



Bluetooth® High Power Media Receiver DSX-GS80



Music Center



pandora*

(SiriusXM) READY*

**DUAL
BLUETOOTH**

**VOICE
CONTROL**

100Wx4 MAX
45Wx4 RMS
OUTPUT POWER

**EXTRA
BASS**

EQ10
Karaoke EQ

**DYNAMIC
STAGE
ORGANIZ
ER**

**3PRE
5V**

iPod
USB x2
AUX



1.5A
High
Current
Charge**



flac
Free lossless audio codec

**Sound
Synchronizes
Illumination**

**2-ZONE
Dynamic
color
Illuminator**

SONY

History

09/12/2019 : 1st issue.

10/06/2019 : 3-line LCD icon replaced with "Backup Memory" (P.1)

10/15/2019 : Illustration for Subwoofer Direct Mode updated (P.3).

Storable setting list for Backup Memory updated (P.8).

*For UC version only.

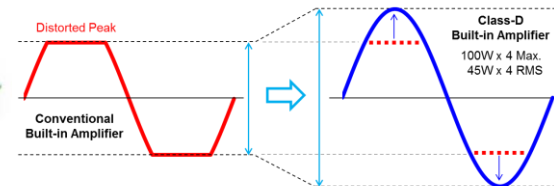
**Rear USB only.

DSX-GS80 Key Features

SOUND

100W x4 (Max.) / 45W x4 (RMS) High Power Built-in Class-D Amplifier

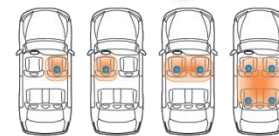
If you play the conventional head unit too loud, the sound clips off the signal peaks and sends distortion to the speakers. In the case of DSX-GS80 with the massive 100W x 4 built-in amplifier, the sound remains clean and powerful even when you turn up the volume.



Sound Optimization

A sophisticated Digital Signal Processing (DSP) function is available, that enables drivers to freely make adjustments while creating a sound field ideal for the inside of vehicles. Time alignment adjusts time differences to reach your ears per channel realizing well-balanced stereo sound. The DSO(Dynamic Stage Organizer) creates a more ambient sound as if there were speakers on the dashboard. The DSEE simulates missing high frequency sound in compressed music such as MP3.

Advanced Sound Engine



Time Alignment
(Listening Position)

DSEE
Digital Sound Enhancement Engine

EXTRA BASS™

Feel the earth rumbling, deep and loud bass sound by EXTRA BASS™! It overcomes engine noise and reproduces clear punchy sound at any volume level. The 2-mode boost steps allow you to get delicate and heavy boost settings to your liking.

**EXTRA
BASS**



DSX-GS80 Key Features

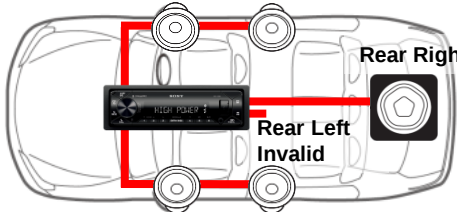
New

Subwoofer Direct Connection with 2-ohm Multiple Speaker load Option

Just connect a subwoofer to either side of the rear channel speaker output. When using this function, as well as front L/R, DSP settings for the subwoofer are available and can be handled on the MENU display. With the newly introduced 2-ohm load feature, you can utilize multiple number of speakers per each channel, realizing a powerful acoustic system including 4 speakers and a subwoofer so easily with no external amplifier.

SOUND

Front Left & Right Channel Power Output for Full Range Speakers



Rear Right for Subwoofer

DSP Settings for Subwoofer

SW Mode	1 / 2 / 3 / Off
Subwoofer Phase	Normal / Reverse
SW Position	Near / Normal / Far
LPF Frequency	120Hz/100Hz/80Hz/60Hz/50Hz
LPF Slope	1/2/3

NOTE: Connect subwoofer to either side L or R of REAR channels. Leave one side open.

FLAC Audio File Compatible*

You can play back FLAC files on Sony head units.

FLAC - Free Lossless Audio Codec, is an audio format similar to MP3, but lossless, meaning audio signals are compressed without any loss in sound quality.

