

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™






General



Hi-Res AUDIO MADE ACCESSIBLE

The Alpine OPTIM8 system features many technologies, components and materials of the Alpine Status system to achieve ultra-high-precision music reproduction - at an affordable price tag. It is designed to play music tracks at 192 kHz / 24-Bit format, which are widely accessible in many online stores and streaming platforms. High-Res Audio playback of 192 kHz / 24-Bit allows Alpine OPTIM8 to create a heightened listening experience in the vehicle that emulates the feeling of an intimate recording studio session.



ALL-IN-ONE SOLUTION

Enhance your sound system with the Alpine OPTIM8. Featuring a built-in 8-channel amplifier with Hi-Res Audio playback up to 96 kHz / 24-Bit, the OPTIM8 is the all-in-one sound solution to amplify and effortlessly sound-tune your system in minutes.



SIMPLIFYING SOUND TUNING

The Alpine OPTIM8 removes all the complexities of tuning a sound system by providing a simple, self-guided process via the OPTIM IOS App (iPhone/iPad) or PC App with the KTX-CSP1 External Mic kit (sold separately) to quickly and precisely measure your vehicle's interior. This innovative Auto-EQ software analyzes your vehicle's acoustic environment and intelligently adjusts to optimize the audio output for your vehicle and provide the best possible listening experience.



POWER YOUR SYSTEM

The OPTIM8 gives you the flexibility to use your factory radio and sound system or tie in an aftermarket radio and sound system. The built-in amplifier boasts 6x 35 Watts + 2x 130 Watts @4 Ω or 6x 70 Watts + 2x 260 Watts @2 Ω, being able to power a full sound system. Digital inputs include Coax and USB (DAC) while a high-level speaker input of up to 30V allows the OPTIM8 to connect to a factory amplifier.

Specifications

General

- Auto-EQ with APVD Collection (Creates a Flat Vehicle Response)
- Manual & Automatic Sound Tuning with PC App Control
- High-quality black brushed aluminium finish
- Integrated Alpine logo patch
- Highly flexible system configuration
- Automatic switch-on function (auto-sensing)
- 4x high-performance AD-converters by Texas Instruments
- Hi-Res Audio DSP with 450 MHz, 32-/40-Bit SharcDSP® (192 kHz / 32-Bit maximum sampling rate without down-sampling)
- Integrated 8-channel digital sound processor
- Built-in 8-channel Class-D digital amplifier
- Matrix inputs with signal summation
- External Bluetooth dongle included
- USB input for DSP setup via PC and USB audio playback
- Powerful and easy-to-use PC software
- Pre-configured systems included in PC software
- Start-stop ready (up to 6 V)

Bluetooth® Function

- Bluetooth dongle included with the PXE-C80-88
- Required for standalone systems for Bluetooth streaming (up to 10 m range)
- Plug-and-Play installation

Inputs

- 8-channel high-level (speaker level)
- 6-channel RCA
- 1x Coaxial up to 192 kHz @24-Bit
- Bluetooth audio (with BT dongle)
- +12 V remote input (ACC)

Outputs

- 8-channel high-level amplifier outputs
- 8-channel PreOuts
- +12 V remote output

Dimensions and Weight

- Weight: 2,4 kg
- Dimensions: Width 220,5 mm / Depth 225 mm / Height 54 mm

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Features

DSP

- Latest ANALOG DEVICES chip
- Up to 8 speaker outputs with adjustable levels
- Outputs can be mixed within up to 8 channels (high level or RCA)
- Independent or linkable setups for all output channels
- Fully adjustable analogue routing (example: channel mix for centre channel or 3-way input signal)
- Param./Graphic 10-band EQ and digital crossover for all inputs
- Volume adjustment (gain) of all channels (-60 dB - +6 dB)
- Digital time correction per channel (0 - 20 ms; ~0.021 ms steps)
- Digital time correction grouping (up to 4 groups possible)
- Digital time correction ON / OFF possible for each channel
- Param. 31-band equalizer per output channel (20 Hz - 40 kHz) with configurable frequency (1 Hz steps), adjustable Q value (Q from 0.404 to 28.852) and Gain ± 12 dB
- Phase adjustable 0° / 180°
- Equalizer ON / OFF possible for each channel
- Digital crossover per output channel (20 Hz - 40 kHz) OFF/-6/-12/-18/-24/-30/-36/-42/-48 dB/oct. (HP, LP, BP) Filter type (Butterworth, Bessel, Link-Ril.) (1 Hz steps)
- Master volume (0 - 35) and master mix level (0 - 100 %)
- Save / load up to 6 pre-sets on the DSP
- 13 input and 7 output system configurations pre-installed

