

Item No. 951006-0-2A

- MEGALINE
- EUPHONIA
- HELICON MK2
- MENTOR
- IKON® MK2
- LEKTOR®
- CONCEPT
- SUBWOOFER

ENGLISH

DALI IKON® SUB MK2 MANUAL



IN ADMIRATION OF MUSIC



IN ADMIRATION OF MUSIC

TABLE 1

IKON SUB MK2	
Subwoofer	1 pc
Power Cord	1 pc
Grille	1 pc
Rubber bumbers	4 pcs
M8 spike/nut	4 pcs
13 mm spanner for spikes	1 pc
Owner's manual	1 pc

FIGURE 1

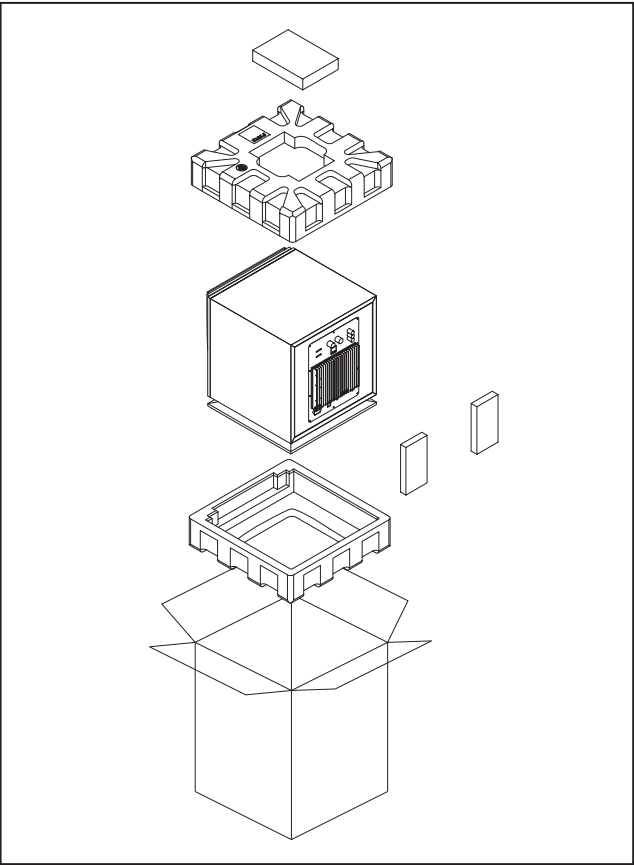


FIGURE 2

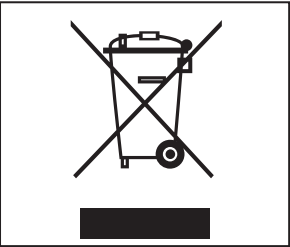


FIGURE 3

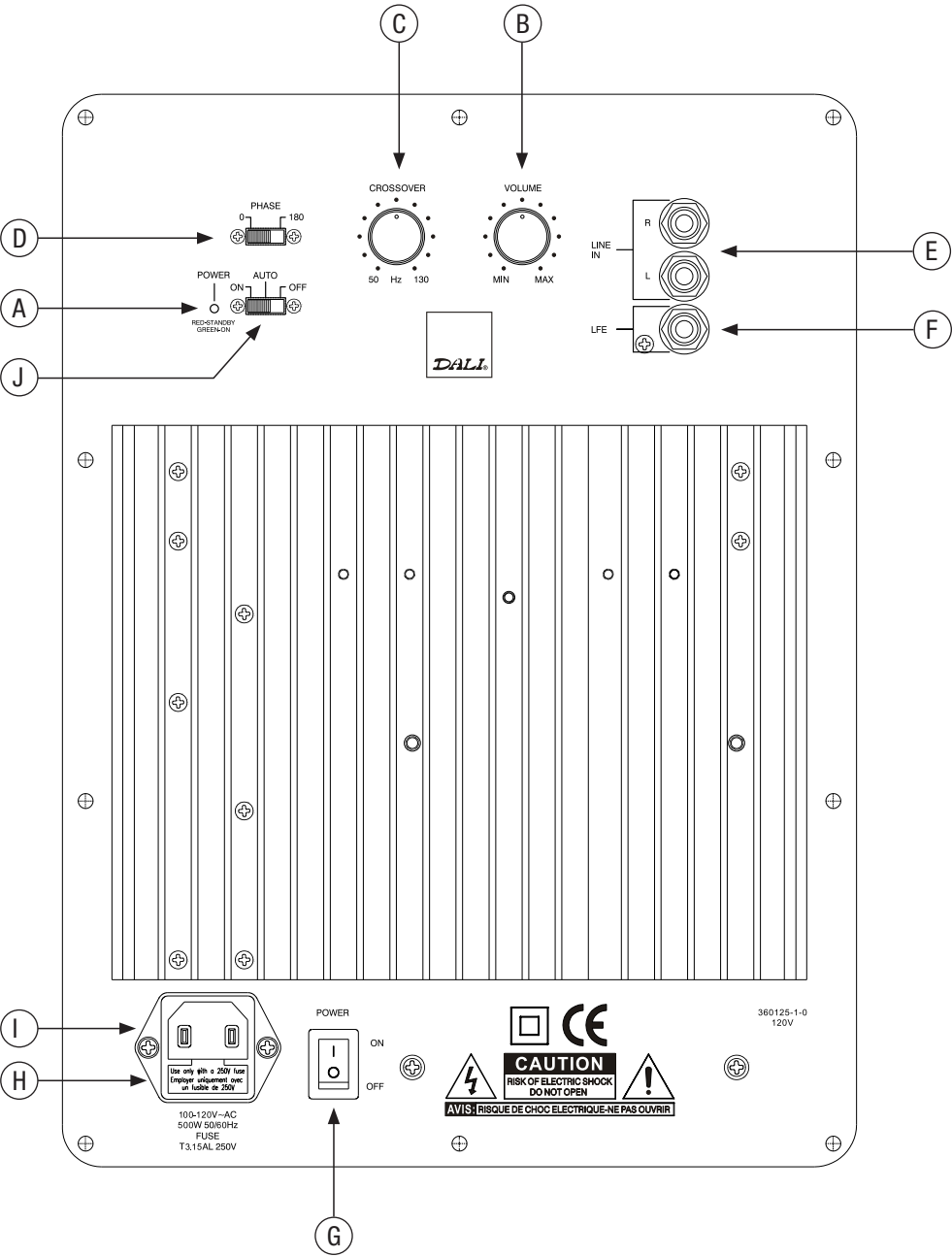


TABLE 2 - IKON SUB MK2 TECHNICAL SPECIFICATIONS

IKON SUB MK2	
Frequency Range +/- 3 dB [Hz]	26-200
Nominal Impedance [ohms]	30k (L/R) 20k LFE
Maximum SPL [dB]	113
Max Amplifier Power Output [watts RMS]	325
Crossover Frequencies [Hz]	50-130
Low Frequency Driver(s) [inches]	1 x 12" long stroke
Enclosure Type	Bass reflex
Continuous IEC Power Output [watts RMS]	250
Max. Power Consumption [watts]	500
Idle Power Consumption [watts]	9
Connection Input(s)	RCA, Stereo (low-pass filtered) LFE (Mono)
Recommended Placement	Floor, near wall or corner
Dimensions (H x W x D) [mm]	450 x 410 x 450
Dimensions (H x W x D) [inches]	17.7 x 16.1 x 17.7
Weight [kg/lb]	29.0 / 63.9
Accessories	M8 Spikes, Rubber Bumbers, Spanner for spikes, Manual, Power cord

All technical specifications are subject to change without notice.