FLAC

16 / 24 bit**
44.1 / 48 kHz**

WAV

16 bit
44.1 / 48 kHz**

MP3

8 – 320 kbps
16 – 48 kHz
& Corresponding VBR

WMA

32 – 192 kbps
32 / 44.1/48 kHz
& Corresponding VBR

AAC

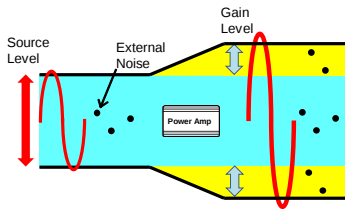
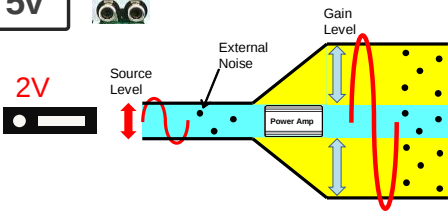
8 – 320 kbps
11.025 – 48 kHz
& Corresponding VBR

**Linear PCM conversion to 16 bit / 44.1 kHz.

High Voltage Pre-out (5V)

In general, head units deliver 2-volt audio signal, meanwhile Sony's head unit with high voltage pre-out gives 5-volt signal, which realizes clearer sound with less distortion when the head unit is used connecting to power amplifier. The more voltage you have at the line level, the less amount of external noise on the signal path will be amplified through the power amplifier. This is because when the input signal voltage is higher, gain level at the power amplifier can be decreased for obtaining the same output level to speakers.

Higher Voltage means lower Gain levels, and less noise.



DSX-GS80 Key Features

SMARTPHONE CONNECTIVITY

Dual* Bluetooth® Connection

Pair your first phone using Bluetooth® for full access to navigation, music playback and communication features. A second phone can be connected simultaneously for making and receiving hands-free calls.

*For iPhone/iPod, auto pairing function via USB cable is available.



Voice Control On Android™ Phones

Use voice commands to get directions, play music in your mobile, and communicate with contacts when connected with your Android smartphone.*

*Available with Android Smartphones with Bluetooth®



Siri Eyes Free (For iPhone)

With Siri Eyes Free feature, you can ask Siri to make calls, select and play music, hear and compose text messages, use Maps and get directions, read your notifications, find calendar information, add reminders, and more. It's just another way Siri helps you get things done, even when you're behind the wheel.

*Siri is available on iPhone 4s or later, iPad with Retina display, iPad mini, and iPod touch (5th generation) and requires Internet access. Siri may not be available in all languages or in all areas, and features may vary by area. Cellular data charges may apply. iPhone and Siri are trademarks of Apple, Inc.



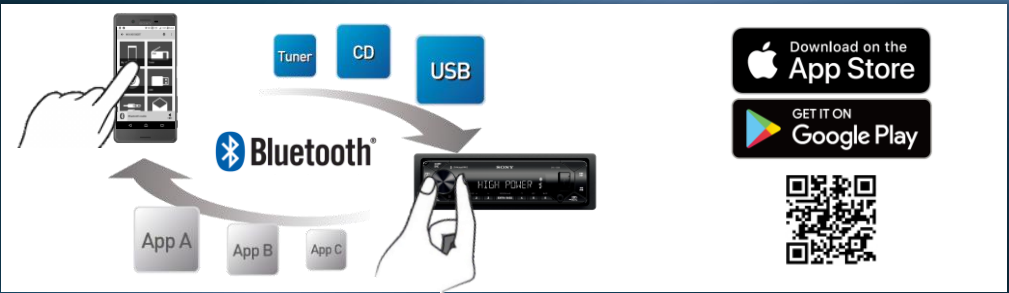
DSX-GS80 Key Features

SMARTPHONE CONNECTIVITY

Synchronized Source Integration

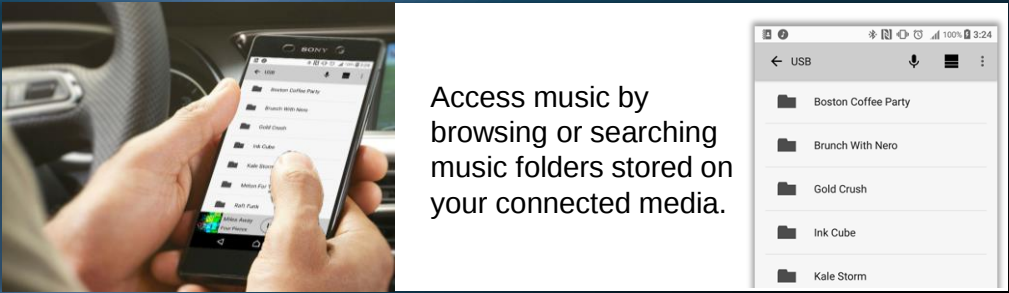
“Sony | Music Center” smartphone app unifies car audio and Smartphone apps which can be safely controlled either from your car audio* or Smartphone. It enables control over basic functions of head unit sources as well as navigation, music, various apps on your smartphone.

* Smartphone apps can be launched through the car audio. Controllable functions vary by apps.



