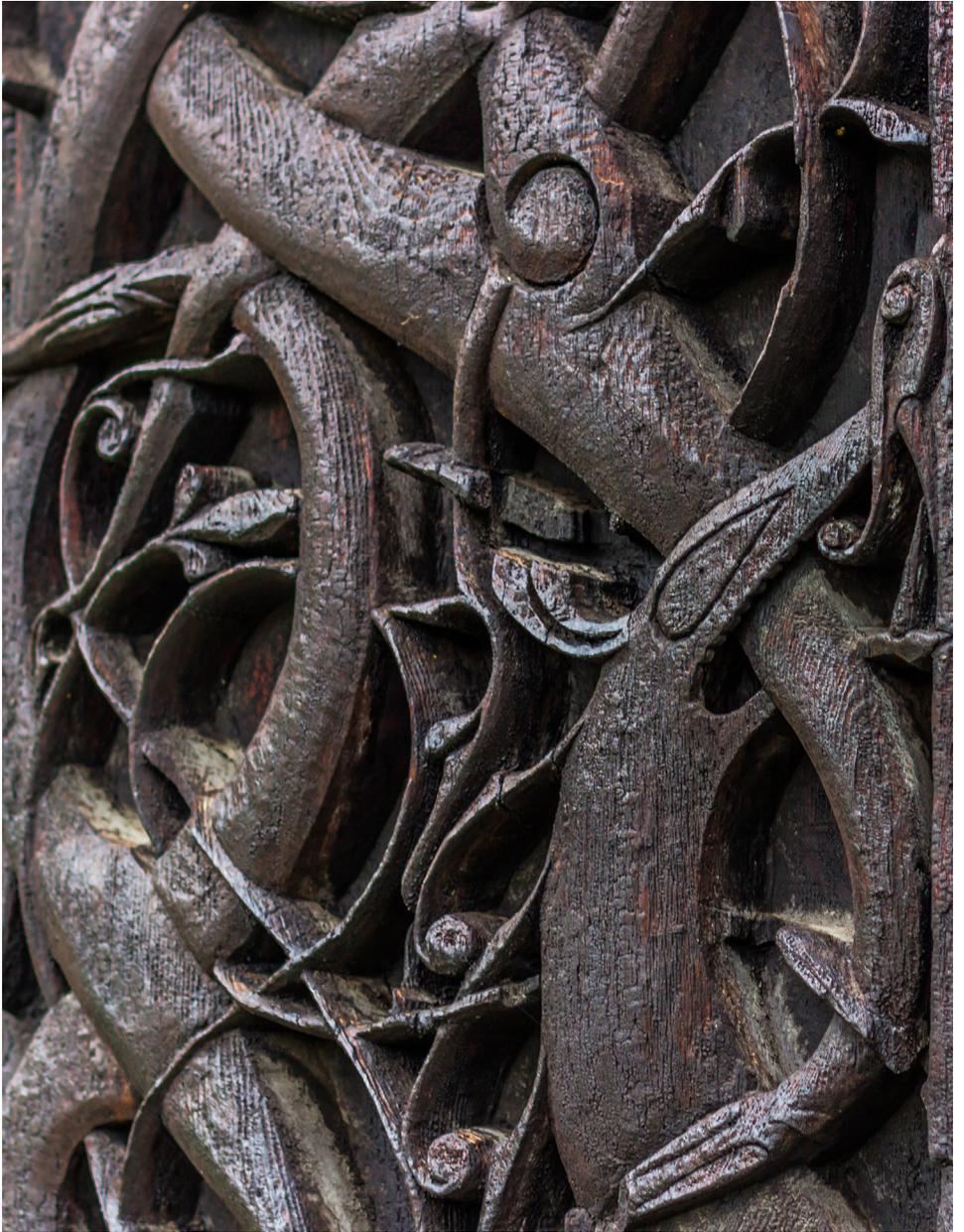


H590 User Manual





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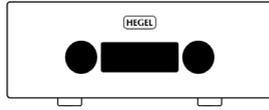
Congratulations on your new Hegel H590. All Hegel products are based on a simple philosophy: Add as little as possible. We work to keep the music signal as close to the original as possible. We are always looking for ways to lower distortion and lower noise so that the music is reproduced as close to the original as possible and is limited only by the quality of the recording. Our aim is to give you the best possible music experience. Our minimalist Scandinavian design is styled to fit in with any interior. Our products are easy to operate and are manufactured according to the best quality principles.

