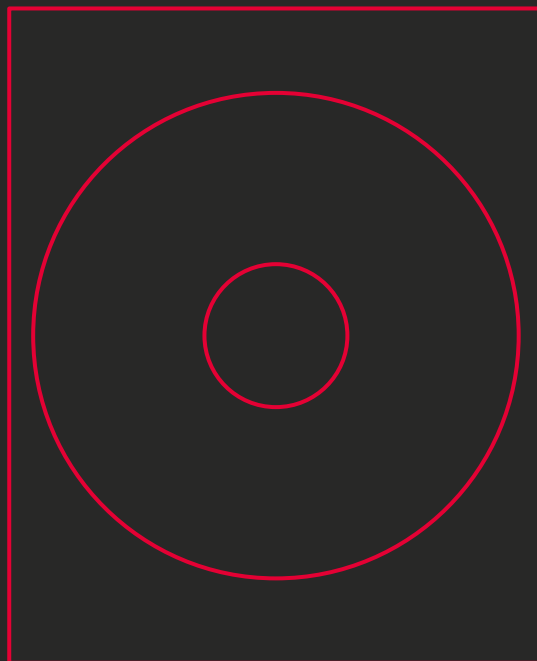


**18S**

# Owner's manual

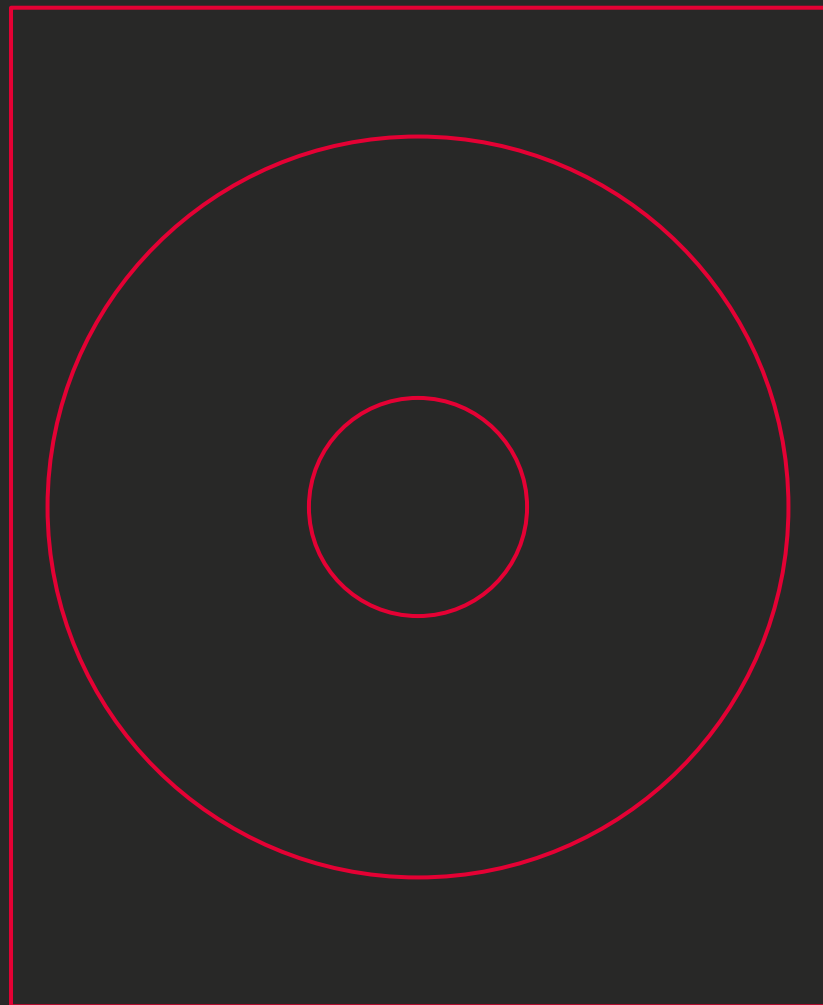
**DYNAUDIO**



# Hello

**Welcome to Dynaudio 18S**

**Active DSP Subwoofer**



# This is **18S**

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# Introduction

## Dear music lover

Welcome to Dynaudio 18S active DSP subwoofer. The 18S is a very high performance product that rewards thoughtful setup and installation so we suggest that you take a little time to read this manual before you begin.

