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**awave**

[www.awave.audio](http://www.awave.audio)

**STEG**

Italy

**AUDIO**<sup>®</sup>

**SYSTEM**

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# **AWAVE DSP Generation 2025**

DSP6v5

DSP10Dmax

DSP8.1

DSP8AD (STEG MDSP8)

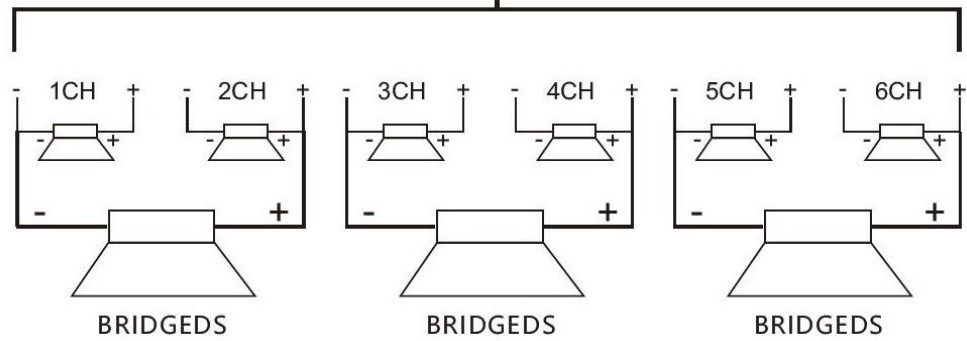
Im Anhang ist eine tabellarische Übersicht der Ausstattungen aller aktuellen Modelle

# AWAVE DSP6v5

- 8 Kanal HighLevel Input 8-32V mit 4 Gain Regler und Anti Error Schaltung
- 2 Kanal Cinch Eingang (Input CH 1+2)
- Optischer und Koaxialer Digitaleingang, OTG-Anschluss, BT-Modul optional
- 8 Kanal DSP (CH1-6 verstärkt, CH 5-8 als PreOut)
- 6 Kanal Endstufe 6 x 90W @ 4Ohm / 6 x 135W @2Ohm
- Gebrückt 270W je Kanalpaar
- Systemleistung ca. 700W
- Input EQ mit 5 Bänder: PAR-EQ, AP1, AP2, LS, HS
- Dynamische Loudness Kontrolle
- Surround Funktionen inkl. Center und Bass-Subharmonics Processing
- Betriebsspannung 9 -18V (Start-Stopp und E-Auto fähig)

