



Hi-Res DSD Player + DSP



P5 DSP Ultra



P2 DSP Pro V2.0



P1 DSP

DSD Player + DSP Amplifier



P3 DSPA Plus



P2 DSPA Pro



P1 DSPA

DSD Player Only



P3 Plus



P2 Pro

DSP Amplifier



DSPA 2416 Ultra



DSPA 1616 Ultra



DSPA 1216 Plus



DSPA 1012 Plus



DSPA 810 Pro V2.0



DSPA 406 V2.0

Stand -alone DSP



DSP16 ULTRA



DSP10

Accessories



T3002



GD16

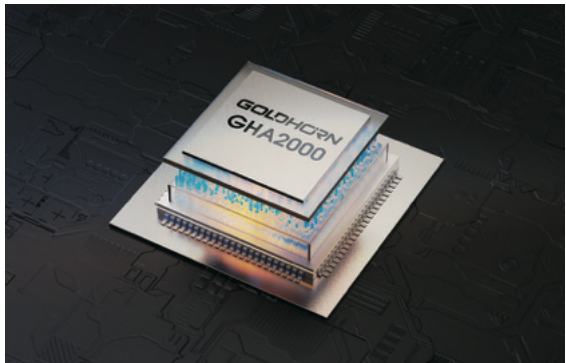


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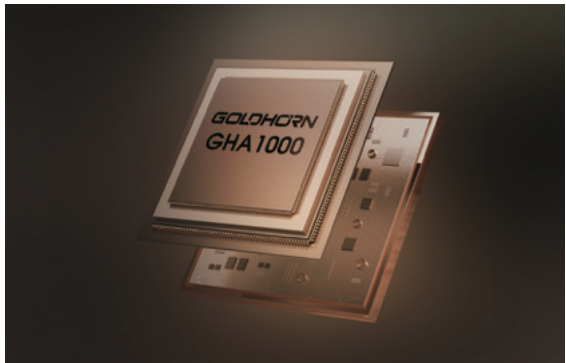
Goldhorn Technology

Goldhorn Originally Designs Chip

GHA2000 and GHA1000 are custom audio stream processing chips. It features a filtering chip designed to address defects such as "digital harshness" and impurities in digital sources. This chip has been fine-tuned in collaboration with the Goldhorn engineers, original manufacturer, and technology professors from universities. The meticulous design and integration of both hardware and software result in superior sound quality compared to similar products.



GHA2000



GHA1000

Digital Audio Signal Input



Oversampling & Reconstruction Module

- GHA2000 & GHA1000 interpolation algorithm to expand sampling rate
- Digital signal reconstruction to reduce quantization error



Digital Filtering Module

- GHA2000 & GHA1000 customized FIR filters
- Precisely remove high-frequency noise, suppress glitches, eliminate impurities, with Advanced Noise Shaping (ANS) technology



Jitter Correction & Clock Synchronization Module

- Dual femtosecond clocks provide a stable timing reference
- Built-in clock synchronization and jitter correction algorithm in GHA2000 & GHA1000 eliminates clock jitter



Time Base Error Controlled at Femtosecond (fs) Level

- Minimizes phase distortion during conversion, Reduces transmission delay



I²S Output

- GHA2000 & GHA1000 reconstructs high-precision I²S clock + high-fidelity characteristic data
- Supports 768kHz PCM / 11.2896MHz DSD



Fully Unlocking the DAC Chip's Conversion Capability

- Significantly improves dynamic range
- Delivers a more delicate and smooth listening experience



High-Quality Analog Audio Output — Effectively Eliminating Digital Harshness

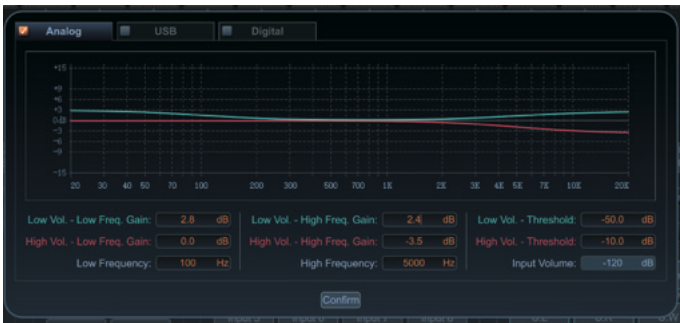
SKYATOM Surround System

As Goldhorn' s independently developed surround sound system, SKYATOM is designed specifically for vehicles equipped with complex multi-channel audio systems. Unlike traditional DSPs that rely on delay synthesis to simulate the center channel, SKYATOM employs advanced algorithms to deeply analyze and optimize audio signals, accurately simulating the positioning of center and surround speakers. This delivers a more realistic and immersive in-car Hi-Fi stereo and virtual surround sound listening experience.



Dynamic Loudness Control (DLC)

Goldhorn DSP, through its Dynamic Loudness Control (DLC) function, detects the signal and processes dynamic results to compensate for noise dynamics and enhance high-frequency detail. This enables a listening experience with powerful dynamics at low volume and non-harsh sound at high volume.



