

7040A

Operating Manual

Genelec 7040A Active Subwoofer

操作手册

真力 7040A 有源低音音箱

GENELEC®





Genelec 7040A Active Subwoofer

Introduction

Congratulation and thank you for choosing Genelec!

Since 1978, Genelec has been guided by a single idea – to make perfect active monitors that deliver neutral and accurate sound in every kind of acoustical environment. In Genelec's quest for this ultimate goal, our unrivalled commitment to research and development has led us to continuously develop innovative driver technology, electronic circuitry, enclosure designs and many more. Our design philosophy is based on sustainability and environmental values, where industrial design serves our product acoustical performance.

Your Genelec product has been designed and manufactured with care in our factory, in Finland, using environmentally efficient solutions to give you reliable operation over many years.

Please take the time to read this manual. Happy monitoring!

General Description

The Genelec 7040A is a very compact active subwoofer for reproducing low frequencies. The 7040A extends the bass reproduction of Genelec 8010, 8020 and M030 active monitors for stereo applications. Using the 7040A extends their frequency responses down to 30 Hz (-6 dB).

Driver

The 7040A contains one 165 mm (6.5 in) magnetically shielded driver, housed in Genelec Laminar Spiral Enclosure™ (LSE™).

Bass Management

Balanced XLR connectors are used for the audio inputs and outputs. There are two input connectors and two outputs.

The bass management unit in the 7040A subwoofer splits the input into low and high frequency components at 85 Hz. Frequencies below 85 Hz are reproduced by the subwoofer. Frequencies above 85 Hz are directed via the subwoofer's output connectors to the main monitors. The subwoofer's outputs have the same level as the inputs.

The subwoofer sensitivity can be adjusted from +12 to -6 dBu to match the subwoofer sound level easily with different monitors.

Two "BASS ROLL-OFF" switches provide bass response adjustment to compensate for the acoustical environment in three 2 dB steps. Two switches allow alignment of subwoofer phase with the monitors. The phase can be adjusted in 90 degree increments between 0° and -270°.

Amplifier

A Class D power amplifier produces 50 W output power with very low THD and IM distortions. Driver overload protection

is included in the amplifier circuitry. The amplifier also incorporates thermal overload and short circuit protections. The power supply accepts mains voltages from 100 to 240 VAC.

ISS™ Autostart

The 7040A is equipped with Intelligent Signal Sensing™ (ISS™) automatic start function. ISS turns the amplifier to standby mode if no input signal has been detected for one hour. The power consumption in standby mode is less than 0.5 watts. Playback automatically resumes once an input signal is detected.

There is a slight delay in the automatic powering up. In those environments where the 7040A is required to be on all of the time, the ISS function can be disabled by setting the "ISS DISABLE" switch to the "ON" position. Then the subwoofer is continuously powered and can be turned off using the power switch on the connector panel. The default position from the factory is with "ISS DISABLE" in the OFF position.

Installation

The subwoofer is supplied with a mains cable and this operating manual. After unpacking inspect the subwoofer for possible damage in transport. Ensure that the subwoofer and the monitors are powered off before connecting cables.