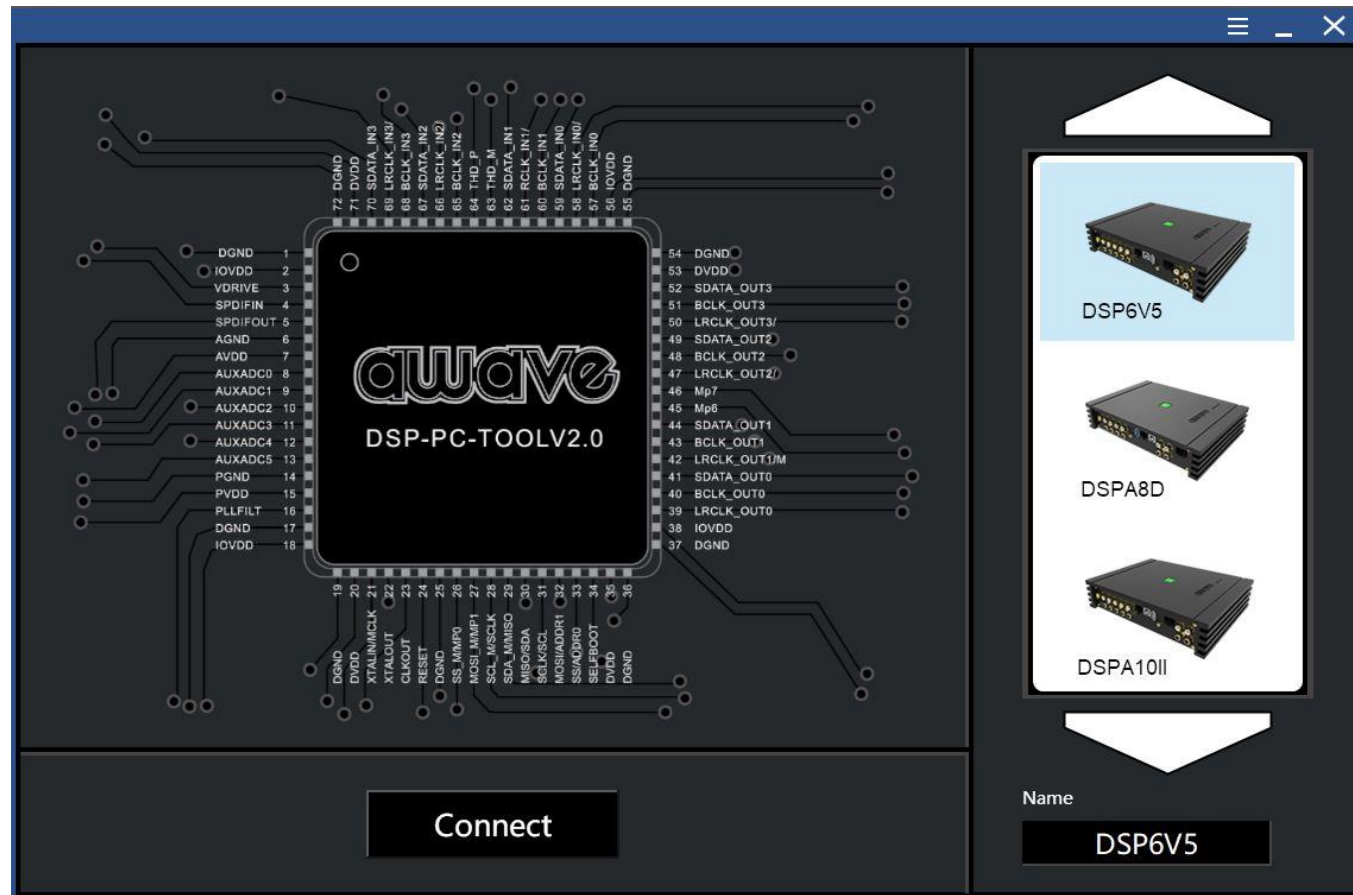


Laptop



Bluetooth-Audio Stick B5v2

- DSP-Software hier runterladen: <https://www.awave.audio/dsp-produkte>
- **Awave\_Setup\_V3.8.17.b5** Software installieren und vertrauensvoll öffnen
- Solange kein DSP verbunden ist, kann man auf der rechten Seite einen DSP auswählen und mit „Connect“ öffnen. Dann sieht man welche Funktionen in welchem Modell integriert sind.
- Ist der DSP schon mit dem Laptop verbunden, erscheint automatisch das richtige Modell und es kann mit „Connect“ gestartet werden.





Rot = nicht verbunden  
Grün = verbunden

# Start-Fenster / Main

The screenshot shows the 'dwave' software interface. At the top, there are menu buttons: 'File', 'Option', 'Encrytion', 'Main' (highlighted with a red box and a red arrow), 'IO', 'Gain delay', and 'Save Load'. Below the menu is a control bar with volume sliders for 'CH1', 'Master vol', and 'SUB', each with a '0.0 dB' display. The main area is divided into eight channels, 'Out CH1' through 'Out CH8', each with a speaker icon and a dropdown menu (e.g., 'FL-Full', 'FR-Full', 'L-SW', 'R-SW'). Below this is a row of 'p' (phase) buttons for each channel, with a yellow arrow pointing to 'CH8' and the text 'Anzeigen der Phase'. Below the 'p' buttons is a row of 'MUTE' buttons for each channel, with a yellow arrow pointing to 'CH5' and the text 'Mute / Unmute der Kanäle'. The central part of the interface is a frequency response graph for 'CH1'. The y-axis is labeled 'dB' and ranges from -18 to +18. The x-axis is labeled 'F/Hz' and ranges from 20 to 20000. A yellow line represents the frequency response, which is flat at 0 dB. Below the graph is a table with 31 columns, each corresponding to a frequency point. The columns are labeled 'ID' (1-31), 'F/Hz' (20, 25, 31, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, 10000, 12500, 16000, 20000), 'dB' (all 0.0), and 'Q' (all 4.30). At the bottom, there are buttons for 'RESET', 'FREQ', 'dB' (highlighted with a red box), 'Q', and 'Bypass'. On the right side, there are settings for 'CH1', including 'Delay' (0.00), 'Polarity' (Polarity normal), 'Phase' (0°), 'HPF' (disabled), 'Type' (Butter-W), 'Freq' (20), 'Slope' (6 dB/oct), 'LPF' (disabled), 'Type' (Butter-W), 'Freq' (20000), and 'Slope' (6 dB/oct). There is also a 'Fine EQ' dropdown menu.

# Rein-Raus / IN-OUT / IO Fenster

The screenshot displays the 'IO' window of the dwave software. The interface is organized into several functional sections:

- Top Menu:** Includes 'File', 'Option', 'Encrytion', 'Main', 'IO' (highlighted with a red arrow), 'Gain delay', and 'Save Load'.
- Volume Controls:** Features three sliders: 'CH1' (0.0 dB), 'Master vol' (0.0 dB), and 'SUB' (0.0 dB).
- Output Channels:** Eight channels are shown, each with a dropdown menu:
  - Out CH1: FL-Full
  - Out CH2: FR-Full
  - Out CH3: FL-Full
  - Out CH4: FR-Full
  - Out CH5: FL-Full
  - Out CH6: FR-Full
  - Out CH7: L-SW
  - Out CH8: R-SW
- Settings Bar:** Contains 'Dynamic Loudness Settings', 'Smart Mixer Settings', 'Audio Input Sources', 'Clear', and 'Input EQ Settings'.
- Analog Inputs:** Eight inputs are listed, each with a 'Normal' button:
  - Input 1: FL-Full
  - Input 2: FR-Full
  - Input 3: FL-Full
  - Input 4: FR-Full
  - Input 5: FL-Full
  - Input 6: FR-Full
  - Input 7: RL-Full
  - Input 8: RR-Full
- Other Input Sections:**
  - Optical Inputs / Coaxial Inputs:** Left, Right
  - BT Inputs:** Left, Right
  - OTG Inputs:** Left, Right
  - Spatial Audio Inputs:** FL, FR, RL, RR, Center, Star SL, Star SR, SW
- Settings:** A gear icon labeled 'Settings' is located in the bottom right corner.

