English

Reference Materials

General specifications

Rated output power (20 Hz to 20 kHz, 0.07% THD)

2-channel driven, 8Ω . . . . . 100 W + 100 W
2-channel driven, 4Ω . . . . . 200 W + 200 W
Driven in monaural, 8Ω . . . . . 400 W

Dynamic power

8Ω . . . . . 125 W + 125 W
6Ω . . . . . 170 W + 170 W
4Ω . . . . . 250 W + 250 W
2Ω . . . . . 500 W + 500 W

Maximum output power (1 kHz, 0.7% THD)

[Models for U.K. and Europe]
4Ω . . . . . 220 W + 220 W

IEC output power (1 kHz, 0.02% THD)

[Models for U.K. and Europe]
8Ω . . . . . 125 W + 125 W

Maximum effective output power (JEITA, 1 kHz, 10% THD)

[Models for China, Korea, U.K., Asia, Central and South America, and Taiwan]
8Ω . . . . . 135 W + 135 W
4Ω . . . . . 270 W + 270 W

Power bandwidth (MAIN L/R, 0.1% THD, 45 W)

8Ω . . . . . 10 Hz to 50 kHz

Damping factor (1 kHz)

8Ω . . . . . ≥300

Input sensitivity/input impedance (1 kHz, 100 W/8Ω)

BAL . . . . . 2.0 Vrms/47 kΩ
LINE . . . . . 1.0 Vrms/47 kΩ

Maximum input signal voltage (1 kHz, 0.5% THD)

BAL . . . . . 2.20 Vrms
LINE . . . . . 1.10 Vrms

Frequency response

5 Hz to 100 kHz . . . . . +0/−3 dB
20 Hz to 20 kHz . . . . . +0/−0.3 dB

Total harmonic distortion plus noise (20 Hz to 20 kHz)

2-channel driven,
LINE to SPEAKERS, 50 W/8Ω 0.035%
2-channel driven,
BAL to SPEAKERS, 50 W/8Ω 0.035%
Driven in monaural,
LINE to SPEAKERS, 200 W/8Ω 0.05%
Driven in monaural,
BAL to SPEAKERS, 200 W/8Ω 0.05%

Channel separation (Input 1.0 kΩ terminated)

1 kHz/10 kHz . . . . . ≥90 dB/ ≥70 dB

Signal to noise ratio (IHF-A network, input 1.0 kΩ shorted, reference level 200 W/4Ω)

. . . . . 110 dB

Residual noise (IHF-A network)

BAL . . . . . 40 µVrms
LINE . . . . . 50 µVrms

Meter accuracy

. . . . . Class 2.5

Power supply

[Models for U.S.A. and Canada] . . AC 120 V, 60 Hz
[Model for China] . . . . . AC 220 V, 50 Hz
[Model for Korea] . . . . . AC 220 V, 60 Hz
[Model for Australia] . . . . . AC 240 V, 50 Hz
[Models for U.K. and Europe] . . . AC 230 V, 50 Hz
[Model for Asia] . . . . . AC 220–240 V, 50 Hz/60 Hz
[Models for Central and South America, and Taiwan] . . . . . AC 110 V, 60 Hz

Power consumption

. . . . . 400 W

Standby power consumption

Off mode . . . . . 0.1 W
Standby mode . . . . . 0.2 W

Maximum power consumption (1 kHz, 4Ω 10% THD)

[Models for Central and South America, and Taiwan] . . . . . 800 W

Dimensions (W x H x D)