Amplifier

- Class-D amplifier with full digital audio path
- Switch-on via remote cable (+12 V) or auto-remote (high-level IN channel 1)
- Max. power output 470 watts RMS @4 Ω
- Output power RMS@4 Ω : 6x 35 watts + 2x 130 watts
14.4V, 1%THD @2 Ω : 6x 70 watts + 2x 260 watts (not bridgeable)
Internal amp. can be deactivated
- Operating voltage: 14.4 V DC (9-16 V)
- Back up current (12,6V) ≤ 3 mA
- THD+N: $\leq 0.06\%$
- Frequency range: 20 Hz - 40 kHz (1 W, 4 Ω)
- Signal-to-noise ratio: >95 dB (RCA A-wt) (RCA)
>80 dB (RCA A-wt) (High Level)
- Input voltage: 11 Vpp (RCA) / 26 Vpp (High)
- Output sensitivity: 4 Vpp (RCA)
40 Vpp (High) (Channel 1-6)
70 Vpp (High) (Channel 7-8)
- Input impedance: >50 k Ω / >50 Ω (RCA / High)
- Switch-on function: High-Level IN (H1 $\pm$) / ACC
- Remote output: 12 V (0,2A)
- System sampling rate: 192 kHz / 32-bit (Hi-Res Audio)

OPTIM8

The all-in-one solution to unleash your sound system!



PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

All-in-One Package



External Controller RUX-CSP1
with connection cable



Controller extension cable

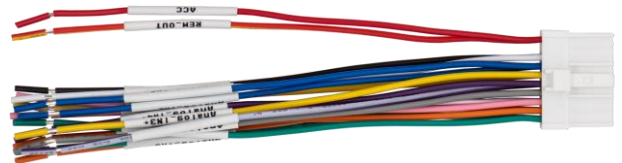


External Bluetooth module



USB 2.0 cable for PC

Content



8-Channel Hi-Level inputs cable
+ Remote output +12 V & ACC input +12 V



Hi-Level outputs cable for channel 1 – 6

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Accessories

KIT-CSP1

Measurement Microphone Kit for OPTIM™8



Features

- Sold separately
- 3,5 mm headset jack with microphone
- Recommended for the PXE-C80-88
- Capture the most accurate sound system measurements in your vehicle for precise tuning results with Alpine's OPTIM™8 Processor.

KWE-PXE8-UNI

Universal Connection Harness - Quadlock



Features

- Quadlock T-cable connection harness (6 m)
- For direct connection to OEM systems with Quadlock connection plug
- Connector:
 - 1x 20-pin OPTIM8 input connector
 - 1x 12-pin OPTIM8 output connector
 - 1x 8-pin Quadlock insert (speaker input)
 - 1x 8-pin Quadlock insert (speaker output)
- For adaptation to ISO, the adapter KWE-FR1AU is additionally required

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Connection

Connectors Left:



6-Channel RCA Inputs

8-Channel Hi-Level Inputs +
Remote Output +12 V +
ACC +12 V IN

Input Select Switch (ACC/SPK)

Digital Coaxial Port

External BT Dongle Connector

USB 2.0 Connector (PC) / USB DAC

Connectors Right:



Fuses (40A)

Power Supply

Speaker Output Terminals (CH7-8)

Speaker Output Terminals (CH1-6)

RCA Output Terminals (CH1-8)