## Dynaudio

# Important safety instructions



- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type

- plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  - 11. Only use attachments/accessories specified by the manufacturer.



- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. 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 or objects

- have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. **WARNING:** To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.
  - 16. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle. The mains plug of the power supply cord shall remain readily operable.



**WARNING**  
**Risk of electric shock. Do not open.**  
To reduce the risk of electric shock, do not remove the rear panel and do not expose the apparatus to rain or moisture. No user serviceable parts inside. Refer servicing to qualified personnel.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



This symbol 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.

## Getting to know the 18S

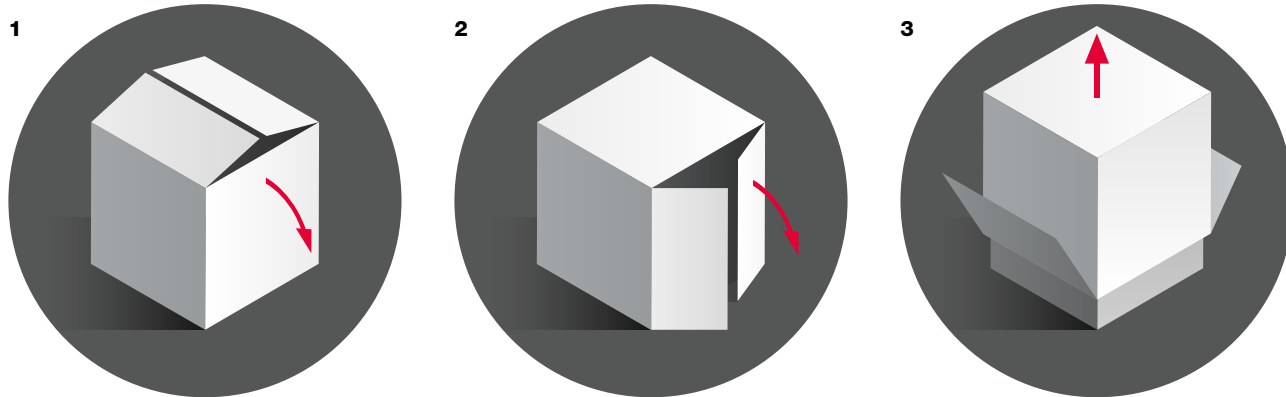
The Dynaudio 18S is a DSP controlled active subwoofer intended to augment the bass performance of full range monitors in near-field or mid-field monitoring installations.

The 18S features a closed box acoustic system and incorporates dual opposed 200mm drivers to minimise mechanical vibration.

Connection facilities include balanced XLR and unbalanced stereo inputs with output sockets provided to enable the connection of a second subwoofer.

The 18S incorporates low-pass filter presets configured to match a range of Dynaudio monitor models, three bands of parametric equalisation and four generic low pass filter presets that can be used with main speaker models from alternative manufacturers.

18S configuration and control is accomplished through a rear panel mounted display combined with a rotary controller.



## Unpacking

1. Open the carton from the top and remove the subwoofer accessories. Do not remove the upper element of the internal packaging.
2. Carefully rotate the carton on to its side and again to turn it upside-down.
3. The carton can now be lifted away from the subwoofer. Remove the lower internal packaging now on top to reveal the underside of the subwoofer.
4. Open the plastic bag and remove it from around the base of the subwoofer.
5. Carefully rotate the subwoofer on to its side and again to turn it onto its feet. The internal packaging can now be removed followed by the plastic bag.

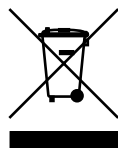
After unpacking, make sure the components are complete and check the subwoofer and all accessories for transport damage. Transport damage may be expected if the packaging is severely marked. Do not attempt to install the subwoofer if it is damaged. If the contents are incomplete or damaged, please contact your Dynaudio retailer or local distributor. Distributor addresses can be found at: [www.dynaudio.com](http://www.dynaudio.com).

### Packaging material

The packaging has been designed so that it may be reused if it was not damaged during initial transport. Keep the packaging and use it for all further transport.

### Note

The 18S is heavy and is best unpacked close to its installed location by two people working together.



