YAMAHA

Make Waves

POWERED LOUDSPEAKERS

DHR SERIES
DHR15 DHR12 DHR10 DHR15M DHR12M

LOUDSPEAKERS

CHR SERIES
CHR15 CHR12 CHR10 CHR15M CHR12M

DHR SERIES

DHR15 DHR12 DHR10 DHR15M DHR12M

CHR SERIES

CHR15 CHR12 CHR10 CHR15M CHR12M

PERFORMANCE. OPTIMIZED.

The DHR and CHR Series are ideal solutions for anyone ready to step up their sound reinforcement game to a new level of professional quality, accuracy, and performance. Premium plywood cabinets finished in a tough polyurea coating provide durability not found on other loudspeakers in this class. Each model has been optimized to meet the demands of a variety of sound reinforcement applications, with DHR/CHR10 and DHR/CHR12 for fixed installation and utilities, DHR/CHR12M and DHR/CHR15M designed for use as floor monitors, and DHR/CHR15 for FOH applications— all featuring customs transducers carefully selected. With DHR Series featuring custom transducers driven by DSP-equipped class-D power amplifiers to deliver stunning sound quality and clarity. Combined with practical features adapted for their specific applications, these two series give you the flexibility to choose the ideal speaker for a wide variety of sonic environments.

DHR Series

High-Efficiency 1000W Class-D Amplifiers

The DHR's lightweight, high performance Class-D amplifier is capable of producing up to 1000W* of power, achieving an SPL of 131dB, delivered with remarkable clarity and dynamic characteristics.

* DHR10 has an output level of 700W.

DHR Series   CHR Series

Custom Designed Transducers

High power output woofers deliver well-defined, powerful bass with minimal distortion, while the 1.4" precision compression driver* produces accurate mid-range and high frequencies.

* DHR/CHR12M and DHR/CHR15M feature a 1.75" coaxial compression driver.

DHR Series   CHR Series

A Rugged, Highly Portable Cabinet

Both the DHR and CHR series feature plywood enclosures like those of our acclaimed DZR loudspeakers to deliver outstanding durability and acoustic performance.

15" coaxial driver

DHR Series   CHR Series

Cabinet designs optimized for a range of audio environments

The DHR and CHR Series feature a comprehensive lineup of loudspeakers with cabinets optimized to meet the demands of specific applications. DHR/CHR10 and DHR/CHR12 are equipped with rotating horns and a dedicated U-bracket for use in fixed installations and utility, while DHR/CHR12M and DHR/CHR15M feature a coaxial compression driver for improved clarity and smoother frequency response for floor monitoring. The largest in the lineup are DHR/CHR15, which feature rigging points for use in fixed installations, besides DHR/CHR12 and DHR/CHR15 have dual-angle pole sockets as temporary main speakers for sound reinforcement.

90° Rotatable horn

90° Can be mounted vertically or horizontally with optional U-Bracket.

DHR/CHR10, DHR/CHR12

Coaxial Driver

DHR/CHR15M, DHR/CHR12M

Rigging points for optional eye bolts

DHR/CHR15

DHR Series

Easy-to-use Onboard 2-Channel Mixer

DHR Series speakers have two input channels. CH1 has a combo jack which accepts either XLR and TRS Phone allowing Mic or Line level input signals. CH2 offers two input options; a combo jack that accepts XLR or TRS Phone, and a pair of RCA pin Jacks for input from CD players or other stereo line-level sources. The onboard mixer allows you to select either CH1+2 MIX to mix the signal of CH1 and CH2, or CH1 THRU to pass the signal from CH1 only.
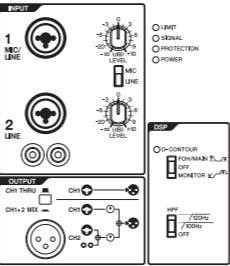
CHR Series

