



marine

USER'S MANUAL

AMPLIFIER

HCP 1MDK

HCP 2MX

HCP 4M

HCP 4MDK

HCP 5MD

HCP 5MD-24V

rev 1.5

Il Manuale Utente è disponibile
anche sul nostro sito
www.hertzaudiovideo.com

The User Manual is also
available from our web site
www.hertzaudiovideo.com

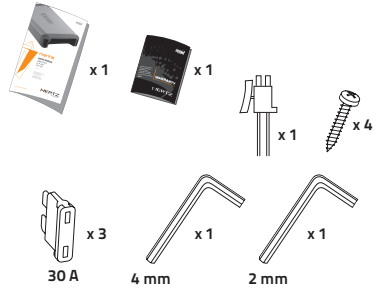
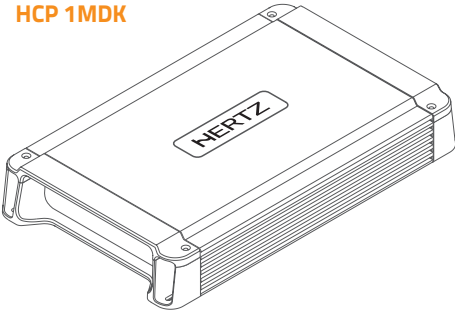
Index

1. PACKAGING CONTENTS	6
2. PRECAUTIONS	7
3. INSTALLATION AND SIZES	35
4. CABLE SIZE CALCULATION TABLES. 1: POWER SUPPLY / 2: SPEAKERS	35
5. POWER SUPPLY and REMOTE IN CONNECTION / FUSE REPLACEMENT	36
6. SUBWOOFER REMOTE VOLUME CONTROL: HRC INSTALLATION	37
7. PRE IN / SPEAKER IN / PRE OUT	38
8. AUTO TURN-ON BY SPEAKER IN (without REMOTE IN)	43
9. INSTALLATION EXAMPLES:	
HCP 1MDK:(1CH) FILTERED SUBWOOFER	45
HCP 2MX:(2CH) FRONT L / R	46
(1CH) SUBWOOFER L+R	47
(1CH) SUBWOOFER MONO INPUT	48
HCP 4M: (4CH) FRONT + REAR	49
(3CH) FRONT + SUB	50
(2CH) LEFT + RIGHT	51
HCP 4MDK:(4CH) FRONT + REAR	52
(3CH) FRONT + SUB	53
(2CH) LEFT + RIGHT	54
HCP 5MD / HCP 5MD-24V:	
(5CH) FRONT + REAR + SUB	55
(5CH) WOOFER + TWEETER + SUB	56
(3CH) FRONT + SUB	57
10. BLOCK DIAGRAMS	
HCP 1MDK:	58
HCP 2MX:	59
HCP 4M:	60
HCP 4MDK:	61
HCP 5MD / HCP 5MD-24V:	62
11. TECHNICAL SPECIFICATIONS	
HCP 1MDK:	63
HCP 2MX:	63
HCP 4M:	64
HCP 4MDK:	64
HCP 5MD:	65
HCP 5MD-24V:	65

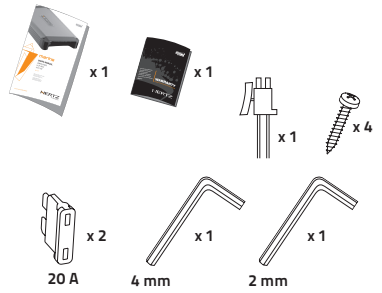
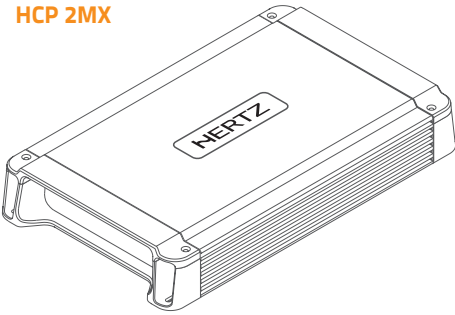


1 PACKAGING CONTENTS

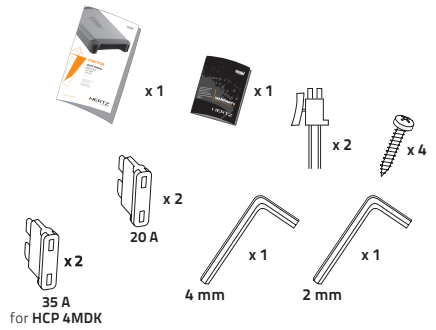
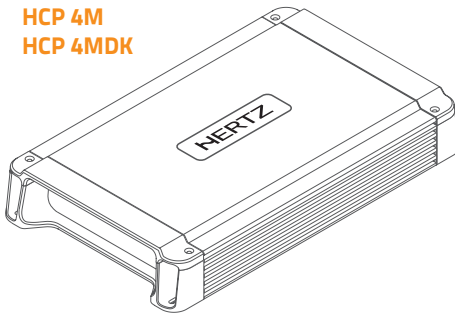
HCP 1MDK



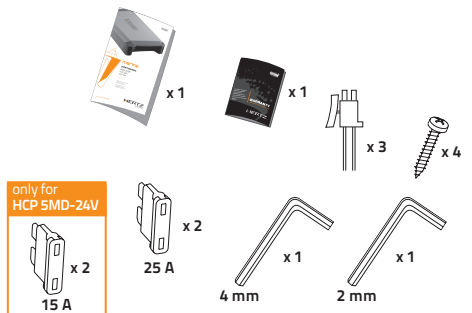
HCP 2MX



**HCP 4M
HCP 4MDK**



**HCP 5MD
HCP 5MD-24V**



2 PRECAUTIONS

English / English

Before installing the components, please carefully read all of the instructions contained in this manual. It is advisable to carefully follow the highlighted instructions. Failure to respect these instructions may cause unintentional harm or damage to the components.

SAFETY CONSIDERATIONS

1. Check your alternator and battery condition to ensure they can handle the increased consumption.
2. Do not carry out any installation inside the engine compartment or exposed to water, excessive humidity, dust or dirt.
3. Never run cables outside the vehicle/vessel or install the amplifier next to electronic gearcases.
4. Install the amplifier in the vehicle/vessel sections where temperature is between 0°C (32°F) and 55°C (131°F). Let the amplifier outer profile be at least 5 cm (2") far from possible walls. There must be good air circulation where the amplifier is installed. If you cover the heat sink, the amplifier goes in protection.
5. The amplifier can reach temperatures of around 80°C (176°F). Make sure it is not dangerously hot before touching it.
6. Periodically clean the amplifier without using aggressive solvents that might damage it. Don't use compressed air, since it would push solid parts in the amplifiers. Dampen a piece of cloth with water and soap, wring it and clean the amplifier. Then use a piece of cloth dampened with water only; eventually clean the amplifier with a dry piece of cloth.
7. Make sure the location you chose for the components does not affect the correct functioning of the vehicle/vessel mechanical and electrical devices. This amplifier was designed for installation/application in marine vehicles and it is not water-proof. The installation should be performed in a dry compartment with no direct contact with water.
8. Make sure power cable is not short circuited during installation and connection with the battery.
9. Use extreme caution when cutting or drilling the vehicle/vessel panels, checking there are no electrical wiring or structural elements underneath.
10. When positioning the power supply cable, avoid to run the wire over or through sharp edges or close to moving mechanical devices. Use rubber grommets to protect the wire if it runs in a hole of the plate or proper materials if it is close to heat-generating parts.
11. Make sure all the cables are properly secured all along their length. Also, make sure their outer protective jacket is flame resistant and self extinguishing. Use a clamping screw to secure positive and negative cables just close to the amplifier respective power supply terminal blocks.
12. Choose the cable gauge according to the amplifier power and to the suggestions you can find here. Use high quality cables, connectors and accessories, as you can find in the Connection catalogue.
13. Pre-plan the configuration of your new amplifier and the best wiring routes to ease installation.
14. In order to avoid incidental damage, keep the product in the original packaging until you are ready for the final installation.
15. Always wear protective eyewear when using tools, as splints or product residue may become airborne.

TYPICAL INSTALLATION SEQUENCE

If you have any questions please refer to the Advanced Manual you can find available on www.hertzaudiovideo.com or contact your Hertz dealer or Hertz authorized service for assistance.

1. Before installing the amplifier turn off the source and all other electronic devices in the audio system to prevent any damages.
2. Using a cable with adequate AWG (see chart: Power Supply Cable), run the power wire from the battery location to the amplifier mounting location.
3. Connect the power supply with the correct polarity. connect (+) terminal to the cable coming from the battery and (-) terminal to the vehicle/vessel chassis.
4. Put an insulated fuse holder 40 cm max far from the battery positive terminal; connect one end of the power cable to it after connecting the other end to the amplifier. Do not mount the fuse.
5. To ground the device (-) in the right way, use a screw in the vehicle/vessel chassis; scrape all paint or grease from the metal if necessary, checking with a tester that there is continuity between the battery negative terminal (-) and the fixing point. If possible, connect all components to the same ground point; this solution rejects most noise which can be generated during the audio reproduction.
6. Route all signal cables close together and away from power cables.
7. Connect the RCA input cables, the applied signal must be between 0.2 VRMS and 5 VRMS.
8. Connect the high level inputs using the proper plug. Applied signal must be between 0.8 VRMS and 20 VRMS. Don't use it if you are already using Pre In preamplified connection.
9. Connect the speaker output using 10 AWG max speaker cable.
10. Don't connect (-) L and (-) R speaker outputs together. If you use an external stereo crossover, make sure that its negative poles are not connected together.
11. The amplifier turns on by connecting the remote turn on terminal (REMOTE IN) to the source specific output. The amplifier turns on automatically, without remote signal, also if using high level inputs (Speaker IN) by setting the "AUTO TURN ON" switch to position ON.
12. The LED on the front panel lights up green indicating that the product is on. The LED lights up red if the outputs go on overload, if the thermal protection is triggered, if the speaker cables short circuit with the vehicle/vessel chassis and if the amplifier is malfunctioning.
13. The fuse/s is/are located near the power supply and speaker terminals. To replace, remove the fuse/s from the housing. Always replace the fuse of the same rating.
14. Secure all auxiliary devices you built to install the components to the vehicle/vessel structure; this ensures stability and safety while driving. The amplifier falling out of its fastening while driving/cruising can seriously damage the people in the vehicle/vessel and other boats.
15. When installation is over, check the system's wiring and make sure all connections were done in the right way.
16. Put the fuse into the fuse holder. The fuse value will have to be 30% higher than the amplifier built-in one. In case the cable supplies several amplifiers, the fuse value will have to be 30% higher than the sum of the values of all other fuses in the amplifiers.
17. Listening level calibration is made by adjusting the source volume up to ¾ of its maximum level; then, adjust the amplifier levels until you hear distortion.

SAFE SOUND

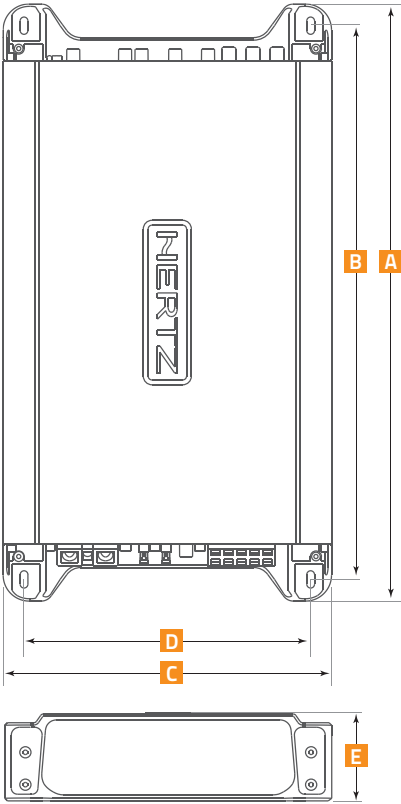
USE COMMON SENSE AND PRACTICE SAFE SOUND. PLEASE REMEMBER THAT LONG EXPOSURE TO EXCESSIVELY HIGH SOUND PRESSURE LEVELS MAY DAMAGE YOUR HEARING. SAFETY MUST BE AT THE FOREFRONT WHILE DRIVING.