List Browse (Sony | Music Center)

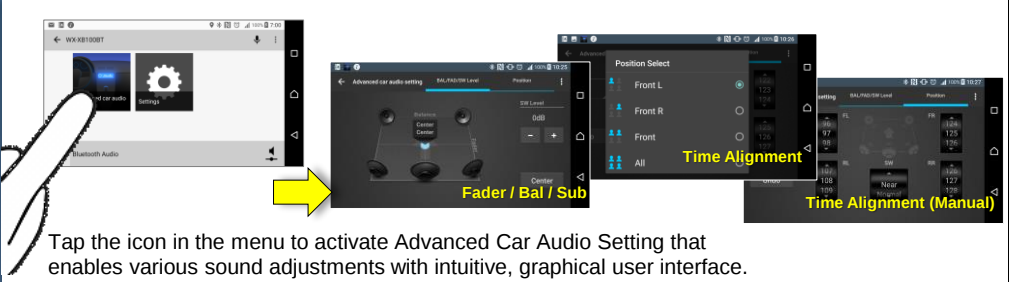
Find your desired music files on connected devices such as USB hooked up to the car audio by browsing through folder(album) list displayed on the smartphone display.



Advanced Car Audio Setting

Various remote settings and audio customizations are available on your Sony | Music Center including illumination color assignment, activation of EXTA BASS, 10-band equalizer, volume, balance, fader, and subwoofer.

With compatibility on the dedicated plug-in software “Advanced Car Audio Setting” you can enjoy additional GUIs for detailed sound settings.

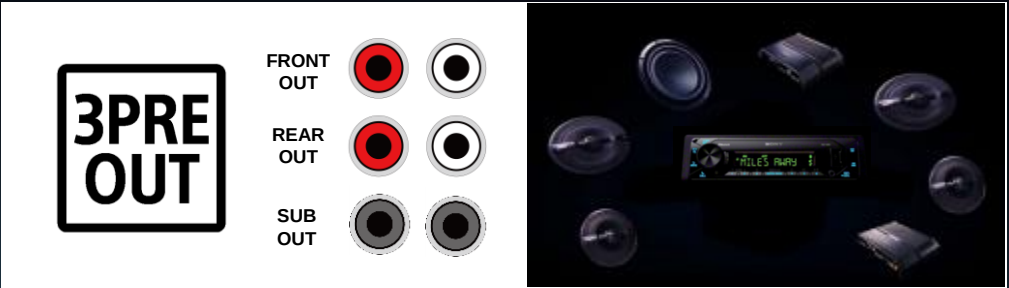


DSX-GS80 Key Features

UTILITY

3-pre out for System Expandability

For future expandability, the 3-pre out connectivity allows you to build a full acoustic system including a subwoofer, a mono amplifier and 4-channel amplifier for even louder and powerful sound reproduction.



Made For iPhone / Made For iPod

Just plug in your iPhone or iPod with a USB cable, and you can control basic playback functions while seeing track information on car audio display.



“Configurable” Steering Wheel Remote Input

“Configurable Steering Wheel Remote Input” covers general command protocol that means you don’t need an adaptor for signal conversion between steering wheel and the head unit.

*Not compatible with all vehicles. Consult your installer for details.



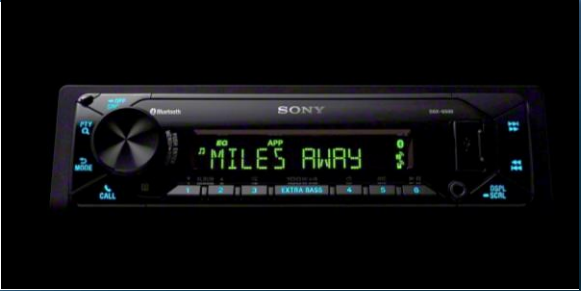
DSX-GS80 Key Features

UTILITY

2-zone Dynamic Color Illuminator*

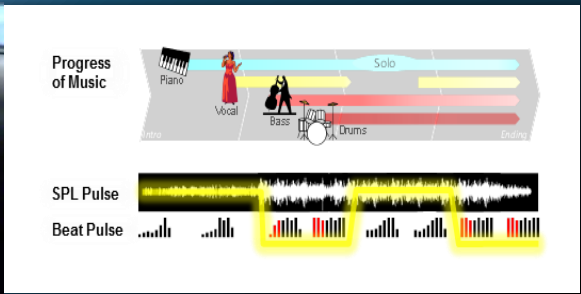
Choose illumination color from up to 35,000 variation to match your in-car decor with the Dynamic Color Illuminator which allows you to set display color separately from that for key illuminations.

*Colors for both LCD and the rest of the illuminations can be assigned separately.



