

**POWERED SPEAKER SYSTEM
DBR series**

DBR15 DBR12 DBR10

Owner's Manual

In order to take full advantage of the DBR series' (referred to in this manual as DBR) superior functionality and enjoy years of trouble-free use, please read this manual before you begin using the product. After you have read the manual, keep it in a safe place for reference when needed.

- Please read the **PRECAUTIONS** on the reverse side of this manual before use.
- This manual uses example illustrations taken from the DBR12 if not otherwise specified.
- The illustrations as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your device.
- The company names and product names used in this manual are the trademarks or registered trademarks of their respective companies.

Features

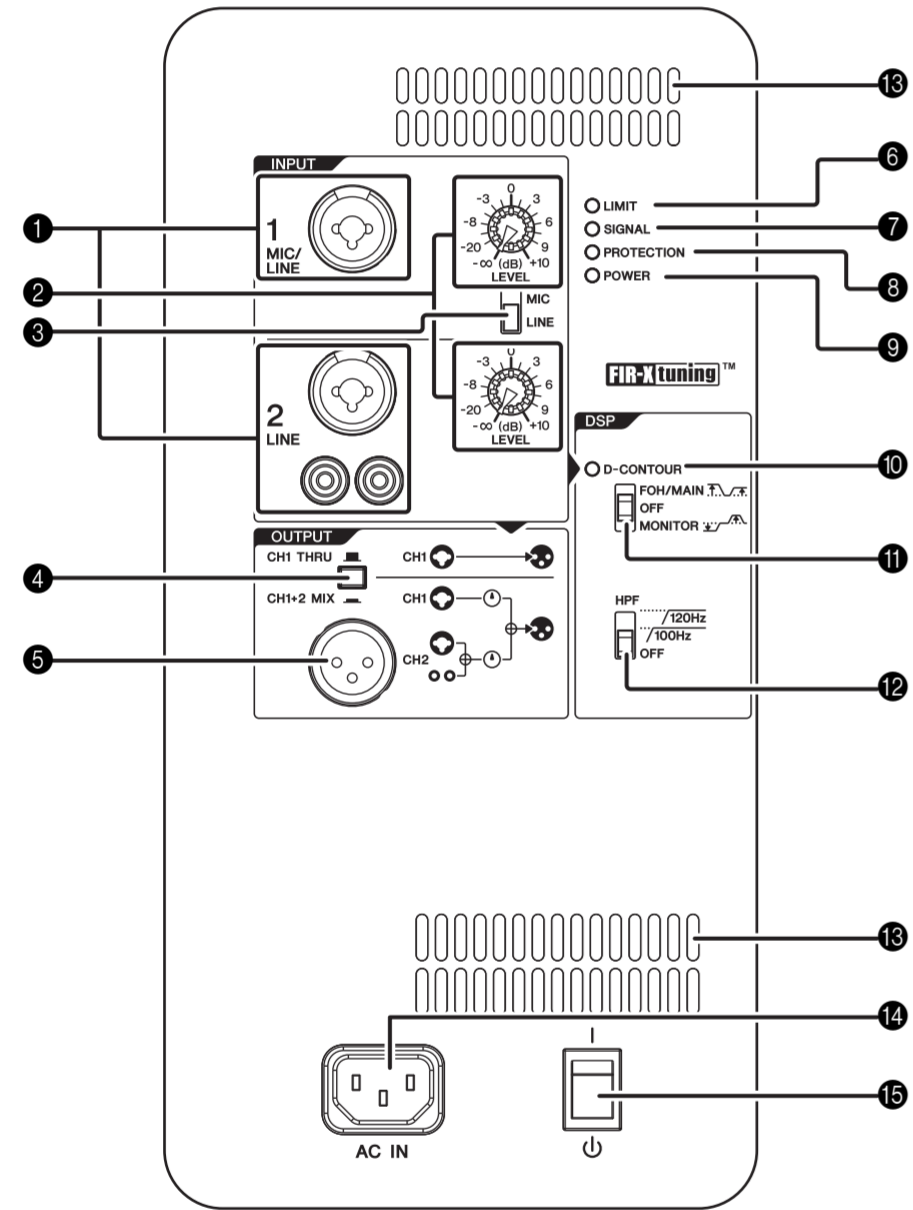
- **FIR-X tuning™**
Our proprietary sound-processing technology utilizing a linear-phase FIR filter delivers excellent sound quality with high resolution and a smooth frequency response that is unaffected by phase interference near the crossover point.
- **D-CONTOUR (Dynamic CONTOUR)**
D-CONTOUR optimizes the level of each frequency range according to the application to be used or the listener's preferences. There are two modes: an FOH/MAIN mode for use as a main speaker, and a MONITOR mode for use as a floor monitor.
- **Simple mixing function**
The DBR features simple mixing functionality, enabling you to select either a direct output of channel 1 (CH1) (parallel connection) or a mixed output of CH1 and CH2.
- **Various input/output connectors**
The comprehensive set of connectors—including XLR for a mixer, phone for a musical instrument, and RCA-pin for an MP3 player—provides maximum flexibility in use with a wide variety of applications.
- **Light weight, high power**
A newly developed power supply and amplifier has enabled compact size and light weight, as well as powerful output.
- **Advanced protection functionality**
DSP-controlled advanced protection functionality promotes optimum reliability even in challenging environments.