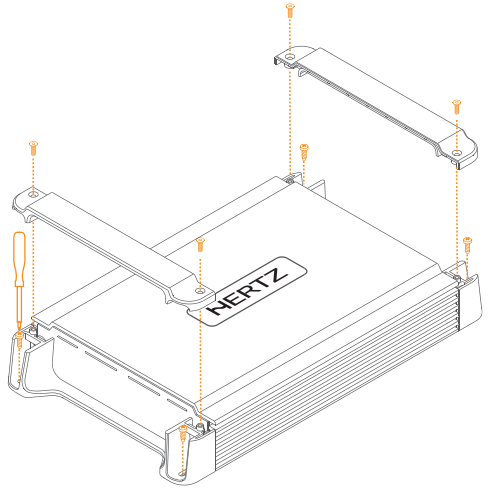
Information on electrical and electronic equipment waste (for those European countries which organize the separate collection of waste)

Products which are marked with a wheeled bin with an X through it can not be disposed of together with ordinary domestic waste. These electrical and electronic products must be recycled in proper facilities, capable of managing the disposal of these products and components. In order to know where and how to deliver these products to the nearest recycling/disposal site please contact your local municipal office. Recycling and disposing of waste in a proper way contributes to the protection of the environment and to prevent harmful effects on health.

3 INSTALLATION AND SIZES



	A	B	C	D	E	
HCP 1MDK	315	291	190	166	50	mm
	12.40	11.45	7.48	6.53	1.97	in.
HCP 2MX	315	291	190	166	50	mm
	12.40	11.45	7.48	6.53	1.97	in.
HCP 4M HCP 4MDK	315	291	190	166	50	mm
	12.40	11.45	7.48	6.53	1.97	in.
HCP 5MD HCP 5MD-24V	345	321	190	166	50	mm
	13.58	12.64	7.48	6.53	1.97	in.



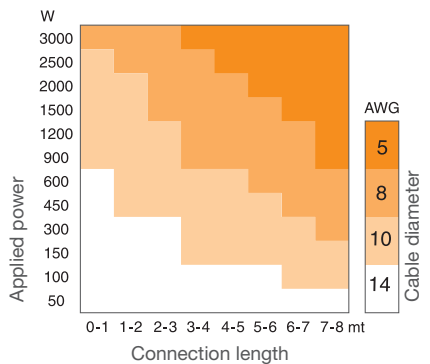
4 CABLE SIZE CALCULATION TABLES: 1: Power supply cable / 2: Speakers cable

1: Power supply cable

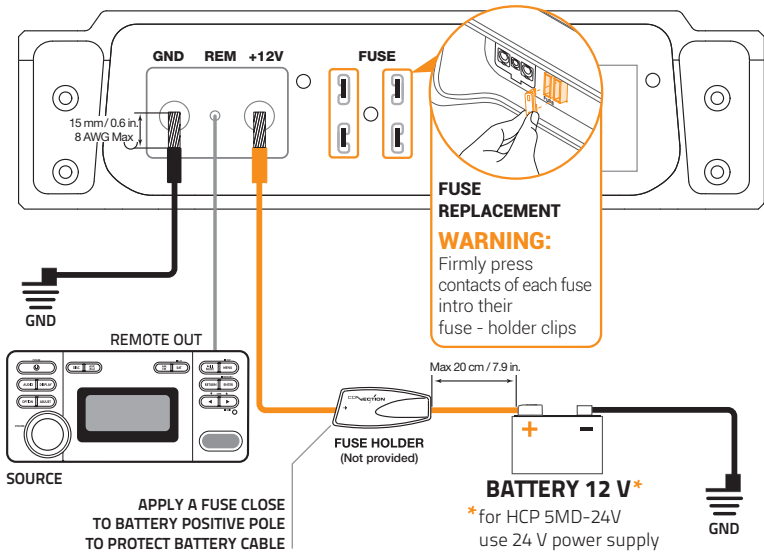
Power & Ground cable calculation table		Cable Size	
Minimum gauge size recommended for MAINPOWER & POWER FLOW cables. MAINPOWER cables ensure higher instantaneous current transfer.		A.W.G.	mm ²
240-350		1/0	53,5
180-240		2	33,6
150-180		4	21,2
120-150		8	8,4
100-120		10	5,3
80-100		12	3,3
60-80		14	2,1
40-60		16	1,3
20-40		18	0,8
8-20			
0-8			
	0-1 1-2 2-3 3-4 4-5 5-6 6-7 7-8		

Cable Length (m)

