

POWERED LOUDSPEAKERS



DHR15 DHR12 DHR10 DHR15M DHR12M

LOUDSPEAKERS









# **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

# **Custom Designed** Transducers

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

**CHR Series** 

\* 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



## 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.



DHR/CHR10, DHR/CHR12

#### DHR Series

#### Easy-to-use Onboard 2-Channel Mixer

DHR Series speakers have two input channels. CH1 has a combo jack



DHR Series

**Block Diagram** 

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.

	Power / Power Handling	Maximum SPL	Frequency Range (-10dB)	LF	HF	Coverage Angle
DHR15	1000W*1	131dB SPL <sup>*3</sup>	44Hz-20 kHz	15" Cone	1.4" diaphragm, 1" throat	H90° x V60°
DHR12	1000W*1	130dB SPL <sup>*3</sup>	48Hz-20kHz	12" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
DHR10	700W*1	128dB SPL <sup>*3</sup>	52Hz-20kHz	10" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
DHR15M	1000W <sup>*1</sup>	131dB SPL*3	50Hz-20kHz	15" Cone	1.75" diaphragm, 1" throat	H65° x V75°
DHR12M	1000W*1	129dB SPL <sup>*3</sup>	55Hz-20kHz	12" Cone	1.75" diaphragm, 1" throat	H90° x V90°
CHR15	1000W <sup>*2</sup>	125dB SPL*4	49Hz-20 kHz	15" Cone	1.4" diaphragm, 1" throat	H90° x V60°
CHR12	1000W <sup>*2</sup>	124dB SPL*4	54Hz-20kHz	12" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
CHR10	700W*2	122dB SPL <sup>*4</sup>	55Hz-20kHz	10" Cone	1.4" diaphragm, 1" throat	H90° x V60° (Rotatable)
CHR15M	1100W <sup>*2</sup>	125dB SPL*4	58Hz-20kHz	15" Cone	1.75" diaphragm, 1" throat	H65° x V75°
CHR12M	1000W <sup>*2</sup>	123dB SPL <sup>*4</sup>	61Hz-20kHz	12" Cone	1.75" diaphragm, 1" throat	H90° x V90°





DHR/CHR15M, DHR/CHR12M

DHR/CHR15

#### **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 proaudio website for more information).

\*1 Dynamic power \*2 EIA426-A, Passive peak \*3 Measured Maximum SPL (peak) \*4\*2 Calculated Maximum SPL (peak)