Hi-Res DSD Player + DSP - P5 DSP Ultra

Flagship all-in-one DSD player with ES9038Pro DAC, triple femtosecond clocks, and 12 billion operations per second. Features 16 audio channels, designed for audiophile systems. Widely awarded and recognized in major international and domestic competitions.



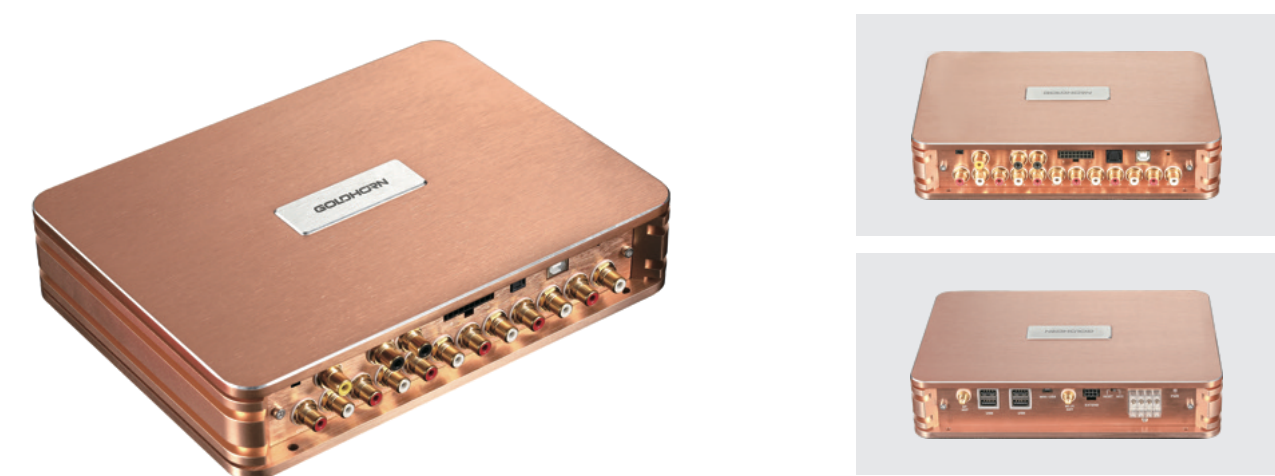
Technical Specifications

Voltage	11V-16V	Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/aptX HD/AAC/SBC
Turn-on	ACC / high level inputs	Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/Bluetooth input sources
Hi-End components	3 x ADAU1463 DSP Chips, 192KHz Sampling Rate 2 x ES9038Pro DAC Chips (32bit/768KHz PCM) 2 x AK5558VN ADC Chips (32bit/768KHz PCM) Goldhorn Originally Designed Chip GHA2000 3 x Femtosecond Clock Generators 4 x ARM Cortex A7 cores Hi-End Proprietary OpAmp Customized Operating System High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Outputs	16 x RCA Outputs 11.2Vp-p(4Vrms)/47KΩ
		Frequency Response	10Hz~80KHz(±1dB)
		Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Music Formats	Hi-res: DFF/DSF Uncompressed: WAV/FLAC/APE/AIFF Compressed: MP3/AAC/OGG/WMA/MV	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 30-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Sampling Rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256	Equalizer Control Mode	Relative/Absolute/No
Inputs	16 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) 1 x Optical Input / 1 x Coaxial Input (up to 192KHz/24bit)	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
		Output Polarity	Positive phase/Inverted phase
		Output Delay	Independently adjustable per channel: 0~20ms/0~680cm, Step 0.005ms
*Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Volume	Independently adjustable per channel: -20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
*Input Delay	High level input time delay adjustment: 0~10ms/0~340cm, Step 0.005ms	Wi-Fi Standard	802.11b/g/n
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/Inverted phase Time Delay: Subwoofer delay range: 0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	USB Terminals	USB2.0 HOST x 3 Type-B USB x 1 USB-DAC(USB-OTG) x 1
		Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
		PC Tuning	Microsoft™ Windows 7 or higher
		Dimensions	303mm x 231mm x 50mm
		Weight	7.32kg
		Operating temperature	-20°C~70°C
		Storage temperature	-30°C~85°C
		Maximum Humidity	-90%RH

*Please note that after upgrading the SKYATOM version , the Input EQ function will be canceled.

Hi-Res DSD Player + DSP - P2 DSP Pro V2.0

Adopts the same integrated source and decoding design as the flagship P5 DSP Ultra, eliminating signal loss from separated designs. Provides 12 RCA outputs for pairing with pure amplifiers, enabling the creation of competition-grade audiophile audio systems.