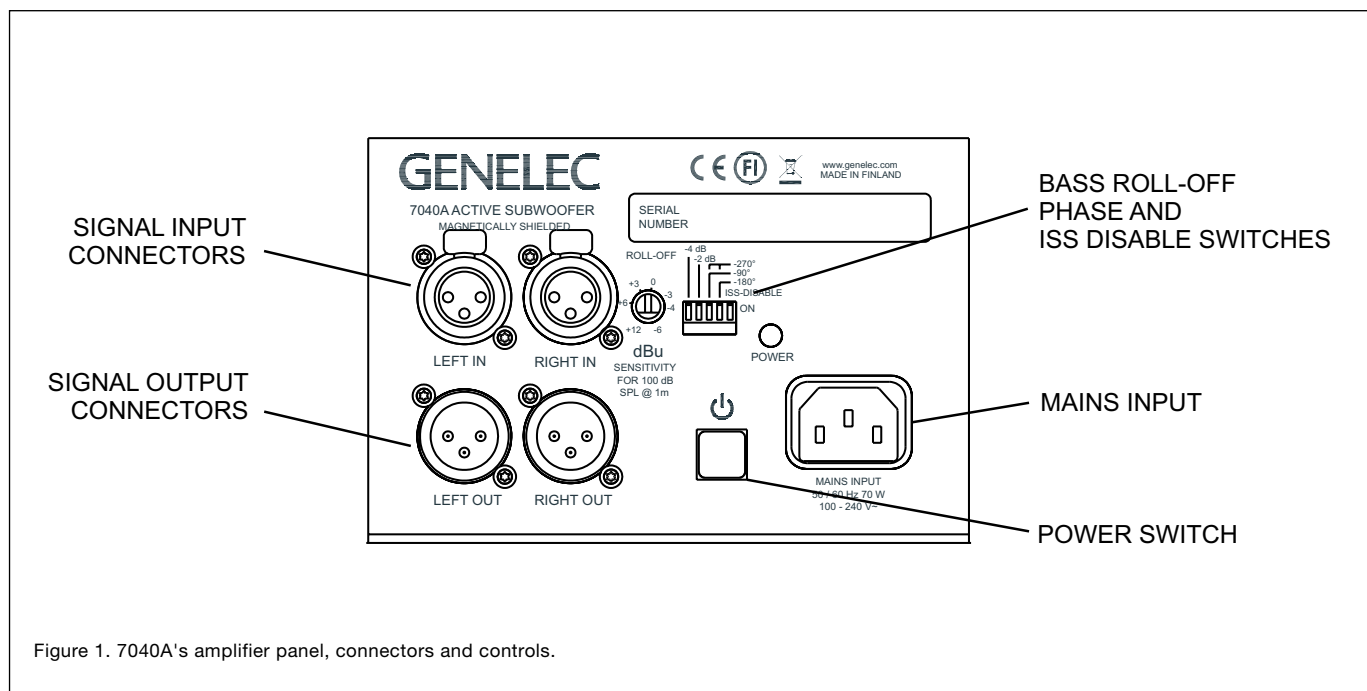


Figure 1. 7040A's amplifier panel, connectors and controls.

Audio connections to the subwoofer and monitors use balanced XLR cables (not included in the subwoofer delivery content). As the 7040A has an integrated amplifier, it may only be connected to a line level signal source, such as a mixing console or preamplifier, never to the loudspeaker outputs of a power amplifier or an integrated amplifier.

The source is connected to the "LEFT IN" and "RIGHT IN" connectors of the subwoofer. The subwoofer's output connectors "LEFT OUT" and "RIGHT OUT" are connected to the monitors.

If the signal source has unbalanced RCA outputs, you can use signal cables as shown in Figure 2.

Once all connections have been made, the subwoofer and monitors can be powered up.

Positioning In The Room

Placement of the subwoofer in the room affects the subwoofer frequency response and sound level dramatically, as the room influences the low frequencies strongly. Even a slight change in the subwoofer's location can make a marked difference in the frequency balance. Often patient and methodical experimentation is needed to find the optimum placement. The placement will also affect the phase alignment between the monitors and the subwoofer, as well as the need for bass roll-off adjustment.

First, place the subwoofer slightly offset from the center of the front wall. The distance to the nearest wall should be less than 0.6 m (24 in) measured from the subwoofer's driver. This position increases acoustic loading and sound output due to the proximity of the wall and floor. Too large a distance from the wall can cause cancellations and reduce subwoofer output. The monitor should be placed at least 1.1 m (43 in) away from walls to avoid reduction of low frequency output (see Figure 3).

If the subwoofer frequency response does not seem balanced, move the subwoofer slightly to the left or right. This changes how the room modes are excited and can result in improved flatness. Positioning the subwoofer close to a corner boosts the subwoofer output but may cause asymmetrical spatial imaging at low frequencies.

Operating Environment

The 7040A subwoofer is designed for indoor use only. The ambient temperature should be 15-35 °C (50-95 °F) and the relative humidity 20-80 %. Condensation is not allowed. If it has been stored or transported in a cool environment, the product must be allowed to warm up in its packing to the ambient temperature before connecting mains power.

Sufficient amplifier cooling and reflex port functioning is required when the

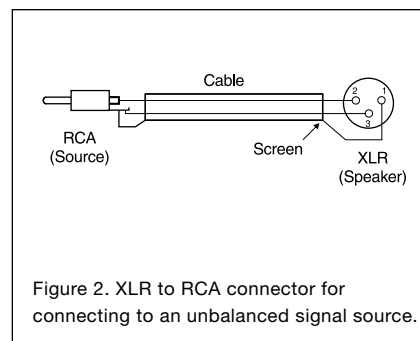


Figure 2. XLR to RCA connector for connecting to an unbalanced signal source.

