



# Decoderstation 5

**Teufel**

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### Original packaging

We recommend that you keep the packaging if you want to take advantage of your right to return goods within eight weeks, because we can only accept the Decoderstation 5 IN ITS ORIGINAL PACKAGING. We are unable to supply empty boxes!

### Contact

Please contact our service department if you have any questions, suggestions or if there is anything you think we could do better:

### Lautsprecher Teufel GmbH

Buelowstrasse 66  
D-10783 Berlin (Germany)  
Tel: +49 (0)30-30 09 300  
Fax: +49 (0)30-30 09 30 30  
[www.teufel.eu](http://www.teufel.eu)

### Technical data

Technical data can be found in the product description on our website at: [www.teufel.eu](http://www.teufel.eu)

### Warranty terms

There is a two-year warranty on equipment and labour for electronics, starting from the date of purchase, with the exception of damage caused by incorrect use or electrical or mechanical overload. An original copy of our invoice is required as the warranty document. This warranty is only valid for electronics that was purchased from Teufel by end users for their own private use. The warranty is not valid for electronics that the end user has purchased from a different distributor. For third-party products, the warranty conditions of the respective manufacturers shall apply. If the Teufel product is sold on privately, the warranty may be transferred to the purchaser, providing that the original proof of purchase is also transferred.

### Returns

Teufel grants customers the right to return or exchange goods within eight weeks of purchase, with reimbursement of the full purchase price paid. The return of individual components from a set is only possible if these components are also offered for sale separately by Lautsprecher Teufel. If one or more components are returned, any price discount given by Lautsprecher Teufel on all components in a set as part of the price for the set is waived. When returning a component, the customer will be reimbursed for the price difference between the set price and the purchase price of the individual components retained by him/her. The financial outcome for the customer is as if they had bought the remaining components at the individual price from the outset.

You can find more information on the subject of returns on the returns form that accompanies the delivery or online in the support area of our website, [www.teufel.eu](http://www.teufel.eu).

If you need to return an item, do not act without the prior agreement of Lautsprecher Teufel.

**We can only process and accept returns if you have told us about the return by telephone first and discussed the procedure with us!**

# Contents

<b>Table of contents</b> . . . . .	<b>3</b>
<b>Instructions for safety and care</b> . . . . .	<b>4</b>
<b>Welcome</b> . . . . .	<b>5</b>
<b>Unpacking • Contents • Attachments</b> . . . . .	<b>6</b>
<b>Introduction</b> . . . . .	<b>7</b>
<b>Function</b> . . . . .	<b>8</b>
Front/Display Decoderstation 5 . . . . .	<b>8</b>
Back/Decoderstation 5 . . . . .	<b>9</b>
Remote control . . . . .	<b>10</b>
<b>Connection</b> . . . . .	<b>12</b>
Signal sources with digital and analogue outputs . . . . .	<b>13</b>
<b>Setting the Decoderstation 5</b> . . . . .	<b>14</b>
Menu structure . . . . .	<b>14</b>
Overall volume and equalising the speakers . . . . .	<b>15</b>
Input source, surround and speaker configuration and equalisation . . . . .	<b>16</b>
Setting the delay . . . . .	<b>17</b>
Setting the speaker size . . . . .	<b>18</b>
<b>Troubleshooting</b> . . . . .	<b>19</b>

## Instructions for safety and care

Please read the following safety information carefully.

*Risk of suffocation – keep packaging materials (e.g. the plastic bags and film) out of the reach and sight of children. Risk of electrocution – do not leave children unsupervised with electrical devices!*

### **In case of emergency:**

*If any of the following occur, disconnect the appliance from the mains and consult our technicians:*

- ▶ *If the plug or cable is damaged*
- ▶ *If foreign bodies or liquid have entered the appliance,*
  - ▶ *If the appliance has been in direct contact with rain or other water,*
- ▶ *If the appliance does not play, even if you have followed the instructions for use*
  - ▶ *If the appliance has been dropped or damaged in some other way.*

*We cannot accept any responsibility for incidents that occur because safety information has not been adhered to.*

**Important:** Please read through these operating instructions very carefully! It is essential that you take note of all of the safety information and operating instructions before switching on the appliance. Please keep these operating instructions in a safe place for future reference.

**Essential:** Please read the operating instructions. You should also follow all instructions for start-up and ongoing use

**Caution – moisture and sunlight:** Never operate the appliances in damp rooms, i.e. near baths, showers, wash basins, drains, in damp cellars or next to swimming pools. Never expose the device to high humidity and do not place it in direct sunlight. Do not expose device to dripping or splashing water. Do not place objects filled with liquids, such as vases on the device.

**Information on location:** Do not use the appliances unsecured in vehicles, in unstable places, on wobbly stands or furniture or supports that are too small. The speakers could fall down and injure people, including you. The appliance must not be placed near sources of heat. This includes radiators and heaters, ovens and other appliances that emit heat (e.g. amplifiers). Sources of heat may not be placed on the appliance e.g. fan heaters or candles.