Technical Specifications

Voltage	11V-16V	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Turn-On	ACC/ high level inputs	Frequency Response	20Hz~40KHz
Hi-End components	ADAU1463 ADI DSP Chip 2 x ES9840Q ADC Chips 6 x ES9038Q2M DAC Chips 3 x femtosecond clock generators Goldhorn originally designed chip GHA1000 Customized operating system Texas Instruments OPA1612 Operation Amp High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Equalizer Control Mode	Relative/Absolute/No
		Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
		Output Polarity	Positive phase/Inverted phase
Music Formats	Hi-res: DFF/DSF uncompressed: WAV/FLAC/APE/AIFF compressed: MP3/AAC/OGG/WMA/MV	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm, 0.01 ms Steps
Sampling rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256	Output Volume	Independently adjustable per channel: -20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Inputs	8 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input(up to 192KHz/24bit) Input Impedance: 6Ω	Source Selection	Mix mode
		Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX HD/aptX/AAC/SBC
		Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
Outputs	12 x RCA Outputs 11.2Vp-p(4Vrms)47KΩ 1 x CVBS video output (NTSC)	Wi-Fi Standard	802.11b/g/n
THD + N	< 0.0003%	USB Terminals	USB2.0 HOST x 4 USB type B for PC software x 1
S/N	> 121dB	Extend	Steering wheel controller terminal x 1
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Dimensions	241mm x 180mm x 50mm
		Weight	3.56kg
Input Delay	High level input time delay adjustment: 0~10ms/0~340cm, 0.01 ms Steps	Operating temperature	-20°C~70°C
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/Bluetooth input sources	Storage temperature	-30°C~85°C
Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct	Maximum Humidity	-90%RH

Hi-Res DSD Player - P1 DSP

The P1 DSP adopts an integrated design of head unit and decoder to avoid transmission loss. It supports multiple inputs including 4-channel high-level, 1 optical, and 1 OTG, with 8 RCA outputs for easy pairing with pure amplifiers. Combined with dynamic loudness and sky surround sound, it delivers a competition-grade hi-fi audio system.



Technical Specifications

Voltage	11V-16V	Music Formats	Hi-res: DFF/DSF uncompressed: WAV/FLAC/APE/AIFF compressed: MP3/AAC/OGG/WMA/MV
Turn-on	ACC / high level inputs	Sampling Rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256
Hi-End components	ADAU1452 ADI DSP Chip AK5704 ADC Chip (192KHz/24bit) AK4438 DAC Chip (768KHz/32bit) NJM4580 & NJM5532 Op Amp 4 x ARM Cortex A7 cores High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Inputs	4 x High Level Inputs 10Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input(192KHz/24bit) 1 x USB-DAC(USB-OTG) Input (192KHz/32bit) Input Impedance: 6Ω	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Outputs	8 x RCA Outputs 11.2Vp-p(4Vrms)/47KΩ	Equalizer Control Mode	Relative/Absolute/No
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX HD/aptX/AAC/SBC	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Polarity	Positive phase/Inverted phase
Input Delay	High level input time delay adjustment: 0~10ms/0~340cm	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Output Volume	Independently adjustable per channel: -20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/Inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhance- ment, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
		Wi-Fi Standard	802.11b/g/n
		USB Terminals	USB2.0 HOST x 2 USB type B for PC software x 1 USB-DAC(USB-OTG) x 1
		Extend	Steering wheel controller terminal x 1
		Dimensions	193mm x 145.5mm x 40mm
		Weight	1.10kg
		Operating temperature	-20°C~70°C
		Storage temperature	-30°C~85°C
		Maximum Humidity	-90%RH

DSD Player + DSP Amplifier - P3 DSPA Plus

An integrated system combining DSP, professional amplifier, and DSD player. Supports USB playback, OTG lossless playback, Bluetooth, and automatic input switching. Offers 10 high-level and 10 RCA outputs (total 20 channels), strong expandability, and OEM steering wheel control. One of the most compatible and fully featured head units available domestically and internationally.



Technical Specifications

Voltage	11V-16V	SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/Inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement			
Turn-On	ACC/ high level inputs		Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct		
Hi-End components	ADAU1463 ADI DSP Chip 3 x PCM1840 ADC Chips (192KHz/32bit) 2 x PCM1690 DAC Chips (192KHz/24bit) MC33078 Op Amp 4 x ARM Cortex A7 cores High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps			Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	
Music Formats	Hi-res: DFF/DSF Uncompressed: WAV/FLAC/APE/AIFF Compressed: MP3/AAC/OGG/WMA/MV				Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Sampling rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256					Output Polarity
Inputs	12 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω	Output Delay				
			Output Volume			
				Intelligent Control		
					Wi-Fi Standard	
						USB Terminals
Extend	Steering wheel controller terminal x 1					
	Dimensions	296mm x 217mm x 43mm				
		Weight	4.28kg			
			Operating temperature	-20°C~70°C		
				Storage temperature	-30°C~85°C	
Maximum Humidity					-90%RH	
	Equalizer Control Mode				Relative/Absolute/No	

DSD Player + DSP Amplifier - P2 DSPA Pro

A high-value solution for OEM multi-channel systems. Features 8 high-level and 8 RCA outputs (total 16 channels), supporting external amplifiers and activation of original 16-speaker systems. Compatible with models like Avancier, UR-V, Lexus, Land Cruiser, and Prado. Supports OEM steering wheel control to enhance the overall audio experience.



