

Multimedia/Source Units/Marine Features

		MULTIMEDIA	SOURCE UNITS												MARINE			
		VRX755VD	DRZ9255	DXZ955MC	DXZ855MP	DXZ945MP	DXZ755MC	DXZ655MP	DXZ555MP	DB455MC	DB355MP	DB255	DB155	ADB340MP	XA311	CMD4	M455	M255
		DVD Multimedia Station with Touch Panel Control	CD Receiver / CeNET Control	CD/MP3/WMA Receiver / CeNET & Touch Panel Control & Digital Recorder	CD/MP3/WMA Receiver / CeNET & Touch Panel Control	CD/MP3/WMA Receiver / CeNET & Touch Panel Control	CD/MP3/WMA Receiver / CeNET Control & Digital Recorder	CD/MP3/WMA Receiver / CeNET Control	CD/MP3/WMA Receiver / CeNET Control	CD/MP3/WMA Receiver & Digital Recorder	CD/MP3 Receiver	CD Receiver	CD Receiver	CD/MP3/Cassette Receiver	Cassette Receiver / C-BUS Control	Extreme Marine CD Receiver / CeNET Control	Marine CD Receiver / CeNET Control	Marine CD Receiver
Multi-media	Fully Motorised 7-inch Wide Screen Color LCD	●																
	-pixel display	336,960		38,400	38,400	20,480	7,680	7,680										
	Screen Resolution of	1440 x 234		400 x 96	400 x 96	320 x 64	160 x 48	160 x 48										
	Touch Panel Control with Soil Resistant Finish	●		●	●													
	Excellent Off-axis Viewing	●																
Source	2 ZONE Entertainment	●																
	Music Catcher Digital Recorder Built-in			●						●								
	Single Play DVD Mechanism plays: DVD Video, CD Audio, VCD	●																
	Plays MP3 and WMA Encoded CDs			●	●	●	●	●	●	●								
	Plays MP3 Encoded CDs	●									●			●				
Sound Make	Plays CD-R/RW	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
	Full Logic Cassette with Auto Reverse													●	●			
	Auto Reverse													●	●			
	AC Processor IV with Anti-Distortion Filter			●														
	Anti-Distortion Filter				●	●	●											
	Dolby Pro Logic II			●		●												
	Built-in DSP for Time Alignment, Seat Position, Virtual Space Enhancer		Digital Time Alignment	●	●	●												
	3-Band Parametric EQ	●	5-Band	●	●	●												
	2-Band Parametric EQ				●			Z-Enhancer Plus	Z-Enhancer Plus							●	Z-Enhancer Plus	
	Z-Enhancer EQ									●	●	●	●		●			●
Audio	3-Band Graphic EQ													●				
	Built-in adjustable High Pass Crossovers for Front/Rear/Centre Channels: Through/50Hz/80Hz/120Hz		●	●	●	●												
	Built-in adjustable Low Pass Crossover with Subwoofer Volume Control: 50Hz/80Hz/120Hz		●	●	●	●		●									●	
	Magna Bass EX	●						●									●	
	24-Bit D/A Converter	●	Burr-Brown	●	●	●												
	High Power	53W x 4	—	53W x 4	53W x 4	53W x 4	53W x 4	53W x 4	53W x 4	52W x 4	51W x 4	51W x 4	51W x 4	50W x 4	40W x 4	53W x 4	52W x 4	50W x 4
	2 Zone Control	●																
	Shock Proof Memory (45sec.)			●														
	4ch Loop Back Circuit																	
	4-Volt/6ch Gold Plated RCA Line Level Output		Max 8V / 8ch	●	●	●												
Appearance	4-Volt/6ch RCA Line Level Output																	
	6ch RCA Line Level Output	●														●		
	4ch RCA Line Level Output																●	
	2ch RCA Line Level Output																	●
	Built-in Amplifier Bypass Circuit (=AMP Canceller)	●		●	●	●	●	●	●	●	●	●	●	●	●			
	Stainless Faceplate			●	●													
	Aluminium Faceplate					●	●	●	●									●
	728 Variable Color LCD and 728 Variable Color Buttons (12 presets and 3 users)																	
	80 Variable Color LCD and 80 Variable Color Buttons (9 presets and 1 users)																	
	Optimedia Display (Touch Panel Control)	●		●	●	●												
Others	Full Color Full Dot LCD			●	●													
	Auto Dimmer			●	●													
	Retractable Rotary Volume Control			●	●													
	Rotary Volume Control		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Screen Saver with User-Programmable Message Information			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Adjustable Display Contrast			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	LCD with Spectrum Analyzer			●	●	●	●	●	●	●	●	●	●	●	●			
	Motorised Detachable Control Panel			●	●	●	●	●	●	●	●	●	●	●	●			
	Flip-Down Detachable Control Panel	●												Flip-Down only		Flip-Down only		
	Extention	CD Text, CD Tilt, Station Tilt	●	CD Text only	●	●	●	●	●	●	●	●	●	●	●	●	● (Except CD Text)	● (Except CD Text)
IR Remote Control		●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Radio Presets		18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	18FM / 6AM	20FM / 5AM	18FM / 6AM	18FM / 6AM	18FM / 6AM
Detachable Control Panel with Blinking LED for Anti-Theft				●	●	●	●	●	●	●	●	●	●	●	●			
Partially Detachable Control Panel		●									●	●	●	●				●
Other Features	CeNET Control of:																	
	DVD Changer	●	●	●	●	●	●	●	●									
	TV tuner	●	●	●	●	●	●	●	●									●
	Dolby Digital/dts 5.1ch Processor	●																
	Sirius Satellite Radio Receiver	●		●	●	●	●	●	●							●	●	
	6-Disc CD Changer	●	●	●	●	●	●	●	●							●	●	
	C-BUS control of C-BUS CD Changer														●			
	Fibre Optical Output for Use with Dolby Digital/dts 5.1ch Processor	●																
	Video Input	1+TV+DVD A/C																
	AUX Input	1																
Other Features	Video Output	1																
	Adjustable AUX Input	—	4ch (2ch x 2)	2ch	2ch	2ch	2ch	2ch	2ch	2ch	2ch	2ch	2ch	2ch		2ch	2ch	
	AUX input																	
	Others	● Full-Loading ● No Hide-away	● 96kHz Sampling ● Silver-Coated 6N RCA Cable ● Copper-Plated Chassis													● Marine Remote Capability	● Marine Remote Capability	