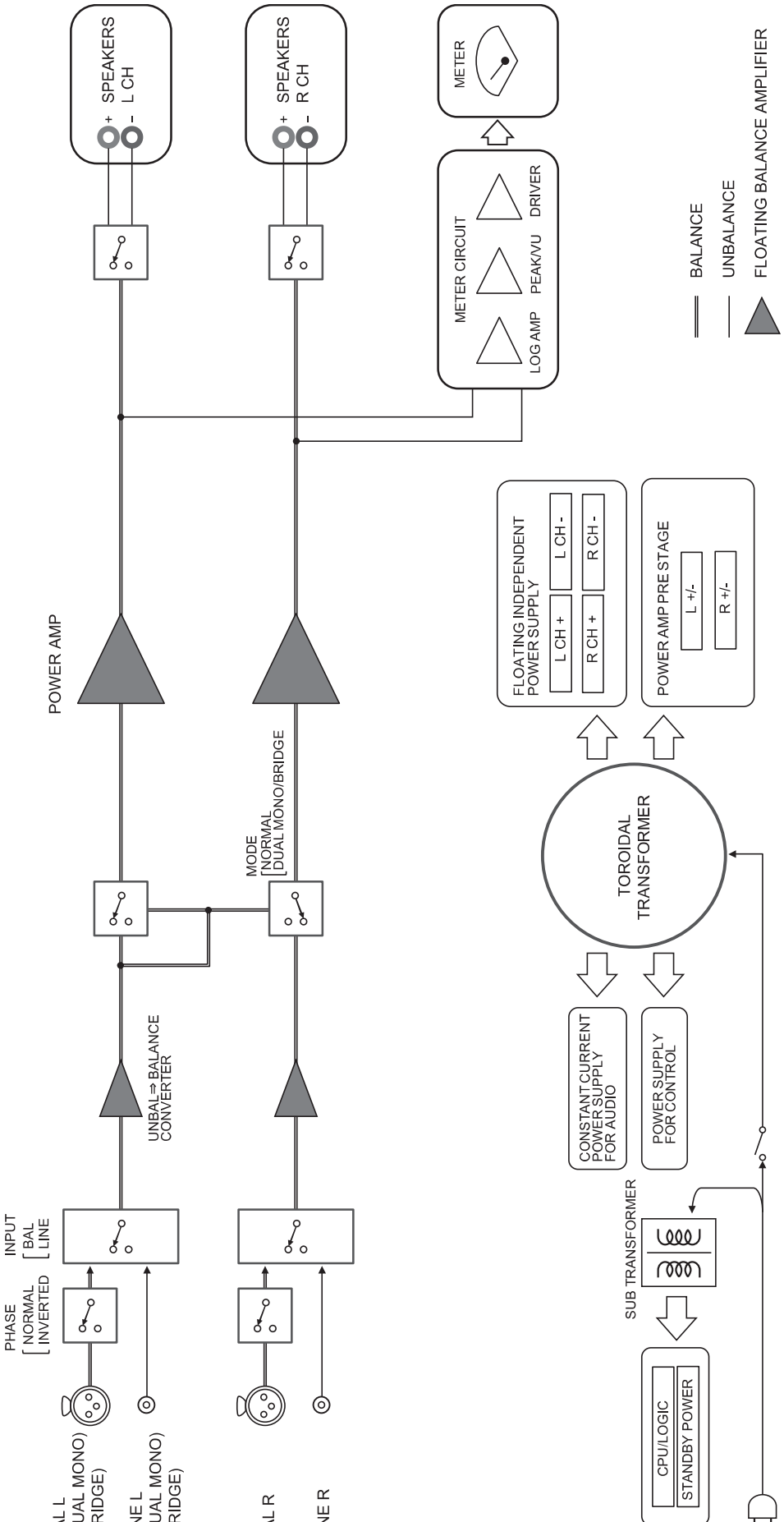
. . . . . 435 × 180 × 464 mm

Weight

. . . . . 26.9 kg