**Routing: Input-Felder in die Output-Felder schieben, evtl. Pegel % anpassen.**

**Output Funktion auswählen, dadurch wird eine Grundeinstellung der Frequenzweiche gemacht**

The screenshot displays the aWave software interface with the following components:

- Top Bar:** Includes a power button, menu options (File, Option, Encryption), and tabs for Main, IO (selected), Gain delay, and Save Load.
- Channel Controls:** Volume sliders for CH1, Master vol, and SUB, all set to 0.0 dB.
- Output Channels (Out CH1 to Out CH8):** Each channel has a dropdown menu for output function. Out CH3 is currently set to 'FL-Full'. A green arrow points to this dropdown.
- Input Sources:** Below the output channels, there are boxes for 'Input 1 FL-Full 100%' through 'Input 4 FR-Full 100%'. A yellow arrow points from the 'Input 1 FL-Full 100%' box in the 'Analog Inputs' section to the 'Input 1 FL-Full 100%' box in the 'Output' section.
- Analog Inputs:** A row of eight input boxes labeled 'Input 1 FL-Full Normal' through 'Input 8 RR-Full Normal'. A yellow arrow points from the 'Input 1 FL-Full Normal' box to the 'Input 1 FL-Full 100%' box in the 'Output' section.
- Other Input Sections:** Includes 'Optical Inputs' (Left, Right), 'Coaxial Inputs', 'BT Inputs' (Left, Right), 'OTG Inputs' (Left, Right), and 'Spatial Audio Inputs' (FL, FR, RL, RR, Center, Star SL, Star SR, SW).



- Kanäle können beliebig verlinkt werden
- Subwoofer Level, für alle Kanäle die als Subwoofer (SW) konfiguriert sind.
- Öffnet Dynamic Loudness Fenster
- Öffnet Smart Mixing Fenster
- Öffnet Input EQ Fenster
- Öffnet Fenster für Spatial 3D-Audio Einstellungen

The screenshot shows the 'awave' software interface with the 'IO' tab selected. At the top, there are volume sliders for 'CH6', 'Master vol', and 'SUB'. The 'SUB' slider is highlighted with a red box and a yellow arrow pointing to it from the text above. Below the sliders, there are eight output channels (Out CH1 to Out CH8) with dropdown menus for their configurations. Out CH7 and Out CH8 are both set to 'L-SW' and 'R-SW' respectively, with a yellow double-headed arrow between them. Below the output channels, there are input source buttons for each channel, some of which are circled in red, pink, and green. At the bottom, there are sections for 'Analog Inputs', 'Optical Inputs', 'Coaxial Inputs', 'BT Inputs', 'OTG Inputs', and 'Spatial Audio Inputs'. A 'Settings' button in the 'Spatial Audio Inputs' section is circled in grey.

# Pegel und Zeit-Fenster Gain / Delay

The screenshot displays the 'dwave' software interface with the 'Gain delay' tab selected. At the top, there are three volume sliders: CH1 at -5.0 dB, Master vol at 0.0 dB, and SUB at 8.2 dB. Below these are eight output channel selectors (Out CH1 to Out CH8) with dropdown menus showing settings like 'FL-T', 'FR-T', 'FL-M&WF', 'FR-M&WF', 'RL-Full', 'RR-Full', 'L-SW', and 'R-SW'. The main area is divided into two sections: 'GAIN' and 'DELAY'. The 'GAIN' section shows gain values for each channel (CH1 to CH8) and a 'MUTE' button for each. The 'DELAY' section shows delay values for each channel, a 'Polarity' dropdown set to '0°', and a 'Gruppenbildung der Kanäle' (Channel Grouping) section with 'MS', 'CM', and 'INCH' options. The 'CM' option is highlighted with a red box. A red arrow points to the 'Gain delay' tab, and blue arrows point to the 'Gruppenbildung der Kanäle' section.