Included Accessories

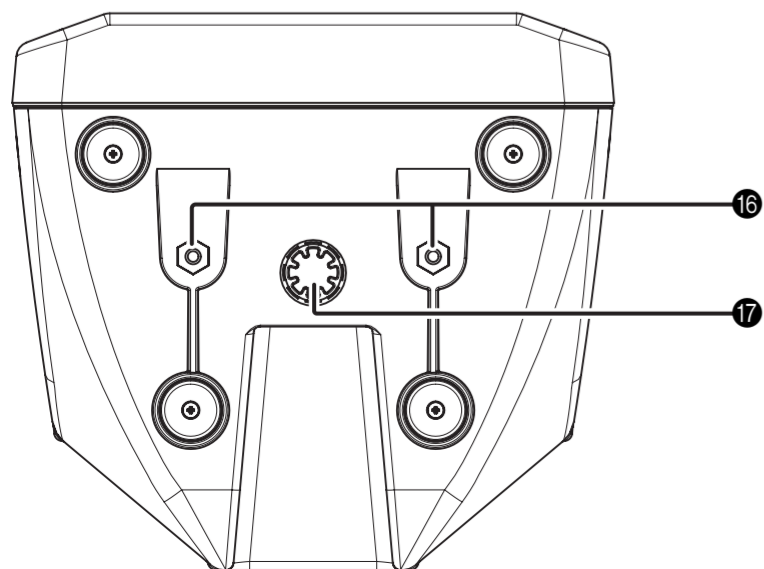
- AC power cord
- Technical Specifications (English only): includes specifications, block diagram, and dimensions.
- Owner's manual (this leaflet)

Controls and Connectors

Rear

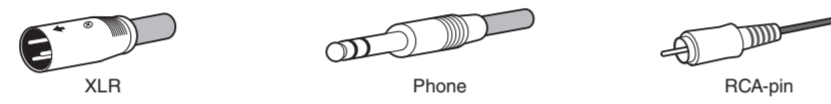


Bottom



1 Input jacks (CH1 and CH2)

These are balanced combo jacks that support both XLR and phone plugs (both CH1 and CH2), and RCA-pin plugs (CH2 only). For the combo jacks, connect a mixer, microphone, or digital musical instrument such as a keyboard. For RCA-pin jacks, connect a device such as an MP3 player or a CD player. For devices with high level signals such as a mixer, connect to CH2, or connect to CH1 then set the [MIC/LINE] switch (3) to [LINE].



2 [LEVEL] knobs

Adjust the level of each input jack (1).

3 [MIC/LINE] switch

Set this switch to [MIC] or [LINE] for the CH1 jack, depending on the level of the input signal. For low-level signals (such as microphones), set the switch to [MIC]. For high-level signals (such as mixer), set the switch to [LINE].

4 Output switch

Selects the output signal sent to the output jack (5). [CH1 THRU]: Delivers the direct output signal of CH1 only. Signal from CH2 will not be output. [CH1+2 MIX]: Outputs the mixed signals of CH1 and CH2.

5 Output jack

This is a balanced XLR jack. This can be used to connect another DBR speaker. Outputs the signal selected by 4 output switch.

6 [LIMIT] indicator

Indicates (lit in red) that the limiter is on when the output voltage of the amplifier has exceeded the maximum level, or when excessive integral power consumption is detected. If this indicator stays lit, lower the input level.

Note Integral power consumption refers to the sum of power provided to the speaker driver per unit time.