“Hegel H590 is our brand new reference integrated amplifier and sets a new standard in our lineup of integrated amps. We have taken digital technology from our reference products, added a brand new usb solution, and given it more power than any of our other integrated products. All that power and versatility is set in the fresh new Hegel appearance. H590 reference is everything that our partners and customers have asked for: a bigger and better Hegel integrated. So we gave them a beast that controls even the biggest of speakers in addition to more inputs, more advanced streaming and much better sound”

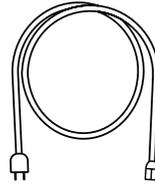
A handwritten signature in black ink, appearing to read 'Bent Holter', with a long, sweeping horizontal line extending to the right.

Bent Holter
Founder Hegel Music System

What's in the box



Amplifier



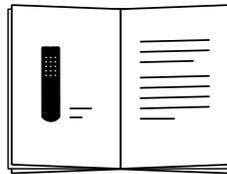
Power Cord



Accessory Box



Remote Control

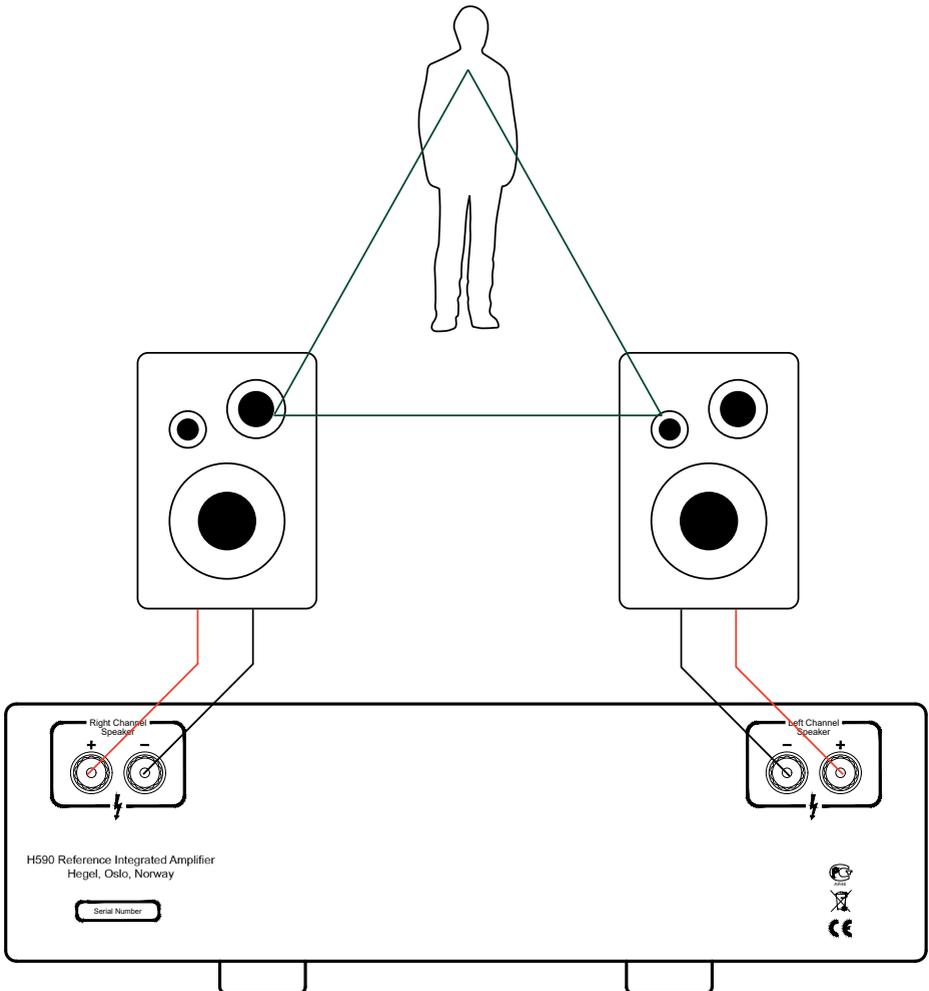


User Manual

Quickstart

1. Connect your speakers

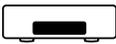
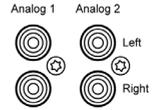
For the best audio experience the distance between the listener and each speaker should be the same.