## Disposal

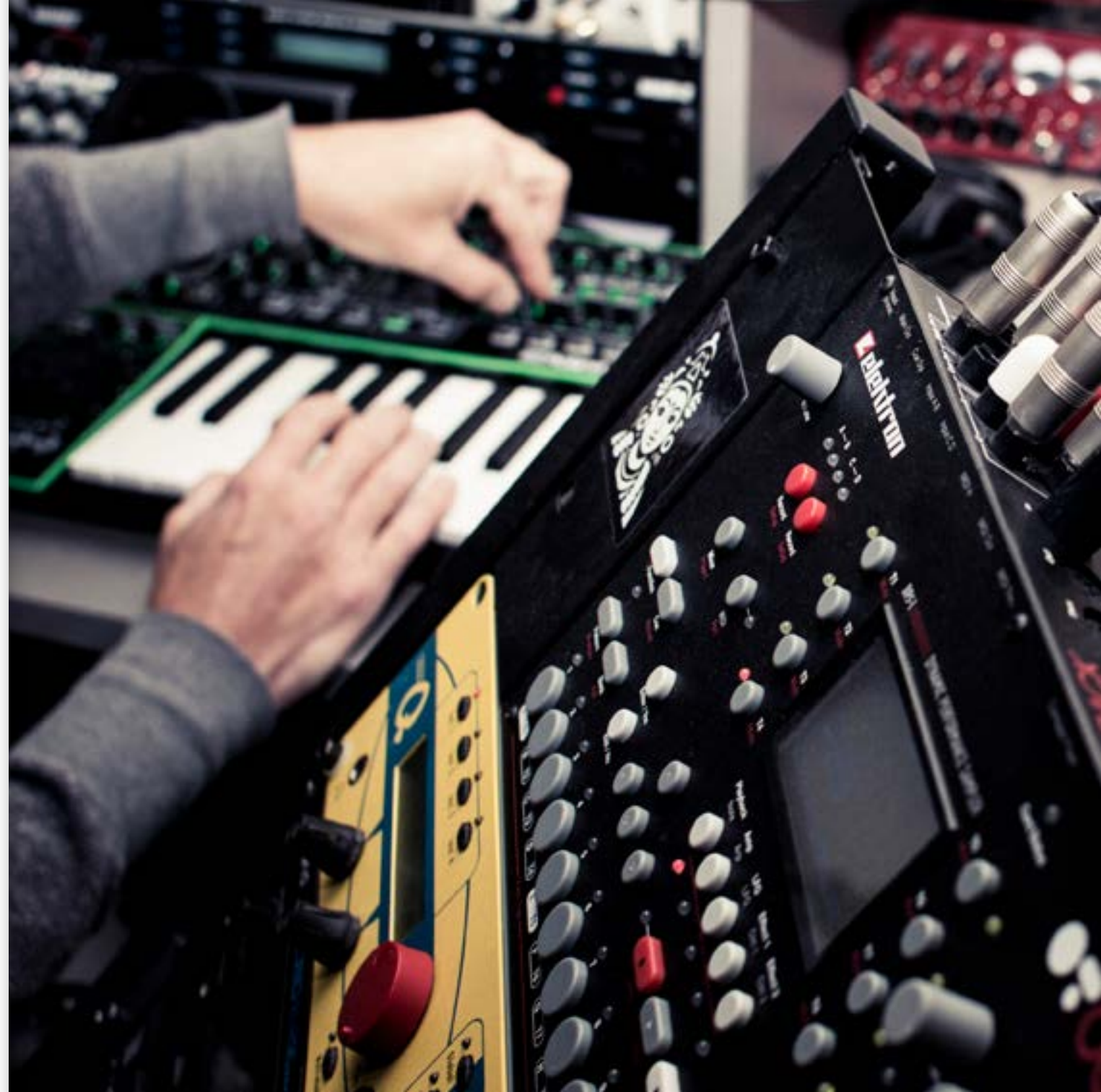
Disposal of used electrical and electronic equipment (applicable in European countries with separate collection systems for this equipment).

This symbol on the product or its packaging indicates that the product may not be treated as household waste. Instead it must be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product

is disposed of correctly, you will help prevent potential negative consequences for the environment and human health. The recycling of materials helps to conserve natural resources. For more detailed information on recycling this product, please contact your local authority, community waste disposal of, or the shop where you purchased the product.

## Carton contents

- 1 x Dynaudio 18S active DSP subwoofer.
- 1 x Mains power cable
- 1 x Document pack



# Installation

## Positioning

The position of subwoofers in studio rooms is generally less critical compared to full-range monitors. However, best results will most likely be obtained if your 18S is placed between the left and right monitors or in the vicinity of one of them. If this is not practical, a subwoofer position to the side of the left or right monitor, or against a side wall can also provide good results.