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™

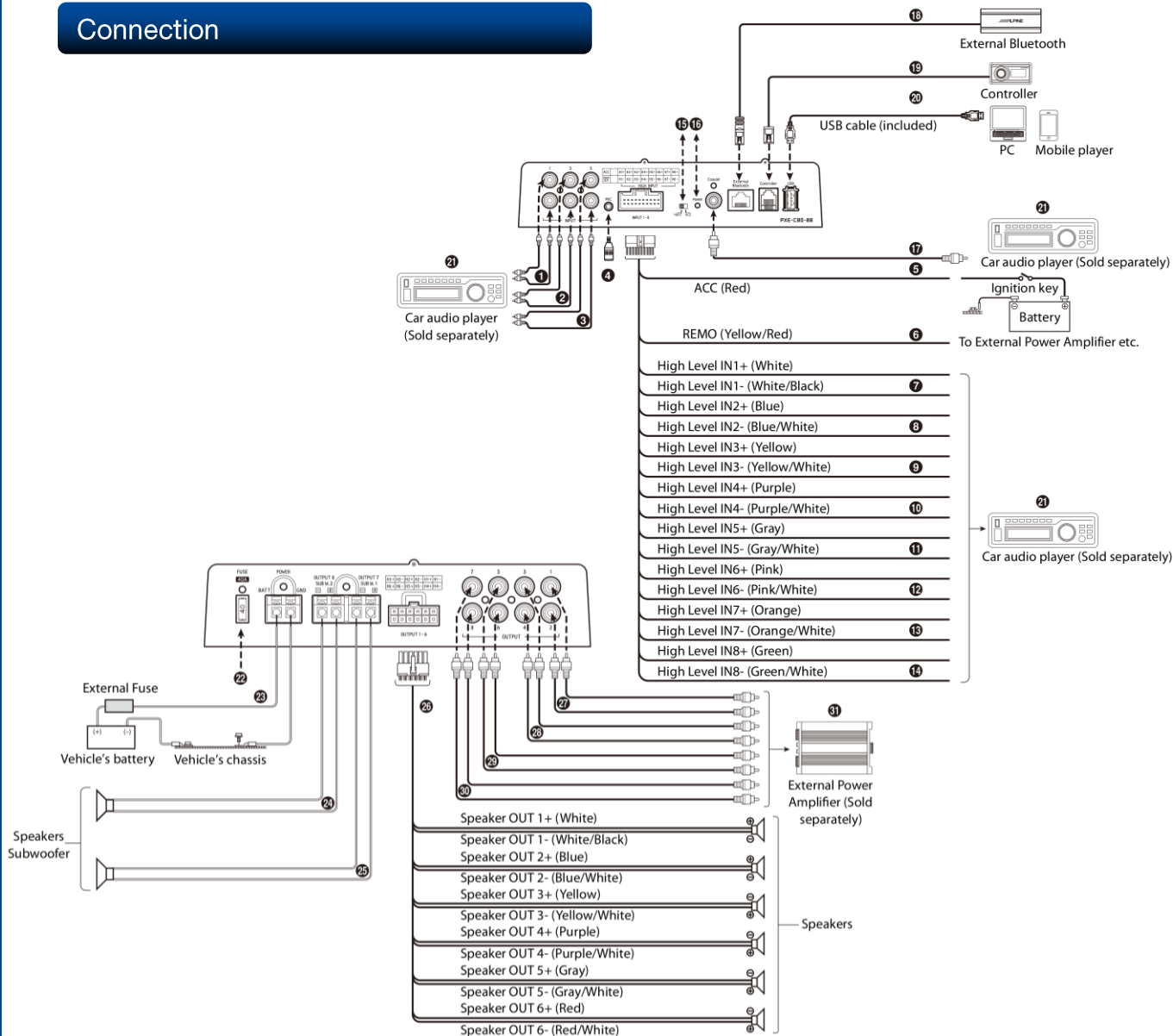


SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Connection



PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



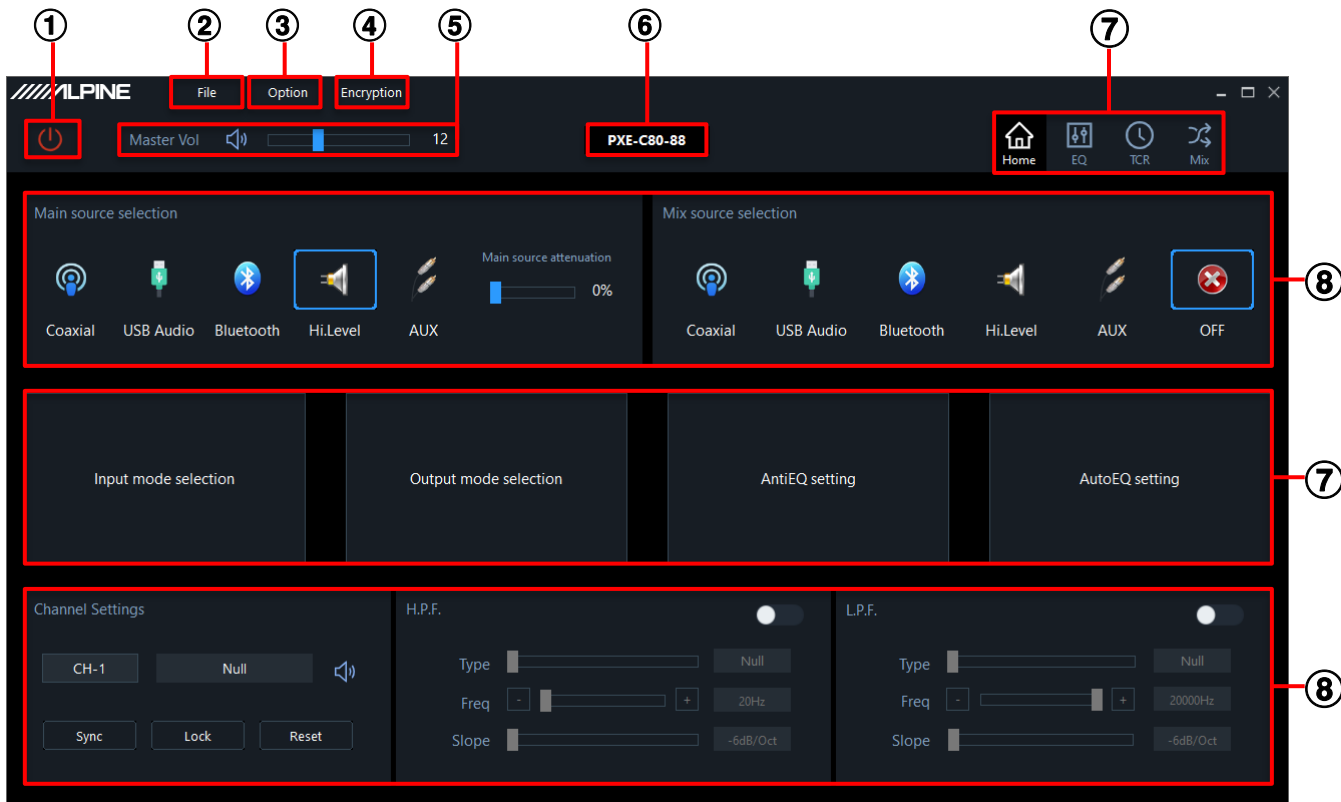
SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Software

PXE Software – Overview (Home Screen):



- | | |
|--|---------------------------------|
| ① Online switch | ⑤ Adjust the total volume |
| ② Load or save the tuning data | ⑥ Display of the device name |
| ③ Select the function setting | ⑦ Function page selection |
| ④ Encryption and decryption of tuning data | ⑧ Editing area of function page |