Sound-synchronized Illumination

Bring dance club atmosphere to your car! Thanks to Sony's original beat sensing technology, the LED changes its color pulsing optimally to either sound pressure or back beat of the music for more enjoyable in-car decor.



High Contrast Vertical Alignment LCD Display

VA (Vertical Alignment) LCD realizes 5 times higher contrast and wider viewing angle than conventional screen, providing improved visibility.



DSX-GS80 Key Features

UTILITY

New

Backup Memory

Save your customizations. Even when there is no continuous power supply, it can store audio settings, preset radio stations, Bluetooth® connections, steering wheel remote customization and more!

*Stored memory can be manually cancelled by pressing RESET button.



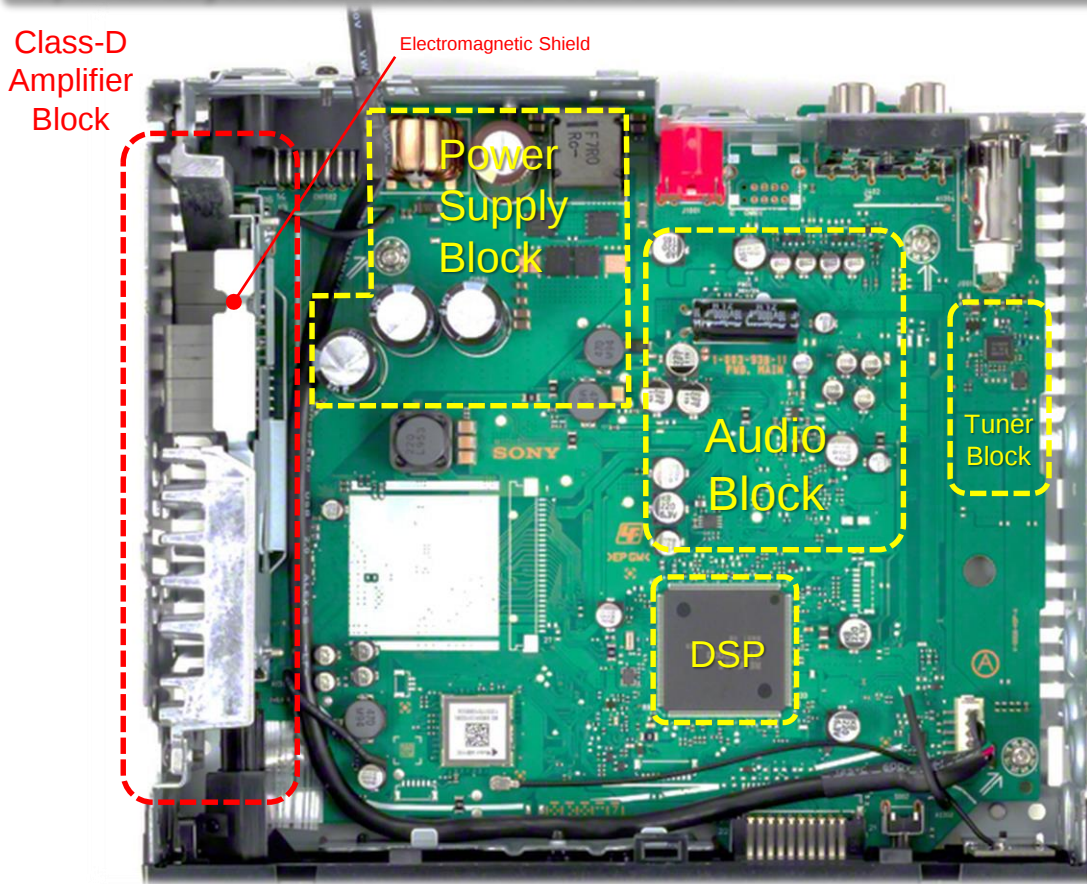
Settings saved in the Backup Memory

DEMO / Tuner Step setting / Caution Alarm setting / Beep setting / Auto Off setting / Steering / ANDROID, USB mode / Rear Sub switch setting / CT setting / Auto(RDS,DAB) Setting / AF/TA setting / Regional / Soft Link / Antenna Power / Parental Control / Blend mode / USB Autoplay / Speaker Load (2Q load) / EXTRA BASS / CA+ / EQ10 Preset / EQ10 Custom / Position* / DSO / Balance / Fader / DSEE / AAV / Rear Bass Enhancer / Subwoofer Direct Drive / Subwoofer / HPF (LPF setting covered under "Subwoofer") / AUX VOL / BT Audio Volume / MAX Volume / Black out / Dimmer / Brightness / Sub display / Illumination / Button color setting / Display color setting / Sound sync / Auto scroll / Pairing (D1 name, D2 name) / Audio device priority (D1 name, D2 name) / Ringtone / Auto Answer / Auto Pairing / BT Signal / Voice out / Auto launch / FM/AM preset / SXM preset / General volume / TA VOL / TALK VOL / RING VOL / MIC Gain / Last Device(HFP1) / Last Device(HFP2) / Last Device(A2DP)

*Manually adjusted time alignment ("Custom" setting in "Position") with "Advanced Car Audio Setting" on Sony | Music Center app can be saved into the backup memory as well.