**Ventilation:** Any slits and openings in the casing have been provided for ventilation. Their purpose is to guarantee reliable operation and to prevent the appliance from overheating. These openings must not be blocked or covered, including by placing the appliance on a bed, sofa, carpet or other soft surface. Do not place any newspapers or table cloths, etc. on the appliance. Additional active cooling of the appliance is generally not permitted.

**Electrical supply:** The appliance must only be supplied from a power source with the correct voltage, as specified on the identification label. If you are unsure about the electricity supply in your home, please contact us or your electricity supplier for more information. Only the mains adapter provided should be used for the electricity supply. This mains adapter must not be modified under any circumstances. Regulations on polarity and earth connection must be adhered to. Only use an appropriate mains plug for the mains cable.

**Information on wiring:** Please place the power cord flat and flush to the wall and floor. Cables that are laid loosely present a trip hazard. This could also result in interference and cause the sound to be disrupted. The electricity supply cable should be laid so that it is not likely to be stepped on or squashed from the sides or above by heavy objects. Damaged cables must be replaced. Pay particular attention to the cable/plug connection, the mains socket and the cable output from the subwoofer. If a fault is discovered, the appliance and the cabling must be disconnected from the mains immediately and the defective cable must be replaced. Remove the appliance's power supply cable from the socket for longer periods of absence or non-use.

**Batteries:** Be sure to insert the batteries with correct positive (+) and negative (-) polarities. Use batteries of the same type; never use different types of batteries together. If the

batteries leak remove them immediately and wipe away the liquid inside the battery compartment. Risk of explosion! Never throw batteries in a fire. Batteries must not be exposed to sun or heat.

**During thunderstorms:** In order to avoid damage caused by lightning strikes, the appliance should be switched off and also unplugged from the mains socket as soon as a thunderstorm is expected.

**Risk of overload:** You should not overload wall sockets, extension cables or integrated appliance sockets, because this could potentially lead to short circuits and even fires. Avoid turning up the volume control very high even when using a compatible amplifier.

**Foreign bodies and liquids:** Foreign bodies and liquids must not get into the appliance via its openings under any circumstances, as they could come into contact with parts carrying high voltages, which could then cause short circuits and fires. Therefore, do not spill any liquids of any kind on the device.

**Troubleshooting:** Do not attempt to repair the appliance yourself. Contact our service department first for authorisation, if you think that you can repair the fault yourself. Otherwise the appliance must be sent in for testing.

**Unusual sounds:** Any unusual sounds occur during use or the sound becomes distorted, the speaker output must be reduced immediately so that the system plays an undistorted sound.

**Information on volume:** Loud noises can damage hearing. Sudden high sound pressure may be created, particularly if a subwoofer in »Standby/Auto Onk mode is switched on by a bass impulse at full volume. In addition to physical damage, please be aware of possible psychological consequences. Children and pets require particular care. If necessary, set the volume control of your signal source device or amplifier to a low level. At high volumes, always keep a certain distance from the appliance and never have your ears right next to the speaker.

### **Care instructions and cleaning**

To make sure you are able to enjoy your Lautsprecher Teufel product for a long time, please note the following tips:

- ▶ Do not expose the case to direct sunlight. Avoid extreme fluctuations in temperature and protect your speakers from moisture.
- ▶ Please only use a lightly dampened or dry cloth to clean the Decoderstation 5.
- ▶ Abrasive cleaners, products that contain alcohol and household chemicals should be avoided.
- ▶ Disconnect the appliance from the mains before cleaning.

## Teufel Decoderstation 5



### Dear Customer,

many thanks for buying the Decoderstation 5.

You have bought a very high quality decoder, because Teufel appliances are fitted with high quality components and have been carefully made.

Please read these instructions carefully before operating the unit and store the manual in a safe place for future reference. If you have any questions you can contact our engineers on +49(30)-300 9 300. You can also send us an e-mail using the contact form at [www.teufel.eu](http://www.teufel.eu). Please have your invoice number ready, so we can immediately locate your product and provide the best possible support.

Before contacting us with a question, please read these instructions carefully and visit our website at [www.teufel.eu](http://www.teufel.eu), where you can find the answers to many questions in the »FAQ/Support« area.

Please also refer to our safety information on page 4 of these operating instructions and only use the appliance once you have read the safety information.

Please take note of the serial number displayed on the sticker on the box (e.g. DE00509070122A-025) and this invoice number:

### My INVOICE NUMBER is:

.....

### My SERIAL NUMBER is:

.....

This serial number and the invoice number make it easier for us to process your request quickly if you require service.

*Please make a note of your serial number and invoice number.*

You can order the optional attachments shown directly from our online store: [www.teufel.eu](http://www.teufel.eu).

### Unpacking

Fold the flaps on the top of the box outward, remove the rigid foam or polystyrene and carefully lift the appliance out of the box.