MP3/WMA Feature			DXZ955/755MC	DXZ855/655/555MP	DB455MC	DB355MP	
Media	CD-R		●	●	●	●	
	CD-RW		●	●	●	●	
CD R/RW Writing (1)	Disc at Once		●	●	●	●	
	Track at Once		●	●	●	●	
	Session at Once		●	●	●	●	
	Multi Session	Mixmode CD	●	●	●	●	
CD Extra		●	●	●	●		
Yellow Book	Mode1		●	●	●	●	
	Mode2 Form1		●	●	●	●	
	Mode2 Form2					(●)	
File System	ISO9660	Level1	●	●	●	●	
		Level2	●	●	●	●	
	ISO9660 Extension	Joliet	Play	●	●	●	●
		File Name		128-Bytes	128-Bytes	128-Bytes	128-Bytes
	Others	Romeo	Play	●	●	●	●
		File Name		128-Bytes	128-Bytes	128-Bytes	128-Bytes
Fat	File Name						
FILE Descriptor	.mp3 / .MP3		●	●	●	●	
	.Mp3 / .Mp3		●	●	●	●	
	WMA		●	●	●	●	
	.mp		●	●	●	●	
MPEG Format	MPEG1		●	●	●	●	
	MPEG2		●	●	●	●	
	MPEG2.5		●	●	●	●	
Sampling Frequency	MPEG1		Fs=32/44.1/48kHz	Fs=32/44.1/48kHz	Fs=32/44.1/48kHz	Fs=32/44.1/48kHz	
	MPEG2		Fs=16/22.05/24kHz	Fs=16/22.05/24kHz	Fs=16/22.05/24kHz	Fs=16/22.1/24kHz	
	MPEG2.5		Fs=11.025/12kHz	Fs=11.025/12kHz	Fs=11.025/12kHz	Fs=16/22.1/24kHz	
	WMA		Fs=22.05 - 44.1kHz	Fs=22.05 - 44.1kHz	Fs=22.05 - 44.1kHz		
Bitrate	MPEG1		32kbps - 320kbps	32kbps - 320kbps	32kbps - 320kbps	All Bitrate except 8kbps	
	MPEG2		8kbps - 160kbps	8kbps - 160kbps	8kbps - 160kbps	All Bitrate except 8kbps	
	MPEG2.5		8kbps - 160kbps	8kbps - 160kbps	8kbps - 160kbps	All Bitrate except 8kbps	
	WMA		48,64,80,96,128,160,192kbps	48,64,80,96,128,160,192kbps	48,64,80,96,128,160,192kbps		
Others	Directory Depth		Max 8	Max 8	Max 8	Max 8	
	File Name Number		128-Bite	128-Bite	128-Bite	28	
	Total File Number		512	512	512	254	
	Total Folder Number		255	255	255	128	
	ID3 Tag	ver.1.x		● (#2)	● (#2)	● (#2)	●
		ver.2.x		● (#3)	● (#3)	● (#3)	●
		Title		●	●	●	●
		Artist		●	●	●	●
		Album		●	●	●	●
		Year					
		Genre					
		Comment					
	WMA-Tag	Jacket(JPEG)					
		Title		●	●	●	●
		Artist		● (#4)	● (#4)	● (#4)	●
		Copyright					
		Description					
		Rating					
		Album #		●	●	●	●
		RMP		●	●	●	●
	RMP	Title		●	●	●	●
		Artist		●	●	●	●
		Album		●	●	●	●
Year							
Genre							
Comment		(#5)	(#5)	(#5)			
VBR			●	●	●	●	
Play List	.m3u		●	●	●	●	
	.asx		●	●	●	●	
Lyrics List							

NOTE: 1. With S1-WMA, only alphanumeric characters and some symbols are accepted. Up to five hierarchies are supported Number that can be recognized by P-List is five (with new time-stamp).
 Maximum number of files for 1P-List is 255.
 2. 30 characters.
 3. For one character, Ver. 1.1 is used. More the one character is supported by rounding off. With Ver. 2, 60 bytes worth of characters is supported. Up to 30 characters when recorded in Unicode.
 4. Supports WMA-TAG recorded with Winamp2.
 5. RMP SI fields means not supported.