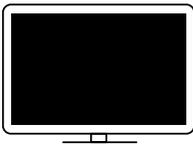
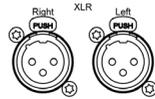
2. Connect a source



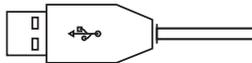
Unbalanced Analog



Balanced Analog

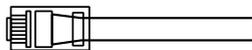


Coaxial Digital



USB Computer

USB

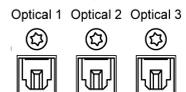


Network streaming

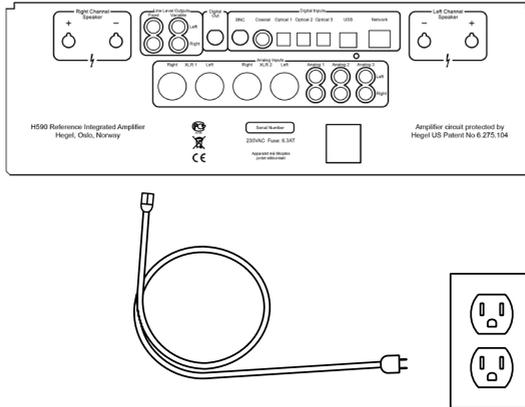
Network



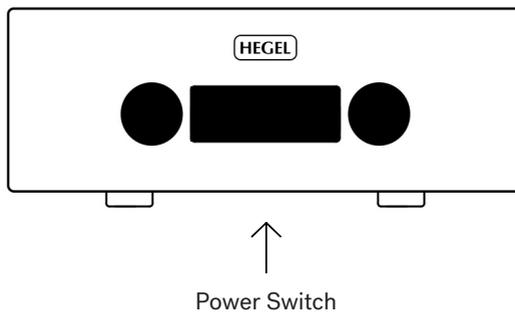
Optical Digital



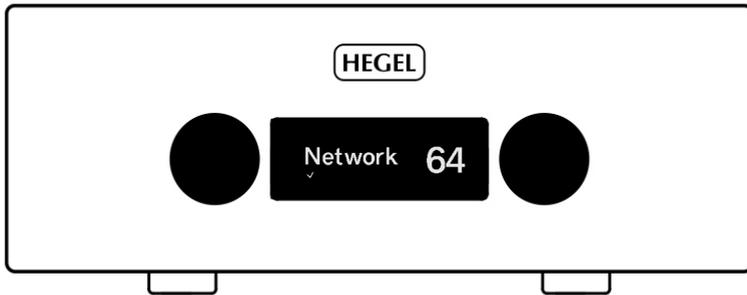
3. Connect the power cord



4. Turn on the amplifier



General Use



Operating the H590

The source and volume can be changed using the input and volume selector on the front panel or using the remote control.

Power Button

The H590 amplifier can be switched on and off with the power button located on the underside of the amplifier, towards the front of the unit.

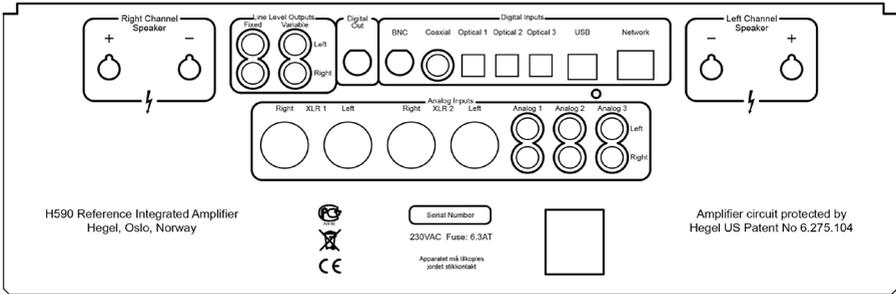
NOTE: When powering up, the H390 takes a few seconds to calibrate, the outputs are muted and the volume flashes to indicate that mute is on. This is normal and is part of the start-up procedure.

NOTE: When the H390 has been switched off, wait 30 seconds before powering it on again.