Powerful 100Wx4 Amplifier & Uncompromising Sound Quality

Optimal Layout of Circuit and Circuit Blocks



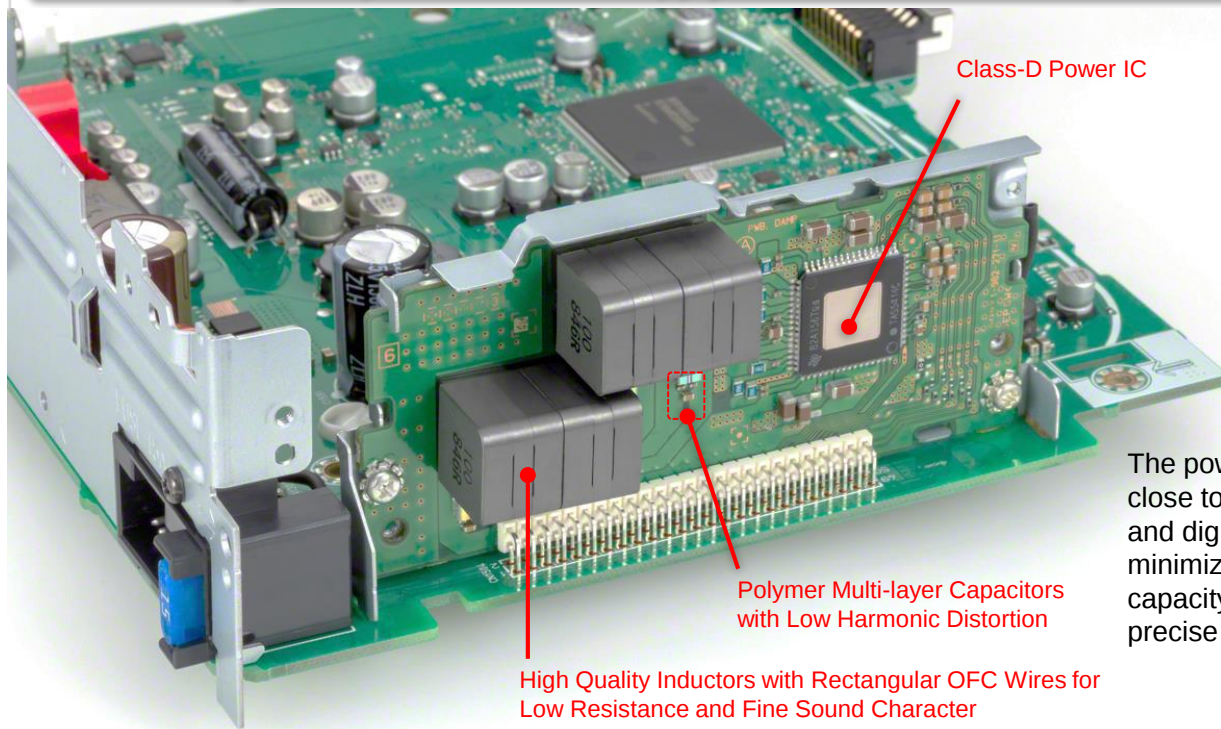
While class-D digital amplifier is highly efficient and delivers incredible power in its compact size, designers face challenges such as coping with EMI - electromagnetic interference.

Sony's expertise and the long years of engineering experience with digital amplifier together with the latest EMI analysis and prediction technology made it possible to realize outstanding output power with a double-DIN CD receiver.

The power supply block is optimally designed including choices of components and ideal circuit layout for low-noise, high efficient electric power transmission.

Powerful 100Wx4 Amplifier & Uncompromising Sound Quality

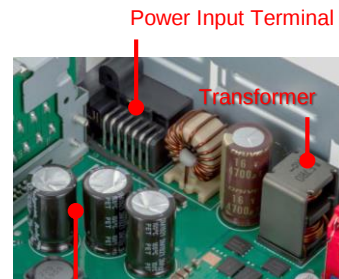
Class-D Digital Amplifier & Power Supply Blocks



Not only is the digital amp block isolated to avoid electromagnetic interference, it includes carefully selected optimal components to achieve sophisticated sound quality.