Channel	Gain (dB)	Delay (ms)
CH1	-5.0	80.00
CH2	-4.0	30.00
CH3	-1.0	70.00
CH4	0.0	25.02
CH5	-5.0	130.10
CH6	-3.0	40.10
CH7	0.0	0.00
CH8	0.0	0.00

# Speichern / Laden / Save-Load Fenster

File Option Encrytion aWave Main IO Gain delay Save Load

CH1 Master vol SUB

Out CH1 Out CH2 Out CH3 Out CH4 Out CH5 Out CH6 Out CH7 Out CH8

FC-Full FR-Full FL-Full FR-Full SW SW RL-Full RR-Full

Save And Load Preset

Save Preset

POS1(CMC20... POS2(Didi) POS3 POS4

POS5 POS6 POS7 POS8

Load Preset

POS1(CMC20... POS2(Didi) POS3 POS4

POS5 POS6 POS7 POS8

Input 1 FL-Full 100%

Input 2 FR-Full 70%

Input 1 FL-Full 70%

Input 2 FR-Full 100%

Input 1 FL-Full 100%

Dynamic Loudness Settings Smart Mixer Settings Input EQ Settings

Input 1 FL-Full Normal

Input 2 FR-Full Normal

Input 3 FL-Full Normal

Input 4 FR-Full Normal

Input 5 FL-Full Normal

Input 6 FR-Full Normal

Input 7 RL-Full Normal

Input 8 RR-Full Normal

Optical Inputs Coaxial Inputs BT Inputs OTG Inputs Spatial Audio Inputs Settings

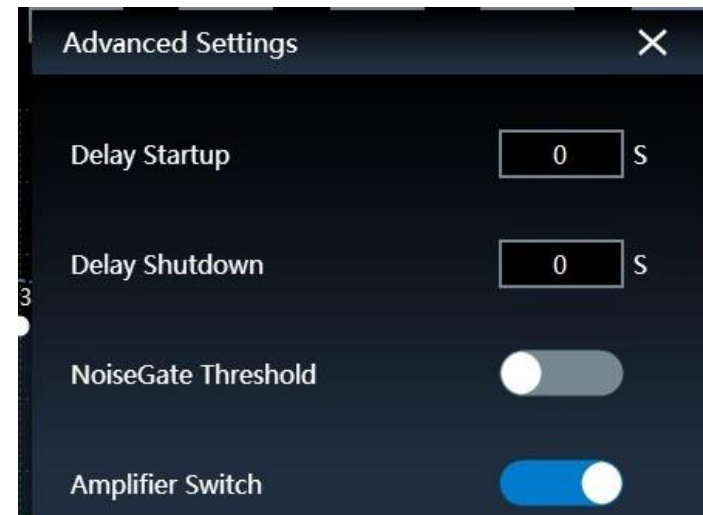
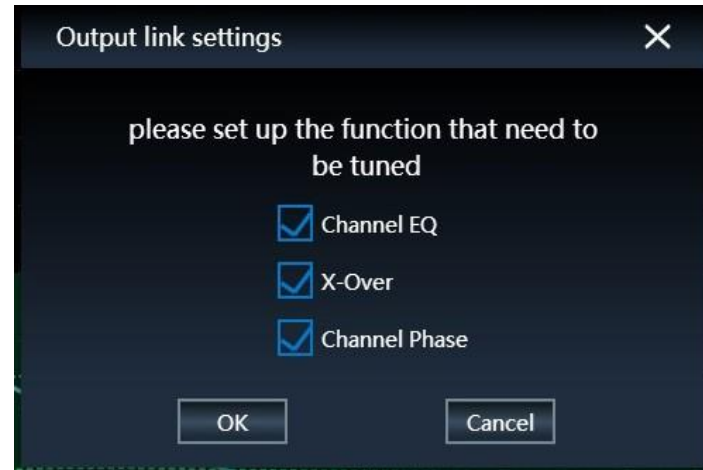
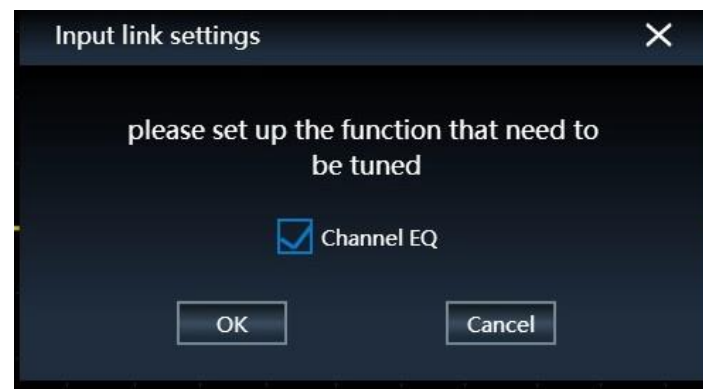
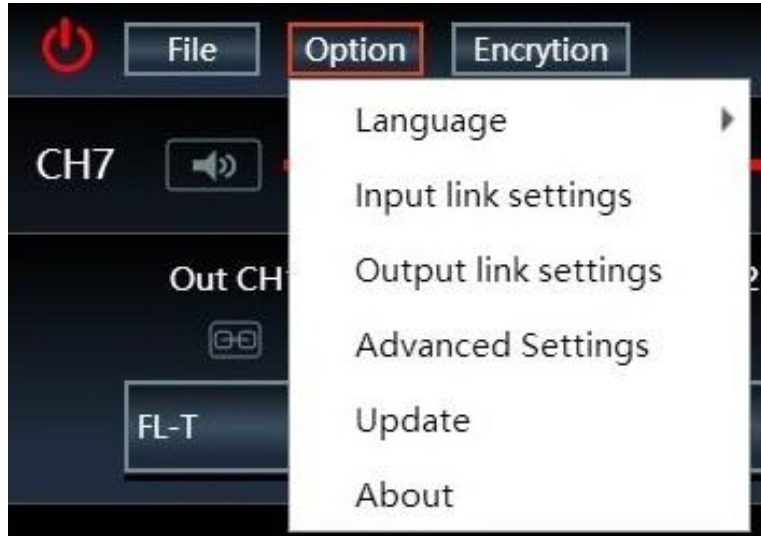
Left Right Left Right Left Right FL FR RL RR Center Star SL Star SR SW