Placing a subwoofer close to or behind the listening position, even in multi-channel surround sound installations, generally results in inferior performance, especially in terms of stereo imaging.

Moving the subwoofer closer to walls and corners will generally increase the amount of bass. Although the extra amount of bass can be compensated for by reducing the volume level of the subwoofer relative to the rest of the system, this can result in uneven bass response at the listening position. Experiment with the position of your 18S to find one which yields the best compromise between convenience, volume and even bass response.

**Note**

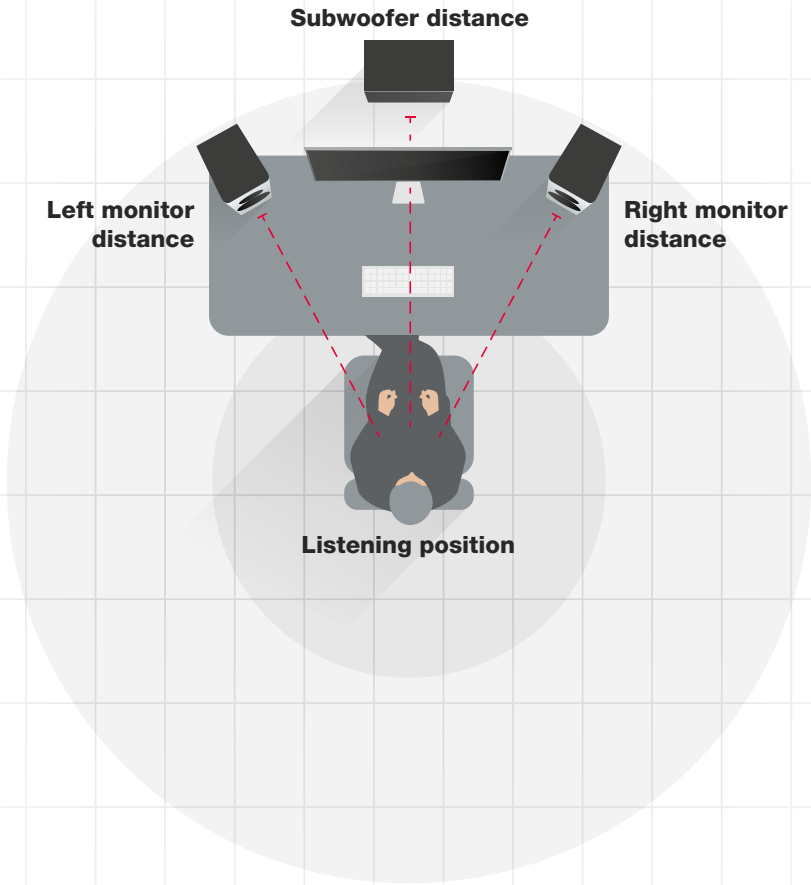
Every studio room will have “room-modes”, where at specific locations and frequencies, the bass may be under or overemphasised. This effect is likely to be stronger in square and rectangular shaped rooms. Experimenting with the position of the subwoofer is likely to reap benefits in terms of minimising room modes.

The 18S incorporates signal processing that can compensate for the time delay and volume level differences between the subwoofer and monitors resulting from their relative positions with respect to the listening position. Once you have positioned your subwoofer, measure the distances as illustrated. The measured distances should then be specified at the appropriate locations in the subwoofer configuration menu. The configuration menu is described in Section 3 of this manual.

**Note**

Two subwoofers used in a single installation can improve performance by maintaining low frequency stereo separation and effectively averaging the effects of low frequency room resonances.

The 18S signal processing is able to compensate for a maximum of 5.35m difference between subwoofer and monitor distances to the listening position.



Mains and signal connections

The 18S is fitted on its rear face with a connection and control panel carrying mains, signal and connection sockets. The panel is illustrated in Diagram 3 and its connection facilities are described in the following paragraphs.

- 1. **Mains power socket.** Connect the subwoofer to a mains power supply using the cable supplied. If multiple cables are supplied with your subwoofer, use the one appropriate for your territory.

**Note**  
Do not switch on your subwoofer until all other connections have been made.

- 2. **Balanced XLR input sockets** (left and right). If your monitoring hardware provides balanced outputs connect them to these sockets using high quality balanced XLR audio cables.