Sleep/Auto standby

In compliance with the EU Energy Efficiency Directive the Hegel device will automatically switch off after 15 minutes without sensing a signal, or with very low signal on the speaker outputs. You can disable or change the Sleep/ Auto Standby settings in the device's menu.*

Connections



Always power the amplifier off before connecting input/output audio cables and the power cable.

Right Channel Speaker

- Right outputs

Line Level Outputs

- Fixed Line level (RCA)
WARNING High level output.
- Variable Line Level (RCA)

Digital Out(DAC loop)

- BNC: Output BNC

Digital Input

- BNC: Input BNC
- Coaxial: Input Coaxial/RCA
- Optical1: Input TOSLINK/EIAJ Optical
- Optical2: Input TOSLINK/EIAJ Optical
- Optical3: Input TOSLINK/EIAJ Optical
- Computer USB input
- Home network connection (LAN - RJ45)

Left Channel Speakers

- Left outputs

Analog Inputs

- XLR1 (XLR): Standard balanced analog input (Pin 1 is Chassis Ground; Pin 2 is Positive Phase; Pin 3 is Negative Phase)
- XLR2 (XLR): Standard balanced analog input (Pin 1 is Chassis Ground; Pin 2 is Positive Phase; Pin 3 is Negative Phase)
- Analog 1(RCA): Standard analog input
- Analog 2(RCA): Standard analog input
- Analog 3(RCA): Standard analog input

AC Power Connection

- AC Power connector with fuse holder:
230V/115V/100V AC depending on country.

Home Theater

Most inputs on H590 can be used as a Home Theater input, see Device Menu.

Digital Inputs

Digital Inputs

The Hegel H590 supports MQA and DSD(DoP) on USB.

USB

The Hegel H590 has a plug and play USB DAC. Connect it to your PC or Mac and enjoy all your music.

There is no driver required for Linux, Mac OS, or Windows10. When connected the amplifier will show up as "Hegel H590 USB" under the speaker settings in your operating system. If you have an older version of Windows you will need to install a driver. Go to support.hegel.com to download the driver. When using the driver your amplifier will show up as "XMOS USB Audio".

Resolution: Up to 384 kHz 32 bit

H590 supports DSD64,DSD128,DSD256 via DoP

MQA (Master Quality Authenticated)

Hegel H590 includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

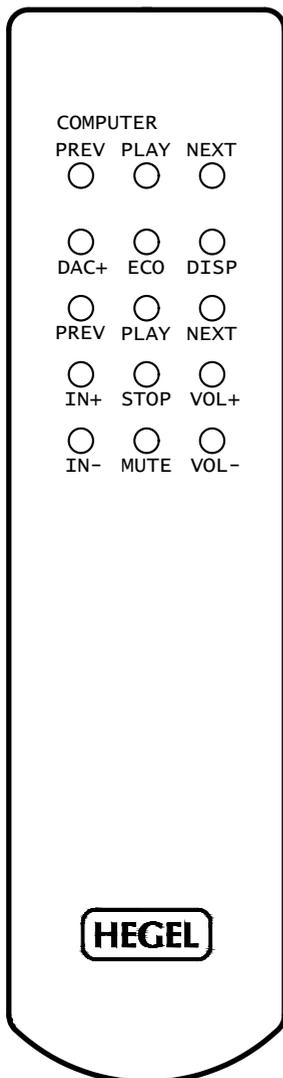
"MQA" or "MQA." indicates that the product is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. "MQA." indicates it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner. "OFS" confirms that the product is receiving a decoded MQA stream or file. This delivers the final unfold of the MQA file and displays the original sample rate.

Hegel H590 supports up to MQA 8X (352.8kHz/384kHz)

Visit mqa.co.uk for more information.



