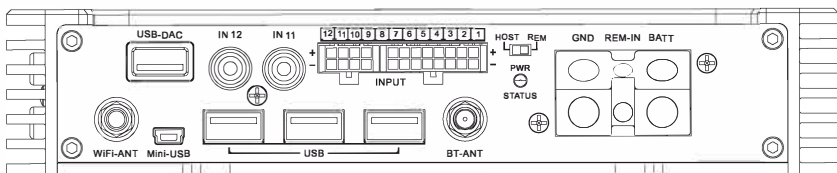


## FUNCTIONAL DESCRIPTION

### P3 DSPA Plus



### 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.

### PWR / STATUS

If the LED lights up in blue, the player is ready for operation. If the blue color turns into 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.

### 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.

### USB - DAC

Users can play audio signal from phones with OTG function via USB connection, with sampling rates up to 192KHz/32bit.

### BT ANT

This port is for the Bluetooth® antenna.

**USB 1 ~ 3**

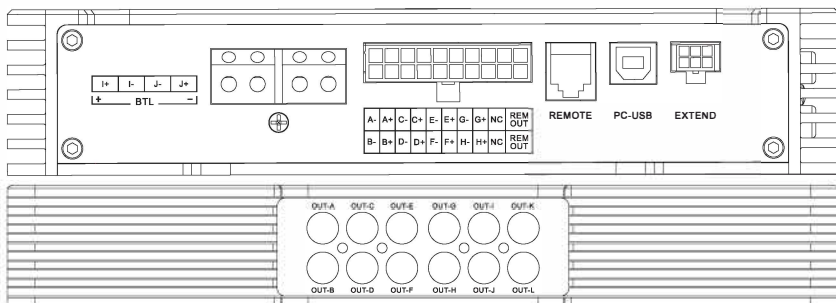
Connect the three USB 2.0 HOST terminals with external USB/portable SSD, or cables for the panel control with display.

**Mini - USB**

This terminal is for firmware upgrade.

**Wi - Fi**

This port is for Wi-Fi antenna.

**EXTEND**

Connect this terminal with cables for steering wheel control (limited car make/model only).

**PC - USB**

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

**REMOTE**

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. (UNBRIDGEABLE!)

**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 L**

The twelve RCA outputs provide other devices with the modified output signals.

## Technical Specifications

<b>Integrated DSP for P1 DSPA /P2 DSPA Pro /P3 DSPA Plus/P2 DSP Pro</b>	
DSP chip	Analog Devices™ 32 bit, 295 Mhz, 48KHz Sampling Rate 1.2 Billion MAC Operations per Second
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	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 Equalizer Filter Type : PE/LS/HS/AP 31-Band Parametrical Equalizer : ±15 dB, 0.1 dB Steps Q : 0.5~15 0.1 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 : 0~20 ms/0.02 ms Steps Variable Phase Rotation from 0° to 360° (step : 1°)
Frequency Response	20Hz~40KHz
Signal-to-Noise Ratio (A-weighted)	Analog Input: 106 dB Digital Input: 111 dB
THD	Analog Input <0.003% Digital Input <0.003%
Input Sensitivity	Low Level : 3V High Level : 10-16V
Other Features	Error Protection System 8 Presets for Sound Setups

※The information in this manual is subject to be changed without notice.

※Technical changes and errors reserved.

※All trademarks and trade names are the property of their respective owners.

<b>P3 DSPA Plus</b>	<b>P2 DSP Pro</b>
11-16V	
ACC/ high level inputs(IN 1+/IN 1-)	
12 x High Level Inputs 16Vrms Max	8 x High Level Inputs 16Vrms Max
2 x AUX Inputs 3Vrms Max	
—	1 x Optical Input
Input Impedance : 6Ω	
10 x High level Outputs 8ch : 80W/4Ω/ch Max. 2ch : 150W/4Ω/ch Max.	—
12 x RCA Outputs 17Vp-p(6Vrms)/47kΩ	12 x RCA Outputs 11Vp-p(4Vrms)/47kΩ
1 x BLT outputs 200W/4Ω Max.	1 x CVBS video output (NTSC)
USB2.0 HOST x 3	USB2.0 HOST x 4
USB Type B x 1	
MiNi USB x 1	
USB-DAC x 1	—
Steering wheel controller terminal x 1	
802.11b/g/n	
Hi-res : DFF/DSF/DSD (up to 256) uncompressed : WAV/FLAC/APE/AIFF compressed : MP3/AAC/OGG/WMA	
PCM : 44.1KHz~768KHz/16~32bit	
DSD : DSD64/DSD128/DSD256	
—	APTX HD
APTX/AAC/SBC	
Red	Gold
296 x 217 x 43 mm	241 x 180 x 50 mm