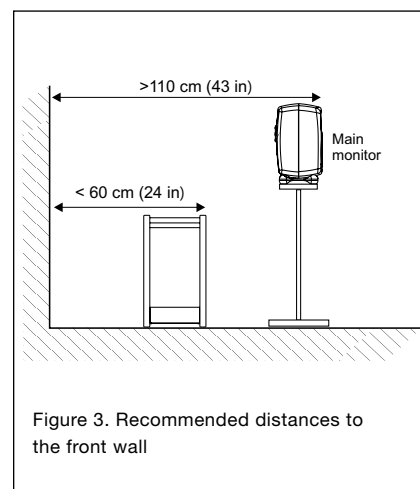


Figure 3. Recommended distances to the front wall

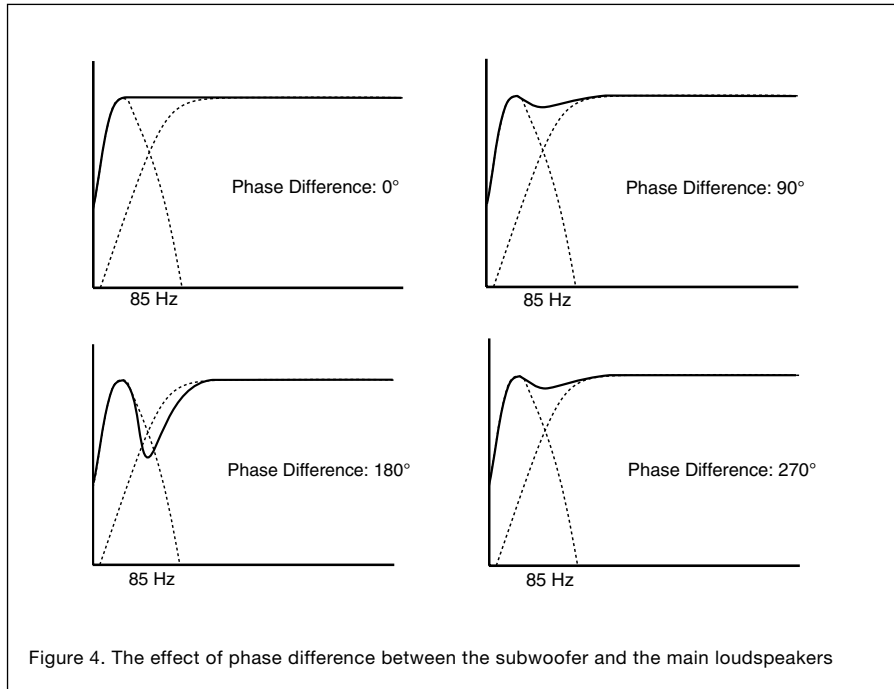


Figure 4. The effect of phase difference between the subwoofer and the main loudspeakers

Subwoofer placement	Bass Roll-Off setting
Near to a wall	-2 dB
In a corner	-6 dB
Flush mounted	-2 dB

Table 1. Suggested Bass Roll-Off settings

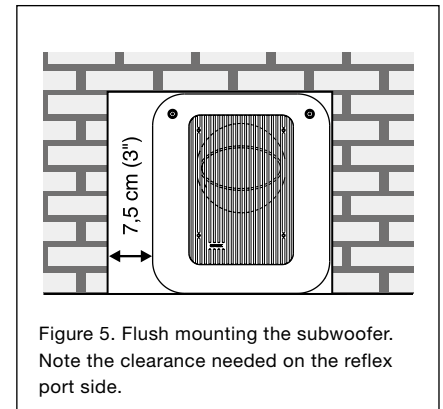


Figure 5. Flush mounting the subwoofer. Note the clearance needed on the reflex port side.

subwoofer is installed in a restricted space, such as a cabinet or integrated into a wall structure. See section "Flush Mounting the Subwoofer." A restricted space must be sufficiently ventilated to prevent ambient temperature rise above 35 °C (95 °F).

Do not cover the driver of the subwoofer. Do not place the subwoofer so that there is less than 10 cm (4 in) of free space in front of the grille.

Thick carpets under the subwoofer can block the ventilation clearance needed for cooling the amplifier unit. To ensure proper functioning of the reflex port the reflex port side (opposite of the connector panel) should have a minimum clearance of 7.5 cm (3 in).

Flush Mounting the Subwoofer

If the subwoofer is flush mounted into a wall or a cabinet, ensure amplifier cooling and unrestricted airflow from the reflex port. Make the recess 7.5 cm (3 in) wider than the subwoofer. Place the subwoofer into the right end of the recess with the driver side facing the room. This leaves sufficient 7.5 cm (3 in) of free space for the reflex port. The height and depth of the recess should not be much larger than the subwoofer.

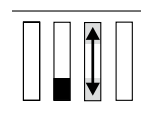
Setting the Input Sensitivity

The 7040A has the same sensitivity as 8010, 8020 and M030 monitors in free

field. However, when placed near reflecting surfaces the sensitivity of 7040A typically must be attenuated due to increased wall loading. A typical initial setting for the rotary sensitivity control is -4 dBu. The +12 dBu setting provides maximum attenuation. The use of proper measuring equipment with careful listening is highly recommended.

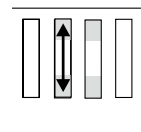
Phase Alignment by Listening

Connect an audio frequency signal generator to LEFT IN or RIGHT IN input of the 7040A and feed in an 85 Hz tone. Connect a monitor to the corresponding output, so that the test signal is reproduced by both subwoofer and monitor.

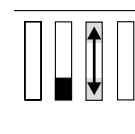


Toggle the -180° phase switch (DIP 4 from left) "ON" and "OFF". Set it to the position giving the lowest sound level at

the listening position.



Next, toggle the -90° phase switch (DIP 3) "ON" and "OFF", and again set it to the position which gives the lowest sound level.



Finally, invert the -180° phase switch (DIP 4) to the opposite setting. Now you can remove the test signal.

Phase Alignment Using Test Equipment

Feed in the test signal to LEFT IN or RIGHT IN of the subwoofer. Place the microphone at the listening position. Using a real-time analyser or other frequency response measurement system, adjust the sensitivity of the subwoofer until the frequencies below and above 85 Hz are reproduced at equal level. Then, adjust the phase switches for the maximum dip of at least -6 dB at the crossover frequency (85 Hz). Invert the -180° switch to the opposite setting. The phase is now aligned and the measurement should show a smooth response around 85 Hz.

Setting the Bass Roll-Off

The acoustic response of the subwoofer can compensate the room characteristics. To adjust the subwoofer use the "Bass Roll-Off" switches located on the connector panel. These offer attenuation levels of -2, -4, and -6 dB at the lowest subwoofer output frequencies. Table 1 provides suggestions for Bass Roll-Off

switch settings. Flat anechoic response is obtained when both roll-off switches are set to "OFF".

Safety Considerations

Genelec 7040A subwoofer has been designed in accordance with international safety standards. However, to ensure safe operation and maintain the unit in safe operating condition, the following warnings and cautions must be observed:

- Do not expose the subwoofer to water or moisture. Do not place any objects filled with liquid, such as vases on the subwoofer or near it.
- Servicing and adjustment must only be performed by authorized Genelec service personnel.
- Opening the amplifier unit is strictly prohibited except by authorized service personnel.
- Always use a mains power connection with protective earth terminal. In case of fault, failing to do this may lead to personal injury.
- Free flow of air around the subwoofer is necessary to maintain sufficient cooling. Do not obstruct airflow around the subwoofer.
- Note that the subwoofer is not completely disconnected from the AC mains service unless the mains power cord is removed from the amplifier or the mains outlet. Easy access to either end of the power cord must be ensured at all times.