CONTENTS

1.0 INTRODUCTION	7
2.0 UNPACKING	7
3.0 POSITIONING	7
4.0 CONNECTION	7
5.0 INSTALLING AND ADJUSTING	9
6.0 RUNNING-IN	11
7.0 OVERLOADING	11
8.0 MAINTENANCE	11
9.0 DISPOSAL	11
10. AMPLIFIER BACK PLATE (FIGURE 3)	12
11.0 TECHNICAL SPECIFICATIONS	12



RISK OF ELECTRIC SHOCK DO NOT OPEN.
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE THE BACK PANEL.
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL.



The lightning flash within an equilateral triangle is intended to alert you to the presence of non insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute an electric shock to persons.



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

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- 1 Read instructions - all the safety and operating instructions should be read before the appliance is operated.
 - 2 Retain instructions - the safety and operating instructions should be retained for future reference.
 - 3 Heed warnings - all warnings on the appliance and in the operating instructions should be adhered to.
 - 4 Follow instructions - all operating and use instructions should be followed.
 - 5 Water and moisture - the appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool and the like.
 - 6 Carts and stands - the appliance should be used only with a cart or stand if recommended by the manufacturer.
 - 7 Wall or ceiling mounting - the appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
 - 8 Ventilation - the appliance should be situated so that its location or position does not interfere with proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet, that may impede the flow of air through the ventilation openings.
 - 9 Heat - the appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances that produce heat.
 - 10 Power sources - the appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
 - 11 Power cord protection - power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit from appliance.
 - 12 Cleaning - do not use any liquid cleaners. Use only a dry cloth to wipe off dust and grease.
 - 13 Non-use periods - the power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
 - 14 Object and liquid entry - care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
 - 15 Damage requiring service - the appliance should be serviced by qualified personnel when:
 - a) The power-supply cord or the plug has been damaged; or
 - b) Objects have fallen, or liquid has been spilled into the appliance; or
 - c) The appliance has been exposed to rain; or
 - d) The appliance does not appear to operate normally, or exhibits a marked change in performance; or
 - e) The appliance has been dropped, or the enclosure damaged.
 - 16 Servicing - the user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
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1.0 INTRODUCTION

Congratulations on your new DALI IKON MK2 subwoofer. Please read this manual thoroughly before unpacking and installing the subwoofer in order to get the most from your purchase. You can find more information on our website: www.dali-speakers.com or by contacting your authorised DALI dealer.

2.0 UNPACKING

Be careful not to damage the contents when unpacking the parts (see Figure 1). Check that all parts are included in the cardboard box (see Table 1). Keep the packaging materials in case your subwoofer needs to be relocated or serviced.

3.0 POSITIONING

Both the amount and quality of the deep bass depend on the size and shape of the room, the position of the subwoofer(s) and the main speakers. If positioned near a side or back wall, the bass will be accentuated. A corner position will accentuate it even more, and we recommend this position, as it increases the maximum bass output while simultaneously reducing the risk of overloading your subwoofer.

DALI IKON SUB MK2 features a front-firing woofer and located at the rear side of the subwoofer is a heat sink, which can become hot when the subwoofer is powered. Prevent the heat sink from being blocked or covered. Ensure a minimum distance of 5 cm/2" between the heat sink and the nearest obstacle to secure free airflow around the heat sink.

4.0 CONNECTION

DALI IKON SUB MK2 has a built-in power amplifier with an active crossover. The inputs of the subwoofer amplifier should be connected to your stereo or surround sound (pre-) amplifier/receiver using a RCA cable (sold separately). When changing connections, always disconnect the mains voltage from the subwoofer to prevent damage.

The subwoofer can be connected to your stereo or surround sound amplifier/receiver in two ways:

- 1) **LINE input:** the signal from the amplifier is low pass filtered inside the subwoofer using one or both of the LINE INPUTS. This way of connecting the subwoofer is typically used for connecting to a stereo amplifier/receiver.
- 2) **LFE input:** the signal from the amplifier is filtered inside the amplifier when using the LFE input connector. This way of connecting the subwoofer is typically used for surround sound (A/V receiver) Setups.