Technical Specifications

Voltage	11V-16V		
Turn-On	ACC/ high level inputs		
Hi-End components	ADAU1452 ADI DSP Chip 2 x PCM1840 ADC Chips (192KHz/32bit) PCM1690 DAC Chip (192KHz/24bit) NJM4580 & MC33078 Op Amp 4 x ARM Cortex A7 cores High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Music Formats	Hi-res: DFF/DSF uncompressed: WAV/FLAC/APE/AIFF compressed: MP3/AAC/OGG/WMA/MV	Input Delay	High level input time delay adjustment: 0~10ms/0~340cm
Sampling rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Inputs	8 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. Input Impedance: 6Ω	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Outputs	8 x High Level Outputs 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 8 x RCA Outputs 16Vp-p(5.6Vrms)/47KΩ 1 x CVBS video output (NTSC) 16 - channel DSP Outputs, 8 x RCA + 8 x High Level Outputs	Equalizer Control Mode	Relative/Absolute/No
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/AAC/SBC	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Dynamic Loudness Control	Separate DLC parameters for Analog/ Bluetooth input sources	Output Polarity	Positive phase/Inverted phase
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/Inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm
		Output Volume	Independently adjustable per channel: -20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
		Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
		Wi-Fi Standard	802.11b/g/n
		USB Terminals	USB2.0 HOST x 3 USB type B for PC software x 1
		Extend	Steering wheel controller terminal x 1
		Dimensions	217mm x 170mm x 43mm
		Weight	2.72kg
		Operating temperature	-20°C~-70°C
		Storage temperature	-30°C~-85°C
		Maximum Humidity	-90%RH

DSD Player + DSP Amplifier - P1 DSPA

An entry-level upgrade solution designed for new audio enthusiasts. Combines DSD player, 4-channel amplifier, and 10-channel DSP. Supports full-format decoding, ideal for active two-way systems, offering an affordable, high-performance sound upgrade.



Technical Specifications

Voltage	11-16V		
Turn-On	ACC/ high level inputs		
Hi-End components	ADAU1452 ADI DSP Chip 2 x PCM1862 ADC Chips (192KHz/24bit) PCM1690 DAC Chip (192KHz/24bit) NJM4580 & MC33078 Op Amp 4 x ARM Cortex A7 cores High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Music Formats	Hi-res: DFF/DSF uncompressed: WAV/FLAC/APE/AIFF compressed: MP3/AAC/OGG/WMA/MV	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Sampling rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256	Equalizer Control Mode	Relative/Absolute/No
Inputs	4 x High Level Inputs 10Vrms Max. 2 x RCA Inputs 3.2Vrms Max. Input Impedance: 6Ω	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Outputs	4 x High Level Outputs 30W/4Ω/ch RMS, 65W/4Ω/ch Max. 6 x RCA Outputs 16Vp-p(5.6Vrms)/47KΩ 1 x CVBS video output (NTSC)	Output Polarity	Positive phase/Inverted phase
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/AAC/SBC	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/Slope 1&2 AP 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Volume	Independently adjustable per channel: -20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Input Delay	High level input time delay adjustment: 0~10ms/0~340cm	Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
Dynamic Loudness Control	Separate DLC parameters for Analog/ Bluetooth input sources	Wi-Fi Standard	802.11b/g/n
		USB Terminals	USB2.0 HOST x 2 USB type B for PC software x 1
		Extend	Steering wheel controller terminal x 1
		Dimensions	180mm x 140.5mm x 36mm
		Weight	2.29kg
		Operating temperature	-20°C~-70°C
		Storage temperature	-30°C~-85°C
		Maximum Humidity	-90%RH



PLAYER



Your listening experience is our priority.

DSD Player Only - P3 Plus

A high-end pure audio source DSD player featuring the ES9028Pro DAC chip, fully supporting a wide range of audio format decoding. Offers optical and coaxial outputs for seamless integration with high-end DSPs and amplifiers. Supports OEM steering wheel control, making it an ideal choice for car owners pursuing premium sound quality.



Technical Specifications

Voltage	11V-16V	THD+N	<0.00017%,@1KHz	
Turn-On	ACC	S/N	<-125dB	
Hi-End components	Goldhorn originally designed chip GHA1000	Source Selection	Factory unit/AUX/player/Auto/Bluetooth® 5.0	
	1 x ES 9028Pro DAC Chip (32bit/768KHz PCM)	Intelligent Control	Panel control with IPS display;	
	3 x femtosecond clock generators		2.4GHz wireless digital remote control;	
	Customized operating system		Mobile App Control;	
Music Formats	Texas Instruments OPA1612 Operation Amp	Steering wheel control (for limited car make only)		
	High Temperature for High Reliability to 105°C	Wi-Fi Standard	802.11b/g/n	
	electrolytics and WIMA film Caps	Bluetooth® Receiver	Bluetooth® 5.0	
	4 x ARM Cortex A7 cores	Profile: A2DP/AVRCP	Audio Codec: aptX HD/aptX/AAC/SBC	
Sampling rate	Hi-res: DFF/DSF	USB Terminals	USB2.0 HOST x 3	
	uncompressed: WAV/FLAC/APE/AIFF	Extend	Steering wheel controller terminal x 1	
	compressed: MP3/AAC/OGG/WMA/MV	Dimensions	217mm x 170mm x 43mm	
	PCM: 44.1KHz~768KHz/16~32bit	Weight	2.10kg	
Inputs	DSD: DSD64/DSD128/DSD256	Operating temperature	-20°C~70°C	
	4 x High Level Inputs 10Vrms Max.	Storage temperature	-30°C~85°C	
		Input Impedance: 6Ω	Maximum Humidity	-90%RH
		Outputs	2x RCA Outputs 11.2Vp-p(4Vrms)/47KΩ	
1 x Optical Output / 1 x Coaxial Output				
(up to192KHz/24bit)				
1 x CVBS video output (NTSC)				