Amplifiers

	APA4300HX	APA4320	APA2160	APA2001	APA450	APA250	APX480M	APX280M
AMPLIFIER BASIC INFORMATION								
Number of Channels	4	4	2	1	4	2	4	2
Maximum Power Output (Watts)	600	640	320	400	400	200	640	320
Continuous Power Output (Watts)	75 x 4	80 x 4	80 x 2	200 x 1	50 x 4	50 x 2	80 x 4	80 x 2
MOSFET Power Supply	●	●	●	●	●	●	●	●
Protection Circuits	●	●	●	●	●	●	●	●
HP-LP Electronic Crossover	●	●	●	●	●	●	●	●
Variable Crossover Frequency	55Hz-200Hz	55Hz-500Hz	55Hz-500Hz	50Hz-250Hz	55Hz-5.5kHz	55Hz-5.5kHz	55Hz-500Hz	55Hz-500Hz
10X Frequency Multiplier	●	●	●	●	●	●	●	●
Mixed Mode Operation	●	●	●	●	●	●	●	●
Bridgable (Number of Channels)	4/3/2	4/3/2	2/1		4/3/2	2/1	4/3/2	2/1
2 Ohms Load Capability (in Stereo)	●	●	●	●	●	●	●	●
Ground Loop Isolated Input Circuit	●	●	●	●	●	●	●	●
Turn On/Off Muting Circuit	●	●	●	●	●	●	●	●
Gold-Plated Connectors	●	●	●	●	●	●	●	●
Bass Extender 0-18dB	●	●	●	●	●	●	●	●
Speaker Level Inputs	●	●	●	●	●	●	●	●
MAXIMUM POWER OUTPUT								
Total Power (Watts)	600	640	320	400	400	200	640	320
Per Channel (Watts)	150 x 4	160 x 4	160 x 2	400 x 1	100 x 4	100 x 2	160 x 4	160 x 2
CONTINUOUS POWER OUTPUT PER/CH.								
4 Ohms, 20Hz-20kHz (Watts)	75 x 4	80 x 4	80 x 2	200 x 1	50 x 4	50 x 2	80 x 4	80 x 2
THD @ Rated Output. (%)	0.0012	0.08	0.05	0.10	0.05	0.08	0.08	0.05
2 Ohms, 20Hz-20kHz (@ .5%THD)		115 x 4	125 x 2	400 x 1	90 x 4	110 x 2	115 x 4	125 x 2
Bridged, 1kHz (@ .5%THD)		230 x 4	250 x 1		190 x 2	230 x 1	230 x 4	250 x 1
LOAD CAPACITY								
Stereo, Ohms	2	2	2	2	2	2	2	2

Processors and Equalizers

	EQS744	MCD360
GENERAL INFORMATION		
Graphic EQ Bands	5	
3 Band Parametric EQ		
4 Band Parametric EQ		
Adjustable Center Frequencies		
Adjustable Q Factor		
DSP Presets (Factory/User)		
EQ Presets (Factory/User)		
7 Adj. Sound Field Parameters		
5 Seating Positions		
3 Band F/R Ind. Digital Parametric EQ		
High Pass Crossover Slope (dB)	12	
Low Pass Crossover Slope (dB)		
F/R Parametric Presets		
Digital Fiber Optic Inputs		
Digital Fiber Optic Outputs		
Pink Noise Generator		
Automatic Loudness Selector		
Virtual Space Enhancer (VSE) Circuit		
AUX Input	●	
Gold RCA In/Out Connectors		●
EQ Defeat Switch	●	
Adj. Line Level Subwoofer Output	●	●
Subsonic Filter		
Selectable Subwoofer LP Frequency	●	●
Selectable HP Frequency		●
Subwoofer Stereo/Mono		
Speaker Level Input		
Ground Loop Isolation Circuit	●	●
Built-In Bass EQ		●
Remote Subwoofer Level Control		●
2/4/6 Channels of Output		●
Separate Front and Rear Crossover Points		●
Output Voltage	7V	5V
CeNET Control		
EQ AND CROSSOVER INFORMATION		
EQUALIZER TONE ACTION		
18dB @ 40Hz, 180Hz, 1kHz, 7kHz, 16kHz	●	
Variable 20-60Hz, 120-300Hz, 1k-2.4kHz, 7k-20kHz		
12dB @ 30 or 50Hz		
12dB @ 100,200,400,1kHz,3kHz,12kHz		
HIGH PASS FREQUENCY		
Selectable @ 50,80,120Hz (18dB/Oct.)		●
Variable 32Hz-8kHz (Front), 32-400Hz (Rear)		
LOW PASS FREQUENCY		
Selectable @ 50, 80, 120Hz	●	
Selectable @ 60,90Hz		
Variable @ 50-250Hz		●
Variable @ 32-400Hz		
Selectable 70,90,120Hz		
SUBWOOFER LINE OUTPUT		
Adjustable Range (dB)	0-12	



Subwoofers/
Proaudio Speakers

	SW12X	SW10X	SRW1285	SRW1085	SRW1245	SRW1045	SRS1685	SRC4685	SRC5795	SRR6985	SRR1685
SIZE OF SPEAKER											
3/4 inch											
1 inch											
2.7 inch											
3 1/2 inch											
4 inch											
5 1/4 inch											
6 1/2 inch											
4 x 6 inch											
5 x 7/6 x 8 inch											
6 x 9 inch											
8 inch											
10 inch											
12 inch											
15 inch											
TYPE OF SPEAKER											
Tweeter											
Midrange											
Woofer											
Dual Voice Coil Subwoofer											
Single Voice Coil Subwoofer											
Dual Cone											
Coaxial											
3 Way											
CONE MATERIAL											
Pure Silk Dome (Tweeter)											
Polyether Imide (Midrange)											
Polypropylene											
Glass Fiber											
CONTINUOUS POWER (W)	300	300	350	300	350	300	45	35	35	60	40
MAX MUSIC POWER (W)	600	600	750	600	750	600	200	140	150	280	180
MOUNT DEPTH (in)											
	6.6	5.9	5 7/8	5	5 1/8	5	5	1 9/16	2	2 15/16	1 7/8
CUT-OUT SIZE											
Width (in)	11.5	9.4	11	9 1/16	11	9 1/16	9 1/16	4 1/8	5	5 15/16	5 1/4
Depth (in)								6 1/8	7 3/8	8 3/4	