NOTE: When the subwoofer is connected to the music/home cinema system, don't power up the subwoofer until all other components are "on".

4.1 STEREO CONNECTIONS

If you want to use DALI IKON SUB MK2 in a stereo setup, your stereo (pre-) amplifier/receiver should have either a set of stereo RCA line outputs or a mono RCA line output available (please refer to the instruction manual of your stereo (pre-)amplifier/receiver). The line output connector(s) of your stereo (pre-)amplifier/receiver must be connected to the LINE INPUT connectors (L+R) of the subwoofer via one or two RCA cables (sold separately).

4.2 SURROUND SOUND CONNECTIONS

4.2.1 LINE INPUT

Use the LINE INPUT connectors L or R if you want to adjust the subwoofer Frequency output using the DALI IKON SUB MK2 crossover button.

To use this option, connect the subwoofer output connector(s) of your surround sound (pre-) amplifier/receiver with the LINE INPUT connectors on the subwoofer using a RCA cable (sold separately). If the surround sound (pre-) amplifier/receiver has only one subwoofer output connector, connect it to the LINE INPUT L connector (white) of the subwoofer using a RCA cable.

Please refer to chapter “5.0 Installing and Adjusting” for instructions on how to make the adjustments.

4.2.2 LFE INPUT

Use the LFE input connector (red), if you want to adjust the subwoofer output from your surround sound (pre-) amplifier/receiver. When the LFE input connector is used the built-in crossovers are bypassed and the crossover frequency adjustment button will not be functioning.

To use this option, connect the surround sound (pre-) amplifier/receiver subwoofer output to the LFE input connector on the DALI IKON SUB MK2 with a RCA cable (sold separately).

Please refer to the instruction manual of your surround sound (pre-) amplifier/receiver on how to adjust the crossover settings.

4.3 USING TWO SUBWOOFERS

In most cases you will achieve excellent results with one DALI IKON SUB MK2. Use of two subwoofers is possible as a no-compromise stereo solution, or for reproduction of very powerful sound pressures in a stereo or surround setup in larger rooms.

The connections are basically the same as stated in previous chapters, but for stereo you should only connect the left channel output connector of your stereo or surround (pre-) amplifier/receiver to the LINE INPUT L connector on the DALI IKON SUB MK2 placed to the left in your room. In a similar way you should connect the right channel output connector of your stereo or surround (pre-)amplifier/receiver to the LINE INPUT R connector on the DALI IKON SUB MK2 placed to the right in your room.

For a surround setup, split the output signal from your surround sound (pre)amplifier/receiver using a RCA splitter (sold separately) and connect the two outputs. In all other respects, follow the instructions above - but use separate channels. Please consult your authorised DALI dealer if you have further questions.

5.0 INSTALLING AND ADJUSTING

Start by checking that the voltage of your mains output corresponds to the indication on the back of your DALI IKON SUB MK2.

WARNING: If the wrong voltage is supplied there is a serious risk that the electronics of the subwoofer will suffer permanent damage.

After checking the VOLTAGE, connect the mains cable and move the POWER switch to ON. Adjusting the subwoofer is done using the controls on the rear side of the subwoofer in accordance with the following tuning method, which will help you achieve the best results: Play a piece of music you know well, preferably one including rhythmic bass such as kettle drums, bass guitar etc.

Since the performance is highly dependent on the main speakers, the listening room, the subwoofer position in the room and your personal preferences, we recommend experimenting with different settings to achieve the best listening results rather than giving any specific advice on settings.

NOTE: The position of the subwoofer will significantly affect its contribution to the overall sound (see chapter “3.0 Positioning”). When you have decided which method of connection you want to use and you have positioned the subwoofer, you can begin the process of tuning the system.

You are now ready to adjust your DALI IKON SUB MK2.