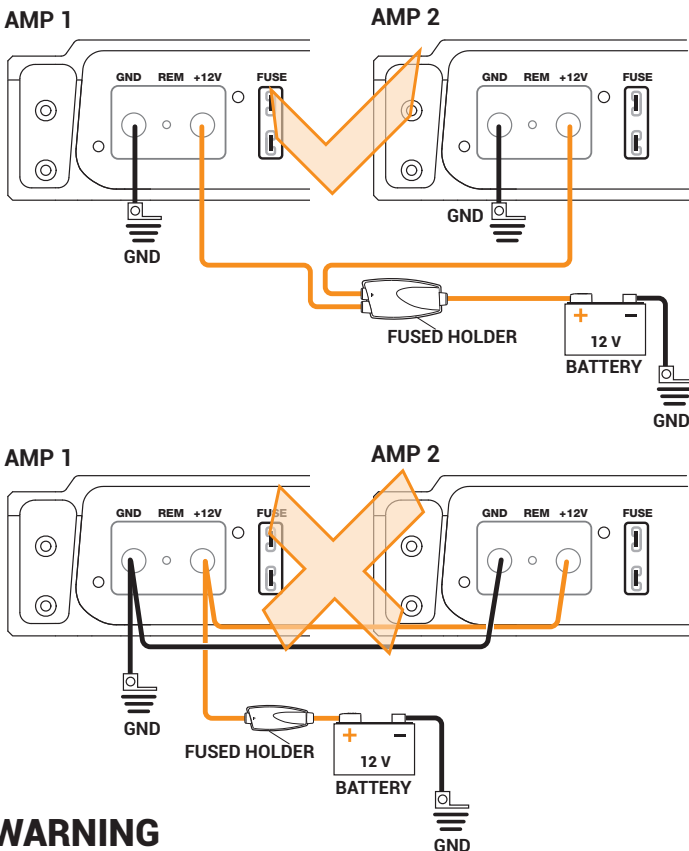
2: Speakers cable



5 POWER SUPPLY and REMOTE IN CONNECTION / FUSE REPLACEMENT

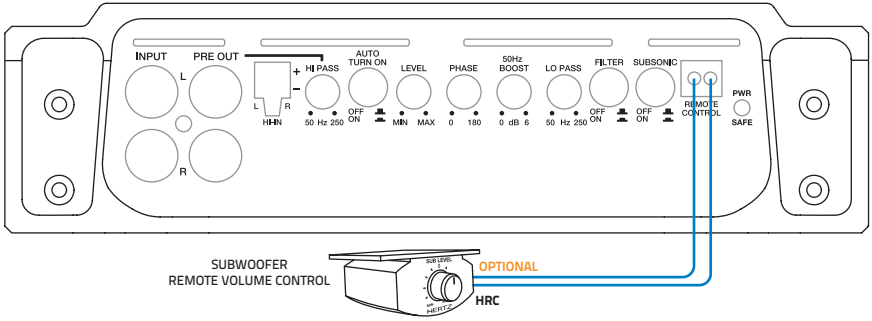


MULTIPLE POWER SUPPLY CONNECTION

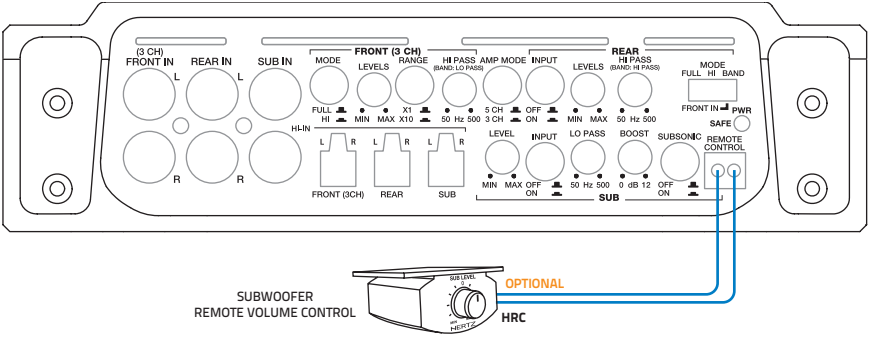


6. SUBWOOFER REMOTE VOLUME CONTROL: HRC INSTALLATION

HCP 1MDK

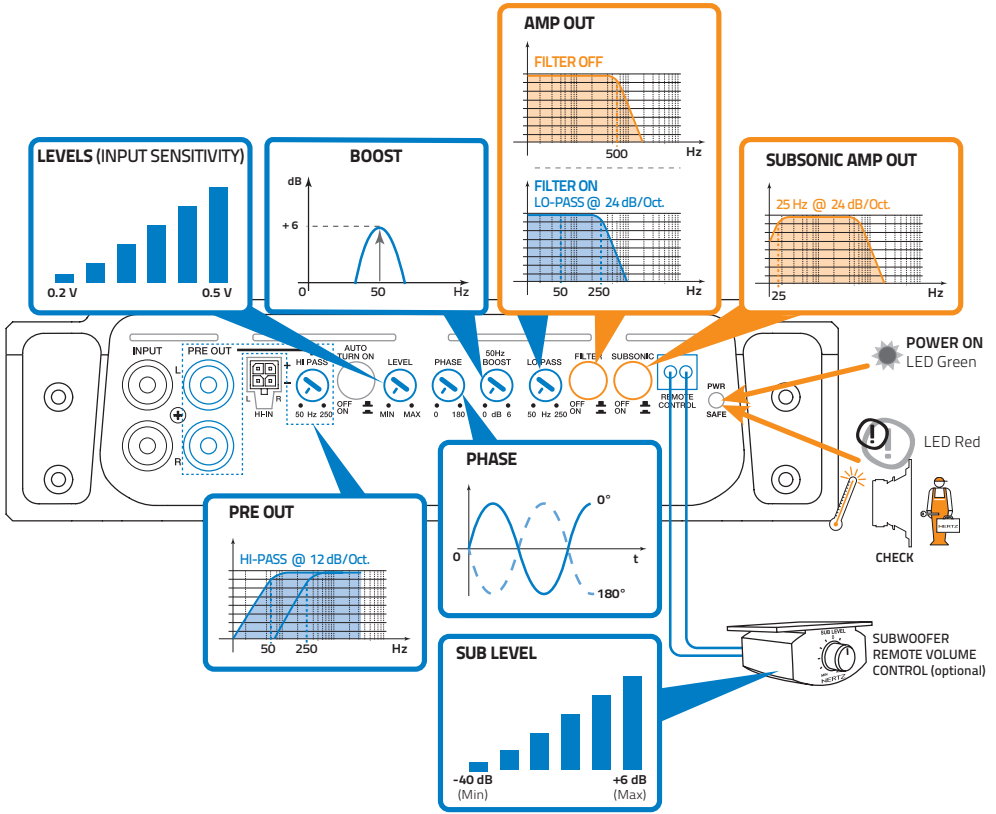


HCP 5MD
HCP 5MD-24

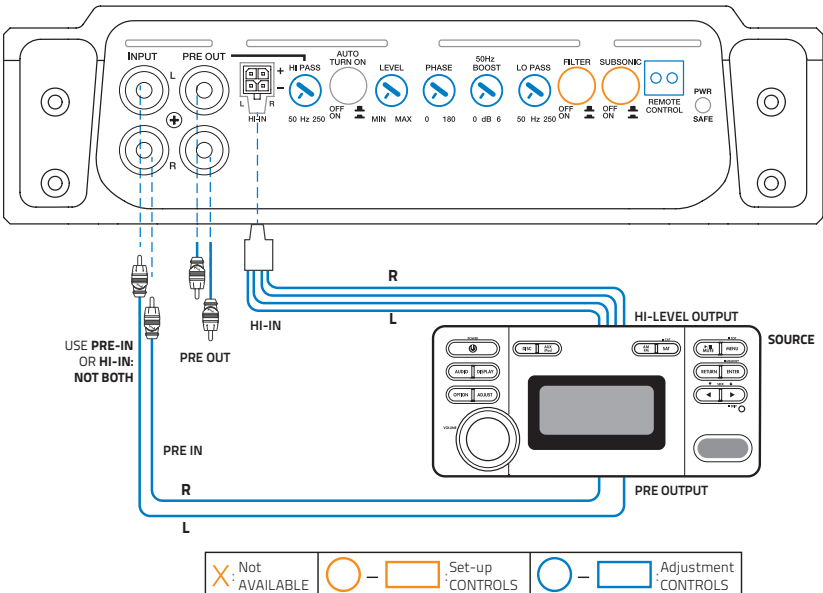


7 PRE IN / SPEAKER IN / PRE OUT

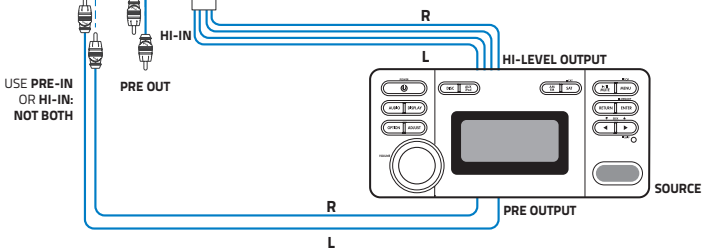
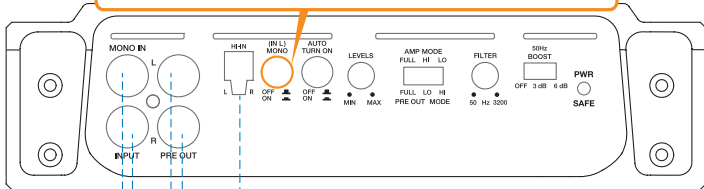
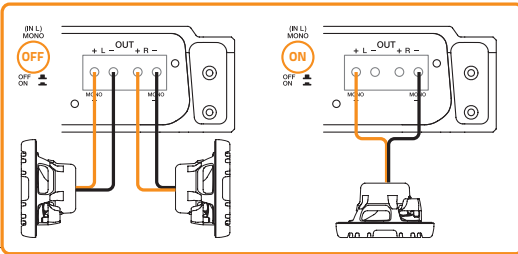
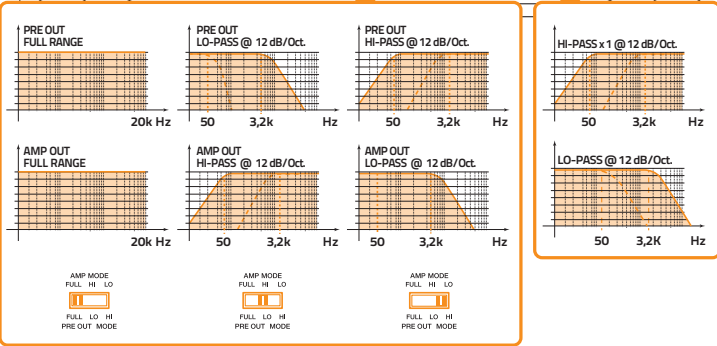
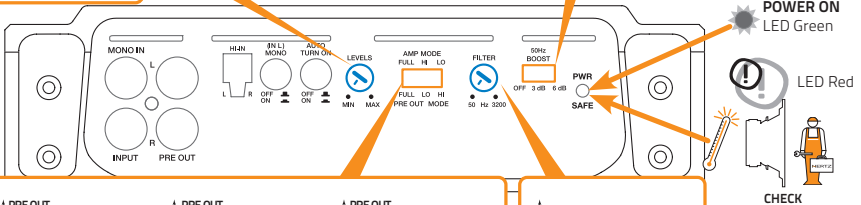
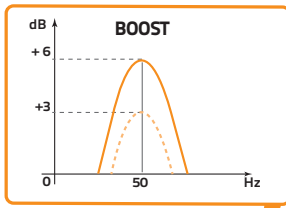
HCP 1MDK



HCP 1MDK

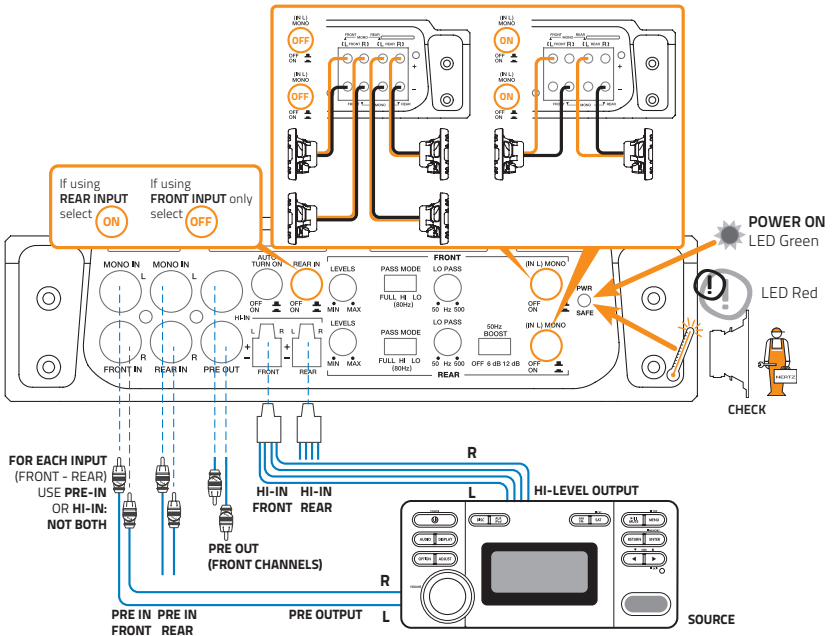
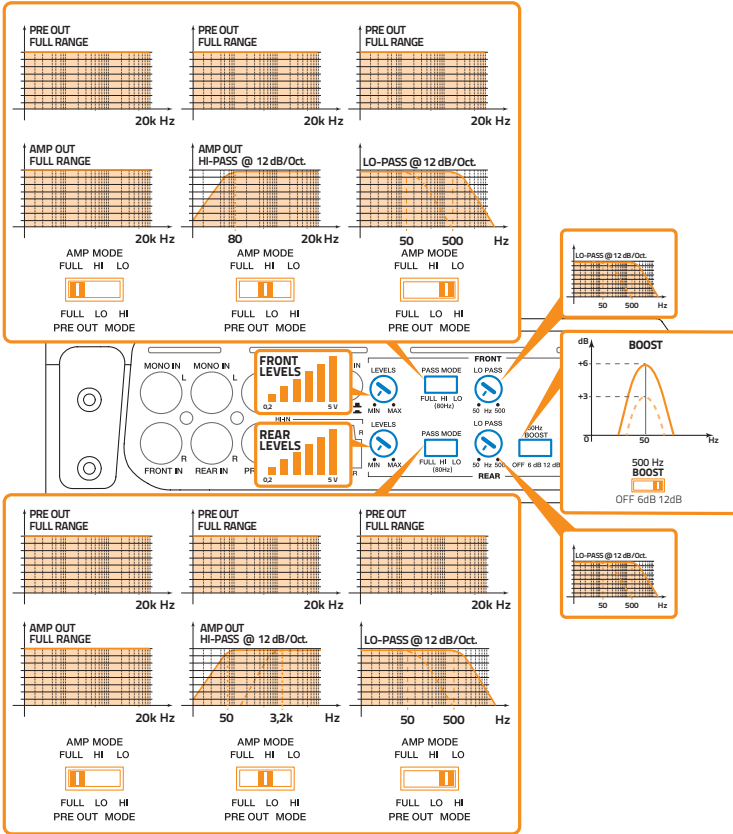


HCP 2MX



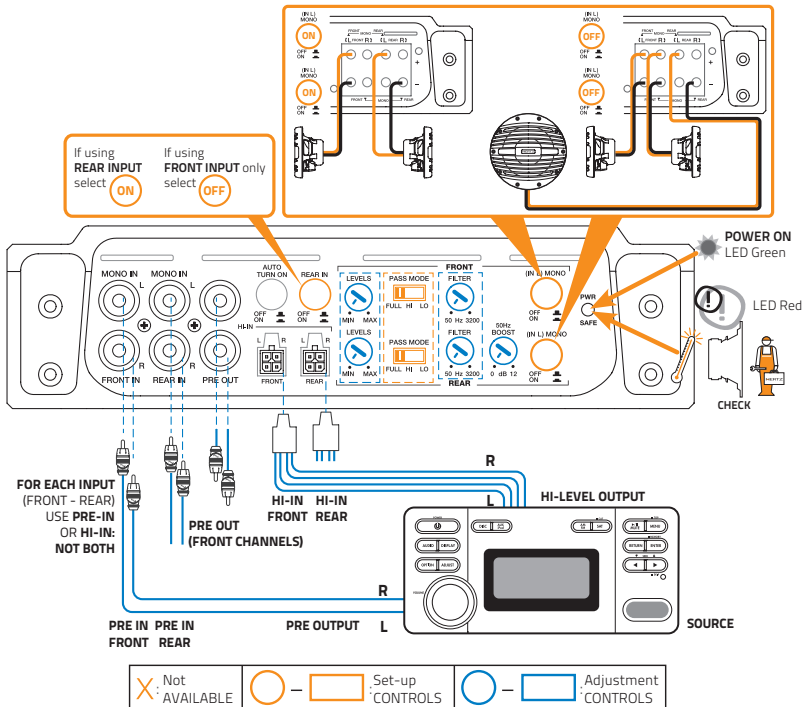
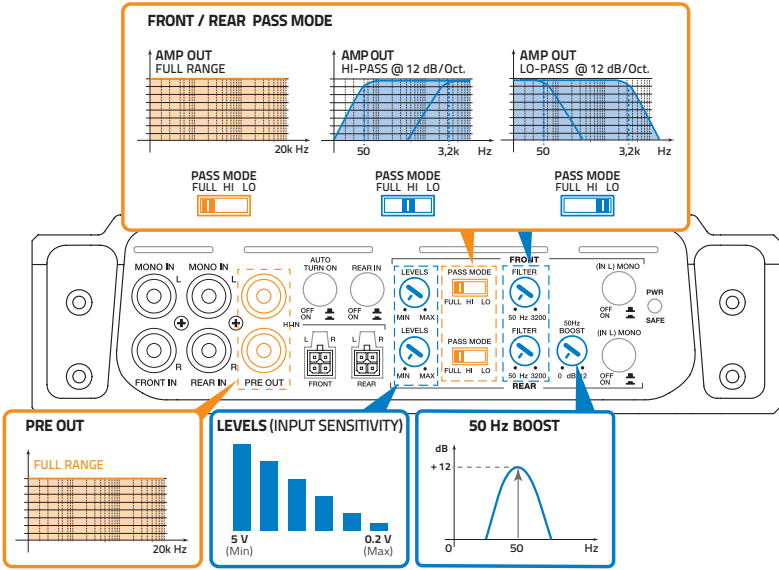
- ✗ Not AVAILABLE
- — □ Set-up CONTROLS
- — □ Adjustment CONTROLS