Warning!

This equipment is capable of delivering sound pressure levels in excess of 85 dB, which may cause permanent hearing damage.

Maintenance

No user serviceable parts are inside the amplifier unit. Any maintenance of the unit must only be performed by Genelec authorized service personnel.

Guarantee

This product is supplied with a two year guarantee against manufacturing faults or defects that might alter the performance. The guarantee can be extended to five years by registering the product on www.genelec.com. Refer to the supplier for full sales and guarantee terms.

Compliance to FCC rules

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:

This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

Symbols



WEEE Directive 2012/19/EU



Power/standby switch

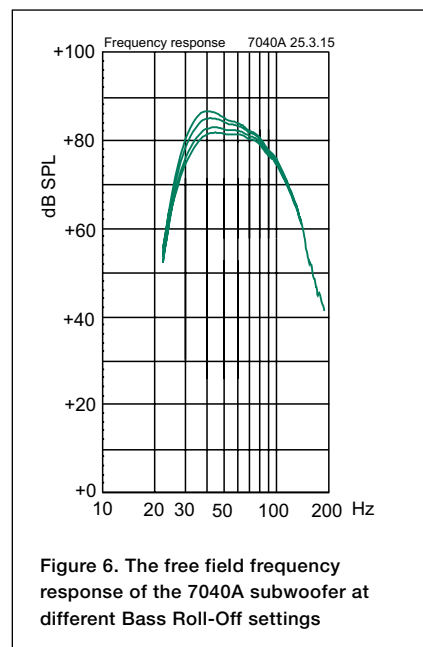


Figure 6. The free field frequency response of the 7040A subwoofer at different Bass Roll-Off settings

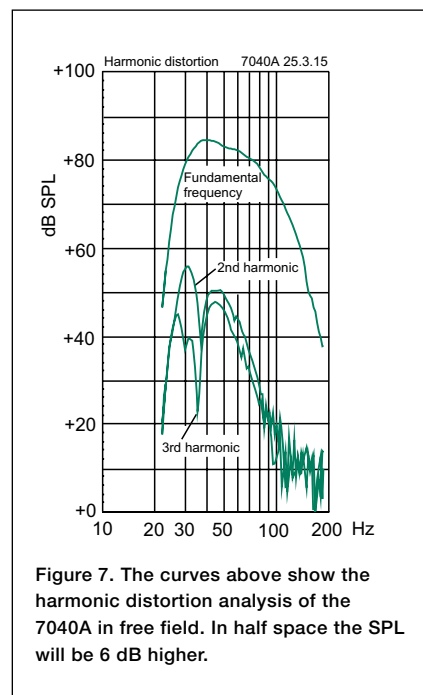


Figure 7. The curves above show the harmonic distortion analysis of the 7040A in free field. In half space the SPL will be 6 dB higher.

7040A Operating Manual

SYSTEM SPECIFICATIONS	
	7040A
Free field frequency response (-6 dB)	30...90 Hz
Accuracy of frequency response	± 3 dB (33...85 Hz)
Maximum short term sine wave SPL output averaged from 40 to 85 Hz, measured in half space at 1 meter	100 dB
Self generated noise level in half space at 1 m (A-weighted)	≤ 5 dB
Harmonic distortion at 90 dB SPL at 1 m on axis in half space 40...85 Hz	
2nd	≤ 2.5%
3rd	≤ 1.5 %
Driver, magnetically shielded	165 mm (6½ in)
Weight	11.3 kg (24.9 lb)
Dimensions	
Height	410 mm (16⅛ in)
Width	350 mm (13¾ in)
Depth	205 mm (8⅛ in)

CROSSOVER SECTION	
	7040A
Subsonic filter (18 dB/octave) below	35 Hz
Input channels	2
High pass frequency for main channel outputs	85 Hz
Midband rejection >400 Hz	≥ 50 dB
Bass Roll-Off control in 2 dB steps	0 to -6 dB @ 35 Hz
Phase matching control in 90° steps	0 to -270°
Input sensitivity control	+12 to -6 dBu

AMPLIFIER SECTION	
	7040A
Amplifier short term output power (Long term output power is limited by driver unit protection circuitry)	50 W
Amplifier system THD at nominal output	≤ 0.08 %
Mains voltage	100 - 240 VAC universal
Power consumption (average)	
Standby (ISS active)	≤ 0.5 W
Idle	5 W
Full output	70 W

INPUT SECTION	
	7040A
Input connectors XLR female	
pin 1	gnd
pin 2	+
pin 3	-
Input impedance	10 kohm balanced
Input level for 100 dB SPL output @ 1 m	Variable from +12 to -6 dBu

OUTPUT SECTION	
	7040A
Input connectors XLR male	
pin 1	gnd
pin 2	+
pin 3	-
Main monitor Out gain	0 dB



真力 7040A 有源低音音箱

介绍

感谢您选择真力 (Genelec) 产品!

