



**C ONE**

**active crossover and 1 Ohm stability**

**Instruction Manual**



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## **C ONE 1 Channel High End Amplifier**

### **Congratulations!**

Dear Customer,

Congratulations on your purchase of this innovative and high-quality HELIX product. The HELIX C ONE highlights best quality, excellent manufacturing and state-of-the-art technology.

Thanks to more than 30 years of experience in research and development of audio products this amplifier generation sets new standards.

We wish you many hours of enjoyment with your new HELIX amplifier.

Yours,

AUDIOTECH FISCHER Team

### **General instructions**

#### **General installation instructions for HELIX components**

To prevent damage to the unit and possible injury, read this manual carefully and follow all installation instructions. This product has been checked for proper function prior to

shipping and is guaranteed against manufacturing defects.

Before starting your installation, disconnect the battery's negative terminal to prevent damage to the unit, fire and / or risk of injury. For a proper performance and to ensure full warranty coverage, we strongly recommend to get this product installed by an authorized HELIX dealer.

Install your C ONE in a dry location with sufficient air circulation for proper cooling of the equipment.

The amplifier should be secured to a solid mounting surface using proper mounting hardware. Before mounting, carefully examine the area around and behind the proposed installation location to ensure that there are no electrical cables or components, hydraulic brake lines or any part of the fuel tank located behind the mounting surface. Failure to do so may result in unpredictable damage to these components and possible costly repairs to the vehicle.

### **General instruction for connecting the HELIX C ONE amplifier**

The HELIX C ONE amplifier may only be installed in vehicles which have a 12 Volts negative terminal connected to the chassis ground. Any other system could cause damage to the amplifier and the electrical system of the vehicle.

The positive cable from the battery for the complete system should be provided with a main fuse at a distance of max. 30 cm from the battery. The value of the fuse is calculated from the maximum total current input of the car audio system.

**Use only suitable cables with sufficient cable cross-section for the connection of the HELIX C ONE. The fuses may only be replaced by identically rated fuses (3 x 30 A) to avoid damage of the amplifier.**

Prior to installation, plan the wire routing to avoid any possible damage to the wire harness. All cabling should be protected against possible crushing or pinching hazards. Also avoid routing cables close to potential noise sources such as electric motors, high power accessories and other vehicle harnesses.

### **Connectors and control units**

**C ONE side view with optionally available HELIX Digital Input Module HDM 1**



**1. Optical Input (optional)**

Optical input for digital stereo signals ( SPDIF format).

**2. SPDIF Direct In switch (optional)**

Switch for routing the digital input signal directly to the amplifiers internal power stage.

**3. Line Input**

RCA inputs for connecting low level line signals.

**4. GND**

Connector for the ground cable (negative terminal of the battery or metal body of the vehicle).

**5. +12 V**

Connector for the +12 V power cable of the positive terminal of the battery.

**6. REM**

Connector for the remote cable.



**7. Twin Power Link switch**

Switch for operating two C ONE amplifiers in bridge mode.

**8. Mono RCA/Cinch In- / Output**

Mono RCA/Cinch signal in- or output for bridge mode operation in Twin Power Link mode.

**9. Remote Control**

Input for connecting the optionally available cable remote control for volume adjustment.

**10. LPF**

Control for adjusting the lowpass filter of the from 15 Hz to 4,000 Hz.

**11. HPF**

Control for adjusting the high pass filter from 15 Hz to 4,000 Hz.

**12. Output Channel**

Speaker outputs for connecting loudspeakers.

**13. Phase**

Control for adjusting the phase from 0° to 180°.

**14. Bass Boost Frequency**

Control for adjusting the center frequency of the Bass Boost from 40 to 120 Hz.

**15. Bass Boost Gain**

Control for adjusting the bass boost from 0 to 9 dB.



**16. Level control**

Control for adjusting the input sensitivity of the low level Line Inputs.

**17. Input Mode switch (stereo / mono)**

Switch to adapt the amplifier to the number of used input channels.

**18. Power & Protect LED**

This LED indicates the operating mode of the amplifier.

**19. Fuses**

Input fuses for protection against internal errors.

**20. Impedance selection switch**

Switch for adapting the amplifier to the impedance of the connected speaker.

**21. LED switch**

Switch for turning on and off the LED illumination.

**22. Cutoff Frequency switch**

Switch for adjusting the maximum upper cutoff frequency of the appropriate crossover filter.

**23. X-Over switch**

Switch for activating the filters for each channel pair.

**24. HDM Slot**

Slot for the optionally available HELIX Digital Input Module HDM 1.

# Initial start-up and functions

## 1. Optical Input (optional)

Optical input in SPDIF format for connecting signal sources with a digital audio output. The sampling rate of this input must be between 28 and 96 kHz. C ONES standard equipment. This can only be retrofitted with the optionally available HELIX Digital Input Module HDM 1.

**Please note:** The digital input is not part of the

**Important:** The signal of a digital audio source normally does not contain any information about the volume level. Keep in mind that this will lead to full level on the outputs of the HELIX C ONE. This may cause severe damage to your speakers. We strongly recommend to only use volume controlled audio sources!

**Note:** This amplifier can only handle stereo input signals and no MP3- or Dolby-coded digital audio stream!

**Note:** It is possible to use the Optical Input and the low level Line Input at the same time.

## 2. SPDIF Direct In switch (optional)

Due to the SPDIF Direct In switch, the input stages of the C ONE can be bypassed and the input signal of the Optical Input directly and lossless routed from the integrated DA converter to the internal power stage. To activate the direct signal routing you have to set the SPDIF Direct In switch to "On".