HCP 4M

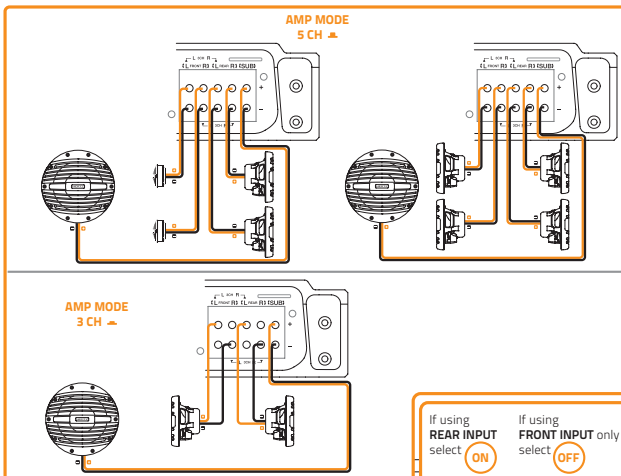
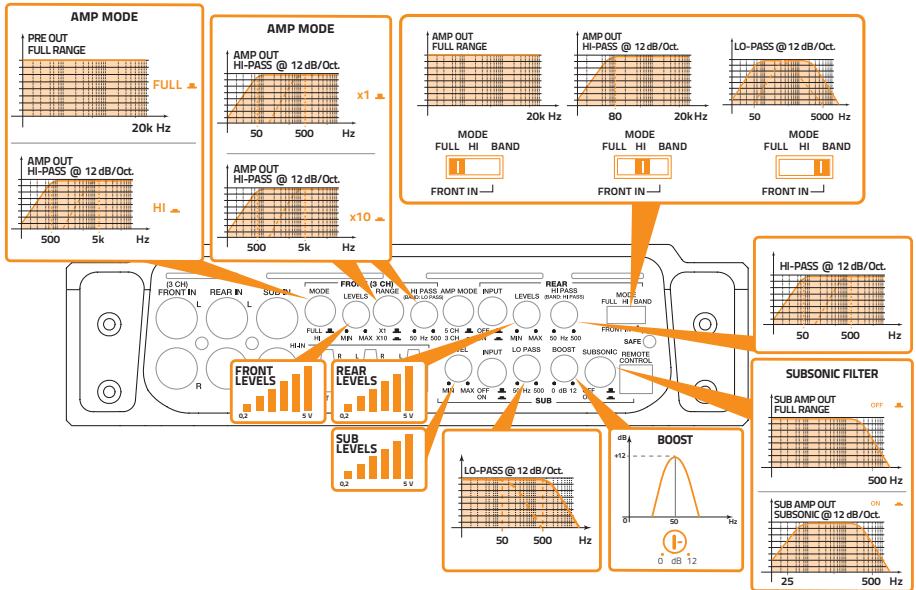


X: Not AVAILABLE ○ — □: Set-up CONTROLS ○ — □: Adjustment CONTROLS

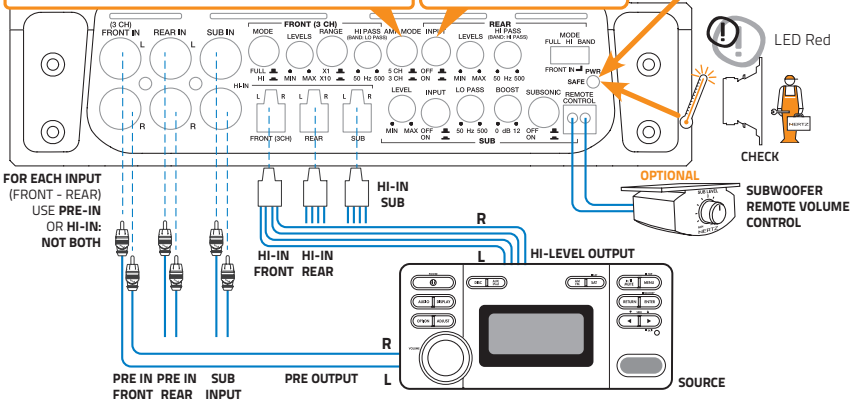
HCP 4MDK



HCP 5MD / HCP 5MD-24V



If using REAR INPUT select **ON**
 If using FRONT INPUT only select **OFF**

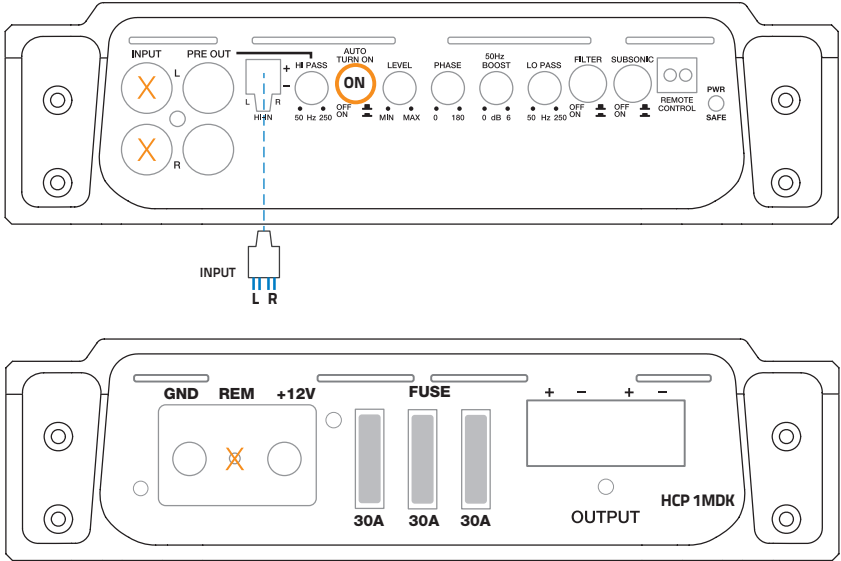


FOR EACH INPUT (FRONT - REAR) USE PRE-IN OR HI-IN: NOT BOTH

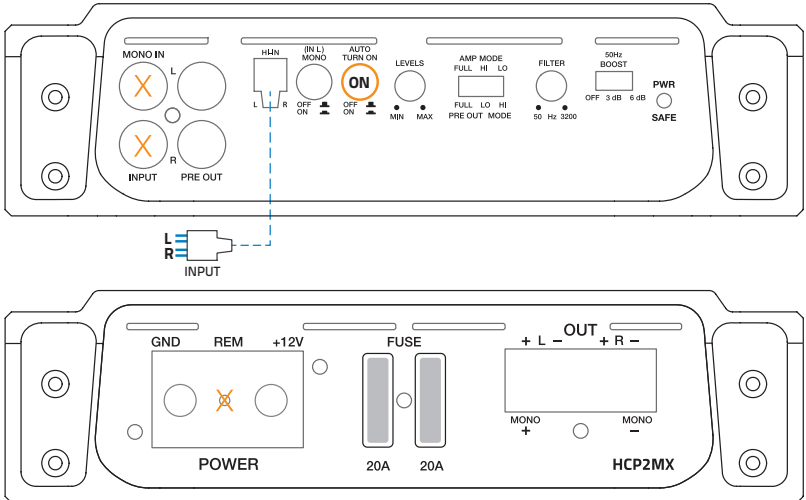
X: Not AVAILABLE ○ - □ Set-up CONTROLS ○ - □ Adjustment CONTROLS

8 AUTO TURN ON BY SPEAKER IN (without REMOTE IN)

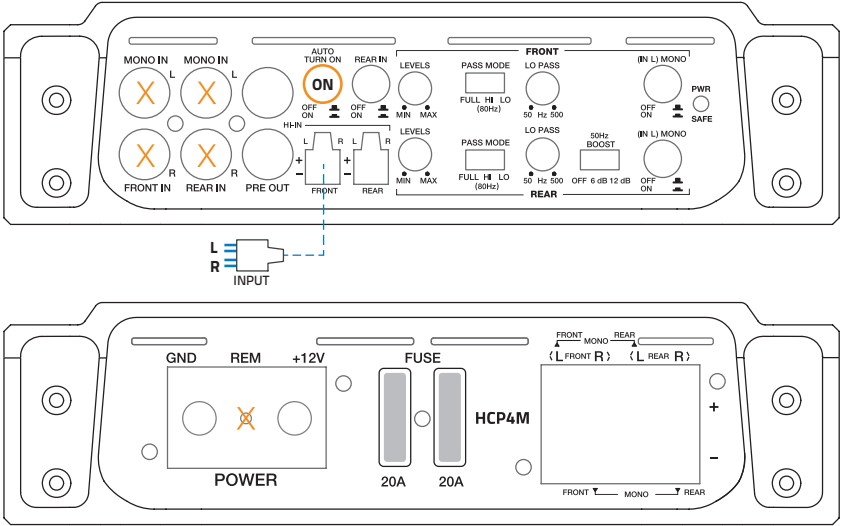
HCP 1MDK



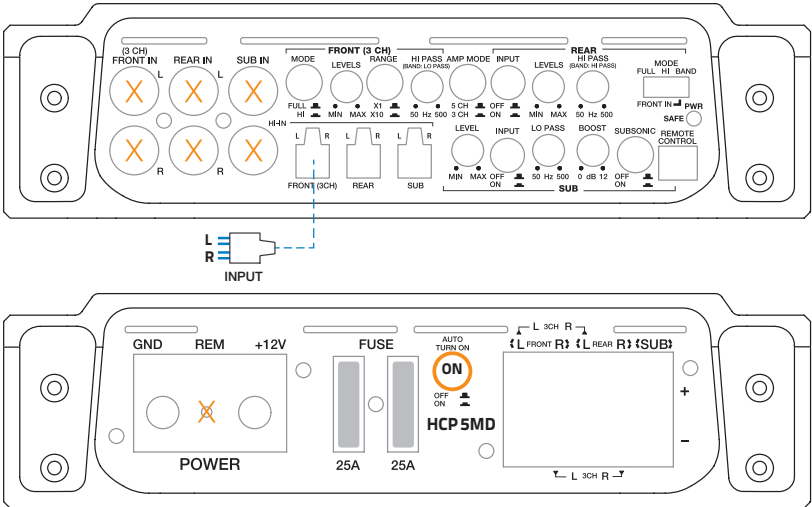
HCP 2MX



**HCP 4M
HCP 4MDK**



**HCP 5MD
HCP 5MD-24V**

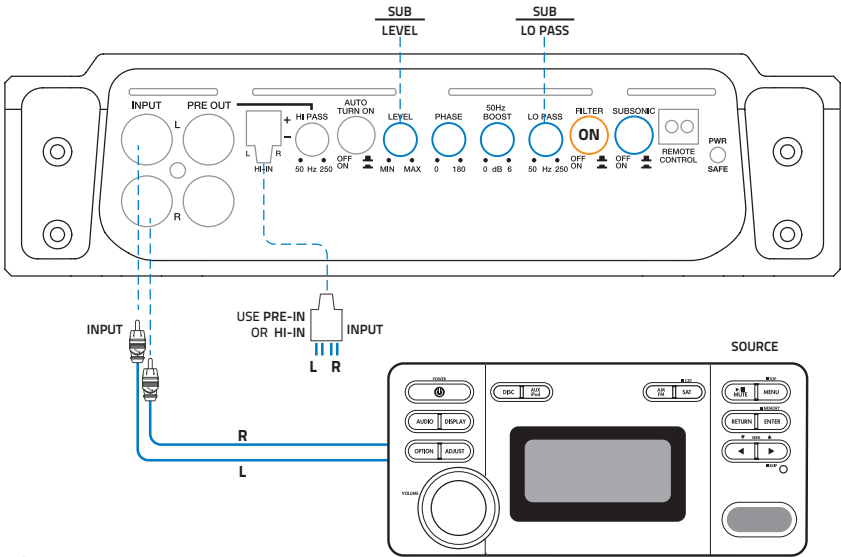


9 INSTALLATION EXAMPLES

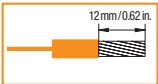
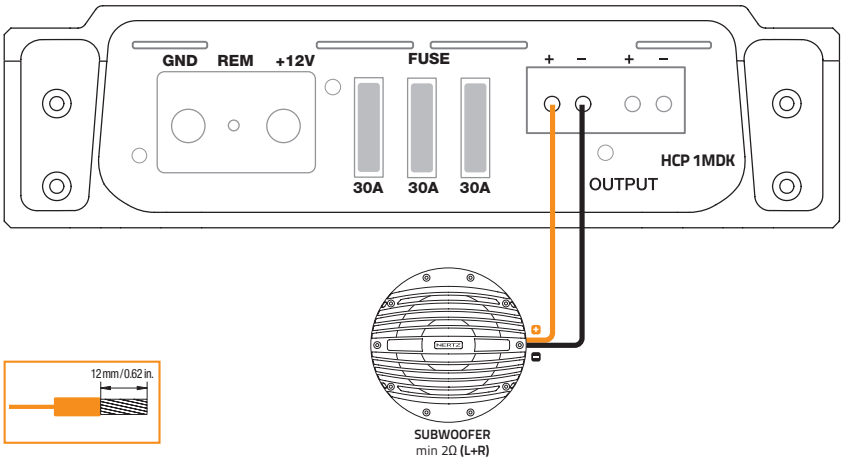
1CH: FILTERED SUBWOOFER

HCP 1MDK

INPUTS:



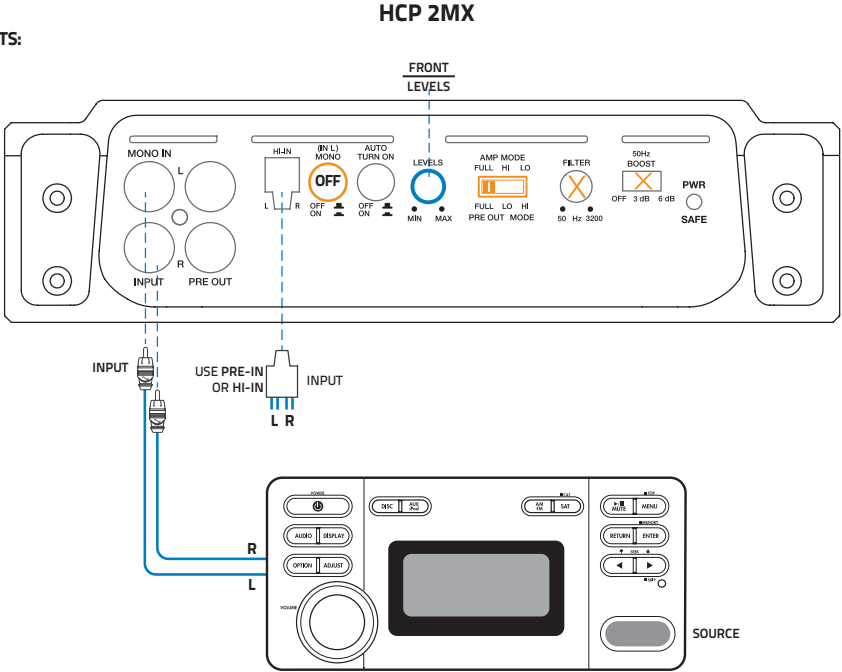
OUTPUTS:



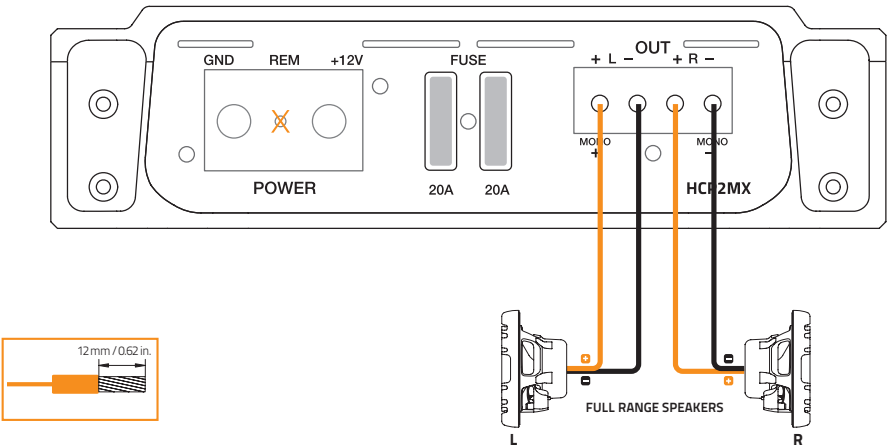
X: Not AVAILABLE	○ - □ Set-up CONTROLS	○ - □ Adjustment CONTROLS
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2CH: FRONT L/R

INPUTS:



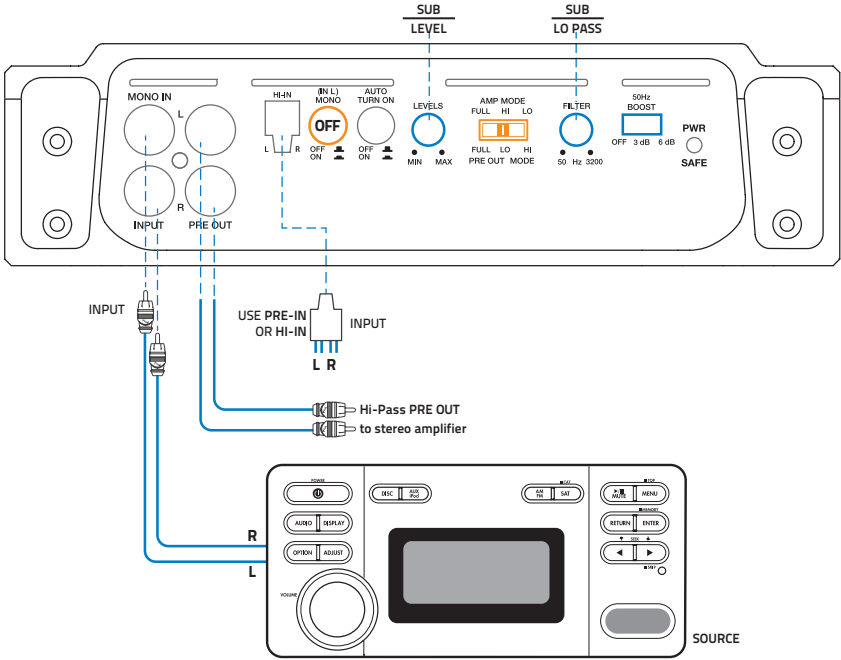
OUTPUTS:



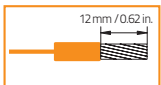
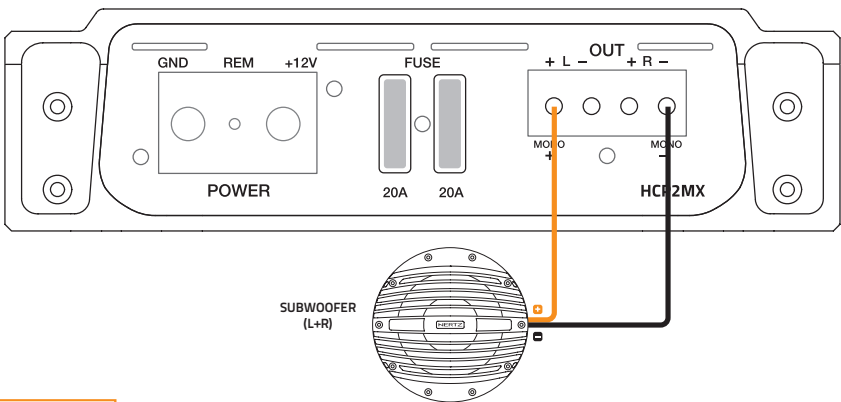
1CH: SUBWOOFER L+R

HCP 2MX

INPUTS:



OUTPUTS:

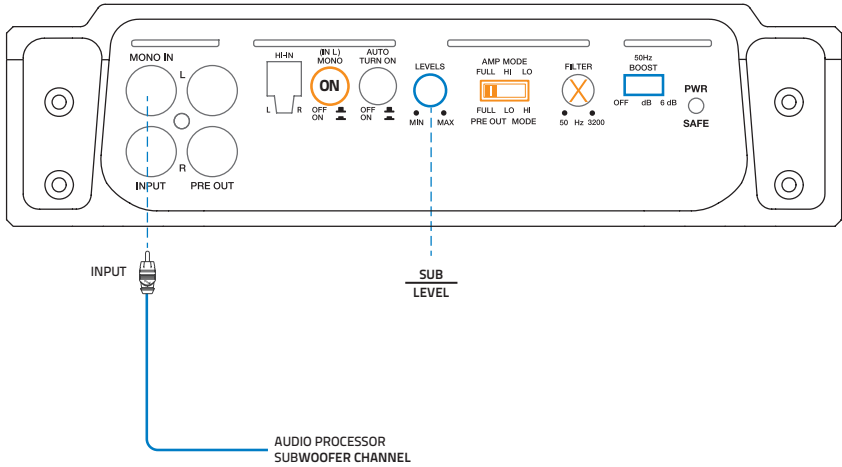


X: Not AVAILABLE	○ — □ Set-up CONTROLS	○ — □ Adjustment CONTROLS
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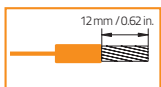
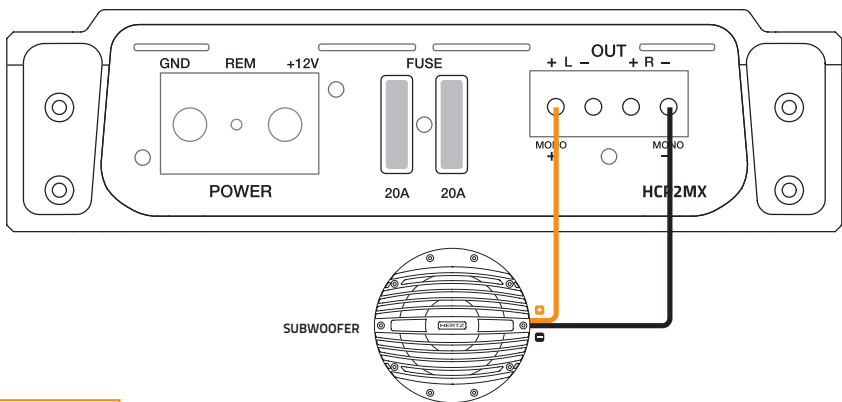
1CH: SUBWOOFER - MONO INPUT

HCP 2MX

INPUTS:



OUTPUTS:

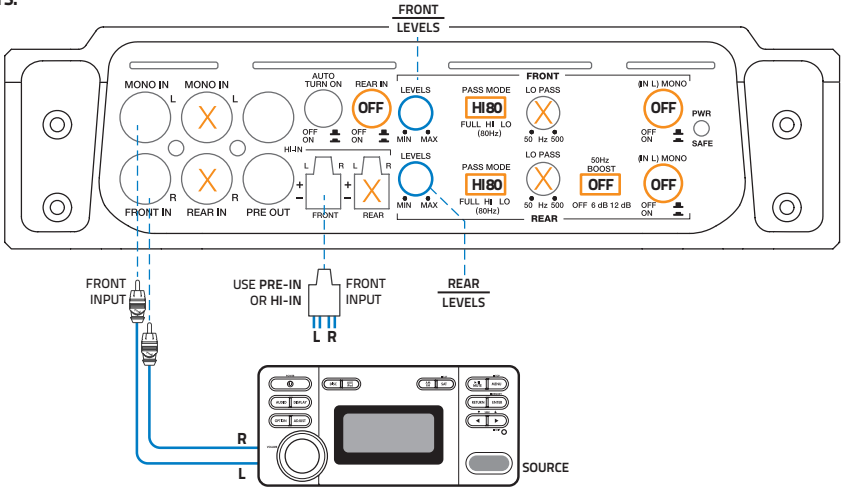


X: Not AVAILABLE	○ — □ Set-up CONTROLS	○ — □ Adjustment CONTROLS
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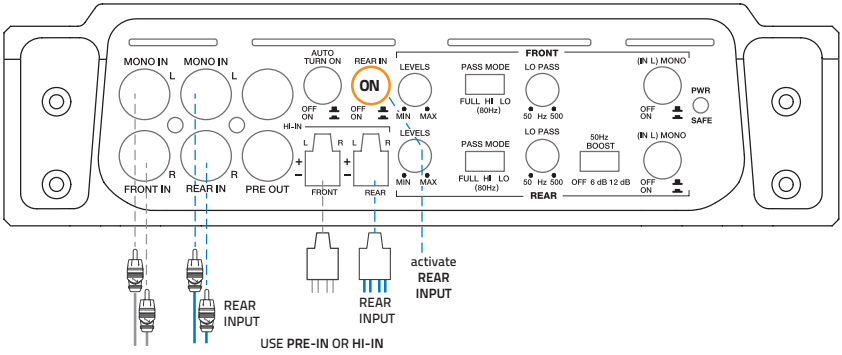
4CH: FRONT + REAR

HCP 4M

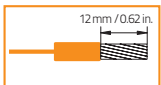
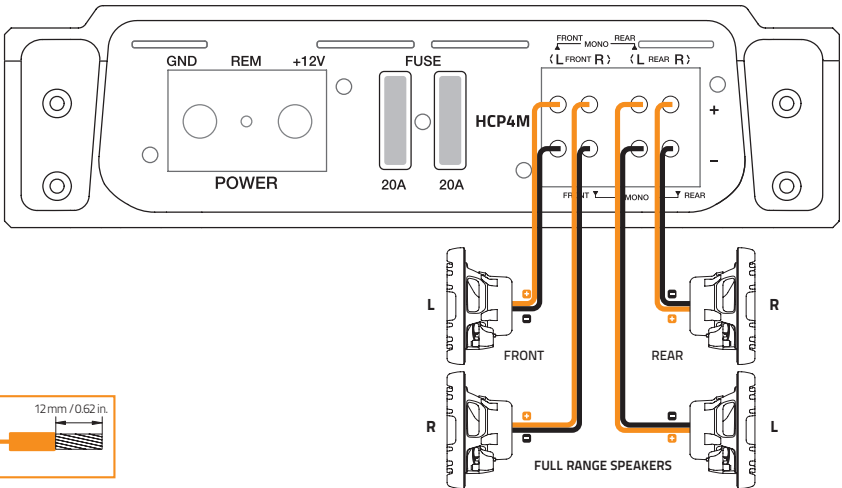
INPUTS:



Using also REAR INPUTS:



OUTPUTS:

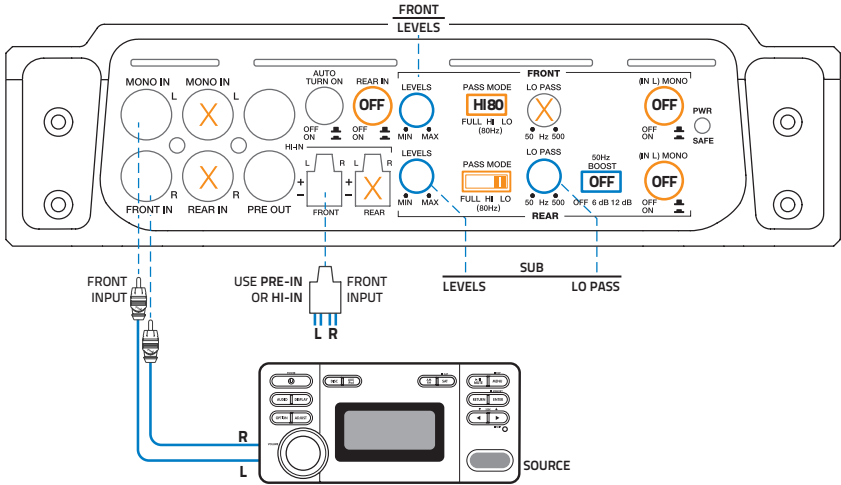


X	Not AVAILABLE	○ — □	Set-up CONTROLS	○ — □	Adjustment CONTROLS
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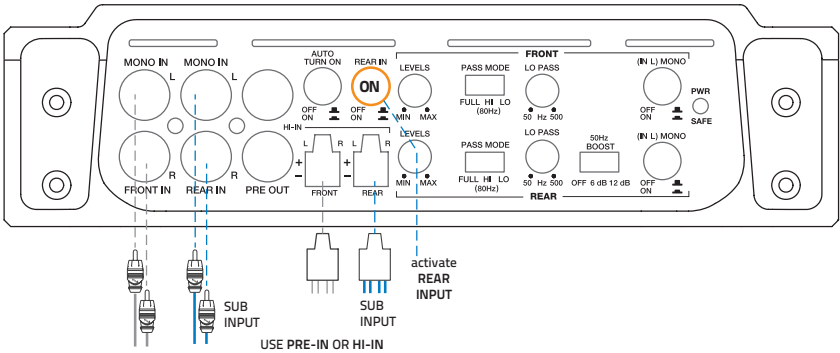
3CH: FRONT + SUB

INPUTS:

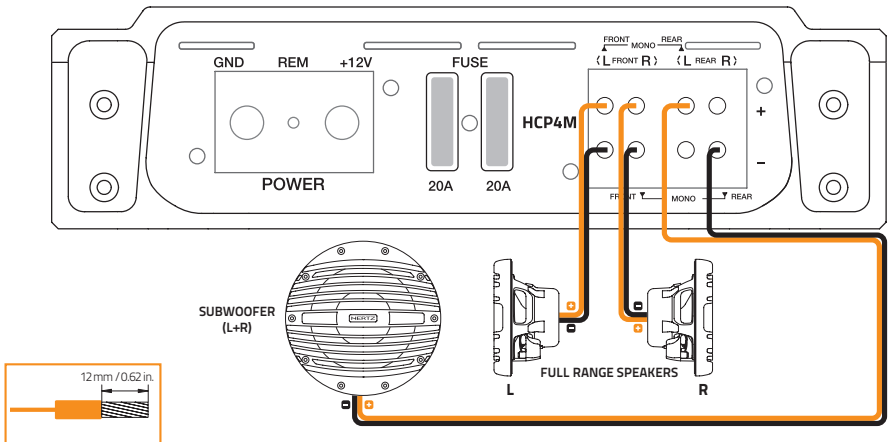
HCP 4M



Using also REAR INPUTS:



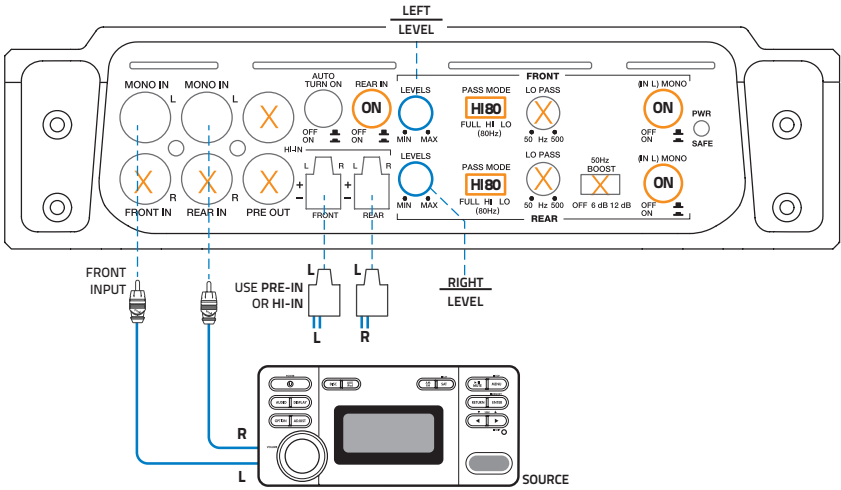
OUTPUTS:



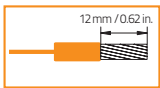
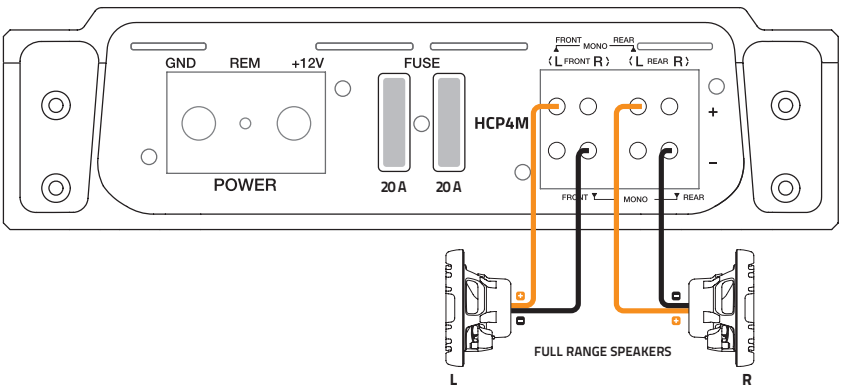
2CH: LEFT + RIGHT

INPUTS:

HCP 4M



OUTPUTS:

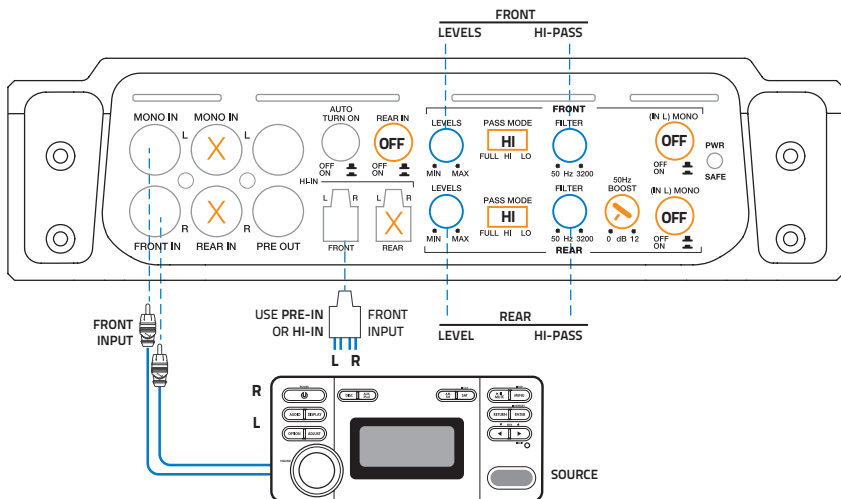


X	Not AVAILABLE	○ - □	Set-up CONTROLS	● - □	Adjustment CONTROLS
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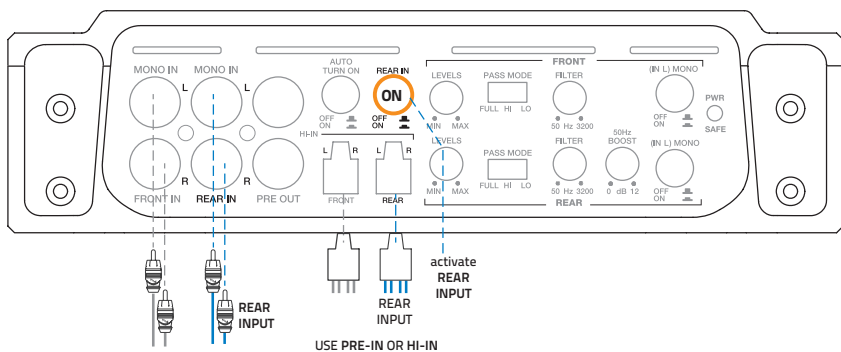
4CH: FRONT + REAR

INPUTS:

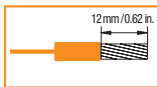
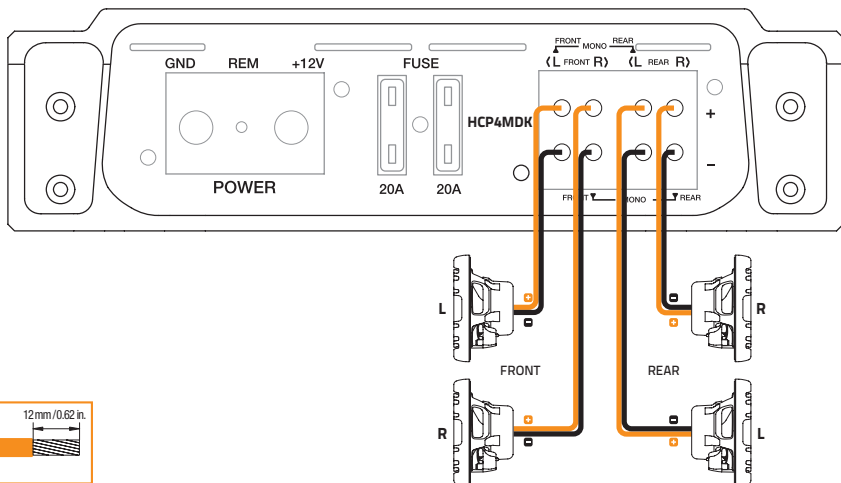
HCP 4MDK



Using also REAR INPUTS:



OUTPUTS:

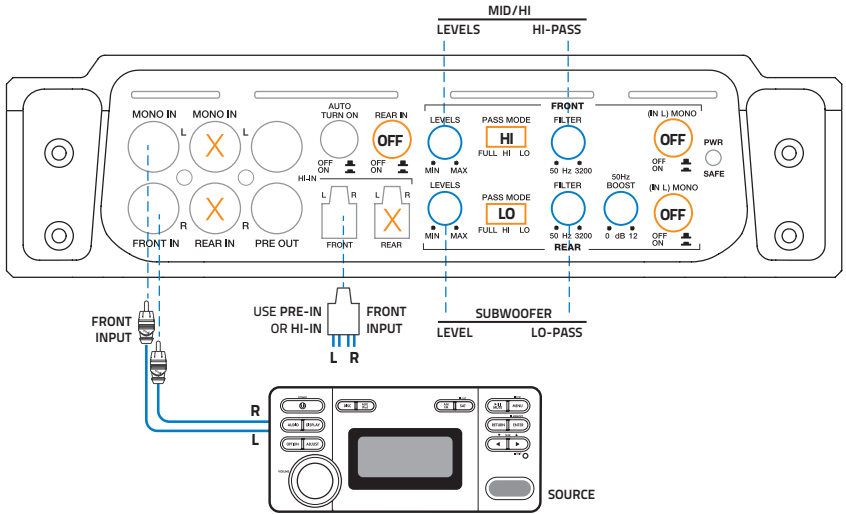


- X Not AVAILABLE
- O - □ Set-up CONTROLS
- O - □ Adjustment CONTROLS

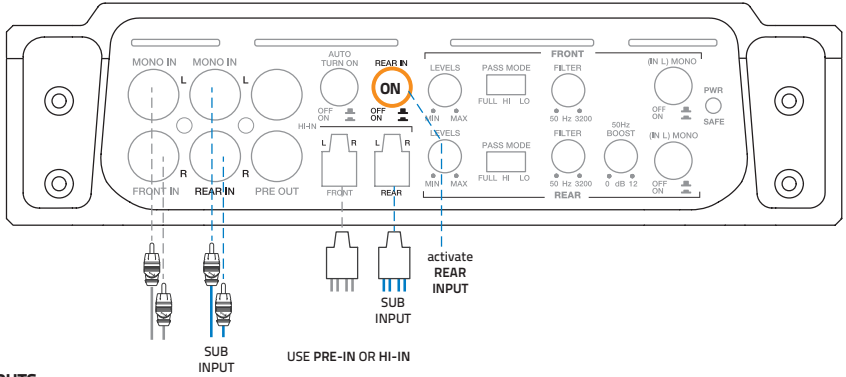
3CH: FRONT + SUB

INPUTS:

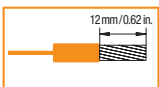
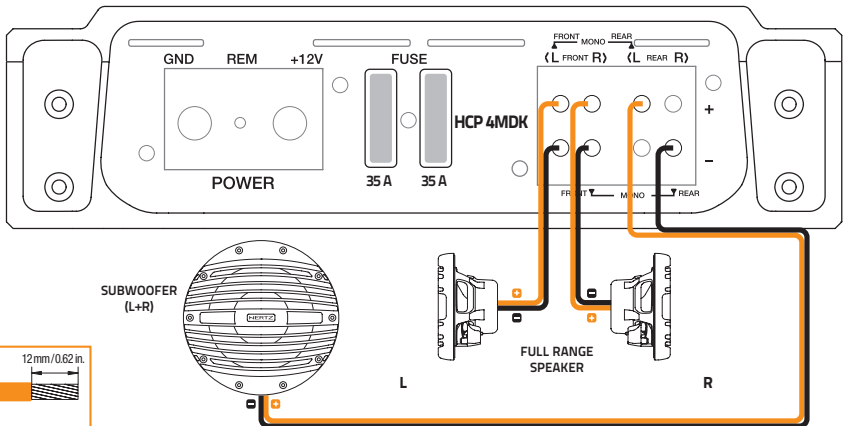
HCP 4MDK



Using also REAR INPUTS to drive SUBWOOFER:



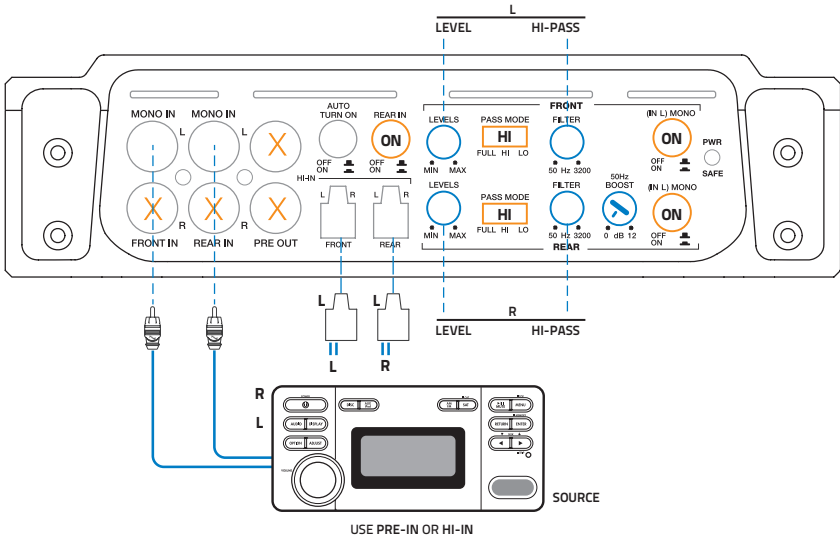
OUTPUTS:



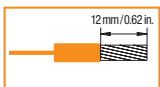
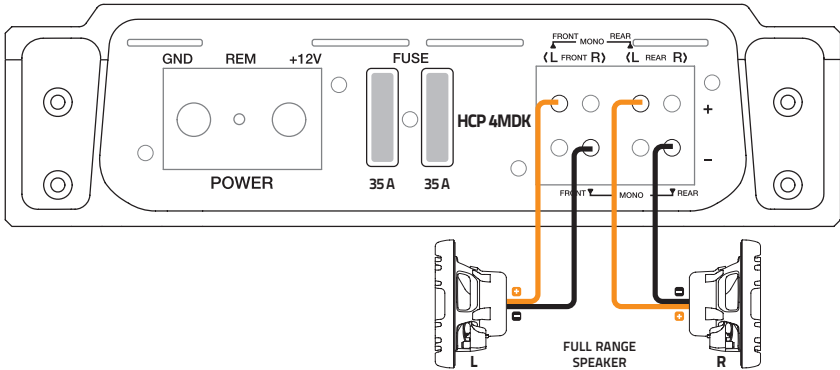
2CH: LEFT / RIGHT

INPUTS:

HCP 4MDK

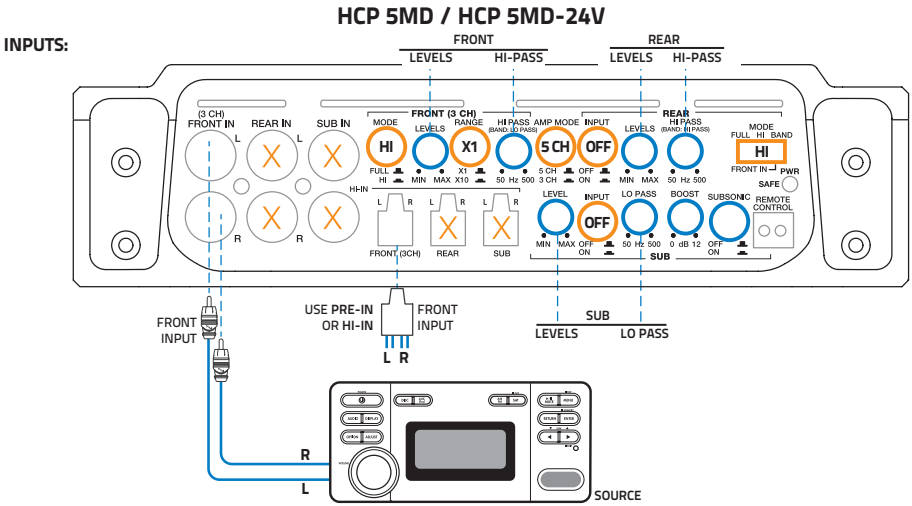


OUTPUTS:

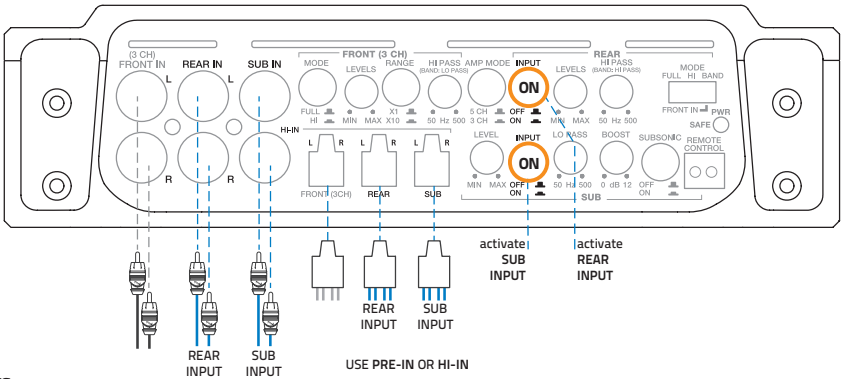


Not AVAILABLE	Set-up CONTROLS	Adjustment CONTROLS
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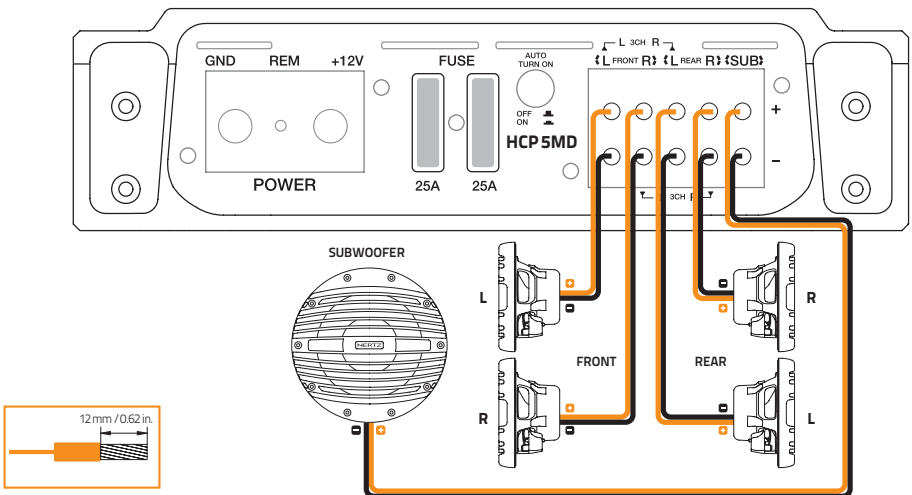
5CH: FRONT + REAR + SUB



Using also REAR / SUB INPUTS:



OUTPUTS:

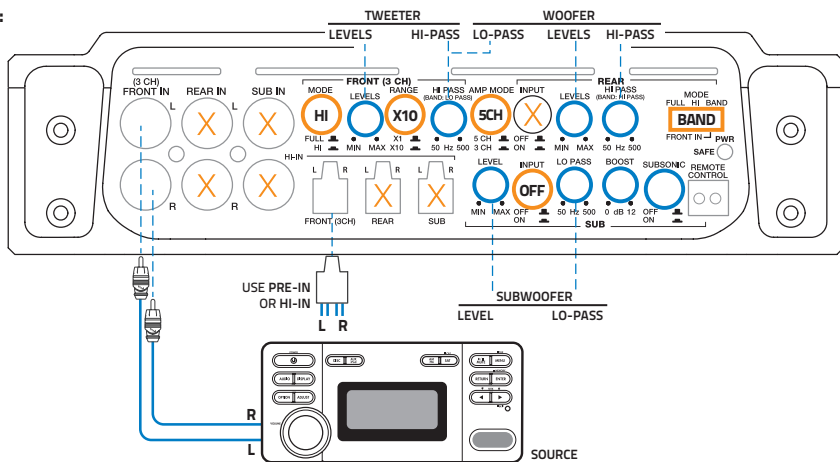


- X: Not AVAILABLE
- — □: Set-up CONTROLS
- — □: Adjustment CONTROLS

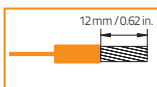
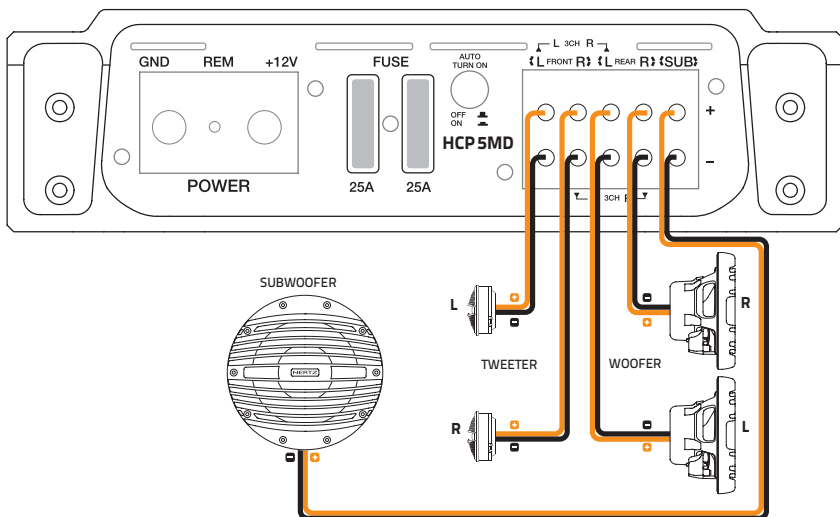
SCH: WOOFER + TWEETER + SUB