For your own benefit, we recommend that you do not dispose of the box as it can be used to guarantee safe transport if the device requires servicing later on.

### Contents

- ▶ 1 x Decoderstation 5
- ▶ 1 x Infrared remote control
- ▶ 1 x Batteries for the remote control
- ▶ 1 x Mains adapter
- ▶ 1 x Operating instructions

#### Warning:

*Explosion hazard with inappropriate replacement of the battery. Replacement only by the same or an equivalent type. Not expose batteries to excessively warm as sunshine, fire or like. If you plan to not use the device for a longer period of time: remove the batteries from remote control and store them appropriately to prevent possible damage from leaking.*

### Accessories (optional)



#### Mono-cinch cable

You can connect the Decoderstation 5 to a coaxial digital output using the mono cinch cable available from our online shop.



#### Optical fibre (Toslink)

You can connect the Decoderstation 5 to appliances with an optical digital output using the optical fibre cable available from our online shop.



#### Equalisation measuring device

The equalisation measuring device also available from our online shop allows the Decoderstation 5 to be precisely equalised. We advise using a gauge measuring device because you cannot achieve a similarly good result by equalising the levels by ear.



#### Teufel Y adapter cable

The first choice for sound connections from PC or portable CD or MP3 players to the Decoderstation 5. Connection to almost any sound card is ensured by using the thin plug on the 3,5mm jack. Available in 1,5 metre, 2,5 metre and 5 metre lengths.

### **About the Decoderstation 5**

Decoderstation 5 is a stand-alone decoder that can be used to process audio signals from analogue and digital sources.

The appliance not only makes it possible to switch between various signals, it can also enhance stereo signal sources, for example, for a surround sound experience. The Decoderstation 5 is the perfect appliance for anybody who wants to operate a fully active speaker set without missing out on the comprehensive features that are otherwise only offered by AV-receivers.

The following signal sources can be connected to the Decoderstation 5:

### **Digital signal sources**

The Decoderstation 5 can decode digital signals and reproduce them via the integrated analogue 5.1 multi-channel output. Digital sources such as DVD players that can transfer multi-channel digital sound tracks with the appropriate media (e.g. film DVDs) are especially well-suited to this type of connection. The digital signals are transmitted to the optical or coaxial connections of the Decoderstation 5.

### **Analogue signal sources**

The Decoderstation 5 also offers ample connection options for analogue stereo sources. A total of three cinch stereo inputs are available for the same number of stereo signal sources. These two-channel stereo signals can be emitted with the Decoderstation 5 in various surround modes (configurations), for example in Dolby Pro-Logic II format encrypted in the stereo signal. This means that it is possible to reproduce all stereo sources effectively over several channels, either with or without the use of rear surround speakers.

### **Analogue 5.1 signal input**

The Decoderstation 5 has an analogue 5.1 input. You can connect the appropriate signal sources, e.g. from a computer soundcard, here and forward them to the connected sound system.

### **Equalising the 5.1 speaker system**

In addition, the comprehensive setting options of the Decoderstation 5 allow perfect equalisation of the speakers and therefore audio adjustment for your individual loudspeaker settings.

## Function: Front / Display Decoderstation 5

Description of the display and operating elements on the front of the Decoderstation 5.



### Switching on the Decoderstation 5

Switch on the Decoderstation 5 by pressing the dial control. The appliance will be ready for use after a few seconds. A progress bar will be shown in the display during this time.

### Switching off the Decoderstation 5

Switch off the Decoderstation 5 by pressing the dial control for one second. Alternatively you can use the »Off« button on the remote control, which immediately switches off the appliance.

### Standby

Soft blue illumination around the main dial indicates stand-by mode and that the Decoderstation 5 is ready to start up.

### Display

The two-line display is your central information source about the status of the Decoderstation 5. All setting parameters are displayed here.



### Note

Please note that the Decoderstation 5 display will automatically return to its default state after a few seconds if no input has been given.

### Default display state

The left of the top line always shows the signal source selected: »5.1« for analogue multi-channel input, »OPT1« and »OPT2« (optical inputs), »COAX1« and »COAX2« (coaxial inputs) and »TV«, »CD« and »AUX« (analogue stereo inputs).

The overall volume is displayed in the form of a bar display to the right of this. The second line shows the surround configuration that is active at that time for the selected input.

More information on volume control and the sound configurations provided can be found on pages 15 and 16.

### Operation from the appliance itself

You can control all of the Decoderstation 5 menu functions using the dial control, its push function, and the return button. An overview of the menu can be found on page 14.

#### ① Dial control with push function

The dial control is used to select menu items, specific parameters, and to adjust values. It controls the overall volume of the system in its default setting.

The push function of the dial control performs several functions:

- ▶ Calling up the main menu from the default setting
- ▶ Confirmation of selection and access to submenu
- ▶ Exiting submenu/value input
- ▶ Confirmation of input - certain parameters, for example configuration of speaker size, require input confirmation in order to be accepted.