自1978年起,真力就遵循着一个理念——制造最好的有源监听音箱,在各种各样的声学环境中提供自然、精准、中性的声音重放。为了实现这一终极目标,多年来我们在研发上投入了不遗余力的努力,在单元技术、电子电路技术和箱体设计等方面引领行业前沿。我们坚持环保和可持续发展的设计理念,同时,产品的工业设计为产品的声学性能服务。

您的这件真力产品是在位于芬兰的真力工厂精心设计,并选用最优的环保材料制造而成的。它值得信赖,经久耐用,可以长久地陪伴您。

请您抽时间阅读这本操作手册。祝您聆听愉快!

概述

真力 (Genelec) 7040A 是一款非常紧凑的有源低音音箱,用于重放低频内容,适合搭配真力 8010、8020、M030 音箱组成 2.1 立体声系统,将低频下潜扩展至 30Hz (-6dB)。

单元

7040A 带有一个 165mm (6.5 in) 防磁型单元,安装在真力 LSE™ 层状螺旋式箱体中。

低频管理

输出采用平衡 XLR 接口。共有 2 个输入和两个输出接口。

7040A 中的低频管理模块将输入信号分成 85Hz 以上和 85Hz 以下两个部分。85Hz 以下内容由低音音箱重放。85Hz 以上内容由低音音箱通过输出接口送出给主音箱。低音音箱的输出电平与信号输入电平一致。

低音音箱的灵敏度可以在 +12 到 6dBu 范围内调节,与不同的主音箱进行音量匹配。

2 个“BASS ROLL-OFF” (低频滚降) 开关以 2dB 为一阶共有 3 个档位,用于针对实际声学环境进行频率响应补偿调整。同时,还有两个开关用于调整与主音箱的相位匹配,有 0°、-90°、-180°、-270° 共 4 个档位。

功放

7040A 具有 50W 的 D 类功放, THD 失真度及

MI 失真度极低。功放电路中带有单元过载保护。同时,功放中还带有过热保护和短路保护。主电源为自适应电源, 100~240VAC 均可适用。

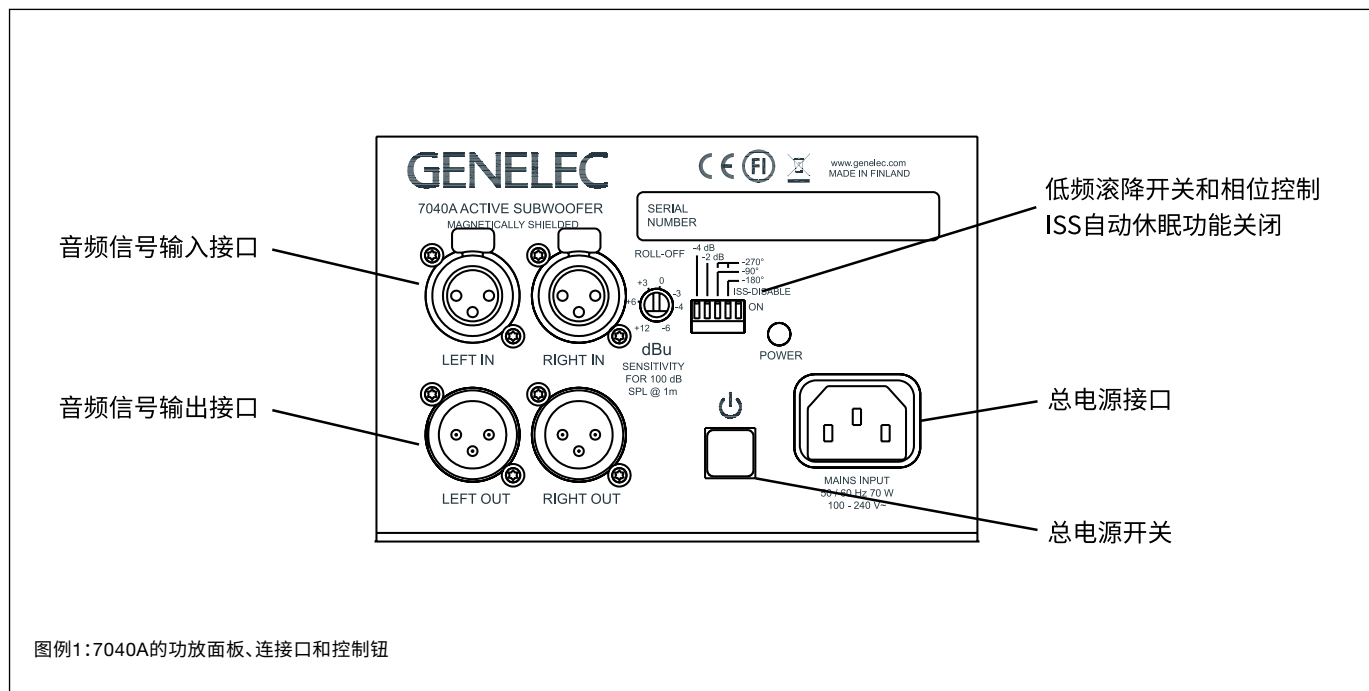
ISS™ 自动待机

7040A 带有 ISS™ 智能信号监测自动待机功能。当监测到一段时间内没有音频信号时,音箱自动切换到待机状态。音箱在待机模式下的功耗小于 0.5W。当再次接收到音频信号时,音箱自动切换回工作状态。

