responsible for indirect losses or damages arising from the use of the product. A replacement cannot exceed the value of the product under warranty.*
- 6) This warranty complements any national/regional law obligations of dealers or national distributors and does not affect your statutory rights as a customer.*