#### ② Return

While you are descending the menu structure of the Decoderstation 5 using the push function of the dial control, the return button is used to navigate the next menu level up or to leave the entry field without entering any new values.

For example, if you are equalising an individual speaker, pressing Return once will take you to the next menu up and pressing it twice will take you to the main menu. Pressing Return several times lets you quit the menu input and the Decoderstation 5 will return to its default display state.

#### ③ Mute

Pressing the button once will mute the Decoderstation 5. If you press it again the appliance will return to the level previously selected. The mute state is shown in the display of the Decoderstation 5.



## Function: Back/Decoderstation 5



Description of the connections on the back of the Decoderstation 5 and their functions.

### 5.1 Channel Output (Pre Out)

A decoded analogue multi-channel sound signal is emitted via an analogue 5.1 output. Alternatively you can also use the outputs for the left and right front channels for reproduction in stereo. One cinch cable is required per channel to connect to an external appliance (e.g. a subwoofer with multi-channel input), that is a total of six mono cinch cables or three stereo cinch cables.

- ▶ Front left/right: Sound outputs of the left and right front channels
- ▶ Centre: Sound output of the centre channel
- ▶ Sub: Subwoofer output  
(The subwoofer output reproduces the frequency area below 150Hz).
- ▶ Rear left/right: Sound outputs of the left and right surround channels.

### 5.1 In

The Decoderstation 5 has an analogue 5.1 input. You can connect the appropriate signal sources, e.g. from a professional computer soundcard, here and forward them to the connected sound system.

### TV · CD · Aux · Stereo In

You can connect the stereo cinch cable (left / right) for connection to the analogue outputs of your stereo reproduction appliances (e.g. TV set, CD player, video recorder etc.) here.

### Optical 1 · Optical 2 (Digital In)

For connecting the decoder with a digital signal source in optical format (Toslink). You can buy the cable required from the Lautsprecher Teufel on-line shop.

### Coaxial 1 · Coaxial 2 (Digital In)

For connecting the decoder with a digital signal source in coaxial format (cinch).

### + 12 V

DC in power supply from included AC wall adapter.

### Note

You will need an extra phono pre-amplifier to connect a record player.

## Function: Remote control



With the included remote control you can fully control all of the Decoderstation 5 settings from the comfort of your sofa.

### Standby

Activate the Decoderstation 5 using the standby button of the remote control. Switches the device to active operation (press once) or back into standby mode (by pressing again). You can always tell if the device is ready for operation because the background of the dial control will light up.

### Mute

Pressing the button once will mute the Decoderstation 5. If you press it again the appliance will return to the level previously selected. The mute status is shown in the display of the Decoderstation 5.

**You can select the required input using the selection buttons on the remote control.**

### 5.1

Direct selection of the analogue 5.1 signal input on the back of the decoder as input source.

### Optical 1 - 2

These buttons select one of the two optical digital inputs on the back of the decoder as input source.

### Coax 1 - 2

These buttons select one of the two coaxial digital inputs on the back of the decoder as input source.

### TV - CD - Aux

Each of these buttons select one of the three analogue stereo inputs on the back of the decoder as input source.

### Display

Pressing this button once switches the LC display off. Pressing the button again switches the LC display back on.

### Return

Pressing the return button once will end the current screen menu or return to the default display state.

## Function: Remote control

### Mode

You can select the various surround configurations of the Decoderstation 5 by repeatedly pressing this button.

### Speaker

You can select the various speaker configurations of the Decoderstation 5 by repeatedly pressing this button.

### Test

After this button has been pressed, the Decoderstation 5 produces test signals for equalising the speakers. The test signal is then emitted from each loudspeaker in turn (see p. 15 – equalising the speakers).

### Volume +/- (speaker symbols)

You can use these two buttons to increase or reduce the overall volume of the Decoderstation 5 or the individual speaker levels. The current setting is shown in the LC display.

### Left/right arrow

Pressing these buttons triggers the same functions as rotating the control wheel on the Decoderstation 5.

### OK

Pressing this button triggers the same functions as pressing the dial control on the Decoderstation 5 (push function).

### Front L.

This button leads straight back to the volume control of the left front speaker.

### Front R.

This button leads straight back to the volume control of the right front speaker.

### Centre

This button leads straight back to the volume control of the centre speaker.

### Side L.

This button leads straight back to the volume control of the left surround speaker.

### Side R.

This button leads straight back to the volume control of the right surround speaker.

### Subwoofer

This button leads straight back to the volume control of the subwoofer.

### Inserting or changing the batteries.

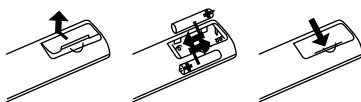
Please change the batteries if the remote control stops working even when right next to the Decoderstation 5.