Phaze1/
Marine Speakers

	SRS1625	SRR1635	SRR6985	SRR1627	SRR1625	SRR1027	SRR1615	SRR6915	SRC5715	SRC4615	SRC925	SRI205	SRI303	CMCY7.1S/ CMCY7.1	CMCY7.1	CMDC7.1	CM1635	CM1625	CM1605	CM5W10.1S/ CM5W10.1
SIZE OF SPEAKER																				
3/4 inch																				
1 inch																				
3 1/2 inch																				
4 inch																				
5 1/4 inch																				
6 1/2 inch																				
4 x 6 inch																				
5 x 7/6 x 8 inch																				
6 x 9 inch																				
7 inch																				
8 inch																				
10 inch																				
12 inch																				
15 inch																				
TYPE OF SPEAKER																				
Tweeter																				
Midrange																				
Woofer																				
Subwoofer																				
Dual Cone																				
Coaxial																				
3 Way																				
Marine																				
CONE MATERIAL																				
Metalized PEI Balanced-Drive (Tweeter)																				
Dome Tweeter																				
Titanium (Tweeter)																				
Metalized PEI Balanced-Drive (Midrange)																				
Polypropylene Cone Woofer																				
Metalized MIPP Cone Woofer																				
MIPP Cone Woofer																				
CONTINUOUS POWER (W)	40	40	50	35	30	30	30	35	35	25	20	40	50							
MAX MUSIC POWER (W)	180	200	250	180	140	120	180	180	140	100	60	150	120	160	130	120	100	100	100	350
MOUNT DEPTH (in)																				
	2 1/4	2 3/16	2 7/8	1 7/8	1 13/16	1 3/4	1 7/8	2 3/4	2 3/8	1 7/8	1 3/8									
CUT-OUT SIZE																				
Width (in)	5	4 7/8	5 5/16	4 7/8	4 1/2	4	4 7/8	5 15/16	4 15/16	3 15/16	3 1/8	1 5/8								
Depth (in)			8 3/4					8 3/4	7 3/16	5 7/8										

Multimedia Centre

	VRX755VD
MONITOR SECTION	
Screen Size (W x H), mm	154.0 x 87.0 (7-inch)
Display Type	Transparent-type TN liquid crystal display
Drive Principle	TFT (Thin Transistor) active matrix display
Number of Pixels	336,960
VRC Video Input	1.0 ± 0.2 Vp-p (input impedance 75 Ω)
VRC Audio Input	130 ± 60 mVrms (input impedance 10 k Ω or more)
TUNER SECTION	
Frequency Bands	
FM: (MHz) 0.2 MHz steps	87.9 to 107.9
AM: (kHz) 10 kHz steps	530 to 1,710
FM Usable Sensitivity (dBf)	9
FM 50 dB Quieting Sensitivity (dBf)	15
FM Alternate Channel Selectivity (dBf)	70
FM Stereo Separation @1 kHz (dB)	35
FM Stereo Freq. Resp. @ ± 3 dB (Hz)	30 to 15,000
DVD SECTION	
Useable Discs	DVD video disc
Frequency Response (Hz)	20 to 22,000 (48 kHz) (+1 dB/-1 dB)
Distortion	0.01
CD SECTION	
Wow/Flutter (WRMS)	Below measurable limits
S/N Ratio (dB) 1 kHz	
Frequency Response (Hz)	20 to 20,000 (+1 dB/-1 dB)
Dynamic Range (dB) 1 kHz	
Harmonic Distortion (%)	0.01
AUDIO SECTION	
Power Output (DIN45324, +B = 14.4 V)	31W x 4
Maximum Power Output	53W x 4
GENERAL	
Dimensions (W x H x D), mm	178 x 50 x 165
Hide-away unit (W x H x D), mm	
Weight (kg)	2.4
Power Consumption	4.0 A (at 1 W)
Power Requirement	14.4 V DC (10.8 ~ 15.6 V)
Speaker Impedance	4Ω (4Ω to 8Ω allowable)

DVD Player

	VZ625	VST55
Signal to Noise Ratio	90dB	
Frequency Response	20Hz-20kHz	
Dynamic Range		
Harmonic Distortion	0.02%	
Separation	80dB	
Video Output Level	1.0V p-p	
Line Level Output	1.8V	

CD Changers

	DCZ625	DC825
Wow/Flutter (WRMS)	Below measurable limit	Below measurable limit
S/N Ratio (dB)	105	105
Dynamic Range (dB)	95	95
Frequency Response (Hz)	5 to 20,000	5 to 20,000
Harmonic Distortion (%)	0.01	0.01
Dimensions (W x H x D), mml	225 x 63 x 167	225 x 63 x 167