7 [SIGNAL] indicator

Indicates (lit in green) when an audio signal exceeding the threshold has been detected.

8 [PROTECTION] indicator

Indicates (lit in red) when the protection circuit is active. The protection circuit will be activated and the speaker outputs will be muted in the situations listed below.

- If amplifier overheating is detected
- If overcurrent is detected
- When turning the power on; the protection circuit will be activated for a few seconds to prevent noise. The indicator turns off when the power supply has started normally.

If the protection circuit has engaged, waiting until the amplifier cools down or powering off and on again will return to normal operation. If the unit does not return to normal operation, please contact your Yamaha dealer.

9 [POWER] indicator

Indicates (lit in green) when the [I/O] (power) (15) switch is turned on.

10 [D-CONTOUR] indicator

Indicates (lit in yellow) when the [D-CONTOUR] switch (11) is set to [FOH/MAIN] or [MONITOR].

11 [D-CONTOUR] switch

Selects one of the D-CONTOUR (Dynamic CONTOUR) presets. [FOH/MAIN]: Boosts the high and low frequency components so that the frequency response is suitable for a main speaker. [MONITOR]: Reduces the low frequency range, which could otherwise tend to be boomy if the speaker is set directly on the floor. This enables you to hear mid and high frequency ranges clearly when using as a floor monitor. [OFF]: Turns off D-CONTOUR. This is a generic frequency response setting.

12 [HPF] switch

Selects the cutoff frequency of the high pass filter. If you set this switch to [120Hz] or [100Hz], the low frequency components below each threshold will be cut. If you use the unit alone, set this switch to [OFF]. If you plan to use the unit along with a subwoofer, we recommend that you set this switch to [120Hz] or [100Hz].

13 Vent

The unit contains a cooling fan. Since the air for cooling is taken in and expelled here, be careful not to block this vent.

14 [AC IN] socket

Connect the supplied power cord here. First connect the power cord to the unit, then plug it into an appropriate AC power outlet.

CAUTION

Turn off the power before you connect or disconnect the power cord.

15 [I/O] (power) switch

Turns power to the unit on [I] or off [O]. First, turn on the power of the connected sound source (external device), then the unit. When turning off the power, reverse the order by turning off the power of the unit first and then the connected sound source (external device).

CAUTION

Even when the switch is in the off position, a small amount of electricity is still flowing to the unit. If it will not be used for an extended period of time, therefore, be sure to unplug the power cord from the wall AC outlet.

- Note**
 - Rapidly turning the unit on and off in succession can cause it to malfunction. After turning the unit off, wait for about 5 seconds before turning it on again.
 - If you are using multiple units, turn on the power to each unit one by one. If you turn on the power to multiple units simultaneously, a temporary drop in the power voltage may occur, possibly resulting in abnormal operation of the units.

16 Screw holes (M8)

Use these M8 size screw holes for installing separately sold brackets or commercially available eye bolts.

17 Pole socket

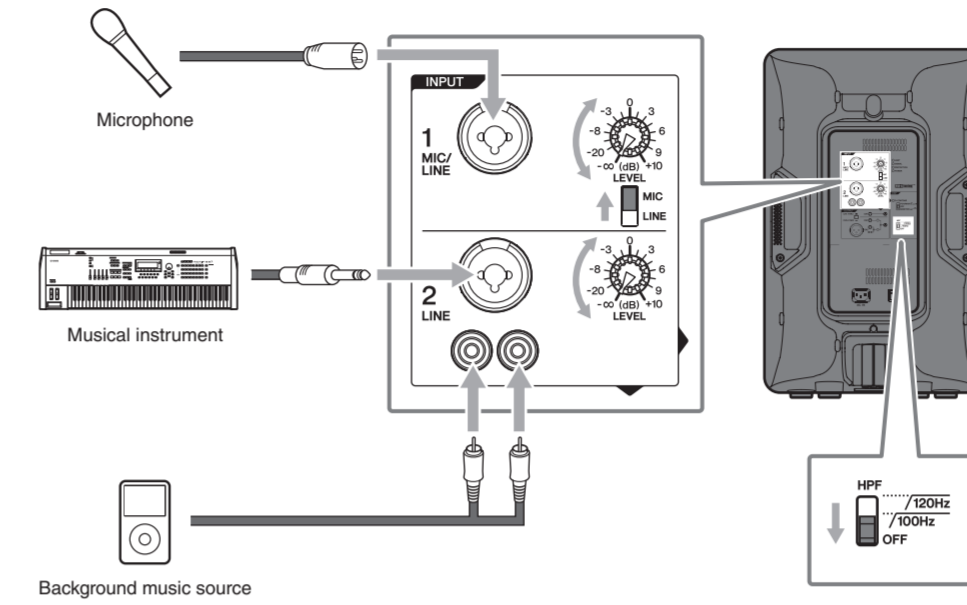
This socket adapts to commercially available speaker stands and speaker poles of 35 mm diameter.