**Please note:** The SPDIF Direct In function is not part of the C ONES standard equipment. It is solely included in the optionally available HELIX Digital In-put Module HDM 1.

**Note:** This switch only affects the signal routing of the Optical Input.

**Note:** The amplifier must be operated in full range mode for routing the digital input signal directly to the power stage. Therefore change the position of the X-Over switch to "FULL" (see page 21, item 23). Note: If the switch is set to "On" position the low level Line Input (3) as well as the Level control (16) are without function!

## 3. Line Input

2-channel low level line input to connect signal sources such as head units / radios / DSPs.

## 4. GND

The ground cable should be connected to a common ground reference point (this is

located where the negative terminal of the battery is grounded to the metal body of the vehicle) or to a prepared metal location on the vehicle chassis i.e. an area which has been cleaned of all paint residues. Recommended cross section: min. 16 mm<sup>2</sup> / AWG 6.

#### 5. **+12 V**

Connect the +12 V power cable to the positive terminal of the battery. Recommended cross section: min. 16 mm<sup>2</sup> / AWG 6.

#### 6. **REM**

The remote lead should be connected to the remote output / automatic antenna (aerial positive) output of the head unit / car radio. This is only activated if the head unit / car radio is switched on. Thus the amplifier is switched on and off together with the head unit / car radio. As soon as there is an additional digital signal processor (DSP) implemented in the signal path, the remote output of the DSP has to be used to turn on the C ONE.

#### 7. **Twin Power Link switch**

The HELIX C ONE amplifier can be connected to a second C NE via the Twin Power Link by which the output power is more than doubled, depending on the speaker configuration. In order to operate two amplifiers in this mode, they must be connected with a RCA / Cinch cable (see page 19, item 8; Mono RCA/Cinch In- / Output). The amplifier which is set as “Master” assumes the complete control (active crossover, bass boost etc.) for both amps. All filter adjustments of the amplifier which operates in “Slave” mode will be deactivated.

**Attention:** Make sure that one amplifier is adjusted as “Master” and the other one as “Slave”. In this mode the minimum speaker impedance is 2 Ohms.

**Note:** If the amplifier operates individually the Twin Power Link switch must be set to “Master”. Examples for speaker configurations in Twin Power Link mode can be found on page 26.

#### 8. **Mono RCA/Cinch In- / Output**

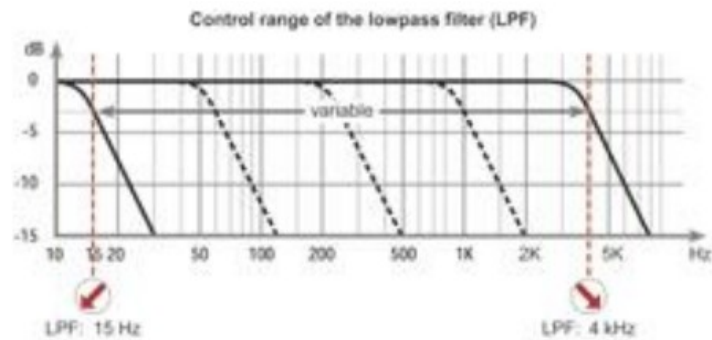
This connector serves as signal in- or -output for connecting a further C ONE amplifier in bridge mode (see page 19, item 7; Twin Power Link switch).

#### 9. **Remote Control**

This input is used to connect an optionally available remote control. The remote control allows you to control the volume of the amplifier.

#### 10. **LPF**

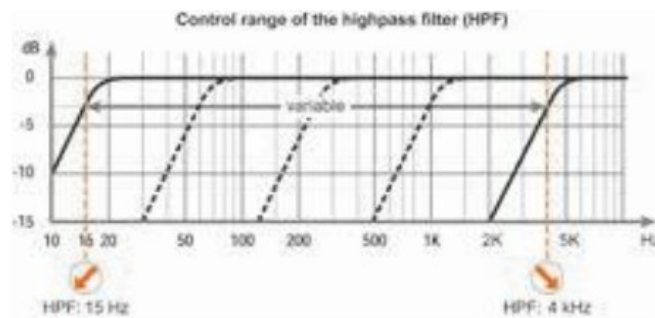
This control is used to fine tune the crossover frequency of the lowpass filter from 15 Hz to 4,000 Hz. Always use the respective Cutoff Frequency switch first to adjust the filter (see page 21, item 22; Cutoff Frequency switch).



### 11. HPF

This control is used to fine tune the crossover frequency of the high pass filter from 15 Hz to 4,000 Hz.

Always use the respective Cutoff Frequency switch first to adjust the filter (see page 21, item 22; Cutoff Frequency switch).

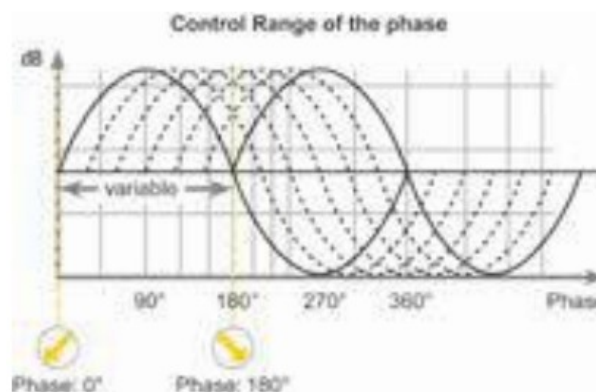


### 12. Output Channel

Speaker outputs to connect loudspeakers. The impedance per channel must not be lower than 1 Ohm.