#### Please note:

- Do not combine new and old batteries
- Do not use different types of batteries
- Observe polarity and the markings in the battery compartment

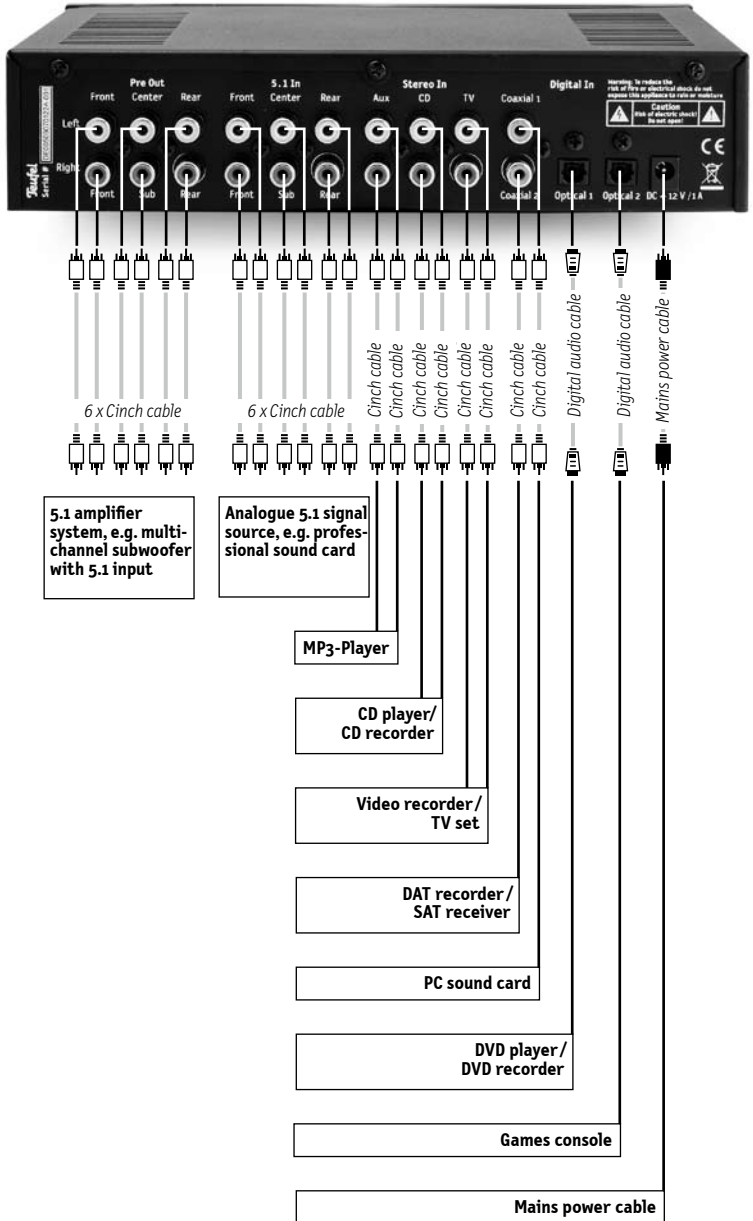
### Note

*You can reproduce all of the functions of the dial control using the OK button and both arrow buttons, left and right.*



## Connection

Example allocation of inputs and outputs of the Decoderstation 5



**Note**

You can vary the allocation of inputs. For example, the audio output of a TV set can also be operated from Aux (here: MP3 player).

## Connection

The Decoderstation 5 is perfect for combining digital and analogue signal sources. With four digital and three analogue inputs and an analogue 5.1 signal input it offers connections for numerous signal sources.

### Connecting digital signal sources

The Decoderstation 5 automatically recognises the signal format transferred via the digital inputs, decodes the data flow and changes it into a stereo or multi-channel signal.

### Connection to one of the two optical digital inputs

E.g. sound card with digital output, CD player, DVD player/recorder and sat receiver etc.

### Use an optical digital cable (Toslink) to connect appliances with optical digital output.

Before connecting the optical digital cable, remove the protective caps from the fibre optics and connection jacks. You can obtain the optical cable required from the Teufel online shop.

### Connection to one of the two coaxial digital inputs

E.g. sound card with digital output, DVD player/recorder, sat receiver and games console etc.

### Use a cinch cable for connecting appliances with coaxial digital output.

Connection of signal sources with analogue outputs.

### In addition to the digital inputs, the Decoderstation 5 also has three analogue stereo inputs.

They can be assigned to analogue appliances of your choice, for example, a stereo sound card, an MP3 player, a TV set, CD player, or video recorder etc.

Either a stereo cinch cable or a 3.5mm mini-jack-Y adapter cable is required per appliance (e.g. for connecting to an MP3 player).

### Connecting an analogue 5.1 signal source e.g. multi-channel computer sound card, etc.

The 5.1 input of the Decoderstation 5 is used for connecting external, analogue 5.1 signal sources, such as a professional sound card or a DVD player with analogue outputs. One cinch cable is required per channel for connection, i.e. a total of six mono cinch cables or three stereo cinch cables.