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



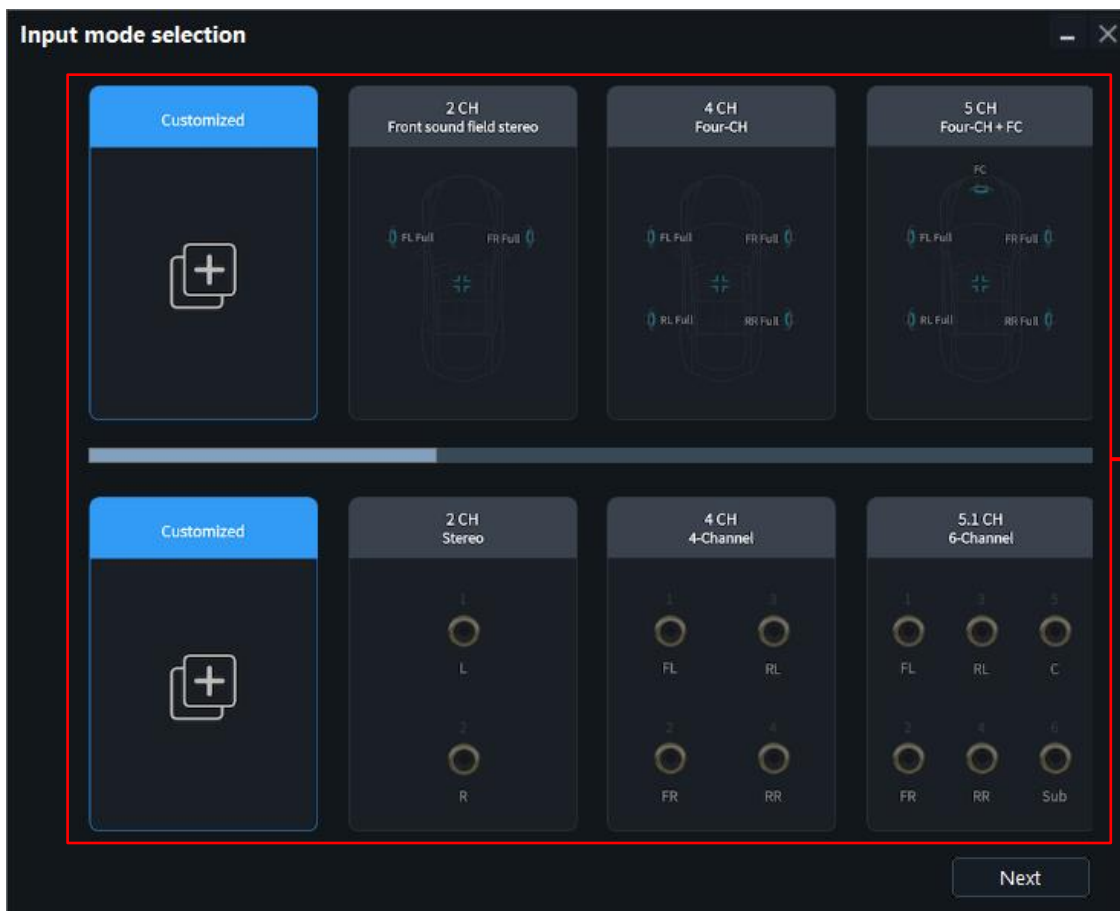
SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Software

PXE Software – System Input Configuration:



① 10 Pre-configured high-level input system layouts + 3 low-level (RCA) input systems available

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



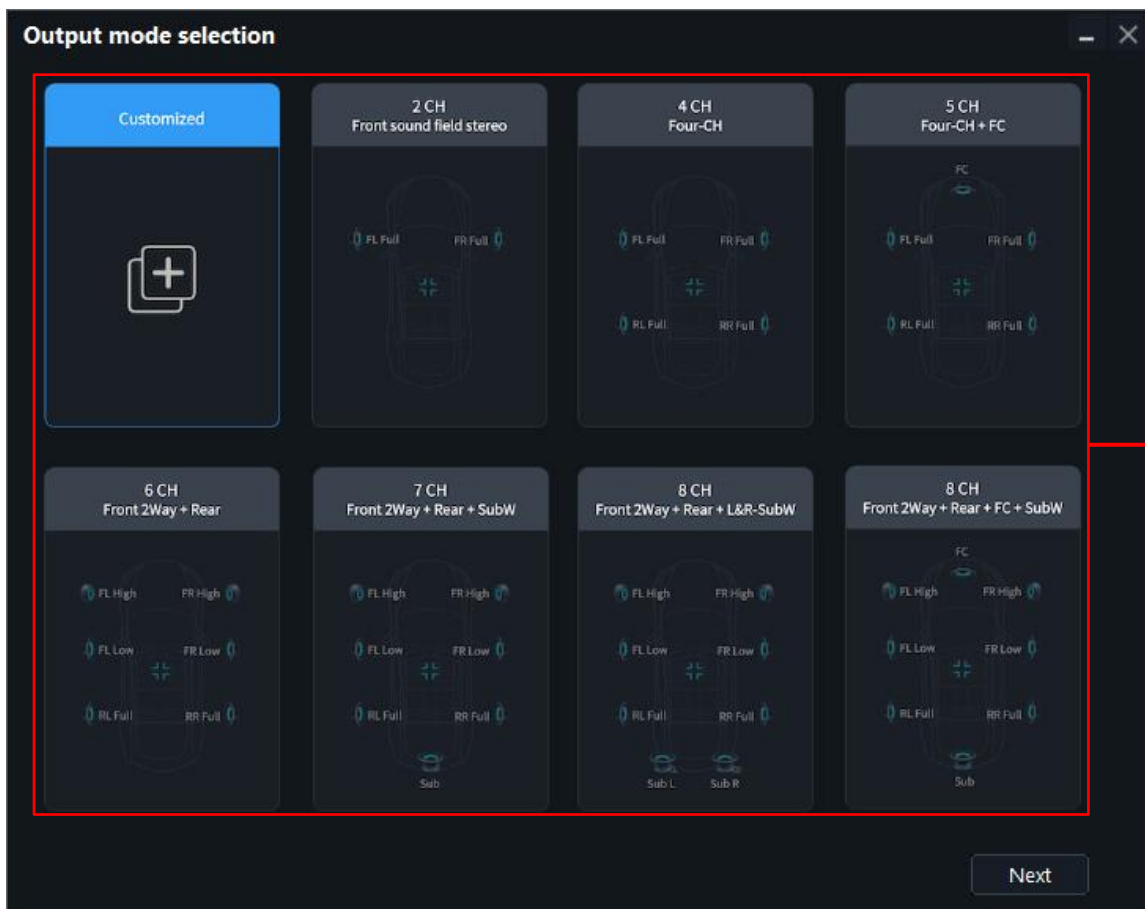
SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Software