Your listening experience is our priority.

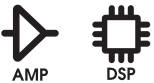
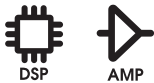
DSD Player Only - P2 Pro

Supports full-format audio decoding and offers optical and coaxial outputs. Designed for pairing with professional DSPs and amplifiers, with support for OEM steering wheel control, making it perfect for audio enthusiasts aiming to build a high-quality source system.



Technical Specifications

Voltage	11V-16V	Source Selection	Factory unit/AUX/player/Auto/Bluetooth® 5.0
Turn-On	ACC	Intelligent Control	Panel control with IPS display; 2.4GHz wireless digital remote control; Mobile App Control; Steering wheel control (for limited car make only)
Hi-End components	Goldhorn originally designed chip GHA1000 2 x AK4493 DAC Chips (32bit/768KHz PCM) 2 x femtosecond clock generators Customized operating system Texas Instruments OPA2604 Operation Amp High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps 4 x ARM Cortex A7 cores	Wi-Fi Standard	802.11b/g/n
		Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/aptX HD/AAC/SBC
		USB Terminals	USB2.0 HOST x 3
		Extend	Steering wheel controller terminal x 1
Music Formats	Hi-res: DFF/DSF uncompressed: WAV/FLAC/APE/AIFF compressed: MP3/AAC/OGG/WMA/MV	Dimensions	194mm x 145.6mm x 40.5mm
Sampling rate	PCM: 44.1KHz~768KHz/16~32bit DSD: DSD64/DSD128/DSD256	Weight	2.20kg
Inputs	4 x High Level Inputs 10Vrms Max. 2 x RCA Inputs 1.2Vrms Max. Input Impedance: 6Ω	Operating temperature	-20°C~70°C
Outputs	6x RCA Outputs 11.2Vp-p(4Vrms)/47KΩ 1 x Optical Output / 1 x Coaxial Output (up to192KHz/24bit) 1 x CVBS video output (NTSC)	Storage temperature	-30°C~85°C
		Maximum Humidity	-90%RH



DSP Amplifier - DSPA 1616 Ultra

Designed and developed for vehicles with multi-channel audio systems, equipped with a built-in Goldhorn SKYATOM. It delivers a maximum power output of $12 \times 80W/4\Omega + 4 \times 150W/4\Omega$, together with 16 RCA outputs. It supports activation of 16 original car channels and is compatible with BBA, Land Rover, new energy vehicles with more than 20 channels, as well as standard vehicles.



Technical Specifications

Voltage	11V-16V	Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AWRCP Audio Codec: aptX/aptX HD/AAC/SBC
Turn-On	ACC/ high level inputs	Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources
Hi-End components	ADAU1463 ADI DSP Chip 4 x PCM1840 ADC Chips (192KHz/32bit) 2 x AK4458VN DAC Chips (768KHz/32bit) High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Inputs	16 x High Level Inputs 10/16Vrms Max. 2 x AUX Inputs 3Vrms Max. 1 x Optical Input / 1 x Coaxial Input (up to 192KHz/24bit) 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
High Level Outputs	16 x High Level Outputs 12ch: 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 4ch: 100W/4Ω/ch RMS, 150W/4Ω/ch Max. 2 x BLT outputs 200W/4Ω/ch RMS, 300W/4Ω/ch Max. THD+N: <0.017% S/N: >100 dB	Frequency Response	20Hz ~ 40KHz
RCA Outputs	16 x RCA Outputs Voltage: 5.6Vrms THD+N: <0.0017% S/N: >108 dB	Equalizer Control Mode	Relative/Absolute/No
DSP Outputs	24 x DSP channels: 16 x high-level + 8 x RCA (8 RCA shared high-level/RCA.)	Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Polarity	Positive phase/Inverted phase
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm
		Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
		Rename	Speakers can be renamed individually for each channel
		Controller	Mode Selection / volume control / Bass control
		PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	331mm x 217mm x 43mm
		Weight	5.08kg
		Operating temperature	-20°C~70°C
		Storage temperature	-30°C~85°C
		Maximum Humidity	-90%RH

DSP Amplifier - DSPA 2416 Ultra

Designed and developed for vehicles with multi-channel audio systems, equipped with a built-in Goldhorn SKYATOM. It delivers a maximum power output of $20 \times 80W/4\Omega + 4 \times 150W/4\Omega$, and comes with 16 RCA outputs. It is compatible with BBA, Land Rover, new energy vehicles with more than 20 channels, as well as standard vehicles.