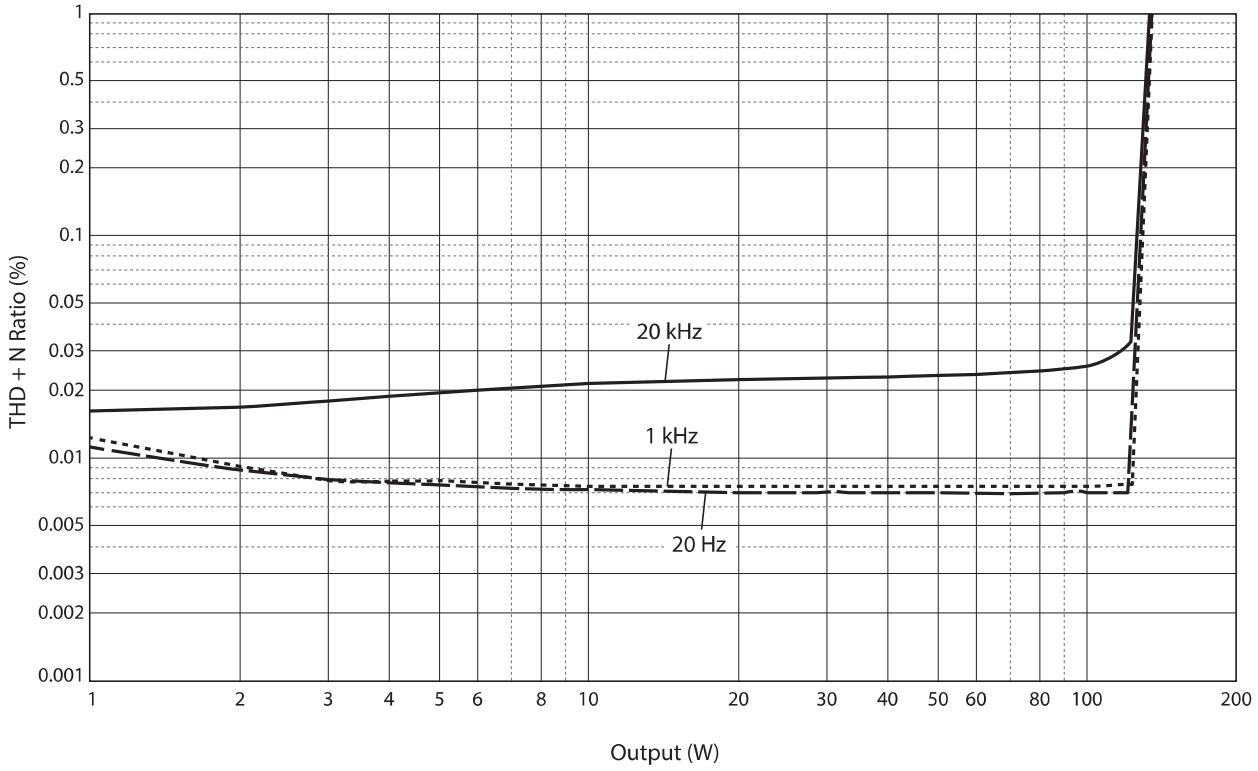
* The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.