The inductors adopted rectangular OFC – Oxygen Free Copper wires for low internal resistance and fine sound character. Choice of the polymer multi-layer capacitors was determined for less harmonic distortion.

The power supply block is placed close to both power input terminal and digital amplifier block to minimize power loss, with high capacity electrolytic capacitors for precise and responsive bass.



High Capacity Electrolytic Capacitors

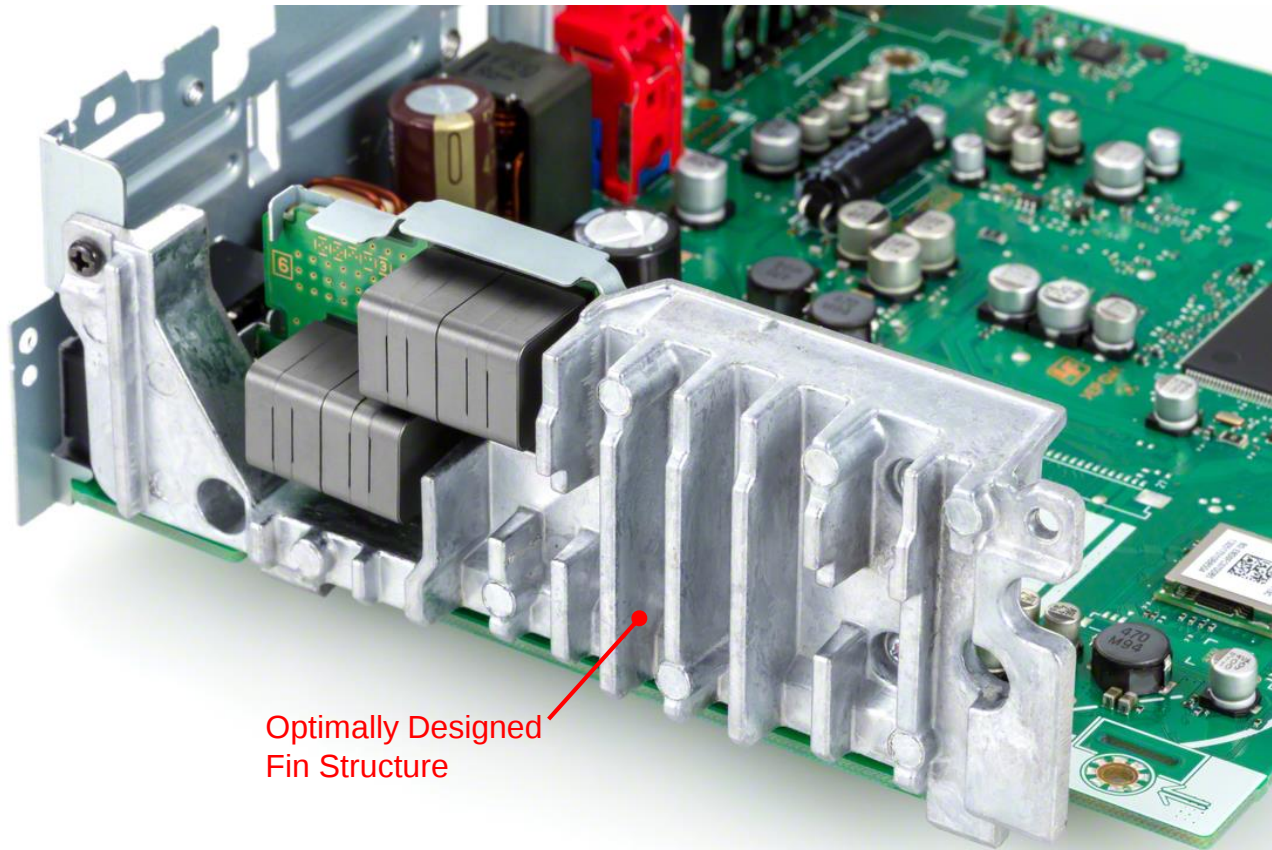
As a result, Sony succeeded to realize the equivalent level of signal to noise ratio to that of the regular head unit with class A/B amplifier incorporated. And in comparison with the standalone class-D 4ch amplifiers in general, it boasts remarkably superior stereo channel separation.

Powerful 100Wx4 Amplifier & Uncompromising Sound Quality

Optimized Heat Ventilation

Even in the case of class-D amplifier with only 10% heat dissipation, appropriate thermal control is important especially in car audio head unit where product size and allowed space for ventilation are very much limited.