Pegelanzeige bei Input und Output Felder

Es können eigene Bezeichnungen hinzugefügt werden. z.B. CMC, Didi, BT, OTG

# Option-Fenster

Einstellungen sind ab Werk sinnvoll eingestellt.



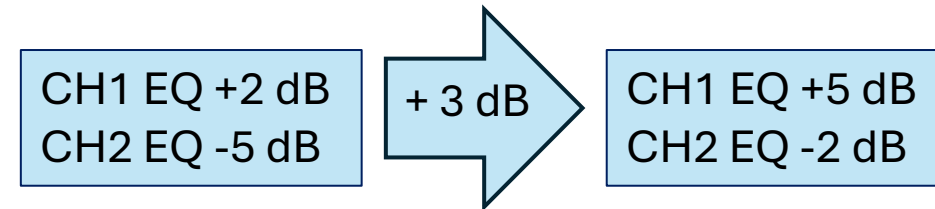
## Input / Output Link Settings

Wenn ausgewählt (Grundeinstellung) werden die jeweiligen Funktionen bei gruppierten Kanälen relativ zueinander, also verknüpft, ausgeführt.

Beispiel für ein EQ-Band:

CH1 und CH2 gruppiert/verlinkt

CH1 wird um 3 dB angehoben



## Advanced Settings

Einschaltverzögerung (normal 0 sec.)

Ausschaltverzögerung (normal 0 sec.)

NoiseGate (normal deaktiviert)

Ein/Aus der Endstufen (DSP bleibt an)



## Output EQ Funktionen

- Parametrischer EQ
- High-Shelf
- Low-Shelf
- Allpass 1. und 2. Ordnung



## Crossover Funktionen

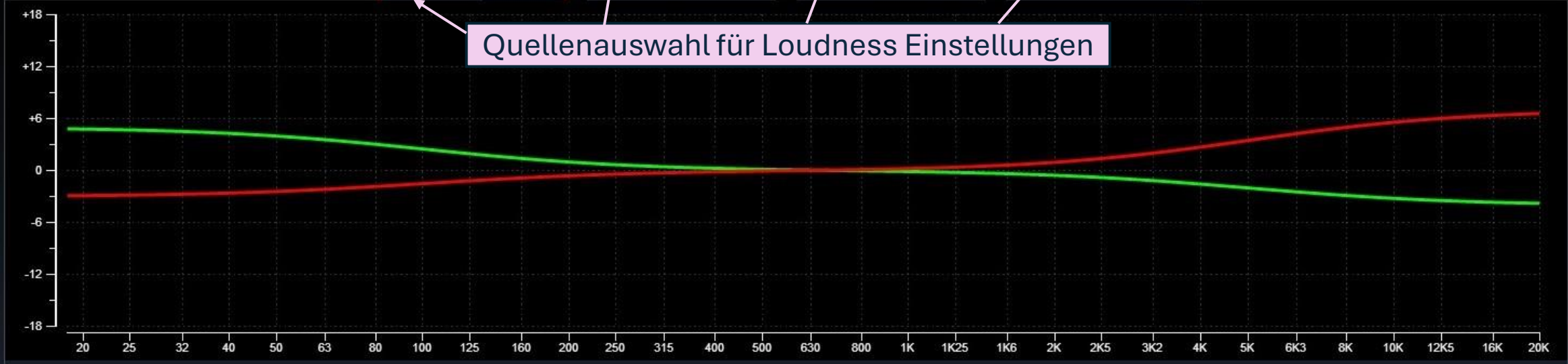
- Flat, 6 bis 48 dB/Octave
- Butter-W., Bessel, Linkwitz
- Phase 0 -360° in 6° Schritten
- Polarität 0 / 180°