Intelligent processing to maximize system performance

When used in combination with Yamaha PX Series amplifiers or other compatible signal processors, CHR Series loudspeakers can take full advantage of dedicated speaker processor tuning settings. Additionally, the DHR/CHR Series can also be used to construct a system in combination with Yamaha subwoofers (visit Yamaha pro-audio website for more information).
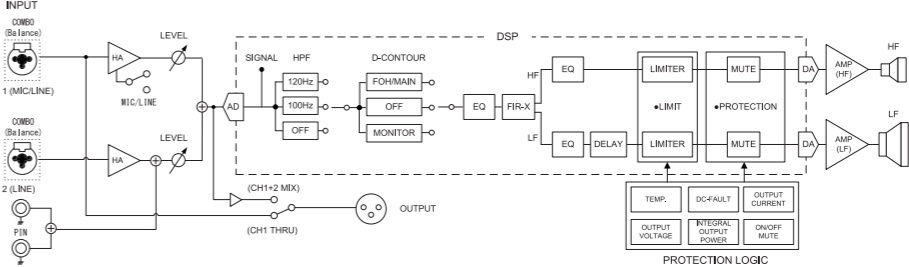
	Power / Power Handling	Maximum SPL	Frequency Range (-10dB)	LF	HF	Coverage Angle
DHR15	1000W*1	131dB SPL*3	44Hz-20 kHz	15" Cone	1.4" diaphragm, 1" throat	H90° x V60°
DHR12	1000W*1	130dB SPL*3	48Hz-20kHz	12" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
DHR10	700W*1	128dB SPL*3	52Hz-20kHz	10" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
DHR15M	1000W*1	131dB SPL*3	50Hz-20kHz	15" Cone	1.75" diaphragm, 1" throat	H65° x V75°
DHR12M	1000W*1	129dB SPL*3	55Hz-20kHz	12" Cone	1.75" diaphragm, 1" throat	H90° x V90°
CHR15	1000W*2	125dB SPL*4	49Hz-20 kHz	15" Cone	1.4" diaphragm, 1" throat	H90° x V60°
CHR12	1000W*2	124dB SPL*4	54Hz-20kHz	12" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
CHR10	700W*2	122dB SPL*4	55Hz-20kHz	10" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
CHR15M	1100W*2	125dB SPL*4	58Hz-20kHz	15" Cone	1.75" diaphragm, 1" throat	H65° x V75°
CHR12M	1000W*2	123dB SPL*4	61Hz-20kHz	12" Cone	1.75" diaphragm, 1" throat	H90° x V90°

*1 Dynamic power *2 Passive peak *3 Measured Maximum SPL (peak) *4 *2 Calculated Maximum SPL (peak)