Setup Examples

Simple system with a single DBR

This example illustrates the system when connecting directly to a microphone, musical instrument, or background music source without using a mixer.
Main application: small-sized live venue, presentations, restaurants

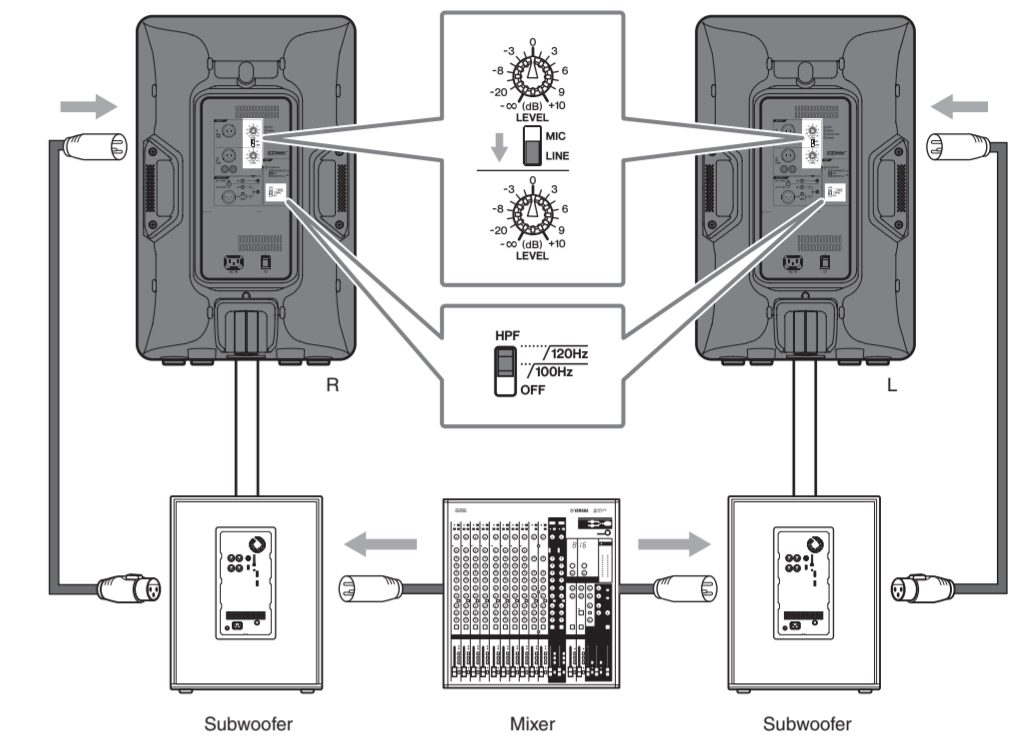
Note For CH2, inputs to the combo jack and to the RCA pin jacks will be mono mixed at a fixed balance. If you want to change the balance, adjust the volume of the connected sound source.