### 13. Phase

This control is used to adjust the phase from 0° to 180°. This allows to match the phase of the subwoofer with the other speakers thus avoiding any cancellations in the frequency response due to phase shifts.

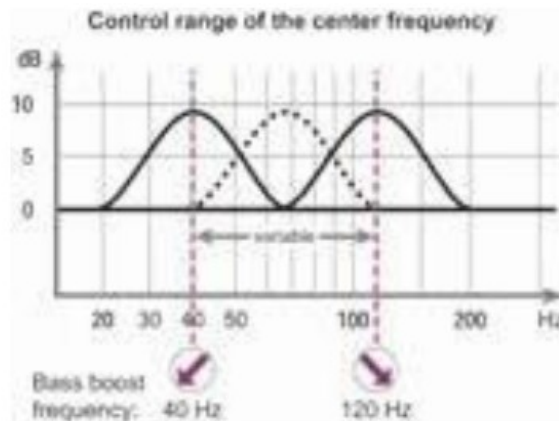


### 14. Bass Boost Frequency

This control is used to adjust the center frequency of the Bass Boost from 40 Hz to

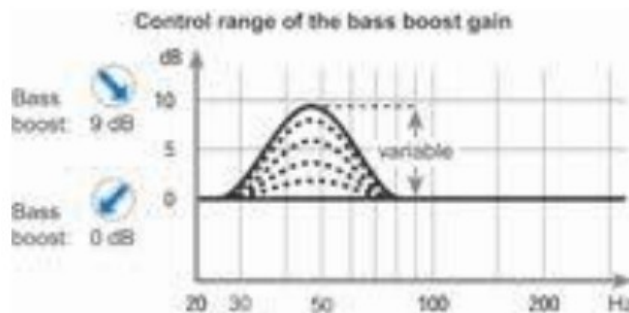


120 Hz. The adjusted bass frequency can be enhanced from 0 to 9 dB with control 15. This is useful to emphasize or correct a determined frequency of the subwoofer (kick bass).



### 15. Bass Boost Gain

This control is used to increase the adjusted Bass Boost Frequency (see item 14) from 0 to 9 dB.



### 16. Level control

This control is used to adapt the input sensitivity to the output voltage of the connected signal source. This is not a volume control, it's only for adjusting the amplifier gain. The control range is 0.5 – 8 Volts. The setting of the control also affects the digital signal input of the optionally available HDM 1 module if the SPDIF Direct In switch is not set to "On" position.

### 17. Input Mode switch (stereo / mono)

This switch is used to adapt the amplifier to the number of used inputs.

**Stereo:** Select this switch setting if both input channels (A and B) are used. In this mode an optimized sum signal is generated by the input signals of the channels A and B.

**Mono:** In mono operation only input channel A needs to be connected e.g. the signal source only provides a mono signal for subwoofer applications.

### 18. Power & Protect LED

The power and protect LED indicates the operating mode of the amplifier.

**Green:** The amplifier is ready for operation.

**Yellow:** The amplifier is overheated. The internal temperature protection shuts down the device until it reaches a safe temperature level again.

**Flashing yellow:** The fuses inside the device are blown. Please check the fuses and, if necessary, replace them. They may only be replaced by identically rated fuses (3 x 30 Ampere) to avoid damage of the amplifier.

**Red:** A malfunction has occurred that may have different root causes. The HELIX C ONE is equipped with protection circuits against over and undervoltage, short-circuit on loudspeakers and reverse connection. Please check for connecting failures such as short-circuits or other wrong connections. If the amplifier does not turn on after that it is defective and has to be sent to your local authorized dealer for repair service.

## 19. Fuses

The input fuses are connected in parallel and provide protection against an internal fault of the device, therefore the system must be additionally protected by a further main fuse located close to the battery (max. distance from battery: 30 cm / 12"). The HELIX C ONE is equipped with 3 x 30 Ampere fuses.

## 20. Impedance selection switch

By using the impedance selection switch the impedance of the connected loudspeakers (4 Ohms, 2 Ohms or 1 Ohm) has to be selected accordingly. If several loudspeakers are connected, the impedance can be approximately calculated as follows: Series connection:  $Z_{total} = Z \times n$

Parallel connection:  $Z_{total} = Z / n$

(n = amount of loudspeakers; Z = loudspeaker impedance)

**Note:** If speakers with "3 Ohms" impedance are used, please choose the position "4 Ohms".

**Important:** In Twin Power Link operation both amplifiers must have the same impedance setting (see page 19, item 7; Twin Power Link switch).

21. LED switch This switch is used to turn on and off the extended LED illumination of the amplifier. It has no effect on the LEDs below the fan, which are used as ultra low-noise current sources in the output driver stages. The functionality of the Power & Protect LED remains unaffected as well.

**Note:** The number of illuminated LEDs depends on the settings made on the amplifier – e.g. MONO or STEREO mode.

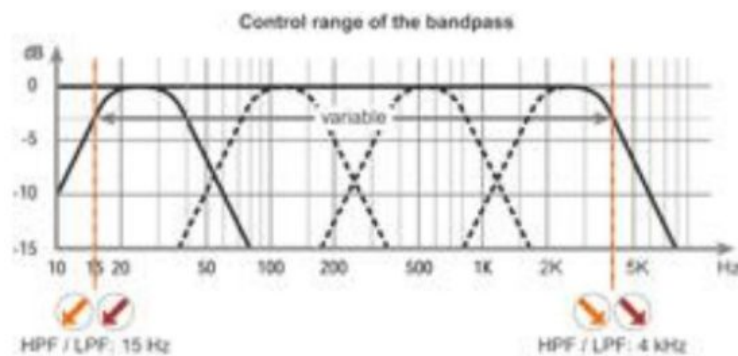
## 22. Cutoff Frequency switch

These switches are used to adjust the maximum upper cutoff frequency of the high pass (HPF) and lowpass (LPF) filter. Afterwards a fine tuning can be done with control 10 (LPF) and 11 (HPF).