Block diagram

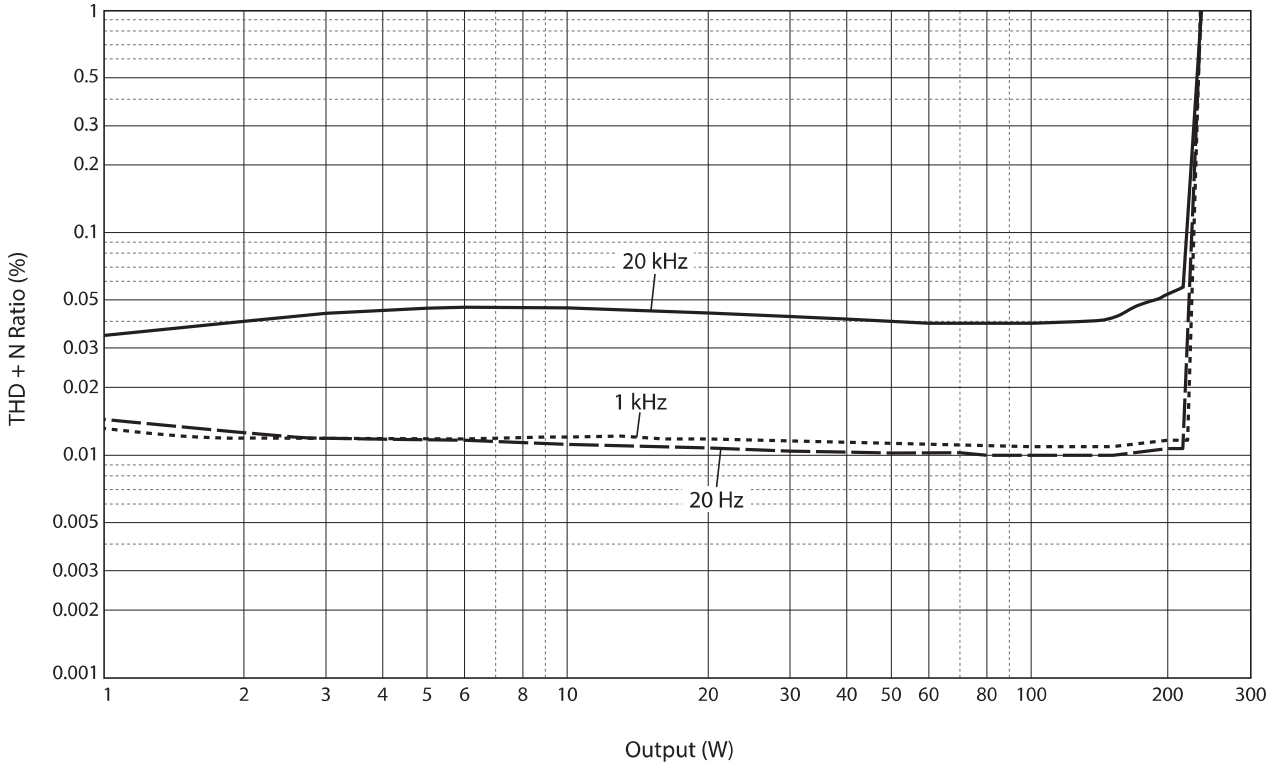


Audio characteristics

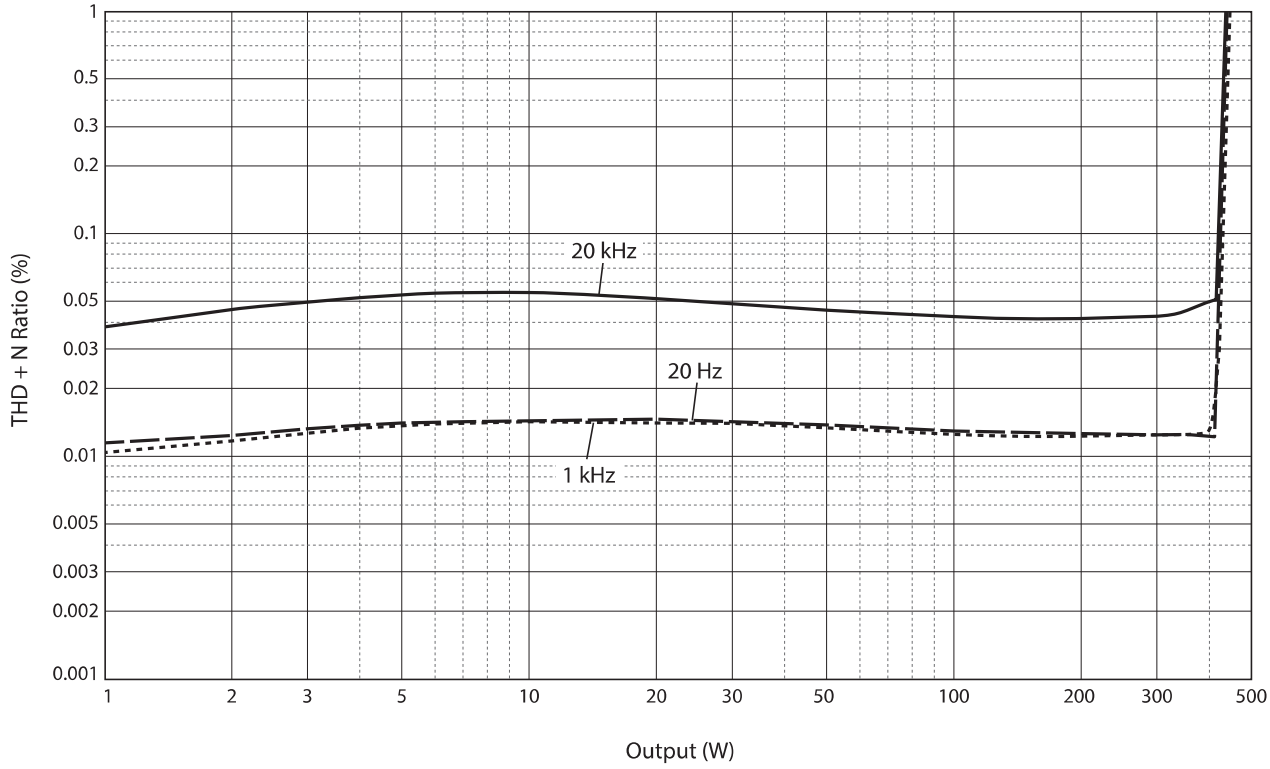
Total harmonic distortion (8Ω)