5.1 PHASE SETTING

The PHASE switch of the subwoofer has two settings: 0 degrees or 180 degrees. The phase setting will adjust the timing between the subwoofer and the main speakers. To set the phase, do the following:

- 1) Turn up the volume of your subwoofer (see figure 3) a little higher than you normally would.
- 2) Set the crossover point to maximum (130 Hz).
NOTE: If you have connected the subwoofer via LFE instead of LINE IN you need to set the crossover point for your subwoofer to maximum in the menu of your surround sound (pre-) amplifier/receiver.
- 3) In your listening position, play music of the type previously described.
- 4) Toggle between 0° and 180° while focusing on the bass output.

The optimal setting of the PHASE switch is where you experience maximum bass output.

5.2 VOLUME ADJUSTMENT

On the rear of the subwoofer you can increase or reduce the volume by turning the VOLUME control clockwise or counter clockwise. The volume should be adjusted so that the bass matches the level of your main speakers. You should be able to appreciate your subwoofer's contribution to the overall sound without it ever being overpowering. Bass must be tight and accurate so that the subwoofer reproduces the exact amount of bass present in the music/soundtrack; no more no less. When installing the DALI IKON SUB MK2 in a surround sound system, we recommend selecting a fixed level on the sub and adjusting the subwoofer output using the surround (pre-) amplifiers/receivers setup function.

If bass levels are set too high, distortion will reduce the quality of your listening experience. Remember that you can boost the bass level by selecting a physical position close to the wall or even better – in a corner (see chapter “3.0 Positioning”).

5.3 CROSSOVER FREQUENCY ADJUSTMENT

Once you have set the phase and the volume level, you need to adjust the overlap between the main speakers and the DALI IKON SUB MK2.

5.3.1 USING LINE INPUT

The crossover frequency adjustment on the subwoofer is only possible when using the LINE INPUT(S).

On the rear of the subwoofer, adjust the CROSSOVER button upwards until you can hear the bass is even with no drop-outs (Frequency range 50-130 Hz). Smaller speakers typically require a higher crossover point, whereas larger speakers will accept a lower crossover point. When using your DALI IKON SUB MK2 together smaller speakers, e.g. the DALI IKON 2, we recommend a crossover point of approximately 90 Hz (12 o'clock position).

After having adjusted the crossover frequency you may have to re-adjust the volume to optimise performance.

5.3.2 USING LFE INPUT

When using your DALI IKON SUB MK2 together smaller speakers, e.g. the DALI IKON 1, we recommend a crossover point of 100 Hz. This must be entered in the menu system of your (pre-) amplifier/receiver. You might need to enter the 'small' setting when selecting type of front speakers in the AV receiver menu.

Using larger speakers (typically floor-standing front speakers) will allow you to choose a lower crossover point, and to define your speakers as 'large' in the menu system.

If in doubt about the capacity of your speakers, we recommend setting the crossover point quite high, defining your speakers as small, and finally reducing the crossover point to the lowest possible position while maintaining an even bass with no drop-outs.

5.4 POWER

The POWER button is the main ON/OFF switch. We recommend switching OFF the subwoofer when it is not to be used for extended periods. When the POWER button is set to OFF there will still be voltage inside the subwoofer. If you completely disconnect the subwoofer from the mains voltage, please be sure to remove the mains plug from the subwoofer. When changing connections, always disconnect the mains voltage from the subwoofer. We recommend that you ALWAYS turn OFF the IKON MK2 SUB on the rear side of the subwoofer BEFORE turning off the mains switch.

5.5 ON/STAND BY

The subwoofer has a built-in circuit that will power up the amplifier of the subwoofer when an input signal is detected (given that the POWER is set to ON and the power mode switch is set to AUTO). When the subwoofer is ON, the ON/STANDBY LED will light green. If an input signal is not detected for approximately 20 minutes, the subwoofer will go into standby mode and the ON/STANDBY LED on the rear of the subwoofer will light red.