Analog
  Optical
  Bluetooth
  OTG

Quellenauswahl für Loudness Einstellungen



Low Frequency Config

Low Vol. - Low Freq. Gain: 5 dB

High Vol. - Low Freq. Gain: -3 dB

Low Vol. - Threshold: -50.0 dB

High Vol. - Threshold: -10.0 dB

Low Frequency: 100 Hz

Input Level: -100.0 dB

High Frequency Config

Low Vol. - Low Freq. Gain: -4 dB

High Vol. - Low Freq. Gain: 7 dB

Low Vol. - Threshold: -50.0 dB

High Vol. - Threshold: -10.0 dB

High Frequency: 5000 Hz

Unterhalb von diesem Pegel wirkt die Einstellung

Einsatz-Frequenz Bass LowShelf

Echtzeit-Pegel bei laufender Musik

Einsatz-Frequenz Hochton HighShelf

Oberhalb von diesem Pegel wirkt die Einstellung

# Smart Mixer

Diesem Preset wird die Input Quelle zugeordnet. Routing muss im I/O entsprechend gemacht werden.

Hier wird der Smart Mixer aktiviert. Die automatische Umschaltung geht nur wenn der DSP vom Laptop getrennt ist! Ist der Smart Mixer nicht korrekt konfiguriert, geht der Ton aus wenn der Laptop abgesteckt wird!

Input Sources	Priority	Preset Binding	Settings
Analog	2	POS1(CMC2...)	Gain Decay: 100 %
Optical		NULL	Sensitivity: -75.0 dB
BT	1	POS3(BT)	Release: 2 s
OTG		NULL	

Pegel-Absenkung

Empfindlichkeit zur Umschaltung

Umschaltzeit zurück

Übliche Einstellung für HighLevel Input und zusätzlich Bluetooth. Bei dieser Einstellung spielt das Preset 1 mit dem analogen Eingang Musik bis über Bluetooth Musik abgespielt wird. Dann schaltet der DSP automatisch auf Preset 3. Dort muss natürlich das Routing und Setup für BT gemacht werden.



# 7+1 virtuelle Spatial 3D-Audio Kanäle => Zuordnung im IO-Fenster

The screenshot displays the 'aWave' software interface, specifically the 'IO' tab. At the top, there are volume sliders for 'CH8' (0.0 dB), 'Master vol' (0.0 dB), and 'SUB' (8.2 dB). Below these are eight output channels, each with a dropdown menu and a '100%' gain indicator:

- Out CH1: FL-T
- Out CH2: FR-T
- Out CH3: FL-M&WF
- Out CH4: FR-M&WF
- Out CH5: RL-Star-Full
- Out CH6: RR-Star-Full
- Out CH7: FC-Full
- Out CH8: R-SW

Below the output channels are eight input boxes, each with a '100%' gain indicator:

- Input 1 FL-Full
- Input 2 FR-Full
- Input 1 FL-Full
- Input 2 FR-Full
- Star SL
- Star SR
- Center
- SW

At the bottom, there are several input source sections:

- Analog Inputs:** Eight inputs (Input 1 to Input 8) with 'Normal' settings.
- Optical Inputs:** Left and Right.
- Coaxial Inputs:** Left and Right.
- BT Inputs:** Left and Right.
- OTG Inputs:** Left and Right.
- Spatial Audio Inputs:** FL, FR, RL, RR, Center, Star SL, Star SR, SW.

Three colored arrows point from the Spatial Audio Inputs section to the input boxes above:

- A cyan arrow points from 'Star SL' to the 'Star SL' input box.
- A yellow arrow points from 'Center' to the 'Center' input box.
- A green arrow points from 'SW' to the 'SW' input box.

Additional interface elements include a top menu bar (File, Option, Encryption), a 'Main' tab, and various settings icons like 'Dynamic Loudness Settings', 'Smart Mixer Settings', 'Audio Input Sources', 'Clear', and 'Input EQ Settings'.



# Spatial 3D-Audio Fenster: 7+1 virtuelle Kanäle für Front- Rear- Star- Surround, Center und Bass-Enhancer

**File** **Option** **Encyption** **Main** **IO** **Gain delay** **Save Load**

Front Field Expansion **OFF** Rear Field Expansion **OFF**  
Extended Frequency **500** Extended Frequency **500**  
Front Treble Enhancement **OFF** Rear Treble Enhancement **OFF**

**Center Enhancement** **Star Surround** **Light** **Bass Boost** **Light**  
**Bass Boost Freq** **20** **Bass Subharmonics**