从待机到开启有一个极短暂的延时。如果您的工作环境中需要 7040A 长期保持开启状态,请将“ISS DISABLE”开关调整到“ON”,将自动待机功能关闭。此时,7040A 将不会进入待机状态,您可以使用接线面板上的电源开关来关闭音箱。通常,音箱的出厂设置为“ISS DISABLE”开关在“OFF”状态。

安装

7040 包装箱中附带一根电源线 and 一份安装手册。打开包装箱后,请您检查是否存在运输途中造成的损坏。在接线之前,确保低音和音箱的电源开关均处于关闭位置。



音频输入、输出均需要使用带有平衡XLR接口的线缆(包装箱中不含)。由于7040A带有内置功放,请务必将其与低电平线路信号相连接,如调音台、前级,请勿将7040A与功放的输出相连接。

请将声源连接至低音音箱的“LEFT IN”和“RIGHT IN”接口。请将主音箱连接至低音音箱的“LEFT OUT”和“RIGHT OUT”接口。

如果声源设备为非平衡RCA输出,请使用图2中的信号线缆。

所有连接完成后,您可以开启音箱。

在房间中的摆位

由于房间对低频的影响巨大,因此低音音箱在房间中的摆位显著影响着低频的频率响应和声压级。即便是很小的改变,也可能引起低频表现的显著变化。通常,您需要使用系统的方法耐心找到低音音箱的最理想摆位。同时,摆位也影响着主音箱与低音音箱之间的相位匹配,以及是否需要使用低频滚降设置。

首先,将低音音箱偏离前墙的中心摆放。从低音音箱单元到最近墙面的距离应小于0.6m(24 in)。由于墙面和地面的反射作用,

这种摆位可以提升低频声压级。如果低音音箱离墙面的距离过远,可能会引起低音抵消现象,并降低低频声压级。在使用低音音箱的情况下,主音箱离墙面的距离最好大于1.1m,以避免低频抵消现象(见图3)。

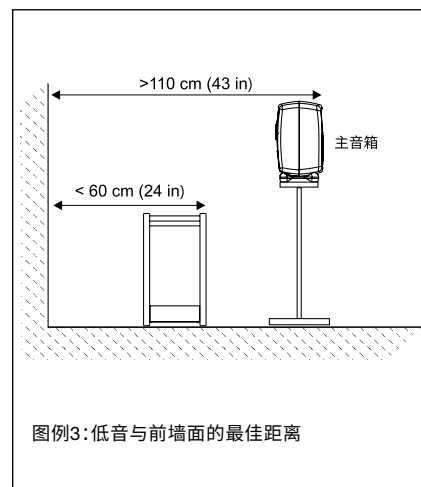
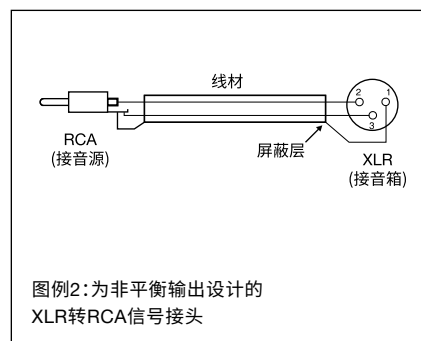
如果低频响应不够均衡,可以尝试左右移动低音音箱。这将改变房间中激起的各种驻波,并可能得到更平直的频率响应。将低音音箱放置在房间角落,会让低频声压级显著增加,但可能引起低频在空间中分布不均的现象。

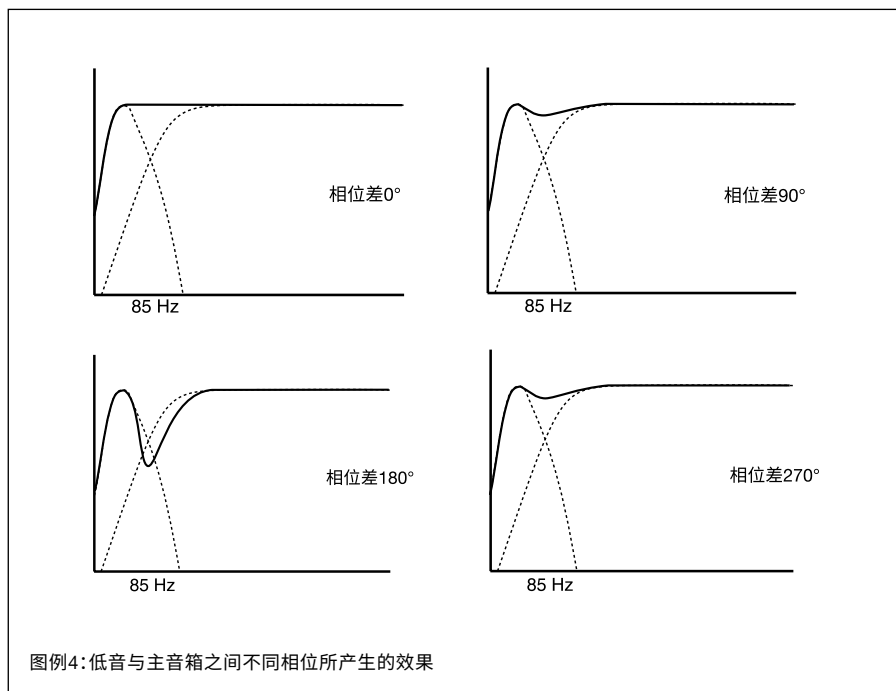
操作环境

7040A是为室内使用而设计的,适用于温度为15-35°C(50-95°F),相对湿度为20-80%的环境。不可耐受冷凝环境。如果音箱在运输、储存过程中处于寒冷环境,请务必保持原包装封闭,并将其放置在正常温度下进行恢复,然后再连接主电源。