Technical Specifications

Voltage	11V-16V	SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement
Turn-On	ACC/ high level inputs	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Hi-End components	2 x ADAU1463 ADI DSP Chips 3 x AK5558 ADC Chips (768KHz/32bit) 2 x AK4458VN DAC Chips (768KHz/32bit) High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Inputs	24 x High Level Inputs 10/16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input / 1 x Coaxial Input (up to 192KHz/24bit) 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω	Frequency Response	20Hz ~ 40KHz
High Level Outputs	24 x High Level Outputs 20ch: 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 4ch: 100W/4Ω/ch RMS, 150W/4Ω/ch Max. 2 x BLT outputs 200W/4Ω/ch RMS, 300W/4Ω/ch Max. THD+N< 0.017% S/N> 100dB	Equalizer Control Mode	Relative/Absolute/No
RCA Outputs	16 x RCA Outputs Voltage : 5.6Vrms THD+N: <0.0017% S/N: >108 dB	Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
DSP Outputs	36 x DSP channels: 24 x high-level + 12 x RCA (8 RCA shared high-level/RCA.)	Output Polarity	Positive phase/Inverted phase
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AWRCP Audio Codec: aptX/aptX HD/AAC/SBC	Output Delay	Independently adjustable per channel : 0~20ms/0~680cm
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Rename	Speakers can be renamed individually for each channel
		Controller	Mode Selection / volume control / Bass control
		PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	410mm x 217mm x 46mm
		Weight	6.6kg
		Operating temperature	-20°C~70°C
		Storage temperature	-30°C~85°C
		Maximum Humidity	-90%RH

DSP Amplifier - DSPA 1012 Plus

Tailored for OEM multi-channel upgrade solutions, offering 8×80W/4Ω + 2×150W/4Ω Max. power output and 12 RCA outputs. Supports activating 12 original vehicle channels, enhancing sound quality across various vehicle types.



Technical Specifications

Voltage	11V-16V	Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AWRCP Audio Codec: aptX/aptX HD/AAC/SBC
Turn-On	ACC/ high level inputs	Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Hi-End components	ADAU1463 ADI DSP Chip 3 x PCM1840 ADC Chips (192KHz/32bit) 2 x PCM1690 DAC Chips (192KHz/24bit) High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Input Delay	High level input time delay adjustment: 0-10ms/0-340cm
Inputs	12 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input / 1 x Coaxial Input (up to 192KHz/24bit) 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
High Level Outputs	10 x High Level Outputs 8ch: 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 2ch: 100W/4Ω/ch RMS, 150W/4Ω/ch Max. 1 x BLT outputs 200W/4Ω/ch RMS, 300W/4Ω/ch Max. THD+N: <0.017% S/N: >100 dB	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
RCA Outputs	12 x RCA Outputs Voltage : 5.6Vrms THD+N: <0.0017% S/N: >108 dB	Frequency Response	20Hz ~ 40KHz
DSP Outputs	20 x DSP channels: 10 x high-level + 10 x RCA (2 RCA shared high-level/RCA.)	Equalizer Control Mode	Relative/Absolute/No
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	Output Polarity	Positive phase/Inverted phase
		Output Delay	Independently adjustable per channel : 0~20ms/0~680cm
		Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
		Rename	Speakers can be renamed individually for each channel
		Controller	Mode Selection / volume control / Bass control
		PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	296mm x 217mm x 43mm
		Weight	4.06kg
		Operating temperature	-20℃~70℃
		Storage temperature	-30℃~85℃
		Maximum Humidity	-90%RH

DSP Amplifier - DSPA 1216 Plus

Specialized for multi-channel luxury and EV systems, featuring built-in Goldhorn SKYATOM. Provides 8×80W/4Ω + 4×150W/4Ω Max. power output with 16 RCA outputs, supporting full activation of 16 original channels to create a Hi-Fi + 7.1 surround sound experience.