Monitors

	OHMD102	OHMD74	OHM153	OHM102	VMA7194	VMA5884
SPECIFICATIONS						
Power Requirement	12V DC	12V DC	12V DC	12V DC	12V DC	12V DC
Current Consumption	1.5A	1.5A	1.0A	1.9A	0.8A	0.8A
Brightness Level	350	350	350	350	400	360
Viewing Angle	L/R 60/60 DEG U/D 40/55 DEG	L/R 60/60 DEG U/D 40/55 DEG	L/R 60/60 DEG U/D 40/55 DEG	L/R 60/60 DEG U/D 40/55 DEG	L/R 60/60 DEG U/D 30/40 DEG	L/R 50/50 DEG U/D 15/35 DEG
Pixels	336,960	336,960	384,000	384,000	336,960	280,800
Resolution	1440x234	1440x234	800x480	800x480	1440x234	640x234
GENERAL SPECIFICATIONS						
Display Type	Color TFT, Active Matrix	Color TFT, Active Matrix	Color TFT, Active Matrix	Color TFT, Active Matrix	Color TFT, Active Matrix	Color TFT, Active Matrix
Screen Size	10.2 inches	7 inches	15.3 inches	10.2 inches	7 inches	5.8 inches
Weight	3.2 lbs	2.2 lbs	2.5 lbs	2.6 lbs	1.5 lbs	1.5 lbs
Dimensions (W x H x D)	9.75" x 9.25" x 2"	226mm x 245mm x 57mm	15" x 2" x 13 1/8"	10" x 2" x 9"	183.2mm x 128mm x 29mm	161mm x 115mm x 29mm
Video System	NTSC/PAL	NTSC	NTSC/PAL	NTSC/PAL	NTSC/PAL	NTSC/PAL

DVH940 Processor

	DVH940
Signal to Noise Ratio	95dB
Distortion	0.01%
Separation	80dB
Input Sensitivity	0.6V, 1.2V, 2V
Subwoofer Cutoff Frequency	50Hz, 80Hz, 120Hz
Subwoofer Level Control	SP-GAIN +/- 10dB
Output Voltage	4V
Input Impedance	47K ohm
Output Impedance	300 ohm
Parametric EQ bands	Bands x 3 (Front/Center/Rear)
Q	1-20 (5 points)
EQ Center Frequency Range	20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k, 5k, 6.3k, 8k, 10k, 12.5k, 16k, 20k
Parametric EQ Boost/Cut	12dB +/-
Time Correction Range	0-5ms (Center) 0-5ms (Rear)
Frequency Response	20Hz-44kHz

Processor and Equalizer

	MCD360	EQ5744
Frequency Response	10-50,000 Hz	10-50,000 Hz
Signal to Noise Ratio	100dB	105dB
EQ Tone Action		
High-Pass Frequencies	32-8,000 Hz 32-400 Hz Rear	
Low-Pass Frequencies		
Subwoofer Line Output	0-18dB	0-12dB
Center Equalizing Frequencies	25-100Hz	40Hz, 180Hz, 1kHz, 7kHz, 16kHz
Auxiliary Gain Sweep		0-4V
Output Voltage		
Dimensions (WxHxD) mm	140 x 245 x 214	178 x 224 x 211

Amplifiers

	APA4300HX	APA4320	APA2160	APA2001	APA450	APA250	APX480M	APX280M
Continuous Power Output (20 ~ 20,000 Hz, 4 Ω)	75 W x 4 (4-ch. operation)	80 W x 4 (4-ch. operation)	80 W x 2 (2-ch. operation)	200 W x 1 (1-ch. operation)	50 W x 4 (4-ch. operation)	50 W x 2 (2-ch. operation)	80 W x 4 (4-ch. operation)	80 W x 2 (2-ch. operation)
Max. Power Output	150 W x 4	160 W x 4	160 W x 2	400 W x 1	100 W x 4	100 W x 2	160 W x 4	160 W x 2
Frequency Response (Hz)	5 to 100,000 (-1 dB)	10 to 50,000 (+/-1 dB)	10 to 50,000 (+/-1 dB)					
S/N Ratio at Min. Volume	112 dB	100 dB	100 dB					
Power Consumption	48 A	37 A						

Radio CD Combinations

	DRZ9255	DXZ955MC	DXZ855MP	DXZ945MP	DXZ755MC	DB455MC	DXZ655MP
TUNER SECTION							
Frequency Bands							
FM: (MHz) 0.2 MHz steps	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9
AM: (kHz) 10 kHz steps	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710
FM Usable Sensitivity (dBf)	9	9	9	9			
FM 50 dB Quieting Sensitivity (dBf)	15	15	15	15			
FM Alternate Channel Selectivity (dBf)	70	70	70	70			
FM Stereo Separation @ 1 kHz (dB)	35	32	32	35			
FM Stereo Freq. Resp. @ 3 dB (Hz)	30 to 15,000	30 to 15,000	30 to 15,000	30 to 15,000			
CD SECTION							
Wow/Flutter (WRMS)	Below measurable limit	Below measurable limit	Below measurable limit	Below measurable limit	Below measurable limits	Below measurable limits	Below measurable limits
S/N Ratio (dB)	112	100	100	100	100	100	100
Frequency Response (Hz)	5 to 20,000	5 to 20,000	5 to 20,000	5 to 20,000	5 to 20,000	10 to 20,000	5 to 20,000
Dynamic Range (dB)	100	96	95	96	95	93	95
Harmonic Distortion (%)	0.003	0.006	0.01	0.01	0.01	0.03	0.01
AUDIO SECTION							
Power Output (DIN45324, +B = 14.4 V)		31W x 4	31W x 4	31W x 4	31W x 4	25W x 4	25W x 4
Maximum Power Output		53W x 4	53W x 4	53W x 4	53W x 4	52W x 4	53W x 4
GENERAL							
Dimensions (W x H x D), mm	178 x 50 x 178	178 x 50 x 160	178 x 50 x 160	178 x 50 x 155	178 x 50 x 155	178 x 50 x 155	178 x 50 x 155
DC/DC Converter (W x H x D)mm	175 x 43 x 99						
Remote Control (W x H x D), mm	52 x 125 x 12	43.4 X 112.7 X 12.5	43.4 X 112.7 X 12.5	44 x 110 x 27	43.4 X 112.7 X 12.5	43.4 X 112.7 X 12.5	43.4 X 112.7 X 12.5
Weight (kg)	1.7	1.7	1.7	1.7	1.6	1.3	1.6
Power Consumption: less than	1.4A	15A	15A	15A	15A	15A	15A
Speaker Impedance	4	4	4	4	4	4	4
	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)