### **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 An	gle	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	Туре		FIR-X tun	ing™ (Linear phase	e 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 Imp	edance	-	-	-	-	-			8Ω			
Power Rating (EIA 426-A)	NOISE	-	-	-	-	-	275W		250W		175W	
	PGM					-	550W	550W		500W		
O an a litit site a (d)	MAX	-					1100W					
Sensitivity (IW, IM)		- 121dP SPL (*1)	- 120dP SPL (*1)	- 121dB SDL (*1)	- 120dP SPL (*1)	- 1024P SPL (*1)	950B SPL (2)	930B SPL (*2)	1254P SPL (*2)	940B SPL (2)	930B SPL (2)	
Transdugar		ISIUB SPE (I)	1290B 3PE ( 1)	ISIUB SPE ( I)	ISOUB SPE (I)	1280B 3FE ( 1)	1250B SFL ( 2)	1230B 3FE ( 2)	1250B SFE ( 2)	1240B SPE ( 2)	1220B SFL ( 2)	
Transducer	Diameter	15" Cone	12" Cone	15" Cone	12" Cone	10" Cone	15" Cone	12" Cone	15" Cope	12" Cone	10" Cone	
	Voice Coil	2"		2.5"	12 Cone	2"	3"		2.5"	12 Colle	10 Colle	
	Magnet	5		Ferrite			0		Ferrite		2	
	Diaphragm	1.75"	PET		14" PFT			PET		1.4" PET		
HF	Туре	1" Throat Compress	sion Driver, Coaxial	1" Throat Compression Driver			1" Throat Compres	sion Driver, Coaxial	1" Th	roat Compression I	Driver	
	Magnet			Ferrite			Ferrite					
Enclosure	'											
Material, Fin	ish, Color		Plywood, D	urable Polyurea coating, Black				Plywood, D	urable Polyurea coating, Black			
Floor Monito	r Angle	5	7°	-			5	7°		-		
Dimensions (W × H × D, w	vith rubber feet)	642 x 369 x 505 mm 25.3" x 14.5" x 19.9"	500 x 343 x 454 mm 19.7" x 13.5" x 17.9"	432 x 692 x 405 mm 17.0" x 27.2" x 15.9"	359 x 578 x 340 mm 14.1" x 22.8" x 13.4"	305 x 494 x 300 mm 12.0" x 19.5" x 11.8"	642 x 369 x 505 mm 25.3" x 14.5" x 19.9"	500 x 343 x 454 mm 19.7" x 13.5" x 17.9"	432 x 692 x 405 mm 17.0" x 27.2" x 15.9"	359 x 578 x 340 mm 14.1" x 22.8" x 13.4"	305 x 494 x 300 mm 12.0" x 19.5" x 11.8"	
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	Sid	e x1	Side x2	Top x1, Side x2	Top x1	
Pole Socket		Ф35 r	nm x1	Φ35 mm x2 (0° or -7°)		Φ35 mm x1	Φ35 mm x1		Ф35 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)	Figure 2, Kear X 1 (Fit for M10 x 30- 50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB- DXRDHR12)	Figure 2, Kear 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)	(Fit for M10 x 30- 50mm Eyebolts), Bottom x2, Side x 2 (Fit for M8 x 55mm UB- DXRDHR12)	(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)		Speal	kON NL4MP x 2 (Pa	arallel)	
Options	Speaker Bracket	-	-	-	UB-DXRDHR12	UB-DXRDHR10	-	-	-	UB-DXRDHR12	UB-DXRDHR10	
Amplifier &	DSP											
Amplifier Typ	be	Class-D				1	-	-	-	-	-	
Power	Dynamic*2		1000W (LF: 80	0W, HF: 200W)		700W (LF: 500W, HF: 200W)	-	-	-	-	-	
Rating	Continuous	465W (LF: 400W, HF: 65W) 325W (LF: 400W, HF: 65W)					-	-	-	-	-	
Cooling			Fan cooling, 4 speeds					-	-	-	-	
AD/DA			24 bit / 48 kHz Sampling					-	-	-	-	
HPF/LPF OFF, 1			00, 120Hz 24dB/oct HPF			-	-	-	-	-		
201 0011101,	Speaker	Clin limiting Integral Power Potection DC-fault							-			
Protection	Amplifier		Ther	mal. Output over cu	urrent		-	-	-	-	-	
	Power Supply	Thermal, Output over voltage, Output over current					-	-	-	-	-	
Connectors	Analog Input	INPUT1: Combo x1, INPUT2: Combo x1 + RCA-pin x2 (Unbalanced)					-	-	-	-	-	
	Analog	XLR3-32 x 1 (CH1 Parallel Through or CH1+CH2 Mix)					-	-	-	-	-	
	Output							-	-			
Analog Input Impedance INPUTI (XLR TRS Phone) · 3k0 INPUT2 (XLR TRS Phone RCA Pin) · 10k0					in) · 10k0	-	-	-	-	-		
Analog	(LEVEL: Maximum)		INPUT1 : LINE= (	DdBu / MIC= -32dB	u, INPUT2= OdBu		-	-	-	-	-	
Input Sensitivity	(LEVEL: Center)	INPUT1 : LINE= +10dBu / MIC= -22dBu, INPUT2= +10dBu					-	-	-	-	-	
Maximum Ar Level	nalog Input		INPUT1 : LINE: +2	24dBu, MIC: -8dBu,	, INPUT2 : +24dBu		-	-	-	-	-	
Controls		LE	LEVEL x2, LINE/MIC, HPF, D-CONTOUR, THRU/MIX, POWER					-	-	-	-	
Power Idle			18W					-	-	-	-	
Consumption	1/8 Power		74	1W	001//D	60W	-	-	-	-	-	
Power Requirements		10	JUV, 110-120V, 220-	-240V, 110V/127V/2	20V(Brazil), 50/60H	1Z	1		-			

\*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)



\*Please visit our Web site for the latest information (http://www.yamahaproaudio.com/)



Yamaha Pro Audio official Instagram







YAMAHA CORPORATION P.O.BOX1, Hamamatsu Japan

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