Technical Specifications

Voltage	11V-16V	SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB ~ +10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement
Turn-On	ACC/ high level inputs	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Hi-End components	ADAU1463 ADI DSP Chip 4 x PCM1840 ADC Chips (192KHz/32bit) 2 x AK4458VN DAC Chips (768KHz/32bit) High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Inputs	16 x High Level Inputs 10/16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input / 1 x Coaxial Input (up to 192KHz/24bit) 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω	Frequency Response	20Hz ~ 40KHz
High Level Outputs	12 x High Level Outputs 8ch: 50W/4Ω/ch RMS, 80W/4Ω/ch Max. 4ch: 100W/4Ω/ch RMS, 150W/4Ω/ch Max. 2 x BLT outputs 200W/4Ω/ch RMS, 300W/4Ω/ch Max. THD+N: <0.017% S/N: >100 dB	Equalizer Control Mode	Relative/Absolute/No
RCA Outputs	16 x RCA Outputs Voltage: 5.6Vrms THD+N: <0.0017% S/N: >108dB	Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
DSP Outputs	24 x DSP channels: 12 x high-level + 12 x RCA (4 RCA shared high-level/RCA.)	Output Polarity	Positive phase/Inverted phase
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AWRCP Audio Codec: aptX/aptX HD/AAC/SBC	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Rename	Speakers can be renamed individually for each channel
		Controller	Mode Selection / volume control / Bass control
		PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	331mm x 217mm x 43mm
		Weight	4.5kg
		Operating temperature	-20℃~70℃
		Storage temperature	-30℃~85℃
		Maximum Humidity	-90%RH

DSP Amplifier - DSPA 810 Pro V2.0

High-quality 8-channel DSP amplifier. Featuring an 8-channel amplifier and 10-channel RCA output design, with 14-channel DSP outputs. It is suitable for 5.1 system three-way audio setups and comes equipped with OTG and premium Bluetooth functionality. With 4 × 65W/4Ω Max. + 4 × 80W/4Ω Max. power output, it meets the needs of entry-level car audio upgrades and offers a high cost-performance solution.



Technical Specifications

Voltage	11V-16V
Turn-On	ACC/ high level inputs
Hi-End components	ADAU1452 ADI DSP Chip 2 x AK5704 ADC-Chips (192KHz/32bit) AK4438 + PCM1754 DAC-Chip (192KHz/24bit) High temperature for high-reliability to 105° Celectrolytic capacitor
Inputs	8 x High Level Inputs 12Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) 1 x Optical Input (up to 96KHz/24bit) Input Impedance: 6Ω
High Level Outputs	8 x High Level Outputs 4ch 25W/4Ω/ch RMS. + 4ch 50W/4Ω/ch RMS. 4ch 60W/4Ω/ch Max. + 4ch 80W/4Ω/ch RMS. THD+N: <0.03% S/N: >100 dB
RCA Outputs	10 x RCA Outputs Voltage: 4Vrms THD+N: <0.0017% S/N: >105 dB
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/aptX HD/AAC/SBC
Input Delay	High level input time delay adjustment: 0-10ms/0-340cm
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement

Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Frequency Response	20Hz ~ 40KHz
Equalizer Control Mode	Relative/Absolute/No
Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
Output Polarity	Positive phase/Inverted phase
Output Delay	Independently adjustable per channel : 0~20ms/0~680cm
Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Rename	Speakers can be renamed individually for each channel
Controller	Mode Selection / volume control / Bass control
PC tuning	Microsoft™ Windows 7 or higher
Dimensions	217mm x 170mm x 43mm
Weight	2.42kg
Operating temperature	-20°C~70°C
Storage temperature	-30°C~85°C
Maximum Humidity	-90%RH

DSP Amplifier - DSPA 406 V2.0

Positioned as an entry-level simple upgrade solution, it features 31-band EQ adjustment, 4 × 30W AB-class rated power output, standard Bluetooth 5.0, and mobile phone OTG functionality. It delivers powerful sound performance, making it ideal for car owners seeking entry-level audio upgrades.



Technical Specifications

Voltage	11V-16V
Turn-On	ACC/ high level inputs
Hi-End components	AK7735 DSP Chip AK7735 ADC- Chip AK7735 + PCM1754 DAC Chip High temperature for high-reliability to 105° Celectrolytic capacitor
Inputs	4 x High Level Inputs 10Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x USB-DAC(USB-OTG) Input (up to 192KHz/32bit) Input Impedance: 6Ω
High Level Outputs	4 x High Level Outputs 30W/4Ω/ch RMS. 65W/4Ω/ch Max. THD+N: <0.03% S/N: >100 dB
RCA Outputs	6 x RCA Outputs Voltage: 4Vrms THD+N: <0.0017% S/N: >105 dB
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX HD/aptX/AAC/SBC
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Input Delay	High level input time delay adjustment: 0-10ms/0-340cm
Dynamic Loudness Control	Separate DLC parameters for Analog/ Bluetooth input sources

Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Frequency Response	20Hz~40KHz
Equalizer Control Mode	Relative/Absolute/No
Output Phase	Variable Phase Rotation from 0° to 360° (step: 1°)
Output Polarity	Positive phase/Inverted phase
Output Delay	Independently adjustable per channel : 0~20ms/0~680cm
Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Rename	Speakers can be renamed individually for each channel
Controller	Mode Selection / volume control / Bass control
PC tuning	Microsoft™ Windows 7 or higher
Dimensions	180mm x 129mm x 36mm
Weight	1.08kg
Operating temperature	-20°C~70°C
Storage temperature	-30°C~85°C
Maximum Humidity	-90%RH



Stand -alone DSP - DSP10

Entry-level pure-source DSP with 10 RCA outputs, offering high cost performance. Suitable for most mainstream vehicles, ideal for initial sound system upgrades.