### Using the 5.1 input as a 4th stereo input

If you require an extra (fourth) stereo input, you can use the 5.1 input for that. Connect your analogue signal source, for example a cassette recorder, to the Front Left and Front Right inputs.

*When connecting the devices, please note the relevant information in the handbooks for the components used.*

### Note

*The 5.1 input is not influenced by the surround-specific parameters of the Decoderstation 5. Except for changing the overall volume, the signal connected here is only forwarded from the input to the output of the Decoderstation 5.*

*Select the sound setting »5.1 Direct«.*

*The other settings relate to the Front Left and Front Right inputs, i.e. to operation as a 4th stereo input.*

## Setting-up the Decoderstation 5

### Menu structure

You can access the default display settings in the main menu by pressing the push button of the dial control once.

You can find more specific information on navigation within the menu structure on page 8.



#### Note

The display shows arrows during selection. If you follow these arrows, further choices will be made available.

\* The availability of these entries depends on the surround and speaker configurations selected.

\*\* The availability of the subwoofer entry depends on the speaker size selected.

\*\*\* The delay function is only available for 3.1 stereo and 5.1 stereo speaker configurations.

Menu entry	Selection	Value range
»MAIN MENU«		
»INPUT«	»5,1« »OPT 1« »OPT 2« »COAX 1« »COAX 2« »TV« »CD« »AUX«	
»SURROUND«	»2.1 Stereo« »3.1 Stereo« * »PLII Movie« * »PLII Music« * »5.1 Stereo« * »5.1 Direct« *	
»SPEAKER«	»3.1 Channel« »2.1 Channel«	
»LEVEL«	»Left« »Center« * »Sub«** »Right« »Side L« * »Side R« *	±12 dB ±12 dB ±12 dB ±12 dB ±12 dB
»DELAY« ***	»Center Spk« »Side Spks«	0 - -1,5 m 0 - -8,4 m
»SPEAKER SIZE«	»LLL« »LLL+Sub« »LSL« »LSL+Sub« »LSS« »LSS+Sub« »SSS+Sub«	

## Setting-up the Decoderstation 5

### Overall volume control

You can control the overall volume of the Decoderstation 5 at any time by turning the dial control. You can reduce the volume by turning the dial to the left and increase it by turning it to the right. The control area ranges from -54dB to +10dB. If »---« is shown on the display, you have selected the minimum volume.



### Equalising the speakers\*

Before familiarising yourself with the other functions of the appliance, we recommend that you perform a basic equalisation of the volume of the connected speakers. The aim of this equalisation is to set the same volume level at the listening position for each of the channels. This is the only way to achieve harmonious and balanced reproduction of the various channels.

Make sure you are in the best possible and most central place for listening. Press the standby button on the remote control and the Decoderstation 5 will be ready for use. Make sure that all signal-sources, any DVD players connected, are not active. Choose a value of -35 dB, for example, as a reference master volume.

The aim is to set the levels of the centre, sub and rear in relation to the output level set on the front speaker.

Press the »Test« button on the remote control. This activates a test tone that cycles through all satellites and the subwoofer in sequence.



First make sure that the left and right front speakers are set to 0dB. You can select the required speaker simply by pressing a button on the remote control and then adjusting its volume up to  $\pm 12$ dB using the volume buttons.

You now can increase or decrease the levels for the centre, both surround speakers and the subwoofer until you can hear these four speakers at

the same volume as both front speakers.

Press the »Return« button again to complete the calibration process.

Equalisation by ear often requires several attempts and does not always provide perfect results right away. For perfect equalisation of the speakers we recommend using a volume level measuring device, available online in the Teufel shop. This device will last a lifetime and allows you to make far more precise settings than by ear. Bass levels in particular are often set too loud – exact adjustment is only guaranteed using a measuring device.

### Mute

Pressing the button once will mute the Decoderstation 5. If you press it again the appliance will return to the level previously selected. The mute status is shown in the display of the Decoderstation 5.



*\* You only need to equalise the speakers when using a 5.1 surround set.*

*In pure stereo mode, set the volumes for the left and right front speakers to 0dB each.*

*By lowering r raising one channel you can optimise the sound experience for an asymmetrical listening situation, similar to a balance controller.*

### Note

*Make sure that the emitting amplifier (e.g. Concept E Magnum) reproduces all of the channels at the same volume.*

### Note

*The volume setting of the subwoofer may be slightly different when playing back music compared with playing home cinema sound, depending on the recording quality and mixing. Whereas a solid bass element often predominates on DVDs with lots of special effects, the desired level is sometimes not achieved for music (especially if the set has been set up for ideal DVD playback). Your personal taste is the best guide for finding a compromise between the two sources. You can directly adjust the subwoofer level as required at any time using the »Subwoofer« button on the remote control.*

## Setting-up the Decoderstation 5

### 1. »INPUT« – selecting the input signal

You can choose the desired input signal source using the »INPUT« option in the menu.