**FL** **FR** **RL** **RR** **Center** **Star SL** **Star SR** **SW**

**GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY** **GAIN** **DELAY**

**Input 2** FR-Full 100% **Input 1** FL-Full 100% **Input 3** RL-Full 100% **Input 4** FR-Full 100%

**Input 4** FR-Full 100% **Input 3** RL-Full 100% **Input 2** FR-Full 100% **Input 1** FL-Full 100%

**Audio Input Sources** **Clear**

**Analog Inputs**

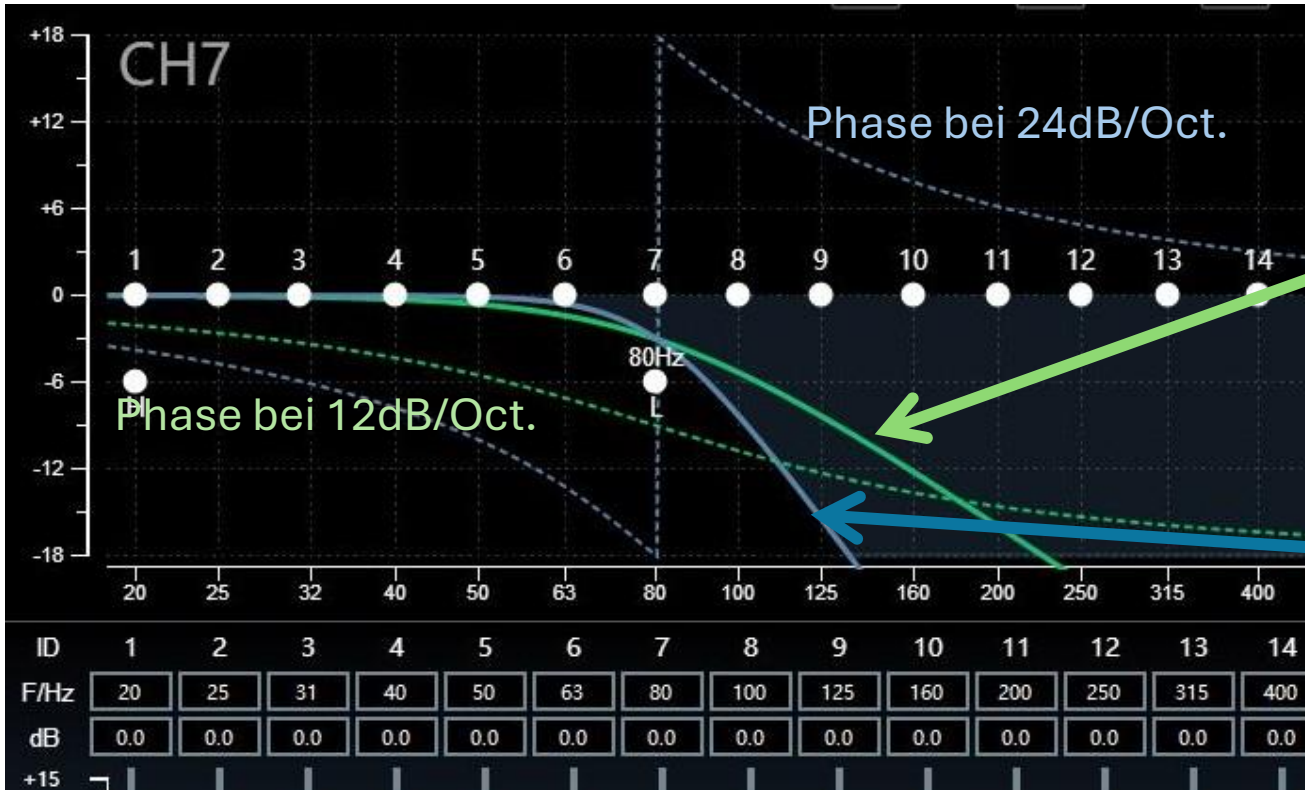
**Input 1** FL-Full **Normal** **Input 2** FR-Full **Normal** **Input 3** RL-Full **Normal** **Input 4** FR-Full **Normal** **Input 5** FL-Full **Normal** **Input 6** FR-Full **Normal** **Input 7** RL-Full **Normal** **Input 8** RR-Full **Normal**