Remote Control - RC8



Remote control buttons (starting top left)

1. PREV Skip to previous track on most media players
2. PLAY Play/Pause on most media players
3. NEXT Skip to next track on most media players
4. DAC+ Input source selector button for Hegel DACs
5. ECO On/Off (standby)
6. DISP Display on/off (hold for off)
7. PREV Skip to previous track on Hegel CD-players
8. PLAY Play/Pause for Hegel CD-players
9. NEXT Skip to next track on Hegel CD-players
10. IN+ Switches to next input on Hegel amplifiers
11. STOP Stop/Eject for Hegel CD-players
12. VOL+ Volume up for Hegel amplifiers
13. IN- Switches to previous input on Hegel amplifiers
14. MUTE Mute for Hegel amplifiers
15. VOL- Volume down for Hegel amplifiers

General information

The Hegel amplifier can be controlled with the included Hegel RC8 Remote Control. The RC8 controls Hegel products, such as amplifiers and preamplifiers, and most media players, avoiding the need for multiple remote controls

The remote control uses two standard 1.5-volt LR03 AAA batteries. To insert the batteries, use a crosshead (Phillips) screwdriver to gently remove the four screws on the underside of the remote control.

Insert the batteries with the correct polarity with + sign and - sign, as shown inside the battery holder. Be careful when inserting the batteries to not damage the battery holder.

Replace the cover. Insert the screws by gently turning them by hand, to avoid damaging the threads in the remote control chassis. Do not tighten the screws too much, as this can damage the screws and the soft metal chassis of the remote control.

CAUTION: Do not drop the remote control on the floor, as this can damage its internal parts and the battery holder.

Mute

The MUTE(14) button mutes the outputs on the amplifier. The volume flashes to indicate that mute is on. Press the mute button, or adjust the volume level, to switch mute off.

On/Off (standby)

The ECO(5) button will turn the amplifier on or off (standby).

Display On/Off

The DISP(6) button may be used to turn the display on or off. Hold the DISP button for more than 1 second to turn the display off. When adjusting inputs or volume the display will light up momentarily. To turn the display on again, press DISP.

Set startup volume

A user defined volume may be used as the power-up volume. Adjust the volume to the desired start up level. Press DAC+(4) and VOL-(15) simultaneously. The volume number will blink three times to indicate that the new start up volume has been saved.

Set max volume

A user defined volume may be used as the max volume. Adjust the volume to the desired maximum level. Press DAC+(4) and VOL+(12) simultaneously. The volume indicator will blink three times to indicate that the new max volume has been saved. To restore to the default max volume of 99, turn the volume all the way up and press DAC+ and VOL+ once more. The volume indicator will blink 99 three times to indicate that the max volume has been reset.

Reset to Factory Default Settings

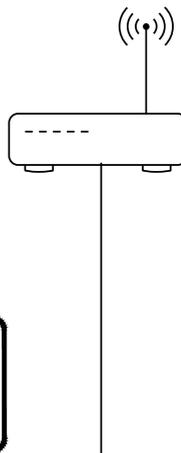
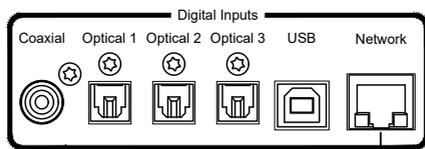
By pressing and holding the DAC+(4) button while pressing MUTE(14), the amplifier will be reset to factory settings. This will clear all user defined settings, including IP settings, and restart the amplifier. This can also be done in the amplifier's menu. Software updates will not be affected.

Network Setup

Connection

To be able to use the amplifier's network and streaming features, the amplifier needs to be connected to your local network.

Connect your Hegel amplifier using an Ethernet cable (not supplied) from the network connection (LAN - RJ45) port on the back of the amplifier, to your router.



Network settings

The amplifier has its own Network Configuration page where you can change the amplifier's network name and IP settings.

To open the page, enter your amplifier's IP address in a browser window.

You can find the IP address in the amplifier's menu under "Network".

For detailed information on the Network Configuration page, supported formats and much more, please visit support.hegel.com



NOTE: Some of the features of the Hegel device require an internet connection.

Wake up on Network

Even when the amplifier is in standby mode the network connection is active. The amplifier can be woken up from standby by starting playback to the Hegel.

Status Indicators

The Hegel device will display the network status in the lower left corner of the display.

Network status is OK:



Network status is not OK:



Troubleshooting

If you experience problems with connecting the amplifier to the network or have other network issues, please try the following:

Disconnect the power chord for at least 30 seconds and then reconnect.

If that does not help, try the following:

Enter the amplifier menu and select factory reset.