## 23. X-Over switch

This switch allows to set the internal crossover to high pass, full range or bandpass mode. If the X-Over switch is set to HPF the crossover frequency for the high pass can be adjusted with the respective Cutoff Frequency switch (22) and control (11 / HPF).

At switch position FULL (full range) the crossover is bypassed. At switch position BPF a bandpass is created in any case. This means that the high pass is always active. By adjusting the high pass (switch 22 and control 11 / HPF) and lowpass (switch 22 and control 8 / LPF) filter any bandpass between 15 Hz and 4,000 Hz can be realized.



**Caution:** To avoid a loss of gain make sure that the crossover frequencies of the high- and lowpass filters do have an interval of at least two octaves when generating a bandpass.

That means if the lowpass signal is adjusted to 320 Hz the high pass should be adjusted to 80 Hz or less (one octave = doubled frequency or halved frequency). If a subwoofer is connected we recommend to use the high pass control (control 11 / HPF) as variable subsonic / low-frequency high pass filter or turn it counterclockwise to 15 Hz to get a subsonic filter.

## 24. HDM slot

The HDM slot is used to mount the optionally available HELIX Digital Input Module HDM 1.

The module extends the amplifier with an optical digital input in SPDIF format including SPDIF Direct In switch.

Thanks to the SPDIF Direct In switch the input stages of the C ONE can be bypassed and allows to directly route the signals of the digital input from the integrated DA

converter to the internal power stage. Further information about the module can be found on page 27.

## Installation

### Connection of HELIX C ONE to the head unit / car radio:

**Caution:** Carrying out the following steps will require special tools and technical knowledge. In order to avoid connection mistakes and / or damage, ask your dealer for assistance if you have any questions and follow all instructions in this manual (see page 16). It is recommended that this unit will be installed by an authorized HELIX dealer.

#### 1. Connecting the low level line inputs

Use the correct cable (RCA / Cinch cable) to connect these inputs to the low level line outputs of your head unit / car radio. It is not mandatory to use both low level line inputs. If only one channel will be connected use channel A and set the Input Mode switch to "MONO". When both channels will be used please choose switch position "STEREO" (see page 21, item 17; Input Mode switch).

#### 2. Connecting a digital signal source

If you have installed the HELIX Digital Input Module HDM 1 and have a signal source with an optical digital output you can connect it directly to the amplifier using the appropriate input.

**Important:** The signal of a digital audio source normally does not contain any information about the volume level. Keep in mind that this will lead to full level on the outputs of the HELIX C ONE. This may cause severe damage to your speakers. We strongly recommend to only use volume controlled audio sources!

**Information:** The C ONE can only handle uncompressed digital stereo signals in PCM format with a sample rate between 28 kHz and 96 kHz and no MP3- or Dolby-coded signals.

#### 3. Configuration of the digital signal input

If you have installed the HELIX Digital Input Module HDM 1 and connected a digital signal source you have the possibility to route the digital signal directly and loss-free from the integrated DA converter to the internal power amplifier. To activate the direct signal routing you have to change the position of the SPDIF Direct In switch to "On" (see page 19, item 2) as well as the position of the X-Over switch to "FULL" (see page 21, item 23).

**Note:** This switch only affects the signal routing of the optical input.

#### 4. **Adjustment of the input sensitivity**

**Attention:** It is mandatory to properly adapt the input sensitivity of the C ONE to the signal source in order to avoid damage to the amplifier.

If you want to change the input sensitivity use the Level control (see page 20, item 16; Level control).

#### 5. **Connection to power supply**

**Make sure to disconnect the battery before installing the HELIX C ONE!**

Connect the +12 V power cable to the positive terminal of the battery. The positive wire from the battery to the amplifier power terminals needs to have an inline fuse at a distance of less than 12 inches (30 cm) from the battery. The value of the fuse is calculated from the maximum total current draw of the whole car audio system (C ONE = max. 90 A RMS at 12 V power supply). If your power wires are short (less than 1 m / 40") then a wire gauge of 16 mm<sup>2</sup> / AWG 6 will be sufficient. In all other cases we strongly recommend gauges of 25 – 35 mm<sup>2</sup> / AWG 4 – 2!

The ground cable (same gauge as the +12 V wire) should be connected to a common ground reference point (this is located where the negative terminal of the battery is grounded to the metal body of the vehicle), or to a prepared metal location on the vehicle chassis, i.e. an area which has been cleaned of all paint residues.

#### 6. **Connecting the remote input**

The remote input (REM) has to be connected to the radio remote output. This is only activated if the head unit / car radio is switched on. Thus the amplifier is switched on and off together with the head unit / car radio.

We do not recommend controlling the remote input via the ignition switch to avoid pop noise during turn on / off.

If an additional digital signal processor (DSP) is installed in the signal path between the radio and the amplifier, the remote output of the DSP must be used to turn on the C ONE.

#### 7. **Connecting the loudspeaker outputs**

The loudspeaker outputs can be connected directly to the wires of the loudspeakers. Never connect any of the loudspeaker cables to the chassis ground as this will damage your amplifier and your speakers.