PXE Software – System Output Configuration:



① 7 Pre-configured output system layouts available

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



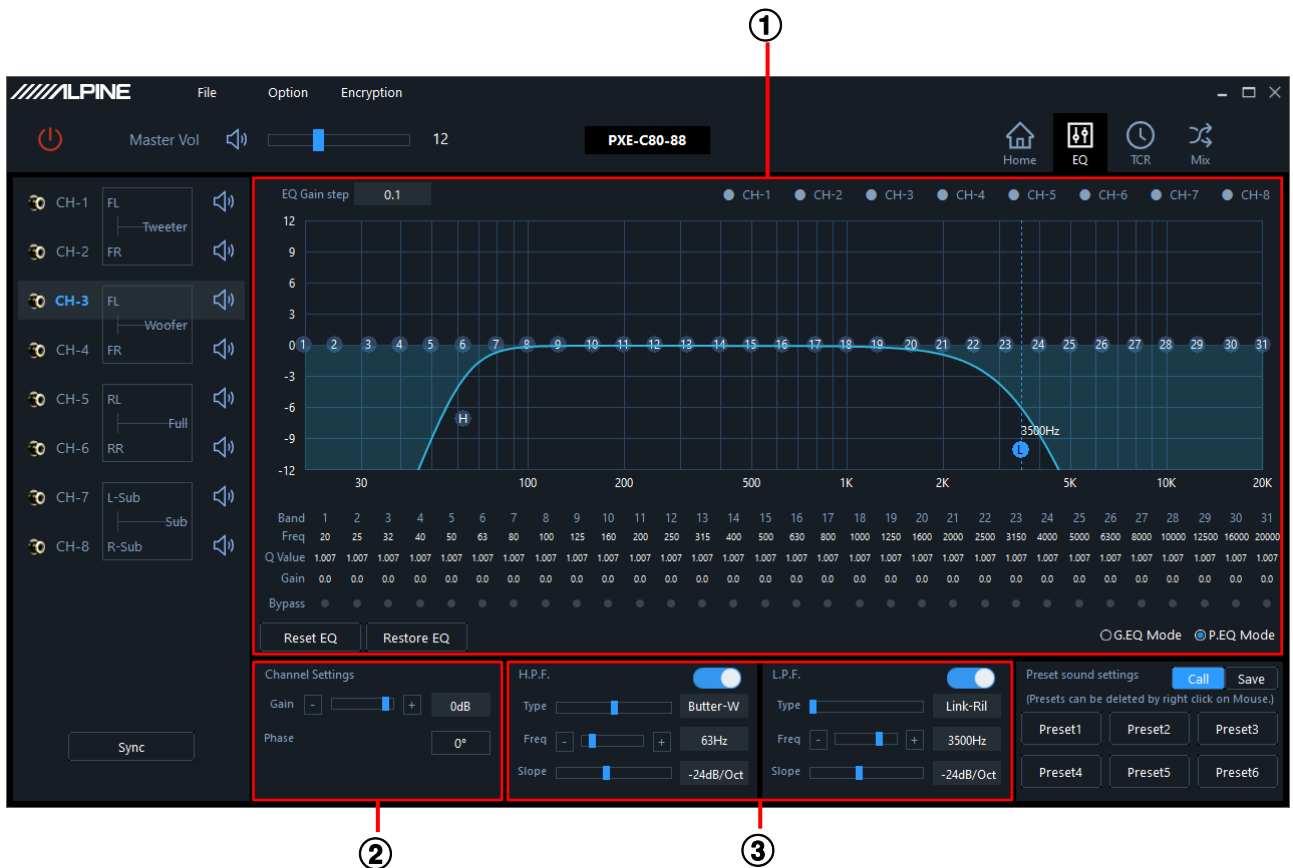
SHARC

**Hi-Res
AUDIO**

**Qualcomm
aptX™ HD**

Software

PXE Software – EQ & X-Over Settings (Output):



- ① Equalizer adjustment
- ② Gain & phase adjustment
- ③ Digital crossover (X-Over)

PXE-C80-88