**Optical Inputs** **Coaxial Inputs** **BT Inputs** **OTG Inputs**

**Left** **Right** **Left** **Right** **Left** **Right** **Left** **Right**

**OK**

# Trennung Subwoofer Phasenverhalten



Trennung 80Hz mit 12 dB/Oct.  
⇒ Phase um 90° gedreht bei 80Hz

Trennung 80Hz mit 24 dB/Oct.  
⇒ Phase um 180° gedreht bei 80Hz



# Übersicht aktueller AWAVE und STEG DSP-Endstufen.

2025 Modelle Gelb hinterlegt

Ausstattung	Modell	AWAVE					STEG					
		A6	DSP6v5	DSP10Dmax	DSP8.1	DSP12AD	DSP12Dmax	MDSP6-II	MDSP8	SDSP6-II	MDSP10	MDSP12
High-Input Kanäle	4	8	8	8	12	12	4	6	6	6	12	
Low-Input Kanäle	4	2	2 (AUX)	2 (AUX)	6	6	4	2	4	4	6	
Eingangsempfindlichkeit	1-6V /8-16V	1-8V / 8 -32V	1-8V / 8 -32V	1-8V / 8 -32V	1-6V /8-16V	1-6V /8-16V	1-6V /8-16V	1-8V / 8 -32V	1-6V /8-16V	1-6V /8-16V	1-6V /8-16V	
Anti-Error-Protection Input	15 Ohm	ja	ja	ja	15 Ohm	15 Ohm	15 Ohm	ja	25Ohm	25Ohm	10Ohm	
Digital Eingang	-	Opt./ OTG / Coax	Opt./ OTG / Coax	Opt./OTG / Coax	Optisch / Coax	Optisch / Coax	-	Opt./ OTG / Coax	Optisch / Coax	Optisch / Coax	Optisch / Coax	
Bluetooth Audio Streaming	ja	optional B5v2	ja	ja	optional B5v2	optional B5v2	ja	ja	optional B5v2	optional B5v2	optional B5v2	
Output RCA	6 x 4V	4 x 1,5V	10 x 1,5V	2 x 1,5V	12 x 4V	12 x 4V	6 x 4V	2 x 1,5V	2 x 4V	10 x 4V	12 x 8V	
DSP-Kanäle	6	8	10	10	12	12	6	8	8	10	12	
Amp-Kanäle	4	6	8	8+1 (Ch9+10)	12	12	4	6	6	8	12	
Leistung 4 Ohm	4x45W	6 x 90W	8 x 90W	8 x 90W + 1 x 250W	8 x 50W + 4 x 100W	12 x 80W	4x45W	6 x 50W	6 x 80W	8 x 45W	12 x 80W	
Leistung 2 Ohm	-	6 x 135W	8 x 135W	8 x 135W + 1 x 350W	8 x 50W + 4 x 150W	12 x 125W	-	6 x 50W	6 x 125W	-	12 x 125W	
Systemleistung	ca. 150W	ca. 700W	ca. 950W	ca. 1200W	ca. 1000W	ca. 1000W	ca. 150W	ca. 300W	ca. 400W	ca. 300W	ca. 1000W	
Brückbar	-	ja	ja	ja	nein / ja	ja	-	-	ja	-	ja	
Input-Mixer	ja	ja	ja	ja	ja	ja	ja	ja	ja	ja	ja	
Input EQ Bänder je Kanal	-	5	5	5	-	-	-	5	-	10	10	
Input EQ: PAR, AP1, AP2, LS, HS	-	ja	ja	ja	-	-	-	ja	-	PAR / AP1 / AP2	PAR / AP1 / AP2	
Output EQ Bänder je Kanal	31	31	31	31	31	31	31	31	31	31	31	
Output EQ	PAR,AP1,AP2	PAR, AP1, AP2, LS, HS	PAR, AP1, AP2, LS, HS	PAR, AP1, AP2, LS, HS	PAR,AP1,AP2	PAR,AP1,AP2	PAR,AP1,AP2	PAR, AP1, AP2, LS, HS	PAR	PAR / AP1 / AP2	PAR / AP1 / AP2	
Crossver / Timecorrection	ja	ja	ja	ja	ja	ja	ja	ja	ja	ja	ja	
Dynamische Loudness Kontrolle	-	ja	ja	ja	-	-	-	-	-	-	-	
Surround Funktionen mit Center Unterstützung	-	ja	ja	ja	-	-	-	-	-	-	-	
<b>flexibel einstellbarer Limiter</b>	-	-	-	-	-	-	-	-	-	-	-	
Bedienteil optional	DRC-Uni	DRC-OTG	DRC-OTG	DRC-OTG	DRC-Uni	DRC-Uni	DRC-Uni	DRC-OTG	DRC-Uni	DRC-Uni	DRC-Uni	
optionaler Sub-Level Regler	-	April 2025	April 2025	April 2025	-	-	April 2025	April 2025	-	-	-	
<b>Maestro I-Data Link / IDL</b>	-	-	-	-	-	-	-	-	-	-	-	
Anzahl Presets	8	8	8	8	8	8	8	8	8	8	8	
Presets Global, inkl. Routing, Quelle	-	ja	ja	ja	-	-	-	ja	-	-	-	
<b>Presets über Masse oder +12V schaltbar</b>	-	-	-	-	-	-	-	-	-	-	-	
Automatische Quellenumschaltung	Main /BT	Main / BT / Digital	Main / BT / Digital	Main / BT / Digital	Main /BT	Main /BT	Main /BT	Main / BT / Digital	Main /BT	Main /BT	Main /BT	
Pegelanzeige je Kanal in GUI	-	IN / OUT	IN / OUT	IN / OUT	-	-	-	IN / OUT	-	-	-	
Betriebsspannung	9-16V	9- 18V	9- 18V	9- 18V	9-16V	9- 16V	9-16V	9- 18V	9- 16V	9- 16V	9- 16V	
Abmessungen in mm	174 x 120 x 41	224 x 155 x 48	?	254 x 210 x 50	307 x 195 x 50	307 x 195 x 50	174 x 120 x 42	174 x 120 x 42	250 x 210 x 57,5	224 x 171 x 49	307 x 196 x 49	
UVP	350,00 €	590,00 €	850,00 €	1.000,00 €	1.000,00 €	1.100,00 €	360,00 €	390,00 €	750,00 €	850,00 €	1.200,00 €	