6.0 RUNNING-IN

You should expect the sound quality from your new subwoofer to gradually improve during the initial period of use. Nothing particular has to be done in order to run in the subwoofer – but expect up to several hours of playback (depending on playback level) before full performance level is reached. Use normal music for running-in the subwoofer.

7.0 OVERLOADING

If DALI IKON SUB MK2 is overloaded, the built-in safety circuit may power down the subwoofer. The subwoofer will power on again when the temperature of the built-in amplifier is within safe working range.

If overloaded, we recommend that you turn off the subwoofer for a few minutes before turning it on again.

NOTE: The built-in safety circuit is no guarantee against damage as a result of overloading.

8.0 MAINTENANCE

Cleaning the subwoofer surfaces can be done with ordinary household cleaning agents and using a micro fibre cloth. Avoid using products that are abrasive or contains acid, alkali or anti-bacterial agents. Avoid using aerosols. Avoid using cleaning agents directly on the drive unit and clean this with extreme care.

8.1 AVOID DIRECT SUNLIGHT

The surfaces of the subwoofer may fade or become discoloured over time when exposed to direct sunlight. Therefore avoid positioning the subwoofer in direct sunlight.

9.0 DISPOSAL

DALI products are designed to meet the international directives concerning Restriction of Hazardous Substances (RoHS) and disposal of Waste Electrical and Electronic Equipment (WEEE). The waste symbol indicates that the speakers meet the directives (see Figure 2). The subwoofer must be processed or recycled appropriately. Please consult your local waste authority for guidance.

10. AMPLIFIER BACK PLATE (FIGURE 3)

- A) ON/STANDBY LED, indicator is green when POWER is set to ON or when an input signal is detected. The LED is red, if the subwoofer is in standby mode.
- B) VOLUME adjustment: Turn the button towards “Max” to increase the sound level. To reduce the sound level, turn the button towards “Min”.
- C) CROSSOVER: Adjustment of the crossover frequency from 50 Hz to 130 Hz.
- D) Toggle the phase of the subwoofer to either 0 degrees or 180 degrees phase angle.
- E) LINE input: Connect the “L” input connector (white) to the LEFT RCA line output connector of your stereo/surround sound (pre-) amplifier. Connect the “R” input connector (red) to the RIGHT RCA line output connector of your stereo/surround sound (pre-) amplifier.
- F) LFE input: Connect the “LFE” input connector (red) to the LFE RCA line output of your surround sound amplifier.
- G) POWER switch: Set the switch to ON to power up the subwoofer. Set the switch to OFF to power off the subwoofer.
- H) FUSE compartment: If the subwoofer fails to power up when connected to the mains and the POWER switch is set to ON, the fuse may have blown or be faulty. Replace the fuse with the same type as originally supplied – see fuse type on the amplifier back plate. If the fuse blows repeatedly, have the subwoofer checked at an authorised service centre – contact your authorised dealer.
- I) MAINS connector: Connect the supplied power cord to the MAINS connector and your mains outlet.

WARNING: MAKE SURE THAT CORRECT VOLTAGE IS SUPPLIED FROM YOUR MAINS OUTLET BEFORE CONNECTION.

- J) There are three settings for the POWER MODE switch: ON: The power to the subwoofer will be controlled by the POWER switch. AUTO: When the main power switch is on, the subwoofer amplifier will turn on when an input signal is detected on one of the inputs. When a signal is not detected for approximately 20 minutes, the subwoofer amplifier will go into standby-mode. OFF: The subwoofer will immediately go into standby mode.

11.0 TECHNICAL SPECIFICATIONS

In table 2 you will find the most common specifications for our subwoofers. Please have in mind that there are countless methods for measuring subwoofers. Only your ears can decide whether one sub sounds better than another. Like all our speakers, DALI IKON SUB MK2 is designed to reproduce music as honestly as possible.

Enjoy your new DALI IKON SUB MK2!