Ensure that the loudspeakers are identical and correctly connected (in phase), i.e. plus to plus and minus to minus. Exchanging plus and minus causes a total loss of

bass reproduction. The positive terminal is indicated on most speakers. The impedance must not be less than 1 Ohm (2 Ohms in Twin Power Link mode), otherwise the amplifier protection will be activated. Examples for speaker configurations can be found on page 24 et sqq.

## Unique Features of the HELIX C ONE

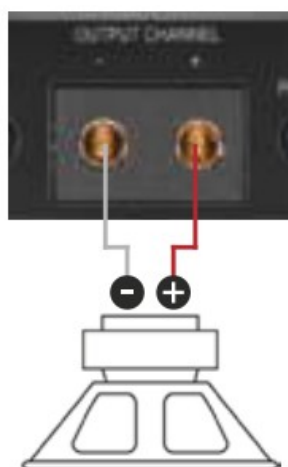
### Start-Stop capability

The switched power supply of the HELIX C ONE assures operation even if the battery's voltage drops down to 6 Volts during engine crank.

### High-Resolution audio

The extremely broadband audio bandwidth of the amplifier ensures a lossless audio reproduction of High-Resolution audio content to provide the best possible sound in studio quality.

## Examples for speaker configurations



### Mono subwoofer application

Subwoofer with one voice coil (single voice coil)

Maximum output power of this configuration:

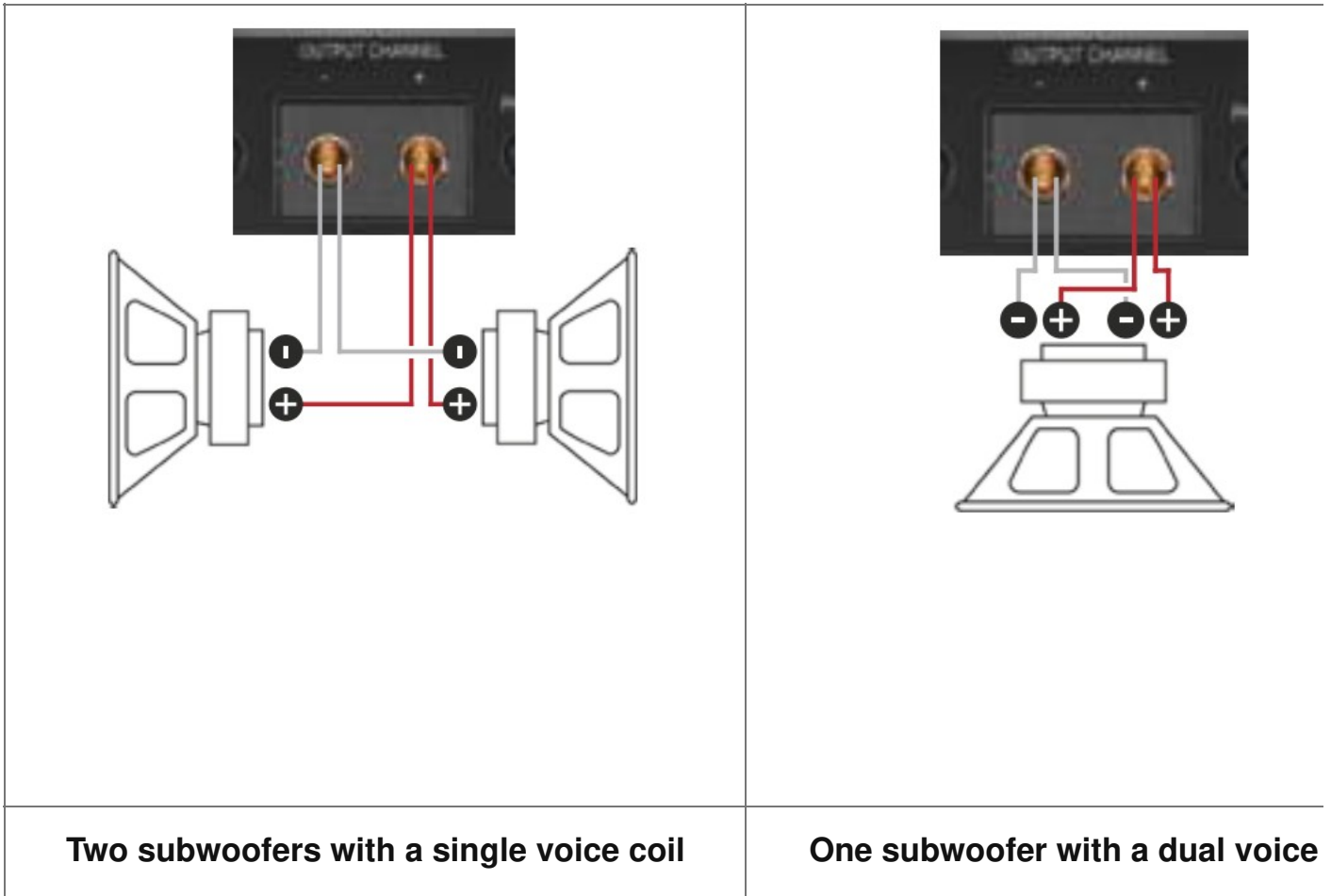
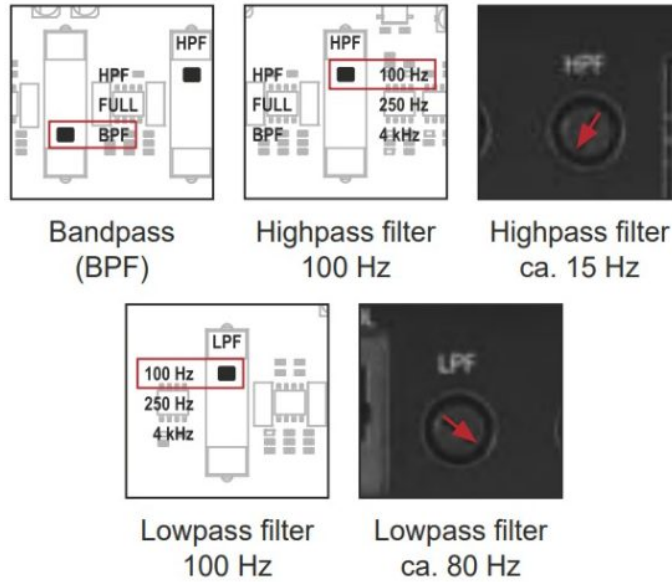
1 x 4 Ohms: 525 / 1,050 Watts