当把音箱进行嵌入式安装或柜式安装时,需为功放留出通风散热空间,确保环境温度在35°C(95°F)以下。同时,需为倒相孔留出空气流动的缝隙,以确保音箱正常工作。请参考“嵌入式安装低音音箱”。

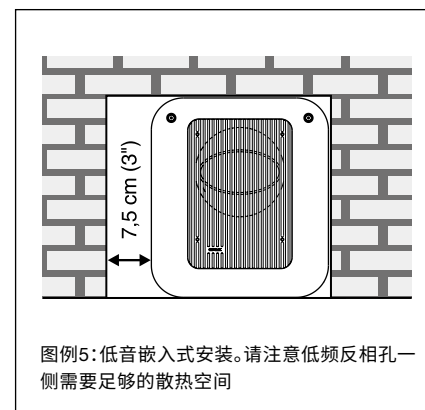
不要遮盖音箱的单元。音箱格栅前方的开放空间不要小于10cm(4 in)。





低音摆放位置	低频滚降设置
靠近墙面	-2 dB
在墙角	-6 dB
嵌入式安装	-2 dB

表格1: 厂家推荐的不同音箱安装情况下的不同低频滚降设置



将低音音箱放置在厚重的地毯上可能会阻碍功放的散热。

为确保倒相孔的正常工作, 请在倒相孔一侧(接线面板的对侧)至少留出7.5cm (3 in) 的缝隙。

嵌入式安装低音音箱

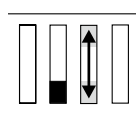
如果把音箱进行嵌入式安装或柜式安装, 需确保为功放留出散热空间, 并确保倒相孔的正常空气流动。嵌入槽的宽度或柜体的宽度需比音箱宽度至少多出7.5cm (3 in)。安装时, 请确保正确的安装方向, 音箱单元一侧指向房间内部, 倒相孔一侧留出缝隙。嵌入槽或柜体的高度和深度最好不要比低音安装所需要的更多。

灵敏度设定

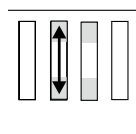
在自由声场中, 7040A低音音箱具有与8010、8020和M030音箱相同的灵敏度。当被放置在靠近反射面的位置时, 由于墙面反射的作用, 您通常需要将7040A的灵敏度降低一些。建议的初始设置为, 将灵敏度旋钮调整到-4dBu位置。将旋钮调整到+12dBu将使音箱灵敏度衰减到最低。建议您使用合适的测量设备, 并配合细心的主观聆听。

通过聆听设置相位

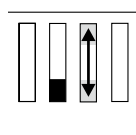
将85Hz测试信号连接到7040A的LEFT IN或RIGHT IN音频输入上。将相应的7040A输出连接到主音箱。此时, 7040A与主音箱同时播放测试信号



ON 将-180°相位开关(左数第4个DIP开关)分别拨到“ON”和“OFF”进行聆听, 并将开关设置



ON 然后, 将-90°相位开关(左数第2个DIP开关)分别拨到“ON”和“OFF”进行聆听, 并将开关设置到在听音位置上获得最低声压级的档位上。



ON 最后, 将-180°相位开关(左数第4个DIP开关)拨到相反的位置, 并断开测试信号。

通过测量设备设置相位

使用实时分析仪或其他频率响应测量设备, 将85Hz测试信号连接到7040A的LEFT IN或

RIGHT IN 音频输入上。将话筒放置在听音位置。调整低音音箱的灵敏度, 使得85Hz以上和以下的声压级相同。然后调整相位开关, 使得分频点上(85Hz)产生最大的衰减(至少衰减6dB)。将-180°开关拨到相反位置。至此相位调整完成, 测试设备上应显示出85Hz附近具有平滑的频率响应。

设置Bass Roll-Off

低音音箱的声学表现可以对房间的声学缺陷进行一定的补偿。您可以使用接线面板上的“Bass Roll-Off”(低频滚降)开关进行调整。它能在极低频段进行-2、-4、-6dB的衰减。表1提供了Bass Roll-Off开关的设置建议。当所有开关都设置在“OFF”时, 低音音箱能够在自由声场中具有平直的响应。

将85Hz测试信号连接到7040A的LEFT IN或RIGHT IN

安全注意事项

7040A严格按照国际安全标准设计, 但您仍需注意以下警告和注意事项, 确保安全的操作以及安全的音箱工作条件:

- 切勿将音箱靠近水或潮湿环境。切勿在音箱上或其附近任何地方摆放装有液体

的物品,例如花瓶。

- 音箱维修和调整必须由具有维修资质的人员来完成。
- 切勿自行拆开音箱。
- 切勿使用未连接保护地的电源线,这可能会危机人身安全。
- 此音箱可以产生超过85dB的声压级,这可能会引起永久性听力损伤。
- 低音周围的空气流通很重要,请确保音箱周围有足够的通风空间。请不要在音箱周围放置任何有碍空气流通的障碍物。
- 请注意,除非将电源线从功放或电源插座上拔掉,否则功放并未完全与交流电源断开连接。

警告!