**Note**  
Balanced signal connection is a feature of professional audio and of some high-end domestic audio equipment. It is inherently more resistant to interference and noise than unbalanced connection.

- 3. **Balanced XLR output sockets** (left and right). The XLR output sockets are intended for the connection of active left and right monitors or for a power amplifier driving passive monitors.

**Note**  
The 18S distance compensation signal processing can only function correctly if the monitors are driven via the subwoofer outputs.

- 4. **Unbalanced phono input sockets** (left and right). If your monitoring hardware provides unbalanced phono outputs connect them to these sockets using high quality phono audio cables.

**Note**  
If your audio source provides only a mono subwoofer output it can be connected to either 18S phono input. In this case however the main speakers must be driven from the audio source and not via the 18S outputs.

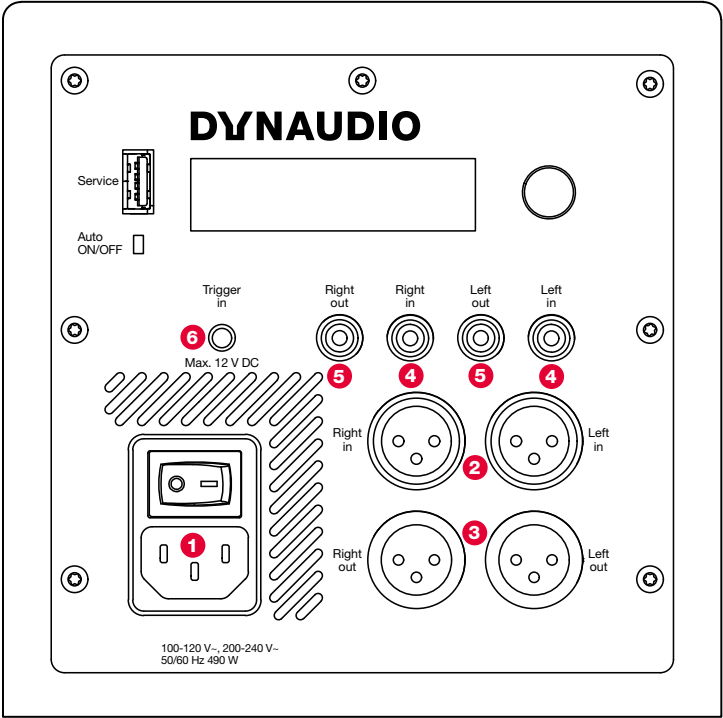
- 5. **Unbalanced phono output sockets** (left and right). The phono output sockets are intended for the connection of active left and right monitors or for a power amplifier driving passive monitors.

**Note**  
The 18S distance compensation signal processing can only function correctly if the monitors are driven via the subwoofer outputs.

- 6. **Trigger input.** The trigger input enables wired remote control of subwoofer standby and operational modes in automated systems. Your Dynaudio retailer or installer will be able to provide more information on the use of the 18S in home automation systems.

**Note**  
The USB socket present on the 18S connection panel is intended for fault diagnosis and firmware update only. It cannot be used for audio connection or playback. Contact your Dynaudio retailer or Dynaudio directly for more information of firmware updates.

Subwoofer connections





# It's time to create

Here's how to optimise your new 18S for your own studio

# Control and configuration

With the 18S subwoofer positioned in the listening room and connected to signal cables and mains power it can be switched on via the mains switch above the mains input socket on the rear panel.

The 18S must be configured appropriately for the monitoring system and main speakers with which it is to be used. This is achieved via the rotary controller, display and menu based interface on the rear panel. Turn the rotary controller to select configuration parameters and press the control to select options.

**Note**  
If multiple subwoofers are employed they should be configured identically.

The 18S configuration menu parameters and their options are described in the following paragraphs:

- **Input sensitivity:** Adjusts the input sensitivity to match the output level of your pre-amplifier or audio-visual processor. Initially select the 0dB option. Only adjust the input sensitivity if the subwoofer volume adjustment doesn't provide a suitable range.
- **Volume:** Set to match the volume of your main speakers so that bass at your main listening position is neither too prominent or too quiet.

**Note**

Setting the subwoofer volume is important in terms of both overall system balance and the demands of different types of programme material.