Radio CD Combinations

	DXZ555MP	DB355MP	DB255	DB155	CMD4	M455	M255
TUNER SECTION							
Frequency Bands							
FM: (MHz) 0.2 MHz steps	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9	87.9 to 107.9
AM: (kHz) 10 kHz steps	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710	530 to 1,710
FM Usable Sensitivity (dBf)		11	11		9	9	
FM 50 dB Quieting Sensitivity (dBf)		17	17		15	15	
FM Alternate Channel Selectivity (dBf)		75	75		70	70	
FM Stereo Separation @ 1 kHz (dB)		35	35		35	35	
FM Stereo Freq. Resp. @ 3 dB (Hz)		30 to 15,000	30 to 15,000		30 to 15,000	30 to 15,000	
CD SECTION							
Wow/Flutter (WRMS)	Below measurable limits	Below measurable limits	Below measurable limits	Below measurable limits	Below measurable limit	Below measurable limit	Below measurable limit
S/N Ratio (dB)	100	100	100	100	100	100	100
Frequency Response (Hz)	5 to 20,000	10 to 20,000	10 to 20,000	10 to 20,000	10 to 20,000	10 to 20,000	10 to 20,000
Dynamic Range (dB)	95	95	95	93	95	95	93
Harmonic Distortion (%)	0.01	0.01	0.01	0.03	0.01	0.01	0.03
AUDIO SECTION							
Power Output (DIN45324, +B = 14.4 V)	25W x 4	25W x 4	25W x 4	25W x 4	29W x 4	29W x 4	27W x 4
Maximum Power Output	53W x 4	51W x 4	51W x 4	51W x 4	53W x 4	52W x 4	50W x 4
GENERAL							
Dimensions (W x H x D), mm	178 x 50 x 155	178 x 50 x 152	178 x 50 x 152	178 x 50 x 155	Body:180.4 x 51.2 x 186 Escutcheon:199.4 x 91.85 x 47	178 x 50 x 155	178 x 50 x 155
Remote Control (W x H x D), mm	43.4 X 112.7 X 12.5	Optional Item					
Weight (kg)	1.3	1.1	1.1	1.2	1.6	1.2	1.2
Power Consumption: less than	15A	15A	15A	15A	15A	15A	15A
Speaker Impedance	4	4	4	4	4	4	4
	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)	(4 to 8 allowable)

Radio Cassette Combinations

	XA311
TUNER SECTION	
Frequency Bands	
FM: (MHz) 0.2 MHz steps	87.9 to 107.9
AM: (kHz) 10 kHz steps	530 to 1,710
TAPE SECTION	
Wow/Flutter (%)	0.10
S/N Ratio	
Standard Tape, without NR (dB)	53
Metal Tape, without NR (dB)	
Frequency Response	
Standard Tape (Hz)	30 to 15,000
Metal Tape (Hz)	
AUDIO SECTION	
Power Output (DIN45324, +B = 14.4 V)	22W x 4
Maximum Power Output	40W x 4
GENERAL	
Dimensions (W x H x D), mm	178 x 50 x 155
Remote Control (W x H x D), mm	
Weight (kg)	1.3
Power Consumption: less than	10A
Speaker Impedance	4 (4 to 8 allowable)

Radio CD Cassette Combination

	ADB340MP
TUNER SECTION	
Frequency Bands	
FM: (MHz) 0.2 MHz steps	87.9 to 107.9
AM: (kHz) 10 kHz steps	530 to 1,710
TAPE SECTION	
Wow/Flutter (%)	0.06
S/N Ratio	
Metal Tape, without NR (dB)	67
Frequency Response	
Metal Tape (Hz)	30 to 20,000
CD SECTION	
Wow/Flutter (WRMS)	Below measurable limit
S/N Ratio (dB)	100
Frequency Response (Hz)	10 to 20,000
Dynamic Range (dB)	95
AUDIO SECTION	
Power Output (DIN45324, +B = 14.4 V)	27W x 4
Maximum Power Output	50W x 4
GENERAL	
Dimensions (W x H x D), mm	178 x 100 x 155
Remote Control (W x H x D), mm	44 x 110 x 27
Weight (kg)	2.6
Power Consumption: less than	15 A
Speaker Impedance	4

FEATURE ICONS

Multimedia/Source Units

DVD Video Playback
The unit is compatible with the DVD Video format so you can watch DVD software in your car.

dts Control
Units with this logo are designed for connection and complete control of the external Clarion hide-away dts/Dolby Digital & Pro Logic II Decoders "DVH940" via CeNET.

Dolby Pro Logic II
Dolby Pro Logic II enables superior surround sound and positioning compared to the former version of surround system. More sophisticated decoding process maximizes the effect of surround sound from the source encoded with Dolby surround. In addition to that, Dolby Pro Logic II is designed to get 5.1-channel sound effect from any 2-channel software, which means you can enjoy perfect surround sound even if the software is in conventional stereo recording. "Phantom mode" is also available in which quasi 5.1-channel sound field is reproduced from 4-speaker system without center speaker.