此音箱可以产生超过85dB的声压级,这可能会引起永久性的听力损伤。

维护

在音箱内部没有任何用户可自行维护的部分。任何关于音箱的维护或维修都应由真力授权的维修服务人员来完成。

质保

产品为材料和工艺上的瑕疵提供2年质保。请参考供货商的销售和质保条款。

FCC符合性声明

该设备符合FCC规定的第15部分。操作必须符合以下两个条件:

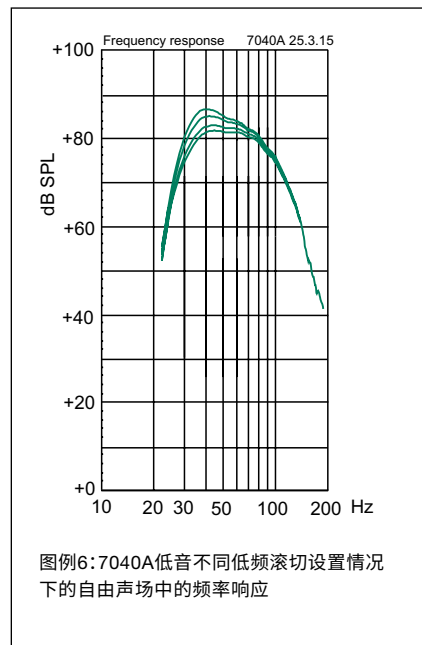
- (1) 此设备不造成有害干扰
- (2) 设备必须接受所收到的干扰,包括可能导致意外操作的干扰

注意:该设备已经经过测试,符合B类数字设备的限制,且符合FCC标准第15部分的要求。这些限制旨在提供合理的保护,防止在住宅区安装时产生有害干扰。该设备会产生,使用和辐射射频能量,如果未按照说明安装和使用,则可能对无线通信造成有害干扰。但是,我们不保证在特定安装中不

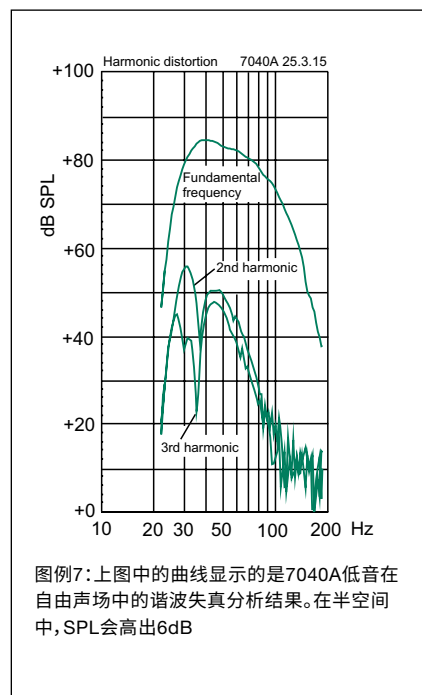
产生干扰。如果设备对无线电和电视的接受产生有害的干扰,用户可通过开关该设备进行验证,我们建议用户采用下述中一种或多种手段进行干扰消除:

- 重新调整天线的方向和位置
- 加大该设备与接收器之间的距离
- 将该设备和接收器分别连接到不同电路的插座上
- 向经销商或有经验的无线电/电视技术人员寻求帮助

任何未经厂方许可的改动都将让用户丧失在FCC规定下操作设备的权力。



图例6:7040A低音不同低频滚切设置情况下的自由声场中的频率响应



图例7:上图中的曲线显示的是7040A低音在自由声场中的谐波失真分析结果。在半空间中, SPL会高出6dB

7040A 低音使用手册

系统参数	
	7040A
自由场频率响应(-6 dB)	30...90 Hz
频率响应精准度:	± 3 dB (33...85 Hz)
最大短期正弦波SPL输出 (40 Hz - 85 Hz均值, 半开放声场, 轴上1m处)	100 dB
自身噪音 (半开放声场, 轴上1m处, A计权)	≤ 5 dB
总谐波失真 at 85dB SPL (40 Hz - 85 Hz均值, 半开放声场, 轴上1m处)	
2次	≤ 2.5%
3次	≤ 1.5%
驱动单元 (带有磁屏蔽)	165 mm (6½ in)
重量	11.3 kg (24.9 lb)
尺寸	
高度	410 mm (16½ in)
宽度	350 mm (13¾ in)
深度	205 mm (8¼ in)

分频部分	
	7040A
低频滤波器 (18 dB/octave) 低于	35 Hz
输入通道	2
主声道高通滤波器	85 Hz
中频抑制 > 400 Hz	≥ 50 dB
低频滚降调整, 2dBstep	0至-6 dB @ 35 Hz
相位匹配调整, 90°step	0至270°
输入灵敏度调整	+12 dBu 至 -6dBu

功放部分	
	7040A
功放短期输出功率 (长期输出功率受限于单元保护电路)	50 W
额定输出下的功放系统THD	≤ 0.08 %
电源电压	100 - 240V 交流电
功耗 (平均)	
待机 (ISS开启)	≤ 0.5 W
闲置	5 W
全输出	70 W

输入部分	
	7040A
输入接口XLR (母)	
pin 1	gnd
pin 2	+
pin 3	-
输入阻抗	10 kohm 平衡
在1m处获得100dB SPL时的输入电平	+12 dBu 至 -6dBu 可调

输出部分	
	7040A
输入接口XLR (公)	
pin 1	gnd
pin 2	+
pin 3	-
主音箱输出增益	0 dB