1 x 2 Ohms: 830 / 1,660 Watts

1 x 1 Ohm: 1,100 / 2,200 Watts

### Filter settings

Bandpass, high- and lowpass filter



### Parallel operation

Two identical subwoofers with one voice coil (single voice coil) or one subwoofer with dual voice coil are connected in parallel.

**Note:** The parallel connection of two voice coils will result in halving the impedance!

**Maximum output power of this configuration:**

Two subwoofers with 1 x 4 Ohms correspond to a total impedance of 2 Ohms: 830 / 1,660 Watts

One subwoofer with 2 x 4 Ohms also corresponds to a total impedance of 2 Ohms: 830 / 1,660 Watts

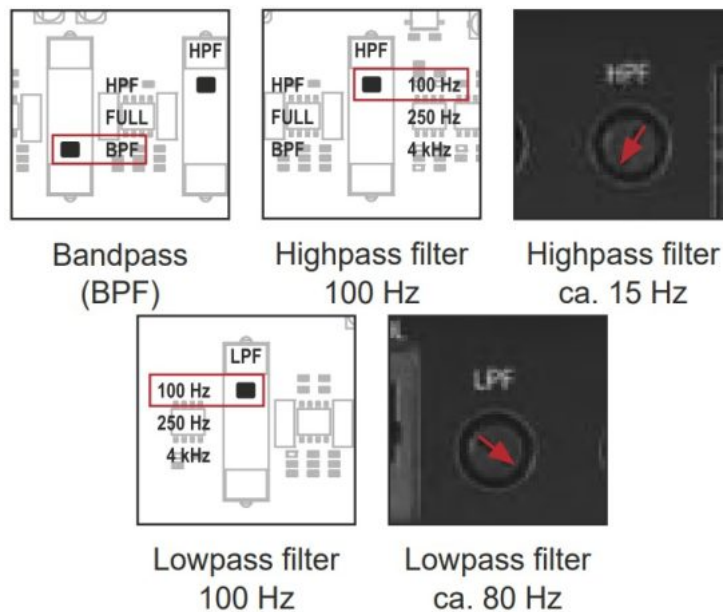
Two subwoofers with 1 x 2 Ohms correspond to a total impedance of 1 Ohm: 1,100 / 2,200 Watts

One subwoofer with 2 x 2 Ohms also corresponds to a total impedance of 1 Ohm: 1,100 / 2,200 Watts

**Note:** The parallel connection of 1 Ohm voice coils will result in shutdown of the amplifier.

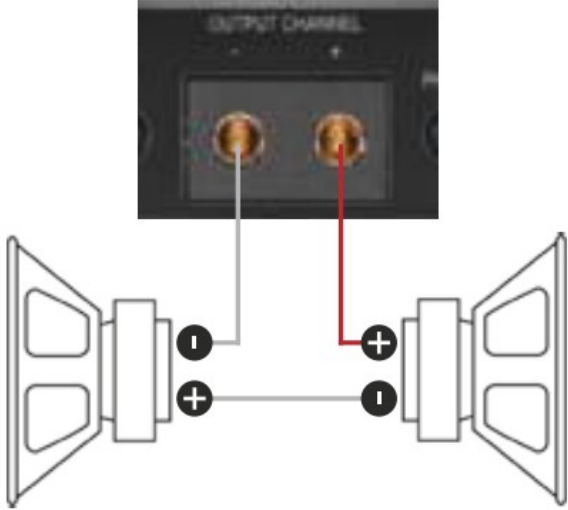
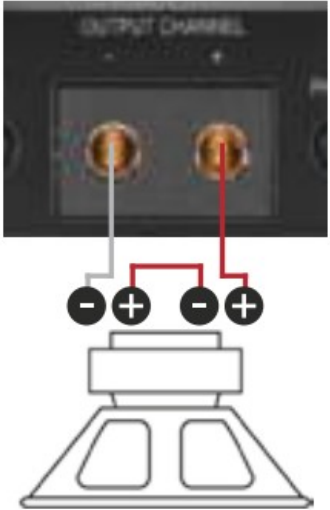
## Filter settings

Bandpass, high- and lowpass filter



**Note:** The values listed here are empirical values that have been approved as useful in practice.



	
<p>Two subwoofers with a single voice coil</p>	<p>One subwoofer with a dual voice coil</p>

### In series

Two identical subwoofers with one voice coil (single voice coil) or one subwoofer with dual voice coil are connected in series.