The following are available:

»5.1«	Analogue 5.1 input
»OPT 1« · »OPT 2«	Optical digital inputs
»COAX 1« · »COAX 2«	Coaxial digital inputs
»TV« · »CD« · »AUX«	Analogue stereo inputs



### 3. »SPEAKER« – Selecting speaker configuration

You can use the »SPEAKER« option in the menu to tell the Decoderstation 5 which scope the connected speaker set has.

You can choose the following:

- »5.1 Channel«
- »3.1 Channel«
- »2.1 Channel«



#### \* Note

The Decoderstation 5 memorises the selected surround configuration for each input separately.

For example, you can listen to your CDs as a conventional two-channel stereo mix or your DVDs using the optical input, but always in 5.1.

### 2. »SURROUND« – Selecting surround configuration\*

Depending on the choice of speaker configuration (see 3, »SPEAKER«) the Decoderstation 5 offers the following surround modes:

#### Speaker configuration

»2.1 Channel« »3.1 Channel« »5.1 Channel«

2.1 Stereo	2.1 Stereo	2.1 Stereo
3.1 Stereo	3.1 Stereo	3.1 Stereo
PLII Movie	PLII Movie	
PLII Music	PLII Music	
	5.1 Stereo	
	5.1 Direct	

The decoupling of the source signal format and the speaker configuration provides you with some practical options: You can expand the two-channel stereo signal to 3.1 (without surround speakers) and 5.0/5.1 (with surround speakers) formats. The two Dolby PLII operating modes expand the reproduction by centre and surround reproduction, according to Dolby specifications.



**Use the PLII Movie setting if you are using Dolby Pro-Logic encoded media such as certain video cassettes.**

Conversely you can also reproduce a multi-channel signal using a smaller surround configuration, such as 2.1. This downmix function also allows you to replace a missing subwoofer with bass management (see page 18).

If you use digital inputs, Dolby and DTS encoded formats are recognised by the Decoderstation 5 and the sound configurations are set automatically and cannot be changed.

### 4. »LEVEL« – Equalisation\*\*

You can use the »LEVEL« option in the menu to adjust the levels of all of the speakers that you have registered in the »SPEAKER« menu option.

You can choose between the following entries, depending on the speaker configuration and the speaker sizes registered:

»Left«	The left front speaker
»Center«	The centre speaker
»Sub«	The subwoofer
»Right«	The right front speaker
»Side L«	The left surround speaker
»Side R«	The right surround speaker



By pressing the dial control you can access the equalisation control of the respective speaker from the level menu. You have a control range of  $\pm 12$ dB per speaker.



As a rule, you will only need this menu once for initial adjustment of your surround system. Please read page 15.



## Setting-up the centre delay

### 5. »DELAY« – Delay \*

In order for the appliance's digital signal processor (DSP) to be able to convert Dolby and DTS multi-channel signals perfectly, it must be aware of the spatial positioning of the individual boxes to each other. Distance differences between the speakers can be equalised by using a delay. The aim is that the signals from all speakers reach the listening position at the same time.

The Decoderstation 5 assumes that the front and surround speakers (side) are all positioned symmetrically to the listening position. It is also assumed that the front speakers are furthest away from the listening position.

You can use menu entries [DELAY]/[Center Spk] and [DELAY]/[Surr Spks] to enter how much closer the centre and surround speakers are positioned relative to this maximum distance. They should be at a comfortable relative distance to the front speakers.

1. Measure the distance between the listening point and the front speakers.
2. Measure the distance between the listening point and the centre speaker
3. Now subtract the distance from the centre box from the distance from the front boxes. Set this value in the Decoderstation 5; use the closest matching value. \*\*

```
DELAY - REL DIST
Center Spk →
```

#### Example

Distance to the front speakers = 3,5 metres each,  
Distance to the centre box = 2,6 metres.

Subtracting the distances gives the following result:  $3,5 - 2,6 = 0,9$  metres.

Therefore the centre speaker is 0,9 metres closer to the listening position than the front speaker.

```
DELAY - REL DIST
Center Spk - 0,9m
```

### Setting the surround delay

1. Measure the distance between the listening point and the front speakers.
2. Measure the distance between the listening point and the surround speakers.
3. Now subtract the distance from the surround speakers from the distance from the front speakers. Set this value in the Decoderstation 5; use the closest matching value. \*\*

```
DELAY - REL DIST
+ Surr Spks
```

#### Example

Distance to the front speakers = 3,5 metres each,  
Distance to the surround speakers = 2,0 metres each.

Subtracting the distances gives the following result:  $3,5 - 2,0 = 1,5$  metres.

Therefore the surround speakers are 1,5 metres closer to the listening position than the two front speakers.

```
DELAY - REL DIST
Surr Spks - 1,5m
```

As a rule you will only need this menu once for initial adjustment of your surround system.