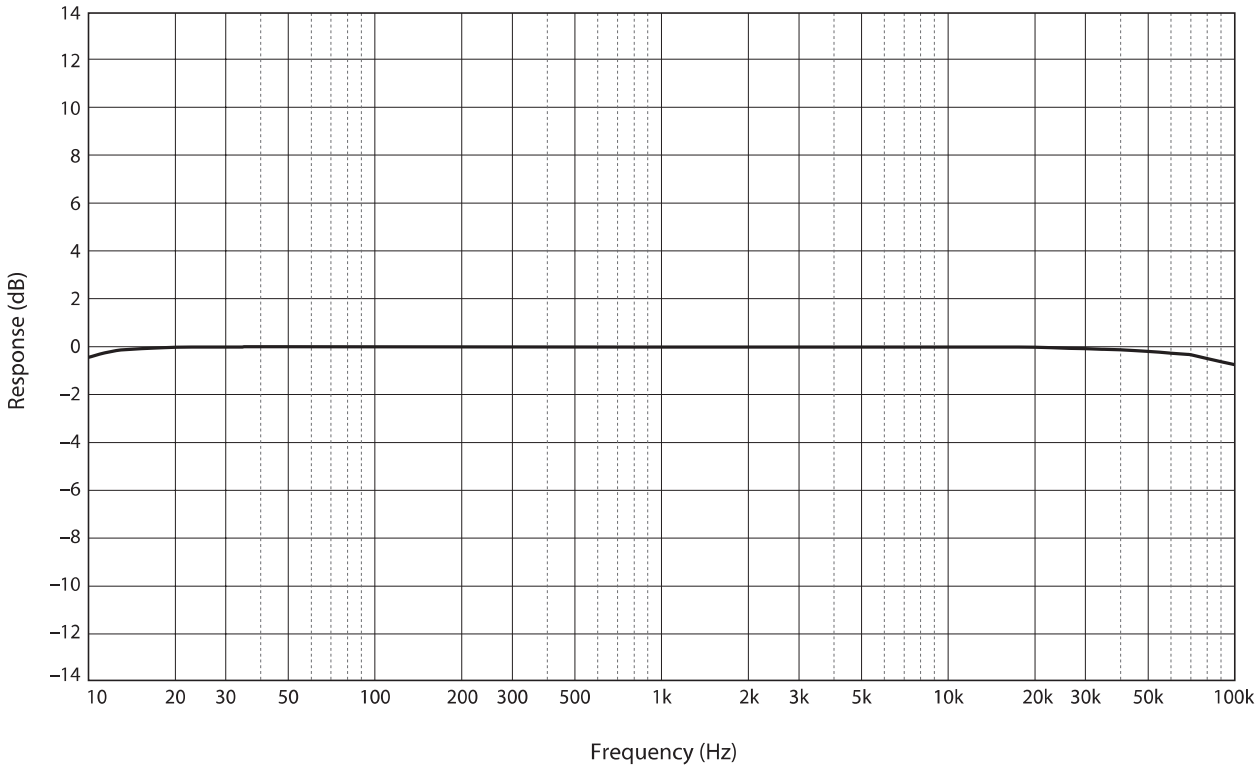
Total harmonic distortion (4Ω)



Total harmonic distortion (monaural 8Ω)



Frequency response



Troubleshooting

Refer to the table below if this unit does not function properly. If the instructions below do not help, or if the problem you are experiencing is not listed below, turn off the unit, disconnect the power cord, and contact the nearest authorized Yamaha dealer or service center.

Problem	Cause	Remedy	See page
Power does not turn on.	The power cord is not connected to the AC IN connector on the rear panel or is not plugged into an AC outlet.	Connect the power cord firmly.	24
	The protection circuitry has been activated because of a short circuit, etc.	Make sure that the speaker wires are not touching each other or shorting out against the rear panel of the unit, and then turn on the power to the unit.	16
	The unit has been exposed to a strong external electric shock (such as lightning or strong static electricity).	Turn off the unit, disconnect the power cord from the AC outlet, wait for about 30 seconds, and then plug the unit in again.	24
The STANDBY/ON indicator on the front panel flashes.	The protection circuitry has been activated because of a short circuit, etc.	Make sure that the speaker wires are not touching each other or shorting out against the rear panel of the unit, and then turn on the power to the unit.	16
	There is a problem with the internal circuitries of this unit.	Disconnect the power cord from the AC outlet and contact the nearest authorized Yamaha dealer or service center.	24
The unit is turned on but no sound is heard.	The protection circuitry has been activated because of a short circuit, etc.	Make sure that the speaker wires are not touching each other or shorting out against the rear panel of the unit, and then turn on the power to the unit.	16
	The SPEAKERS selector is set to OFF.	Set the SPEAKERS selector to the appropriate position.	6
	The speaker cables are not connected properly.	Make sure that the speaker cables are connected properly.	16
	The INPUT selector setting does not match the connected input source.	Select an appropriate input source with the INPUT selector on the front panel.	12

Problem	Cause	Remedy	See page
The sound is suddenly muted.	The protection circuitry has been activated because of a short circuit, etc.	Make sure that the speaker wires are not touching each other or shorting out against the rear panel of the unit, and then turn on the power to the unit.	16
	The speakers are not connected properly.	Make sure that the speakers are connected properly. If the problem persists, the cables might be defective.	16
There is a lack of bass and no ambience.	The + and – wires are connected in reverse at the amplifier or the speakers.	Connect the speaker wires to the correct + and – polarity.	15
A "humming" noise is heard.	Both balanced and unbalanced cables are being used simultaneously between two components.	Do not use both balanced and unbalanced cables simultaneously between two components. Doing so would create a ground loop that could generate static and noise.	12