**Note:** The connection of two voice coils in series will result in doubling the impedance!

Maximum output power of this configuration:

Two subwoofers with 1 x 2 Ohms correspond to a total impedance of 4 Ohms: 525 / 1,050 Watts

One subwoofer with 2 x 2 Ohms also corresponds to a total impedance of 4 Ohms: 525 / 1,050 Watts

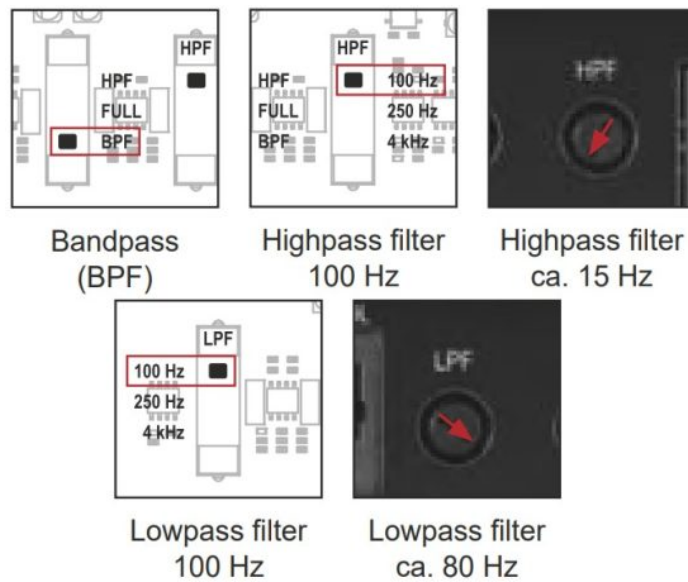
Two subwoofers with 1 x 1 Ohm correspond to a total impedance of 2 Ohms: 830 / 1,660 Watts

One subwoofer with 2 x 1 Ohm also corresponds to a total impedance of 2 Ohms: 830 / 1,660 Watts

**Note:** The connection of subwoofers with 4 Ohms in series is not recommended because it results in a low output power of the amplifier!

### Filter settings

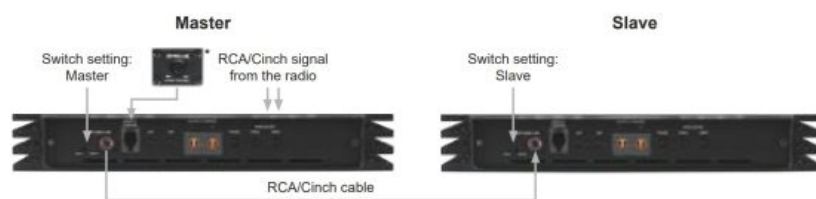
Bandpass, high-and lowpass filter



**Note:** The values listed here are empirical values that have been approved as useful in practice.

## Example configurations for Twin Power Link operation

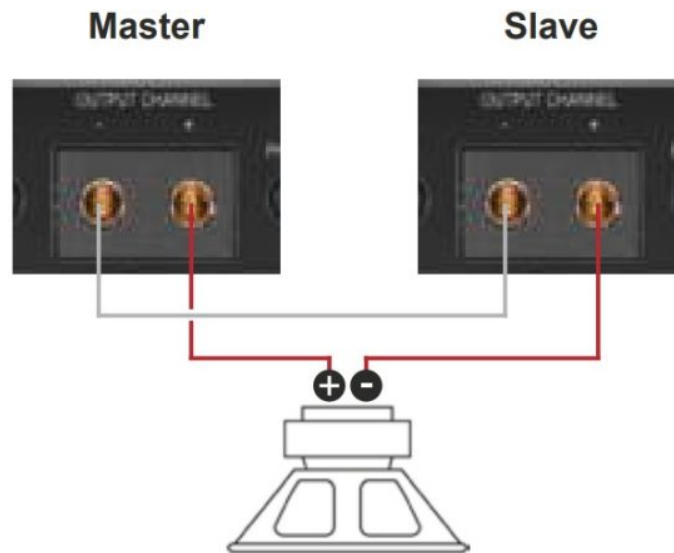
### Amplifier connection in Twin Power Link operation



**Important:** Both amplifiers must be set to the same impedance (see page 21, item 20; Impedance selection switch). The filter settings (HPF, LPF, bass boost etc.) are assumed by the master amplifier. All controls of the slave amplifier are deactivated.

\* Optional accessory. The remote control is not part of the C ONEs standard equipment.

### Speaker connection in Twin Power Link operation



### One subwoofer with one voice coil

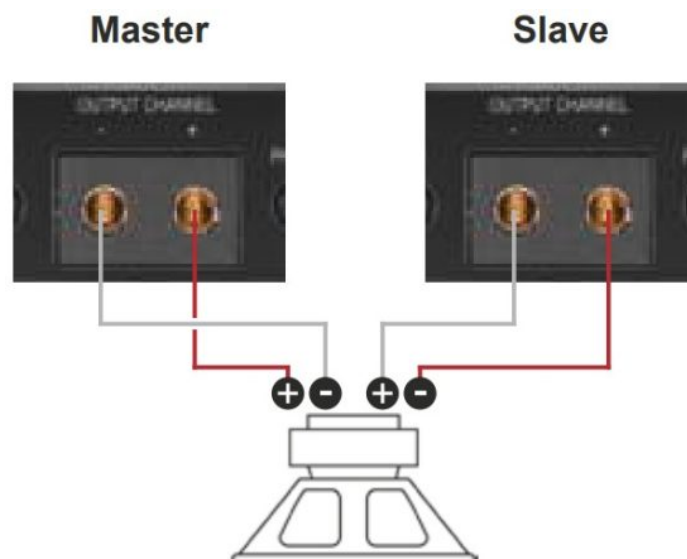
(single voice coil)

Maximum output power of this configuration:

1 x 4 Ohms: 1,660 / 3,320 Watts

1 x 2 Ohms: 2,200 / 4,400 Watts

**Note:** The negative terminals of both amplifiers have to be connected by using a speaker wire. The size should be similar to the speaker wires which are used for the subwoofer connection.