Alpine OPTIM8 – Hi-Res Audio – 8-Channel Digital Sound Processor and 8-Channel Amplifier with Automatic Sound Tuning Function

OPTIM8™



SHARC

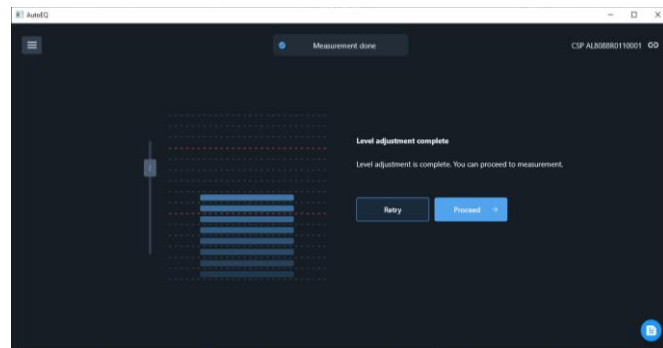
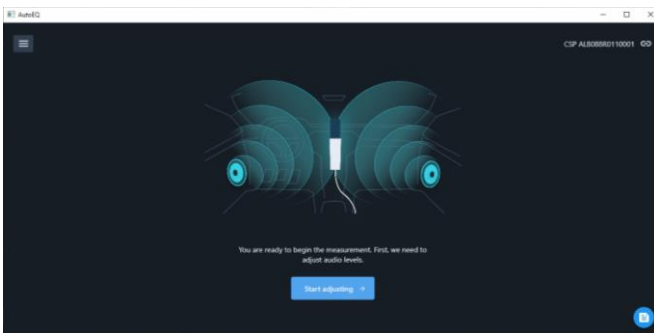
**Hi-Res
AUDIO**

VIR **eilex**
FILTER® PRISM

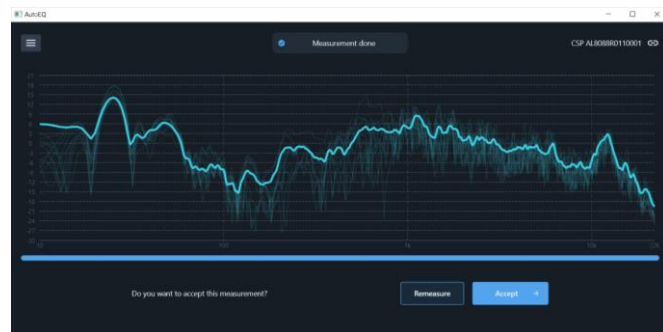
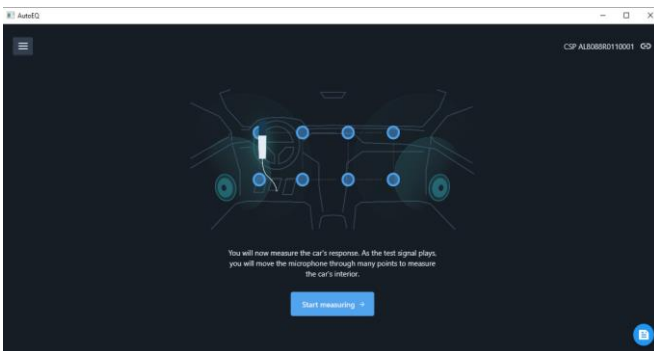
**Qualcomm®
aptX™ HD**

Software

PXE Software – AutoEQ Function



Start automatic measurement



Result of the measurement and target curve