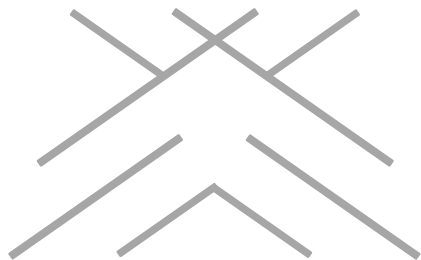
For the DSX-GS80, an exclusively designed integrated heat sink is adopted with optimal fin structures for efficient heat ventilation.



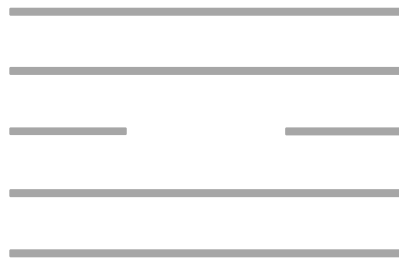
Powerful 100Wx4 Amplifier & Uncompromising Sound Quality

Resonance Damping Top Chassis

Sony's original "**Cross-bracing Press**" design with increased thickness improves top chassis rigidity at more than 10%. Reducing the resonance and shifting resonance peak out of vehicle's harsh vibration frequency band, it minimizes negative impact on the in-car sound quality.

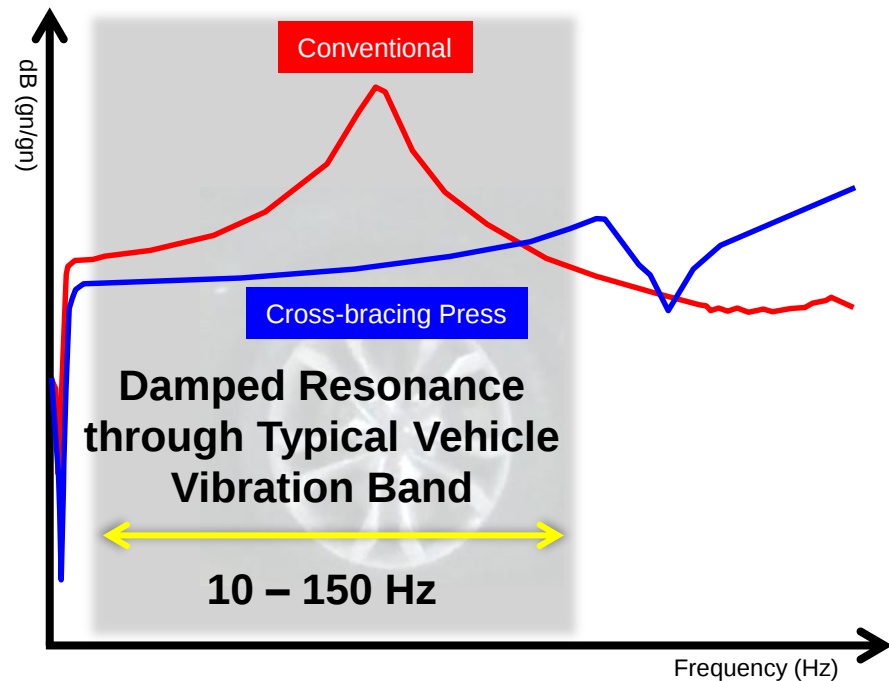


Cross-bracing Press
Pattern on 0.5 mm
Top Chassis



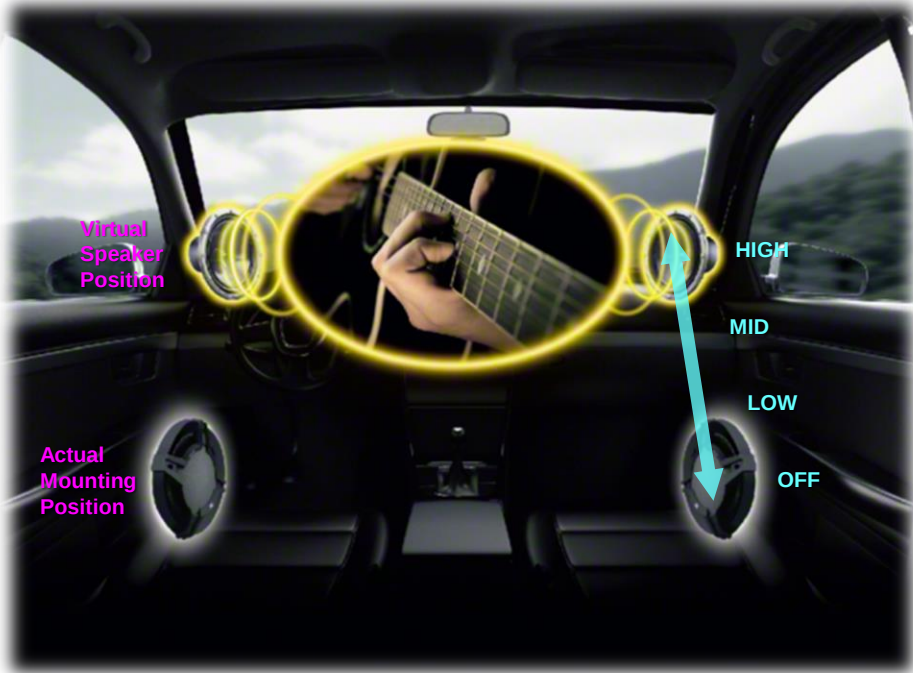
Horizontal Press
Pattern on 0.4 mm
Top Chassis