Streaming

AirPlay

When using AirPlay, you can send the music stream from an AirPlay compatible device to the Hegel device. All AirPlay compatible devices will detect the Hegel device in their list of AirPlay speakers.

When both devices are connected to the same network, the AirPlay icon will be displayed, and you can select the Hegel device as an AirPlay speaker. You are now ready to send the music stream to your amplifier.



Spotify Connect

When using Spotify Connect, you can send the music stream from Spotify to the Hegel device.

Use your phone, tablet or computer as a remote control for Spotify.

Go to spotify.com/connect to learn how.



UPnP/DLNA

The amplifier can function as a Digital Media Renderer. This means that it can receive and play media files from a UPnP/DLNA compatible media player. When using UPnP/DLNA streaming, you can send the music stream from locally stored files or music streaming services to the Hegel device. UPnP stands for Universal Plug and Play and is a widely used media streaming protocol. That means it is supported by a host of products and applications. For details on how to set up your media player, please refer to the user manual supplied with the player.

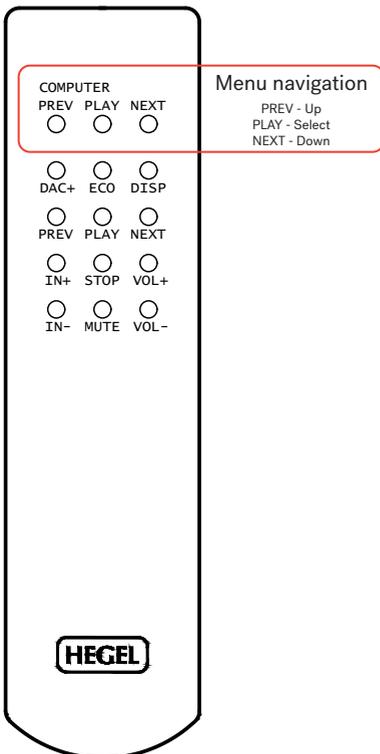
WARNING: When streaming to the Hegel device, always remember to check the player/device volume-setting before pressing play. The Hegel device will change its volume to the volume set in the player.

Device Menu

Navigation

To enter the device menu, turn the amplifier on and press and hold the PLAY(2) button for 5 seconds. To navigate the menu, use the PREV(1) and NEXT(3) buttons. To select a sub-menu or feature, press the "PLAY(2) button. To exit the menu, navigate to "Exit" and press PLAY(2), or turn one of the amplifier's knobs.

NOTE: Some menu features require connection to the internet to work properly. See Network Setup



Info

Information about the Hardware Version of your product and the Software Version currently running.

Network

Information about the Network Device Name and the IP Address of your product.

Update

Check for and download the newest software for your product.

Sleep

By default, the amplifier will automatically switch itself off after 15 minutes without music, or with very low signal on the speaker outputs. Sleep / Auto off can be disabled in this menu.*

Reset

Here you can reset the product to the default factory settings. This will not affect any software updates you have installed.

HT

Most inputs can be configured to act as a Home Theater input. This will set the input volume at a fixed high volume level.

NOTE: The Hegel device menu can be updated with new features and options.

For an up to date and in-depth description of the menu and its features, please visit support.hegel.com



Miscellaneous

USB Volume

In the device menu you can activate the USB Volume feature. That enables you to control the volume of the device with a connected USB source like a computer or a streamer.

Warning: Always remember to check the computer or connected device volume setting before pressing play. When USB volume is activated the amplifier will change its volume to the volume setting on the computer or connected device.

Connecting a subwoofer

The most common way to connect a subwoofer is from the variable line output on your Hegel amplifier. If your subwoofer is equipped with “high level” speaker wire terminals you can also use this. Many subwoofer manufacturers recommend this type of connection if it is available.

Please consult your subwoofer manual for detailed instructions on how to connect and configure your subwoofer for the best audio result.

Power

All electrical components should be turned off or in standby when not in use. This due to safety, because all electrical components can fail, and it is good for the environment. Leaving your product on all the time could also shorten the life expectancy of the product.

That being said, our products sound even better when they are warmed up, typically after about 15 minutes of listening at a moderate volume.

Connecting your TV

The best way to connect your TV is by using one of the optical inputs. If there is no sound, try changing the sound output in the TV’s settings menu. The setting should be changed to PCM or stereo. Please consult your TV’s manual for detailed instructions.