System with two DBRs and subwoofers

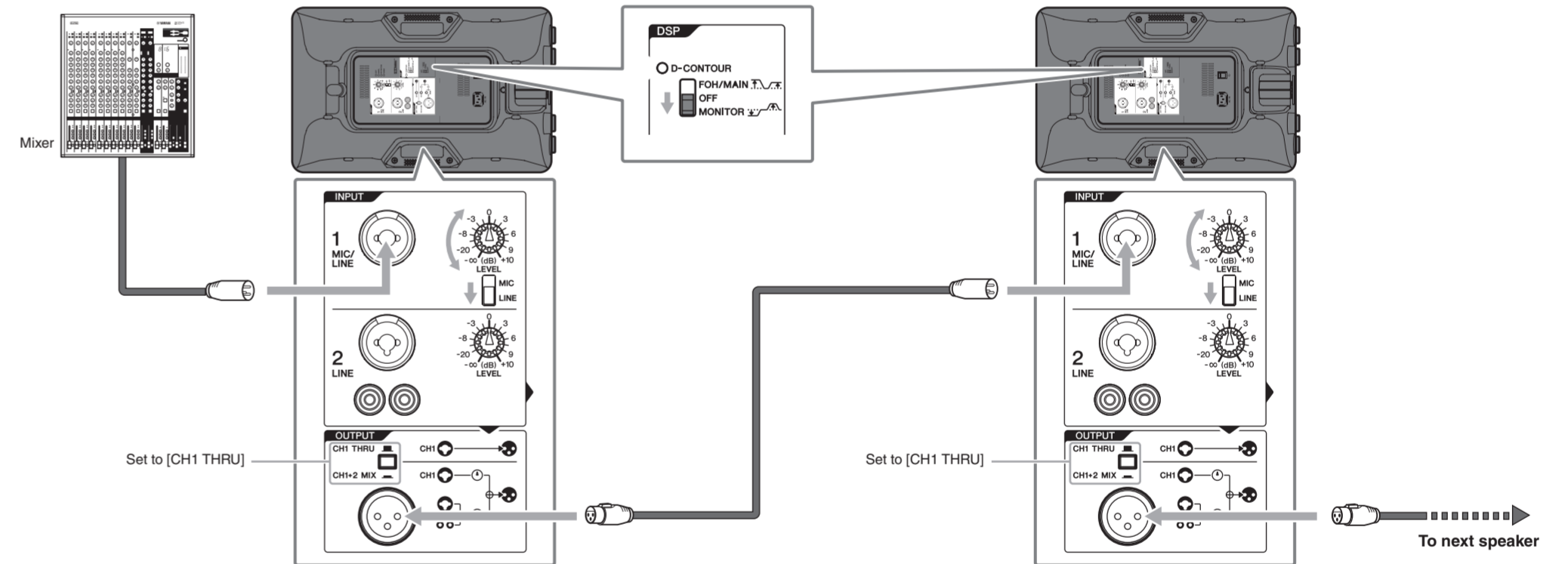
This system is the most suitable for a main speaker system. If desired, you can add another DBR to create a floor monitor system.
Main application: small-sized live venue, house of worship, event site

Note We recommend to use Yamaha DXS series (referred to in this manual as DXS) as a subwoofer. In this case, we recommend that the DBR's HPF cutoff frequency and the DXS's LPF cutoff frequency are set to the same settings; however, you can adjust it as desired.



Floor monitor system

This system is suitable for a performer's monitoring system. For use as a vocal monitor, set the [D-CONTOUR] switch to [MONITOR]. If necessary, you can additionally connect up to four speakers in parallel. In this case we recommend that the signal is input to CH1 and the output switch is set to [CH1 THRU].



Troubleshooting

Symptom	Possible causes	Possible solution
Power does not turn on.	The power cord is not connected properly.	Connect the power cord all the way in so that it is firmly in place.
Power suddenly went off.	The protection system has been activated, shutting down the power supply.	Turn off the power, wait until the amplifier cools down, and then turn on again.
No Sound.	The cable is not connected properly.	Connect the cable all the way in so that it is firmly in place.
Sound is interrupted suddenly.	The protection circuit has been activated, muting the output.	Wait until the amplifier cools down. If the unit won't automatically reset itself, turn off the power, and then on again.
Sound howls (feedback).	A microphone is directed toward the speaker.	Aim the speaker away from the area where the microphone picks up sound.
Each speaker sound differs (if multiple speakers are used).	Sound is amplified too much.	Lower the volume of input device and locate the microphone more closely to the sound source.
	Settings for each speaker differ.	Set the [HPF] switch and [D-CONTOUR] switch of each speaker to the same positions.
Sound is distorted.	The [LIMIT] indicator is off.	When the [MIC/LINE] switch is set to [MIC], and even if you lower the volume fully the sound is still distorted, set the switch to the [LINE] position. If the sound is still distorted even if the switch has been set to [LINE], lower the volume of the connected input devices.
	The [LIMIT] indicator is on.	Output volume is excessive.
The microphone volume is too low.	The [MIC/LINE] switch is set to [LINE].	Set the [MIC/LINE] switch to the [MIC] position.
Low and high frequency are unbalanced.	The output limiter is active.	Lower the input level or the output level until the [LIMIT] indicator lights occasionally.

If any specific problem should persist, however, please contact your Yamaha dealer.