- **Presets:** The 18S incorporates low pass filter presets to match a range of Dynaudio speaker models. If your 18S is to be used in a system with one of the Dynaudio models listed, select it to configure the 18S low pass filter appropriately. If your subwoofer is to be used for the LFE channel in a home theatre system select the filter Bypass option.
- **Parametric EQ:** Provides three bands of low frequency parametric equalisation. Each band offers frequency, gain and Q parameters. Parametric is best used in combination with low frequency room acoustic analysis to identify frequency response anomalies. The equalisation is set to "flat" by default.

**Note**

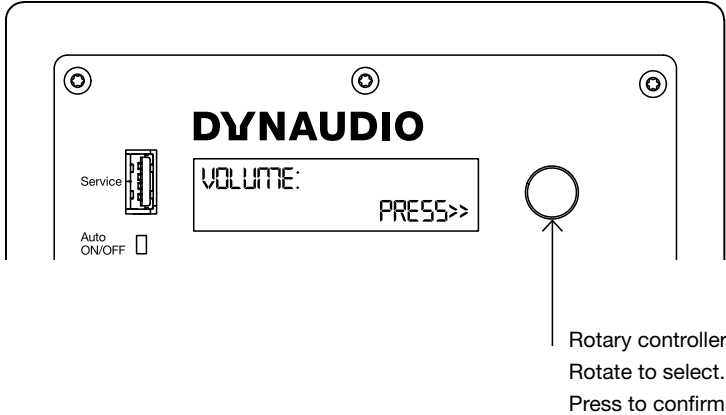
If your Dynaudio speaker model is not listed among the 18S presets, or your 18S is to be used with speakers from an alternative manufacturer, select the generic filter preset closest to the speaker's specified -6dB low frequency cut-off.

- **Auto standby:** Select to specify the delay time before the subwoofer will switch to Standby mode when unused. The auto standby feature can also be switched off.
- **Line Wake-up:** Select to enable or disable trigger input switch on.
- **Left main speaker distance:** Select to specify the distance in metres of the left channel monitor from the listening position.
- **Right main speaker distance:** Select to specify the distance in metres of the right channel monitor from the listening position.

- **Sub speaker distance:** Select to specify the distance in metres of the subwoofer from the listening position.
- **Status:** Select to display the subwoofer operational status.
- **Factory Reset:** Select to return your 18S to its default settings.

The rear panel Auto ON/OFF switch will engage or defeat automatic switch on and off in response to the presence or absence of an input signal.

Subwoofer controls



# In use

Once installed and configured, your 18S should require little attention other than perhaps occasional volume control adjustment to suit different types of programme material.

### Cleaning your subwoofer

Bush the grille surfaces with a soft brush and the cabinet surfaces with a clean lint-free cloth. Do not use a vacuum cleaner. If you wish to use a cleaning agent, apply it to the cleaning cloth and not directly to the subwoofer. Test a small area first, as some cleaning products may damage some of the surfaces.

### Support

Should you require help or advice there are a variety of support options for Dynaudio products. These can be found at [dynaudio.com](https://dynaudio.com).

Data	18S
System	Twin opposed driver, closed box, active DSP subwoofer
Frequency response	20Hz – 230Hz ±3dB
Inputs	2 x balanced XLR, 2 x unbalanced RCA phono
Max. input voltage	1.01Vrms @ +6 dB Sensitivity, 2.0Vrms @ 0 dB Sensitivity 4Vrms @ -6 dB Sensitivity, 10.1Vrms @ -14dB (LFE) Sensitivity
Outputs	2 x balanced XLR, 2 x unbalanced RCA phono
XLR output impedance	Differential: 200Ω, Single-ended: 100Ω
Phono output impedance	100Ω
XLR Pin-out	Pin 1: ground, Pin 2: signal +, Pin 3: Signal –
Auto ON/OFF	Yes
Amplifier power	500W
Power consumption (standby)	<0.5W
Power consumption (max)	650W
Driver	2 x 24cm
Weight	20.5kg 45.2lb
Dimensions (W x H x D)	470 x 333 x 268mm 18.5 x 13.1 x 10.6in

**18S**

**Designed,  
engineered  
and assembled  
in Denmark**

**DYNAUDIO**

Dynaudio A/S  
8660 Skanderborg  
Denmark

**[www.dynaudio.com](http://www.dynaudio.com)**

18S Owner's Manual  
Item no. 4556202

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