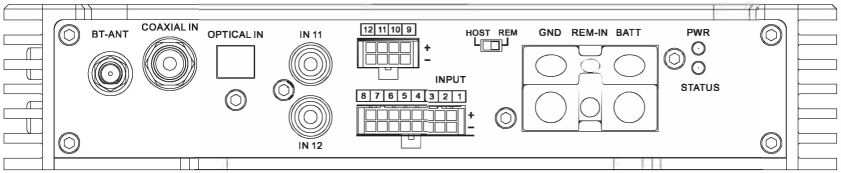
FUNCTIONAL DESCRIPTION

DSPA 1012 Plus



PWR
If the LED lights up in blue, the player is ready for operation.

STATUS
If the LED lights up in flashing red, the temperature for the amplifier inside becomes too high. When the red color continues to exist, the amplifier is automatically turned off to protect the device. Please note that users can only turn on the player again when it is totally cooled down.

POWER
GND
Connect the GND terminal with a negative battery cable or a cable connected to the vehicle's chassis.
REM - IN
Connect a turn - on signal or the turn - on remote signal of your headunit with this terminal. Hereby the device is turned on or off with your headunit.
BATT
Connect the BATT terminal with the positive pole of the vehicle's battery.

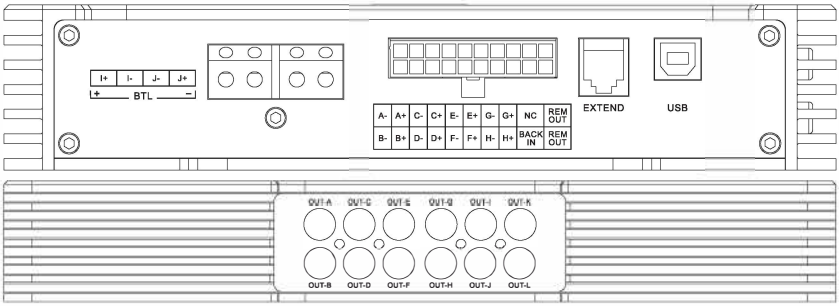
REM / HOST(Mode for Power Selection)
REM
Select this method if you have connected a turn-on signal at the ACC terminal.
HOST
This method only works if you use the device's high level inputs. The device is activated by connecting an amplified headunit output to the (IN 1+/IN 1-) input channel.

IN 1 ~ IN 12
Connect the twelve high level inputs with suitable loudspeaker cables.

IN 11 & IN 12
The RCA inputs capture audio signals from other aftermarket source units (e.g. CD players).
Note: The RCA inputs IN 11 & IN 12 and the high level inputs IN 11 & IN 12 cannot be used at the same time.

OPTICAL & COAXIAL INPUT
The inputs accept PCM stereo signals up to a sampling rate of 192KHz/24 bit.

BT ANT
This port is for the Bluetooth® antenna.



USB
This USB input is suited for connecting a PC/laptop to set up the DSP functions by managing the Goldhorn software.

EXTEND
Connect this terminal with cables for the remote controller.

OUT A ~ OUT H
The eight high level outputs provide speakers and subwoofers with amplified audio signals.
REM OUT 1 & REM OUT 2
Connect the two terminals with suitable cables to control external amplifiers.

OUT I ~ OUT J
The two high level outputs are bridgeable to become BTL1, providing speakers and subwoofers with amplified audio signals.

OUT A ~ OUT J
The twelve RCA outputs provide other devices with the modified output signals.

Technical Specifications

	DSPA 1012 Plus	DSPA 1216 Plus
DSP chip	ADAU1463 Analog Devices™	
Audio Input Features	Equalizer Filter Type : PE/LS/HS/AP 5-Band Parametrical Equalizer : ±15 dB,0.1 dB Steps Q : 0.5~15 0.1 Time Alignment Delay : 0~10 ms/0.02 ms Steps	
Audio Output Features	Equalizer Filter Type : PE/LS/HS/AP Crossover Frequency : 1 Hz step @ 20 Hz - 20 KHz Master Gain : 0~60 dB Channel Gain : -20~+5 dB Phase Shift : Positive phase/Inverted phase Input Mixer, Subwoofer Control Q : 0.5~15 0.1	
	Variable Phase Rotation from 0° to 360° (step : 1°)	
	31-Band Parametrical Equalizer : ±15 dB,0. 1 dB Steps	
	Crossover Filter Type and Slope : Bessel / Butterworth @ -6 /- 12/- 18/-24/-30/-36/-42/-48 dB Linkwitz @ - 12/-24/-36/-48 dB	
	Time Alignment Delay : 0~20ms/0.02 ms Steps	
Signal Converters	Ti ADC/DAC	Ti ADC/AKM DAC
Frequency Response	20Hz~40KHz	
USB	1 x USB Type B for PC Software	
	—	
Remote Control	1 x Remote	
Bluetooth® Receiver	APTX HD/APTX/AAC/SBC	
Other Features	Error Protection System 8 Presets for Sound Setups	
Color	Black	
Dimensions (L×W×H)	296 x 217 x 43 mm	331 x 217 x 43 mm

Technical Specifications

	DSPA 1012 Plus	DSPA 1216 Plus
Voltage	10V-16V	
Turn-On	AC C/ high level inputs	
High Level Inputs	12 x High Level Inputs	16 x High Level Inputs
High Level Inputs Sensitivity	16V Max	10/16V Max
RCA Inputs	2 x RCA Inputs	
Low Level Inputs Sensitivity	3V Max	
Digital Inputs	1 x Optical Input/1 x Coaxial Input (up to192KHz/24bit)	
Input Impedance	6Ω	
High Level Outputs	10 x High Level Outputs	12 x High Level Outputs
High Level Outputs Voltage	8ch : 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 2ch : 100W/4Ω/ch RMS, 150W/4Ω/ch Max. THD+N : <-75 dB S/N : >100 dB	8ch : 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 4ch : 100W/4Ω/ch RMS, 150W/4Ω/ch Max. THD+N : <-75 dB S/N : >100 dB
RCA Outputs	12 x RCA Outputs	16 x RCA Outputs
RCA Outputs Voltage	Voltage : 5.6V THD+N : <-95 dB S/N : >108 dB	Voltage : 5.6V THD+N : <-95 dB S/N : >112 dB
	1 x BLT outputs 200W/4Ω RMS. 300W/4Ω Max.	2 x BLT outputs 200W/4Ω RMS./ch 300W/4Ω Max./ch