**Attention:** The second voice coil of the subwoofer must be connected in reversed polarity to the amplifier which is adjusted as “Slave”!

### One subwoofer with dual voice coil

(dual voice coil)

Maximum output power of this configuration:

2 x 4 Ohms: 1,050 / 2,100 Watts

2 x 2 Ohms: 1,660 / 3,320 Watts

2 x 1 Ohms: 2,200 / 4,400 Watts

**Note:** In this configuration example an 1 Ohm configuration in Twin Power Link operation is possible but not advisable!

## Installation of the HELIX Digital Input Module HDM 1

It is possible to extend the HELIX C ONE amplifier with an optical digital input in SPDIF format incl. SPDIF Direct In switch by mounting the HELIX Digital Input Module HDM 1. To install the module it is necessary to remove the side panel of the C ONE and replace it by the new side panel that comes with the HDM 1.

**Attention:** Install the HDM 1 only in the designated device and its specific slot. Using the module in other devices or slots can result in damage of the HDM 1 module, the amplifier, the head unit / car radio or other connected devices!

Read in the following the steps how to install the module:

1. First disconnect the power supply (+12 V / GND / REM) and RCA / Cinch cables from the device.
2. Remove the acrylic cover by loosening the eight Allen screws.
3. Then dismantle the side panel where the power supply is located by removing the two Allen screws.
4. Prepare the module for installing it into the device. Any further mounting information will be found in the instruction manual of the HDM 1.
5. Insert the module into the specific slot of the device which is marked in the following picture. Make sure that the module is installed properly.



6. Insert the Allen screw which is delivered with the HDM 1 into the mounting hole of the module and fix it carefully.

Caution: Do not overtighten the screw as this may damage the module.

The following figure shows the fixation of a HDM module in the amplifier using the example of the HELIX C FOUR.



7. Fix the new side panel which is delivered with the HDM 1 module with the Allen screws. Afterwards remount the acrylic cover, too.

8. Reconnect all connections to the device.

9. Turn on the amplifier. The digital inputs are automatically detected by the device.

Further information about the module as well as the SPDIF Direct In function can be found in the instruction manual of the HDM 1 module.

## Technical Data

Output power RMS / max.	Normal operation (One amplifier)	Twin Power Link (Two amplifiers)
– @ 4 Ohms	1 x 525 / 1,050 Watts	1 x 1,660 / 3,320 Watts
– @ 2 Ohms	1 x 830 / 1,660 Watts	1 x 2,200 / 4,400 Watts

– @ 1 Ohm	1 x 1,100 / 2,200 Watts	–
Amplifier technology	Class AB	
Inputs	2 x RCA / Cinch 1 x Remote In 1 x Remote control input 1 x Twin Power Link Optional via HDM 1 module: 1 x Optical SPDIF (28 – 96 kHz)	
Input sensitivity	RCA / Cinch 0.5 – 8 Volts	
Input impedance RCA / Cinch	7.5 kOhms	
Outputs	1 x Speaker output	
Frequency response	10 Hz – 80,000 Hz	
Bass boost	0 – 9 dB / 40 Hz – 120 Hz	
High pass	15 Hz – 4,000 Hz adjustable	
Lowpass	15 Hz – 4,000 Hz adjustable	
Bandpass	15 Hz – 4,000 Hz adjustable	
Phase	0 – 180° adjustable	
Slope high- / lowpass	12 dB/Oct.	
Signal-to-noise ratio	120 dB (A-weighted)	
Distortion (THD)	< 0.006 %	
Damping factor	> 1000	
Operating voltage	9 – 16 Volts (max. 5 sec. down to 6 Volts)	

Idle current	2,400 mA
Fuse	3 x 30 A LP-Mini-fuse (APS)
Additional features	Active, adjustable crossover, bass boost, HDM slot, input mode switch, Twin Power Link, Start-Stop capability
Dimensions (H x W x D)	37.1 x 430 x 240 mm / 1.46 x 16.93 x 9.45"

## Warranty Disclaimer

The limited warranty comply with legal regulations. Failures or damages caused by overload or improper use are not covered by the warranty. Please return the defective product only with a valid proof of purchase and a detailed malfunction description. Technical specifications are subject to change!

Errors are reserved! For damages on the vehicle and the device, caused by handling errors of the device, we can't assume liability. This product is tagged with a CE-Certification mark. Thereby these devices are certified for the use in vehicles within the European Community (EC).

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## Documents / Resources

 <p><b>HELIX</b> C ONE</p>	<p><a href="#">HELIX C ONE 1 Channel High End Amplifier [pdf]</a> Instruction Manual</p> <p>C ONE, C ONE 1 Channel High End Amplifier, 1 Channel High End Amplifier, High End Amplifier, Amplifier</p>
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## References

- [User Manual](#)

◆ 1 Channel High End Amplifier, Amplifier, C ONE, C ONE 1 Channel High End Amplifier, HELIX, High-End

■ Helix Amplifier

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