DHR Series

Block Diagram

Specifications

		DHR15M	DHR12M	DHR15	DHR12	DHR10	CHR15M	CHR12M	CHR15	CHR12	CHR10
General											
System Type		2-way, Bi-amped Powered Speaker, Bass-reflex					2-way Speaker, Bass-reflex				
Frequency Range (-10dB)		50Hz–20kHz	55Hz–20kHz	44Hz–20kHz	48Hz–20kHz	52Hz–20kHz	58Hz - 20kHz	61Hz - 20kHz	49Hz - 20kHz	54Hz - 20kHz	55Hz - 20kHz
Coverage Angle		H65° x V75°	H90° x V90°	H90° x V60°	H90° x V60° (Rotatable)	H90° x V60° (Rotatable)	H65° x V75°	H90° x V90°	H90° x V60°	H90° x V60° (Rotatable)	H90° x V60° (Rotatable)
Crossover	Type	FIR-X tuning™ (Linear phase FIR filter)					-	-	-	-	-
	Frequency	1.8 kHz	1.8 kHz	1.8 kHz	1.8 kHz	1.9 kHz	2.0 kHz	1.5 kHz	2.0 kHz	2.0 kHz	2.5 kHz
Nominal Impedance		-	-	-	-	-	8Ω				
Power Rating	NOISE	-	-	-	-	-	275W	250W		175W	
	PGM	-	-	-	-	-	550W	500W		350W	
	MAX	-	-	-	-	-	1100W	1000W		700W	
Sensitivity (1W, 1m)		-	-	-	-	-	95dB SPL (*2)	93dB SPL (*2)	95dB SPL (*2)	94dB SPL (*2)	93dB SPL (*2)
Maximum SPL		131dB SPL (*1)	129dB SPL (*1)	131dB SPL (*1)	130dB SPL (*1)	128dB SPL (*1)	125dB SPL (*2)	123dB SPL (*2)	125dB SPL (*2)	124dB SPL (*2)	122dB SPL (*2)
Transducer											
LF	Diameter	15" Cone	12" Cone	15" Cone	12" Cone	10" Cone	15" Cone	12" Cone	15" Cone	12" Cone	10" Cone
	Voice Coil	3"	2.5"			2"	3"	2.5"			2"
	Magnet	Ferrite					Ferrite				
HF	Diaphragm	1.75" PET		1.4" PET			1.75" PET		1.4" PET		
	Type	1" Throat Compression Driver, Coaxial		1" Throat Compression Driver			1" Throat Compression Driver, Coaxial		1" Throat Compression Driver		
	Magnet	Ferrite					Ferrite				
Enclosure											
Material, Finish, Color		Plywood, Durable Polyurea coating, Black					Plywood, Durable Polyurea coating, Black				
Floor Monitor Angle		57°					57°				
Dimensions (W × H × D, with rubber feet)		642 x 369 x 505 mm 25.3"x14.5"x19.9"	500 x 343 x 454 mm 19.7"x13.5"x17.9"	432 x 692 x 405 mm 17.0"x27.2"x15.9"	359 x 578 x 340 mm 14.1"x22.8"x13.4"	305 x 494 x 300 mm 12.0"x19.5"x11.8"	642 x 369 x 505 mm 25.3"x14.5"x19.9"	500 x 343 x 454 mm 19.7"x13.5"x17.9"	432 x 692 x 405 mm 17.0"x27.2"x15.9"	359 x 578 x 340 mm 14.1"x22.8"x13.4"	305 x 494 x 300 mm 12.0"x19.5"x11.8"
Net Weight		23.0 kg (50.7 lbs)	16.5 kg (36.4 lbs)	24.0 kg (52.9 lbs)	19.2 kg (42.3 lbs)	15.0 kg (33.1 lbs)	21.3 kg (47.0 lbs)	15.6 kg (34.4 lbs)	22.0 kg (48.5 lbs)	17.1 kg (37.7 lbs)	13.7 kg (30.2 lbs)
Handles		Side x1		Side x2	Top x1, Side x2	Top x1	Side x1		Side x2	Top x1, Side x2	Top x1
Pole Socket		Φ35 mm x1		Φ35 mm x2 (0° or -7°)		Φ35 mm x1	Φ35 mm x1		Φ35 mm x2 (0° or -7°)		Φ35 mm x1
Rigging Points for eyebolts		-	-	Top x 2, Rear x 1 (Fit for M10 x 30-50mm Eyebolts)	Top x 2, Rear x 1 (Fit for M10 x 30-50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB-DXRDHR12)	Top x 2, Rear x 1 (Fit for M10 x 30-50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB-DXRDHR10)	-	-	Top x 2, Rear x 1 (Fit for M10 x 30-50 mm Eyebolts)	Top x 2, Rear x 1 (Fit for M10 x 30-50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB-DXRDHR12)	Top x 2, Rear x 1 (Fit for M10 x 30-50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB-DXRDHR10)
Connectors		-	-	-	-	-	SpeakON NL4MP x 3 (Parallel)			SpeakON NL4MP x 2 (Parallel)	
Options	Speaker Bracket	-	-	-	UB-DXRDHR12	UB-DXRDHR10	-	-	-	UB-DXRDHR12	UB-DXRDHR10
Amplifier & DSP											
Amplifier Type		Class-D					-	-	-	-	-
Power Rating*1	Dynamic*2	1000W (LF: 800W, HF: 200W)				700W (LF: 500W, HF: 200W)	-	-	-	-	-
	Continuous	465W (LF: 400W, HF: 65W)				325W (LF: 260W, HF: 65W)	-	-	-	-	-
Cooling		Fan cooling, 4 speeds					-	-	-	-	-
AD/DA		24 bit / 48 kHz Sampling					-	-	-	-	-
HPF/LPF		OFF, 100, 120Hz 24dB/oct HPF					-	-	-	-	-
DSP control, preset		D-CONTOUR (FOH/MAIN, MONITOR, OFF)					-	-	-	-	-
Protection	Speaker	Clip limiting, Integral Power Potection, DC-fault					-	-	-	-	-
	Amplifier	Thermal, Output over current					-	-	-	-	-
	Power Supply	Thermal, Output over voltage, Output over current					-	-	-	-	-
Connectors	Analog Input	INPUT1: Combo x1, INPUT2: Combo x1 + RCA-pin x2 (Unbalanced)					-	-	-	-	-
	Analog Output	XLR3-32 x 1 (CH1 Parallel Through or CH1+CH2 Mix)					-	-	-	-	-
	AC IN	IEC AC inlet x1					-	-	-	-	-
Analog Input Impedance		INPUT1 (XLR, TRS Phone) : 3kΩ, INPUT2 (XLR, TRS Phone, RCA Pin) : 10kΩ					-	-	-	-	-
Analog Input Sensitivity	(LEVEL: Maximum)	INPUT1 : LINE= 0dBu / MIC= -32dBu, INPUT2= 0dBu					-	-	-	-	-
	(LEVEL: Center)	INPUT1 : LINE= +10dBu / MIC= -22dBu, INPUT2= +10dBu					-	-	-	-	-
Maximum Analog Input Level		INPUT1 : LINE: +24dBu, MIC: -8dBu, INPUT2 : +24dBu					-	-	-	-	-
Controls		LEVEL x2, LINE/MIC, HPF, D-CONTOUR, THRU/MIX, POWER					-	-	-	-	-
Power Consumption	Idle	18W					-	-	-	-	-
	1/8 Power	74W				60W	-	-	-	-	-
Power Requirements		100V, 110-120V, 220-240V, 110V/127V/220V(Brazil), 50/60Hz					-				

*1 : Measured peak SPL with pink noise @1m.
*2 : Total peak power of individual outputs (AC 120V, 25°C). This value was measured at minimum load impedance, with protection released.
*3 : Full space (4π)