MP3/WMA
With decoders for both MP3 and WMA (Windows Media Audio), you can play either type of ripped or downloaded audio file. Also supports ID3 Tag for display of metafile information. With digital compression, these formats enable up to 12 hours of music to be fit onto a single CD-R/RW while delivering CD-level quality.

CD Text
When a CD Text compatible CD is played, the artist name and tracks recorded on the CD are shown on the LCD screen.

iPod
iPod Interface lets you easily connect your iPod portable music player for seamless enjoyment of your musical collection.

Sirius Satellite Radio
A subscriber-based digital satellite radio system offering 100 channels of CD digital quality programming from coast to coast, including 60 channels of commercial-free music, plus 40 channels of news, sports, and other categories. It offers reception quality that dramatically outperforms terrestrial radio broadcasts.

Music Catcher System
Freely record, play and erase tunes using a built-in memory. It can store up to about 80 tunes (in LP mode) as high-quality music data files.

CD-R/RW
Capability to play back CD-R/RW audio discs you have recorded at home.

New Optimedia Display
Advanced human-machine interface that fuses high quality graphics and interactive touch-screen operation in an eye-catching design.

Stainless Steel Faceplate
Faceplate is constructed of stainless steel material to add a clean, cool look to the head unit in a way that matches well with most car interiors.

Aluminum Faceplate
Faceplate is constructed of aluminum material to add a clean, cool look to the head unit in a way that matches well with most car interiors.

TOUCH PANEL
It only touches it in the fingertip, and it is the indication vessel which makes most machine control possible.

Variable Color Display
This LCD display lets you mix RGB (Red/Green/Blue) levels to create the background color (DXZ755MC, DXZ655MP). The control buttons on the faceplate automatically change colors to match the display.

Message Information
On select ProAudio Source Units, you can display your own custom messages up to 30-characters. Messages are displayed when the unit is turned on or off.

Auto Dimmer
Automatically dims the displays brightness when the headlights are turned on so that the display is not a distraction during nighttime driving.

Rotary Volume Control
Adjusting the volume is easily done since you do not need to take your eyes off the road when turning the knob, thus ensuring safety while driving. The rotary control also has a retractable feature found on some models with RRC symbol which allows you to retract the button when the system is not in use.

Smart Control Key
One-finger easy, accessing the exact song you want to hear on a loaded CD has never been quicker or simpler.

5.1-Channel Surround
The unit is compatible with Dolby Digital and ds to support 5.1-channel audio. Comprised of five channels (Left, Right, Center, Rear Left and Rear Right) plus a dedicated low-frequency channel for a subwoofer, this system reproduces the sound of movies and music with "being there" reality.

AC-Processor IV
Advanced digital sound processing technology including Time Alignment Control to adjust the time delay among speakers, VSE (Virtual Space Enhancer) to digitally correct irregular reflection and polarization, Parametric EQ to adjust the equalization of each frequency band independently, and Anti-Distortion Filter to restore lost dynamics in MP3 and WMA files.

Digital 3-way X-over
Digitally splits up the frequency range into three bands, feeding each to a separate driver - woofer, midrange and tweeter - for accurate sound with less distortion.

Time Alignment Control
Lets you easily adjust the time delay among the speakers to best suit your interior simply by choosing the type of your car (sedan, mini-van, etc.).

VSE (Virtual Space Enhancer)
Lets you digitally compensate for irregular reflection, polarization, and other acoustic problems that may accompany your car's interior.

Anti-Distortion Filter
Eliminates phase distortion in high and low frequencies and emphasizes the natural frequency characteristics of the sound, for natural flat response and clear details.

Z-Enhancer Plus
Powerful bass and a fresh, crystal-clear treble. Adjustment for 3 different sound settings can be made in easy steps.

Z-Enhancer
Three types of sound quality pat-terns are pre-set for easy selection. Boost the bass only, the treble only, or both, with the level of boost adjustable by the user.

Magna Bass EX
Boosts the bass range in the vicinity of 50 Hz by nearly 10 dB, so the bass comes through loud and clear even if you're listening at low volume.

Low-Pass and High-Pass Filters
A filter that passes signals below a cut-off frequency (LPF) or above a cut-off frequency (HPF), used to optimize the signal for high or low frequency reproduction.

24-bit D/A Converter
Clarion's D/A converter re-quires the 16-bit data from CDs into 24-bit data for rich musical tones.

Parametric EQ
Lets you adjust the equalization of each frequency band independently for the front, center, and rear speakers.

Audio 2-Zone
Lets you divide your in-car entertainment into 2 discrete zones, so the people up front can be listening to the radio while those on the back seat watch a movie on DVD.

2-Zone Entertainment
Function that allows people in the front and back seats to enjoy separate visual or audio entertainment sources.

Subwoofer Control
All ProAudio source units have a dedicated subwoofer level control to give you more control over your system's bass performance. This even includes a low-pass crossover which, when selected (50Hz/80Hz/120Hz selectable), turns the rear channel RCA line level outputs into dedicated subwoofer outputs.

AMP Cancellor
Built-In Amplifier Bypass Circuit for clear sound.

Shock Proof Memory
It is the function which a maximum 20-second data memory has sound that it is formed at the time of bad road running.

Audio Output
All units with this logo have audio outputs for external amplifiers. Some units with 4V output logo have high 4V audio output for high-quality sound. In addition, some Clarion units have Non-fade output for Subwoofer, and also selectable Loop Back Circuit for hide-away dts/Dolby Digital & Dolby Pro Logic II Decoders DVH940.

AUX Input
Accepts input signal from external unit.