#### \* Note

The delay function is only available for 3.1 stereo and 5.1 stereo speaker configurations.

#### \*\* Information

The distance can be entered in 30 cm increments.

Use the setting that is as close as possible to the resulting distance.

### 6. »SPEAKER SIZE«

You can tell the Decoderstation 5 the size of your speakers using the »SPEAKER SIZE« menu option. The 5.1 speaker set-up only consists of five identical speakers, each able to reproduce the full frequency range under perfect conditions. This includes a separate subwoofer that only reproduces the LFE channel. Speakers for home cinema are generally smaller and are therefore limited in the bass range. There is no subwoofer present in other cases.

The Decoderstation 5 comes with bass management to produce a complete sound experience with these systems, too.

The function of this setting: The bass of any channel where bass is limited is routed to the full-area speakers or the subwoofer. If there is no subwoofer the bass and the LFE channel are routed to the front left and right full-area speakers.

You only need to set the speaker size in your system once. The Decoderstation 5 will then distribute frequencies among the speakers automatically and according to the Dolby and DTS standards.

The Decoderstation 5 differentiates between the front speaker pair [F] in »small« or »large«, the centre speaker [C] in »small« or »large«, the rear or side surround speaker pair [R] in »small« or »large« and a subwoofer if one is present [+ Sub].

Seven configurations are available:

The three abbreviations refer to front, centre and surround speakers (FCS).

- »LLL«
- »LLL+Sub«
- »LSL«
- »LSL+Sub«
- »LSS«
- »LSS+Sub«
- »SSS+Sub«

If you have left and right front speakers, centre or surround speakers that are large enough for deep bass reproduction, select a configuration with the entry »Large« at the corresponding position (FCS). This is the case for floorstanding speakers and large shelf speakers.\* Select the setting »Small« in other cases.

Then select whether your speaker system has a separate subwoofer. This refers to active subwoofers with built-in amplifiers. Only select a configuration with »+Sub« if this is the case.\*



SPEAKER SIZE  
← FCS: SSS+Sub

#### \* Notice:

*When selecting "Large" in the speaker set-up the subwoofer will only reproduce 1 LFE-channel from a multi channel source such as DVD.*

*If there is no discrete LFE-channel (e.g. from a stereo source) the subwoofer will not carry a signal as the bass frequencies are directed to the front speakers.*

**»The rear satellites and/or centre will not play with stereo sources such as music CDs (e.g. via PC or DVD player).«**

Use the remote control to switch the decoder into Pro Logic mode or into one of the DSP modes (3.1 stereo, 5.1 stereo).

**»The decoder reacts to the remote control of another appliance / another appliance reacts to the decoder's remote control.«**

As there are no clear regulations on the distribution of codes, each manufacturer can work with the code of their choice. Unfortunately, occasional crossovers in individual cases cannot be prevented. This is, however, not a fault of the Decoderstation 5!

If you have the option to choose another location and can locate the decoder outside the range of the other device's remote control (and not right next to it) this may reduce this problem, as the reception areas may then no longer overlap.

**»The decoder does not respond perfectly to the remote control.«**

The batteries may have been inserted incorrectly or they may be discharged: they may need to be inserted correctly or replaced. Operation could be impaired if the decoder is situated too far away or in direct sunlight.

**»It is not possible to connect a 6.1 or 7.1 speaker set to the Decoderstation 5.«**

The Decoderstation 5 is a 5.1 decoder and is therefore not able to decode a sixth channel (rear). 6.1 or 7.1 operation is therefore not possible.

**»You cannot change the surround configuration.«**

You are probably using a digital input. If a Dolby or DTS signal is being received at this input, the Decoderstation 5 will automatically switch to the correct sound configuration.

**»No Dolby/DTS multi-channel tone is reproduced the digital sources connected.«**

The Decoderstation 5 automatically recognises the format of the signal source when reproducing digital sources. If the decoder is not playing a multi-channel tone, there is probably no multi-channel signal present. Digital signal sources do not always have to transfer multi-channel tones but can also emit regular stereo tones (2.0). For example, this is often the case for television reception with digital receivers.

**»With computer game consoles no multi-channel tones are reproduced via the digitally connected sound cards.«**

Lots of sound chips are able to create surround sound in real time and emit via the analogue outputs on the sound card. However, for transfer using a digital connection, digital encoding of the multi-channel tone in a Dolby AC-3 stream is necessary. This can only be carried out if the sound card is able to perform this decoding in real time and transfer it to the decoder.

At the moment, only game consoles, such as Microsoft Xbox 360 and Sony Playstation 3 and a few sound cards with Dolby® Digital Live support are able to perform real time encoding.

**»You cannot switch off the Decoderstation 5 using the remote control.«**

Keep pressing the dial control until the appliance starts up again.

**»The Decoderstation 5 cannot complete the start process.«**

Temporarily remove the main power supply.

# **Teufel**

Please contact our service department if you have any questions, suggestions or if there is anything you think we could do better.

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