Technical Specifications

Voltage	11V-16V	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Turn-On	ACC/ high level inputs	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 31-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Hi-End components	ADAU1452 ADI DSP Chip 2 x PCM1840 ADC Chips PCM1690 DAC Chip MC33078 Opamp High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Equalizer Control Mode	Relative/Absolute/No
Inputs	8 x High Level Inputs 12Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x Optical Input(up to 96KHz/24bit) Input Impedance: 6Ω	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Outputs	10 x RCA Outputs 16Vp-p(5.6Vrms)/47KΩ	Output Polarity	Positive phase/Inverted phase
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX HD/aptX/AAC/SBC	Output Delay	Independently adjustable per channel : 0~20ms/0~680cm
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Volume	Independently adjustable per channel: -20dB~0dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Input Delay	High level input time delay adjustment: 0~10ms/0~340cm	Rename	Speakers can be renamed individually for each channel
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Controller	Mode Selection / volume control / Bass control
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	193mm x 146mm x 41mm
		Weight	1.8kg
		Operating temperature	-20℃~-70℃
		Storage temperature	-30℃~-85℃
		Maximum Humidity	-90%RH



Stand -alone DSP - DSP16 ULTRA

Flagship pure-source DSP with ES9038Pro DAC chip and high-precision femtosecond clock. Features 0.005ms step delay and 16 RCA outputs, designed for audiophile-grade systems and demanding audio upgrades.



Technical Specifications

Voltage	11V-16V	Frequency Response	10Hz~80KHz(±1dB)
Turn-On	ACC/ high level inputs	Output Crossover	Independently adjustable per channel Filter type: Butterworth / Linkwitz / Bessel Filter frequency: 20Hz ~ 20KHz Filter slope: -6dB/Oct~-48dB/Oct
Hi-End components	3 x ADAU1463 DSP Chips,192KHz Sampling Rate 2 x ES9038Pro DAC Chips (32bit/768KHz PCM) 2 x AK5558VN ADC Chips (32bit/768KHz PCM) 1 x Femtosecond Clock Generators Hi-End Proprietary OpAmp High Temperature for High Reliability to 105°C electrolytics and WIMA film Caps	Output Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 30-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB
Inputs	16 x High Level Inputs 16Vrms Max. 2 x RCA Inputs 3Vrms Max. 1 x USB-DAC(USB-OTG) Input (up to192KHz/32bit) 1 x Optical Input/1 x Coaxial Input (up to192KHz/24bit) Input Impedance : 6Ω	Equalizer Control Mode	Relative/Absolute/No
Outputs	16 x RCA Outputs 11.2Vp-p(4Vrms)/47KΩ	Output Phase	Variable Phase Rotation from 0° to 360°(step 1°)
Bluetooth® Receiver	Bluetooth® 5.0 Profile: A2DP/AVRCP Audio Codec: aptX/aptX HD/AAC/SBC	Output Polarity	Positive phase/Inverted phase
Input Equalizer	Independently adjustable per channel Filter type: PE/LS/HS/AP1&AP2 5-Band Parametrical Equalizer: 20Hz ~ 20KHz Q: 0.5 to 15 Gain: -15dB to +15dB	Output Delay	Independently adjustable per channel: 0~20ms/0~680cm, Step 0.005ms
Input Delay	High level input time delay adjustment: 0~10ms/0~340cm, Step 0.005ms	Output Volume	Independently adjustable per channel:-20dB~+5dB Master Volume: Mute/0 to 60 levels (-100dB to 0dB)
Dynamic Loudness Control	Separate DLC parameters for Analog/Digital/ Bluetooth input sources	Controller	Mode Selection / volume control / Bass control
SKYATOM Surround	6-channel input with independent adjustment Output volume gain: -20dB~+10dB Phase Shift: Positive phase/inverted phase Time Delay: Subwoofer delay range:0~10ms, Other channel delay: 0~40ms Surround Sound Effects: Front sound field extension, front sound field treble enhancement, center enhancement, center treble enhancement, surround sound field enhancement, bass enhancement, bass dive enhancement	PC tuning	Microsoft™ Windows 7 or higher
		Dimensions	303mm x 231mm x 50mm
		Weight	7.32kg
		Operating temperature	-20℃~-70℃
		Storage temperature	-30℃~-85℃
		Maximum Humidity	-90%RH

Accessories - T3002



- Stylish Outlook
- IPS Display
 - Synchronize multiple displays and control: factory head unit, panel control, phone
- Easy Plug & Play connection
- Folder Management

Accessories - GD16



- Mode Selection/volume cotrol/bass control
- Easy Plug & Play connection
- Small size & Intelligent Control
- Dimensions: 63mm x 34mm x 15mm

Accessories - M02



- Capacity: 450 F
- Internal Resistance: 0.20Ω
- Maximum discharge rate: 60
- Maximum Carrying Current: 120 AS
- Maximum instantaneous discharge current: 80 AS
- Discharge-Charge Cycles: 30,000 times or above
- Dimensions: 216mm x 109mm x 39 mm