Comparison of Resonance Measurement



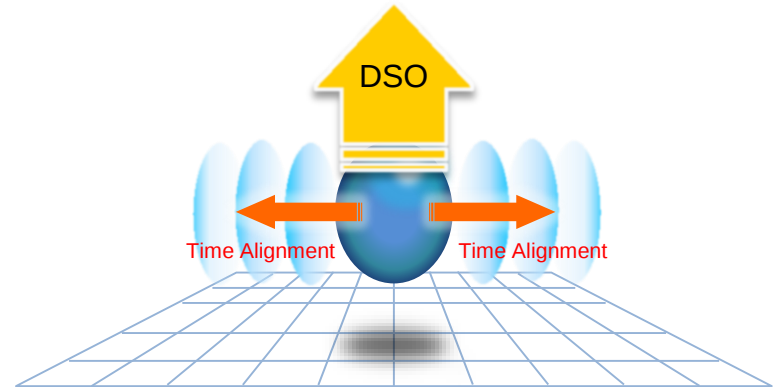
DSO – Dynamic Stage Organizer

Virtual Speaker Elevates Sound Image Just Before Your Eyes



If your speakers are installed into the lower part of the vehicle doors, the sound will come from below and may not be clear. The DSO - Dynamic Stage Organizer creates a sound image just before your eyes as if there were speakers above the dashboard(virtual speakers).

While the Time Alignment works to correct stereo balance horizontally, the DSO corrects vertical positions of the sound image allowing you to choose among 4 options: Off / Low / Mid / High for your preference. For the best results, make sure to utilize the DSO together with the Time Alignment.



Sound-synchronized Illumination

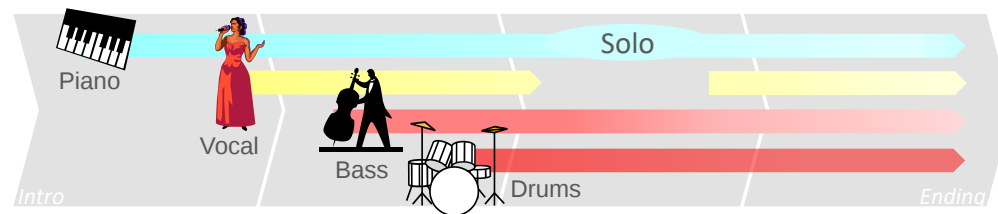
Real-time Switching Pulse Creation by SPL & Beat/Frequency Detection

Bring dance club atmosphere to your car! Thanks to Sony's original beat sensing technology, the LED changes its color pulsing optimally to either sound pressure or back beat of the music for more enjoyable in-car decor.

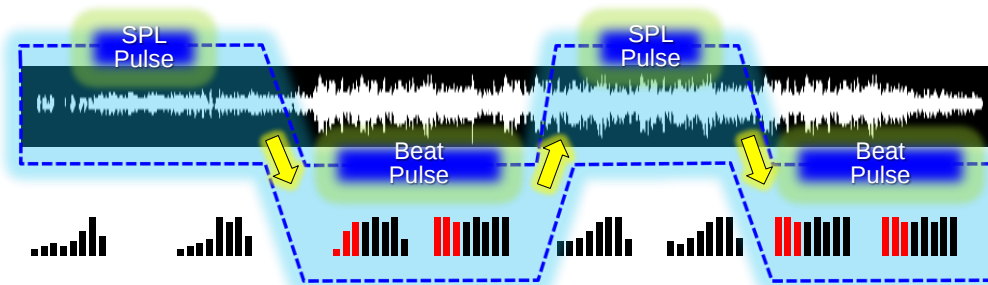
When rhythm presence in 100Hz and below is less, the LED pulses to the SPL(Sound Pressure Level). Once rhythm section becomes outstanding and gets more beat, it switches instantly to synchronize with detected back beat, flashing busily, giving visible sensation to your music listening!



Progress of Music



SPL Analysis



Beat Detection In 100Hz Below