DAC-loop/Digital out

Your device comes equipped with a DAC-Loop function that can be activated in the device menu. The function makes it possible to upgrade the digital inputs of the amplifier with an external high-end DAC. This is done by connecting the jitter reduced coaxial digital output of the amplifier to the external DAC. The output of the external DAC will need to be connected to the XLR input of the amplifier.

In the DAC-Loop submenu the Network and USB inputs can be enabled separately. Both these inputs take full advantage of the internal synchronous master clock. For these inputs we recommend leaving the DAC-Loop function disabled as it in most cases will not benefit the sound.

In this submenu you can also enable the digital output to always be active.

General Information

Technical Specifications

H590 Integrated Amplifier

Power output	2*301W in 8 ohms Dual Mono
Minimum load	2 ohms
Analog Inputs	2*Balanced (XLR) 3*Unbalanced (RCA)
Digital Outputs	1*Coaxial (BNC) S/PDIF
Digital Inputs	1*Coaxial (BNC) S/PDIF 1*Coaxial (RCA) S/PDIF 3*Optical S/PDIF 1*USB 1*Network
Line level Output	1*Unbalanced fixed(RCA), 1*Unbalanced variable(RCA)
MQA supported inputs	USB only
Frequency response	5Hz-100kHz
Signal-to-noise ratio	More than 100dB
Crosstalk	Less than -100dB
Distortion	Less than 0.005% @ 50W 8 Ohms 1kHz
Intermodulation	Less than 0.01% (19kHz + 20kHz)
Damping factor	More than 4000 (main power output stage)
Dimensions	17,1cm x 43cm x 44,5cm (HxWxD), 22kg unit weight. 6,74" x 16,93" x 17,52" (HxWxD), 48,51 lbs unit weight.

Transport and Shipment

When packing the amplifier, please follow these instructions to avoid damaging the unit: Be careful not to hold the volume- and source-knobs when lifting the amplifier. Wrap the bag around the amplifier. Make sure the bottom shock absorber is placed at the bottom of the original cardboard box. Place the amplifier into the shock absorber. Place the top shock absorber on top of the amplifier.

Use and Placement

The Hegel amplifier should be placed on a flat, hard surface for proper cooling. The amplifier must never be placed on a carpet or similar surface as this obstructs air circulation through the unit. For the same reason, the amplifier should have sufficient clearing above, and never be covered while in use.

The amplifier will automatically switch itself off if overheated. When it cools down the amplifier turns back on and the volume is set to 0.

Cleaning

Fingerprints or stains on the front panel or top cover can be removed with a cloth moistened with warm water or a mild detergent suitable for cleaning mirrors and windows.

Warning

Hegel products should only be opened or serviced by certified technicians. The devices contain electronic components that may cause severe electric shock. Work performed on Hegel products by unqualified personnel may cause serious damage or personal injury.

Opening of the product by non-authorized personnel will void the warranty.

The products must not be exposed to rain or moisture.

Warranty

All Hegel products come with a 2-year warranty against defective materials and workmanship. The warranty is limited to the region where it was originally purchased. There is no need for registering the warranty. The purchase receipt will work as a start date for the warranty.

In case you need assistance with your Hegel product, please contact your nearest dealer or distributor. These are listed on www.hegel.com. Our dealers are carefully chosen for their expertise and should be able to help you with any Hegel related issue. You can of course always reach us directly by sending an email to info@hegel.com or by contacting us on our social media pages.

For more information about the H590, please visit www.hegel.com



Disclaimers

The Spotify Software is subject to third party licenses found here:

www.spotify.com/connect/third-party-licenses

AirPlay works with iPhone, iPad, and iPod touch, or Mac and PC with iTunes.

Use of the "Works with Apple AirPlay" badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

Apple AirPlay, iPad, iPhone, iPod touch, Mac and macOS are trademarks of Apple Inc., registered in the U.S. and other countries. The trademark "iPhone" is used in Japan with a license from Aiphone K.K.

MQA and the Sound Wave Device are registered trademarks of MQA Limited. © 2016

* Depending on market, versions of this amplifier exist with and without Sleep/Auto standby. Sleep/Auto standby has no bearing on sound quality or connectivity.



V5