CeNET
CeNET is a high-speed network for complete control of your car multi-media system. With CeNET, you can control components over a single network and easily add new functionality to your car multimedia system by simply connecting CeNET-compatible components.

Digital Optical Output
Building of a 5.1ch sound system which draws a definite sound figure in the car inside and to give should be made possible.

DVD Easy Control
DVD Easy Control, coupled with CeNET components, allows the following possibilities: • Scene / Title FF / FB • Play / Pause • Volume control: General / Centre / Sub-woofer • Audio muting • Balance and Fader control

TV Tuner Control
Unit with this logo can be controlled with hide-away TV Tuners such as TTX7501.

CD Changer Control
A 6-disc CD changer can be controlled from the main unit.

5.1ch Decoder Control
Allows direct control of all functions on DVH940 5.1 Digital Surround Processor.

SIRIUS Control
Head unit is equipped with controls and interface for optional SIRIUS Satellite Radio tuner, for easy upgrade to this next-generation system.

MOS-FET
MOS-FET transistors in the amplifier offer wide frequency response with minimal distortion, and dissipate less heat for high quality energy-efficient sound.

High Performance Power IC
Vertical power transistors are used in the amplifiers to provide high-efficiency, low-distortion output. Great for digital sources with their wide dynamic range.

High Power
With its powerful amplifier IC, Clarion has significantly raised the power limit in the realm of car audio. This improves dynamics and eliminates distortion across the entire frequency spectrum.

Speakers

Water-Resistant Cone
Water-resistant cones prevent sound-quality deterioration caused by mois-ture. Door mounting is possible without further protection.

Aluminum-Coated Polypropylene Cone
Clarion's high-rigidity, lightweight polypropylene cones have an ideal internal loss for woofers. The high input allows you to enjoy powerful digital audio with exceptional music quality.

Metallized MIPP Cone
Injection molded diaphragms use polypropylene compound with mica particles blended in. metallized MIPP cone provides additional rigidity while maintaining lightness for superior dynamic response.

Glass Fibre Cone
Featured on our high-end HX series and In-Phase coaxial series.

Mica Polypropylene Mixed Injection Cone
These injection molded diaphragms use polypropylene with mica particles blended in, with a molecular structure that radiates from the inside out, to attain the lightness and rigidity necessary to create speakers with superior response even to the fast transients of digital sources.

Rubber Surrounds
The rolled edge of the diaphragm provides superior response, while its butyl material is highly durable and moisture resistant. The result is a special rubber surround that cuts distortion and further improves linearity.

PEI Balanced Drive
The novel design features an integrated PEI diaphragm and voice coil bobbin. This design reduces the mass, and given the optimum induction conditions in the magnetic gap, the result is a dramatic improvement in dynamic range.

Dual 4-Ohm Voice Coil
Clarion's systems use dual voice coils to deliver perfect playback of large-amplitude bass. These coils also provide high sensitivity and excellent performance for digital audio and other large input sounds.

Dual Neodymium Magnet
While extremely compact, the neodymium magnet also has very high magnetic energy (BHmax). The powerful magnetic field and minimum magnetic distortion deliver effortless sound.

Rear-Vented Pole Piece
To prevent pressure from building up inside the center cap and causing increased amplitude distortion, a vent is provided on the rear of the pole piece, resulting in completely smooth cone movement, which contributes to the open, airy sound of the speakers.

SMC
Pole Piece department is cut, and a faithful accurate vibration is realized by creating a union magnetic world.

Powerful Strontium Magnet
A high-conductivity magnet is used in Clarion's speaker systems to obtain an air-gap magnetic flux density significantly higher than that obtained from ferrite magnets. Combining this magnet with the heat-resistant voice coil results in speakers that are able to deliver powerful playback at large inputs with improved damping while maintaining the integrity of the digital source.

Large Strontium Ferrite Magnet
Offers all the benefits of the strontium magnet, and boosts the sonic reproductive power by using a large sized Strontium Ferrite magnet in the driver.

Variable Angle Tweeter in Coaxial Speakers
Unlike conventional 2-way speakers, these feature a tweeter that is adjustable for angle and can be aimed for precise high frequency imaging. When coaxial speakers are mounted in the most common door locations, the high frequencies are beamed at the driver and passenger's feet, reducing high frequency response and spatial imaging. By changing the angle so that the tweeter sends high frequencies to the listener's ears, high frequency response is increased, and spatial imaging is dramatically improved.

Wide-Range 80kHz Silk Dome Tweeter / WideRange 120kHz Silk Dome Tweeter
Uses soft silk dome diaphragms and high-power magnets to achieve rich expressiveness. Offers up to 80kHz or 120kHz maximum reproduction for crystalline highs.

Silk-Cloth Soft Dome Tweeter
Clarion's high-end tweeters use soft dome diaphragms laminated The suppleness of

silk, strengthened by the lamination layer, provides natural, finely detailed sound. These tweeters offer superb transient response, even at very low input levels, and can faithfully reproduce delicate pianissimo passages.

Air Compression
The air pressure developed on the back side of the speaker is compressed within the cabinet and propelled forward through the rear duct.

Counter Drive
With the driver mounted on the magnet side of the woofer cone, it enables a large caliber 20cm woofer to be fit inside a slim and compact body.

Lead-Free Solder
Solder used in product manufacturing is lead-free to help protect the environment.

Digital Ready
Featuring higher power handling, Clarion's Digital Ready speakers reproduce the wide dynamic range of Compact Discs and other digital media.

Inline Network
Allows speaker output level adjustment in three steps (0dB/-6dB/-12dB).