HCP 5MD / HCP 5MD-24V

INPUTS:



OUTPUTS:

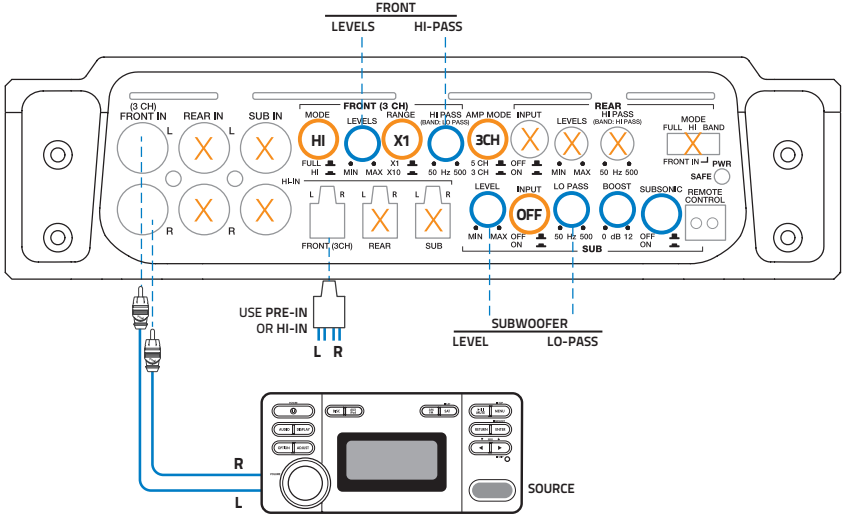


X	Not AVAILABLE	○ — □	Set-up CONTROLS	○ — □	Adjustment CONTROLS
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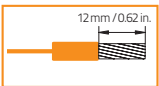
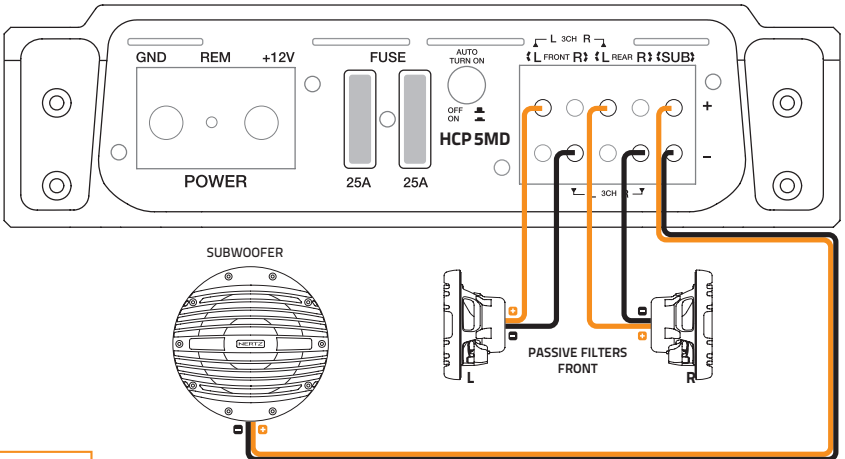
3CH: FRONT + SUB

INPUTS:

HCP 5MD / HCP 5MD-24V



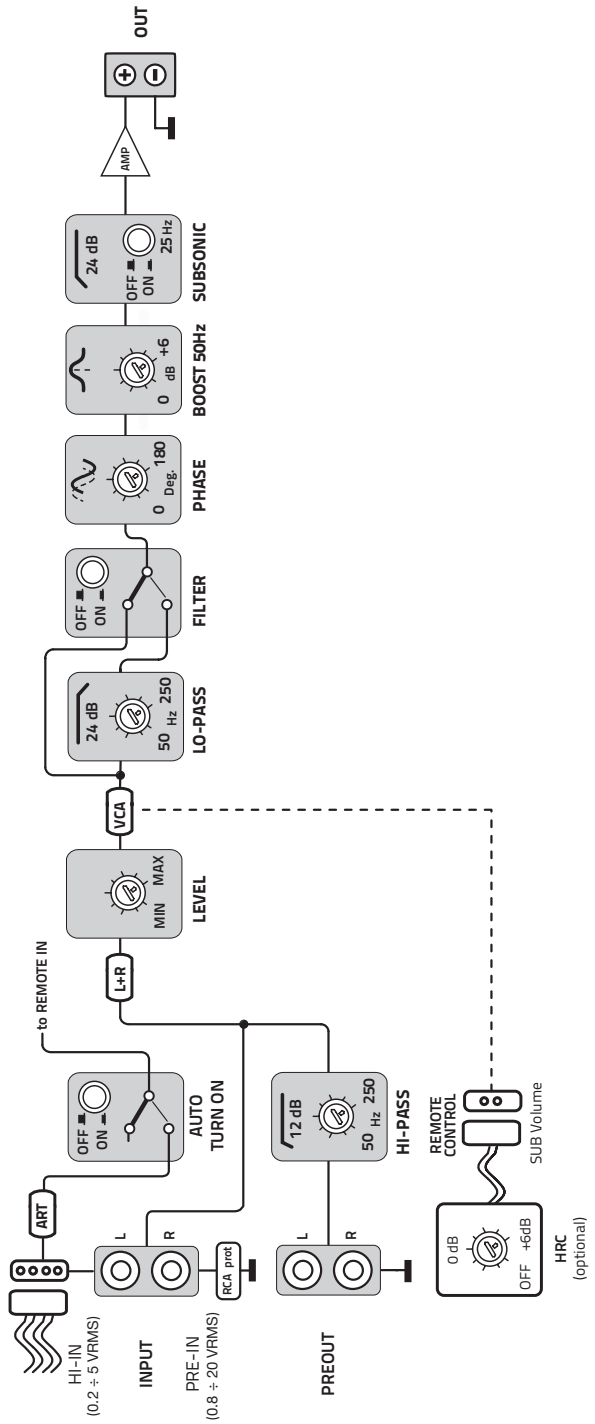
OUTPUTS:



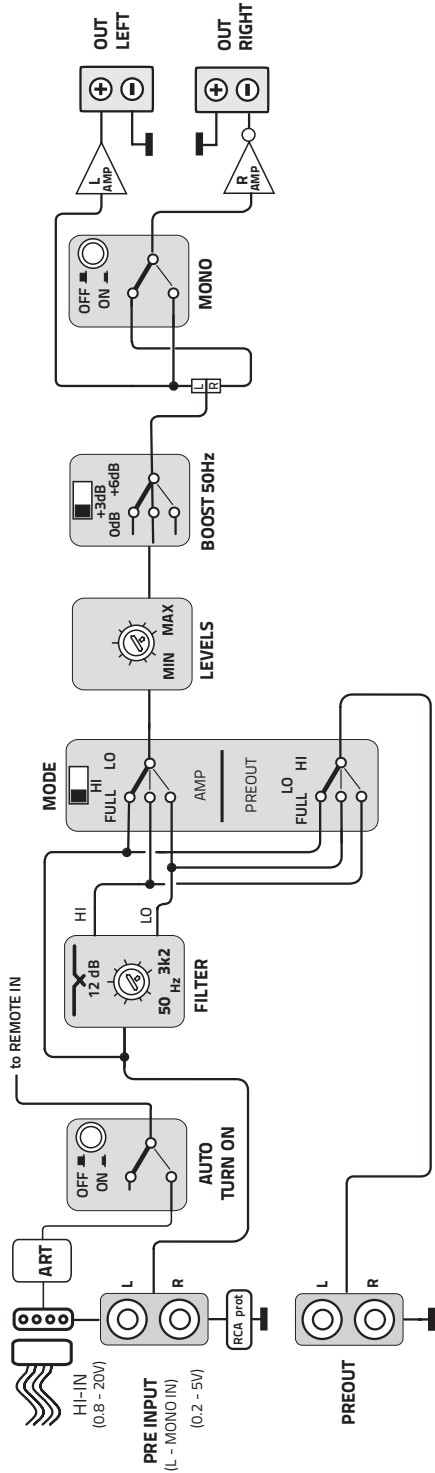
X: Not AVAILABLE	○ - □ Set-up CONTROLS	● - □ Adjustment CONTROLS
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10 BLOCK DIAGRAMS

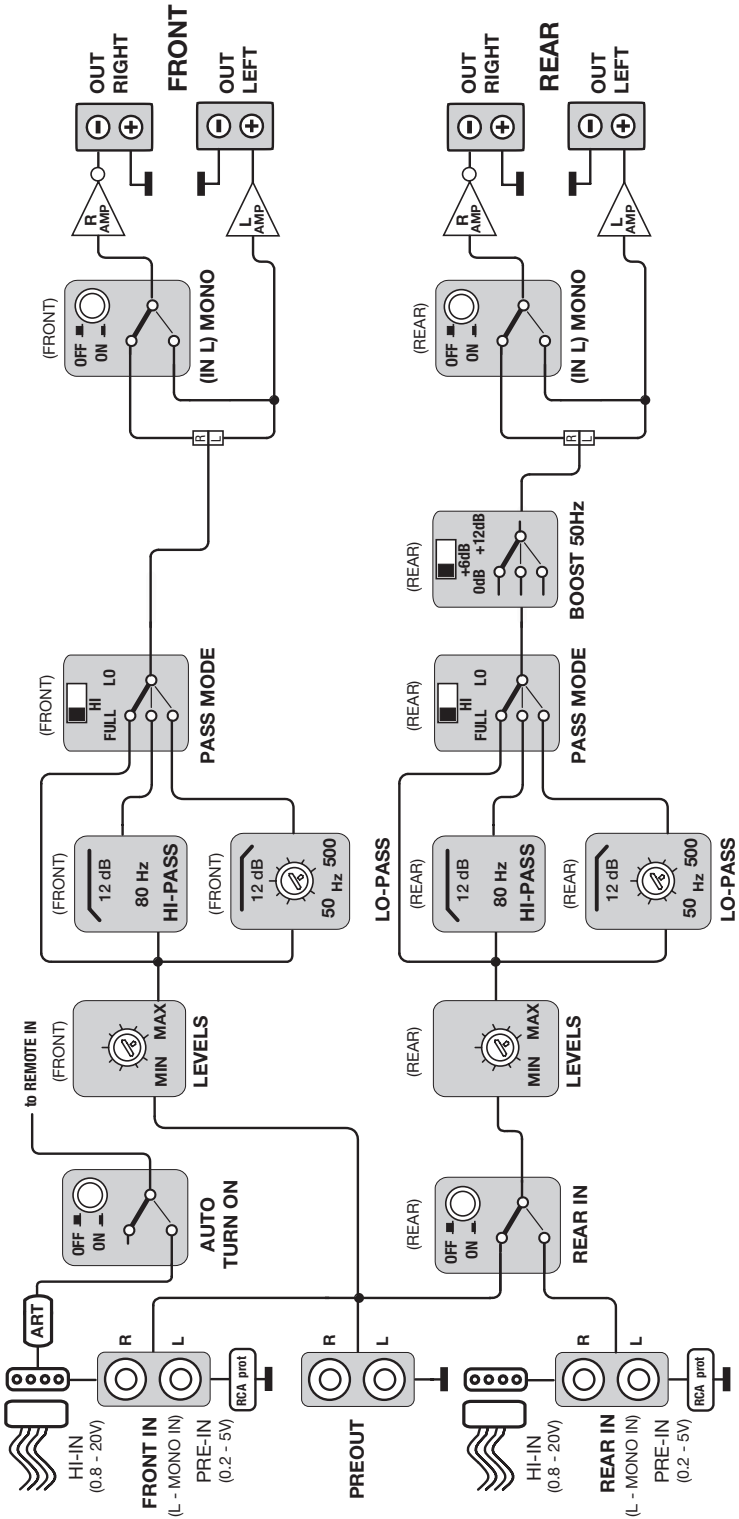
HCP 1MDK



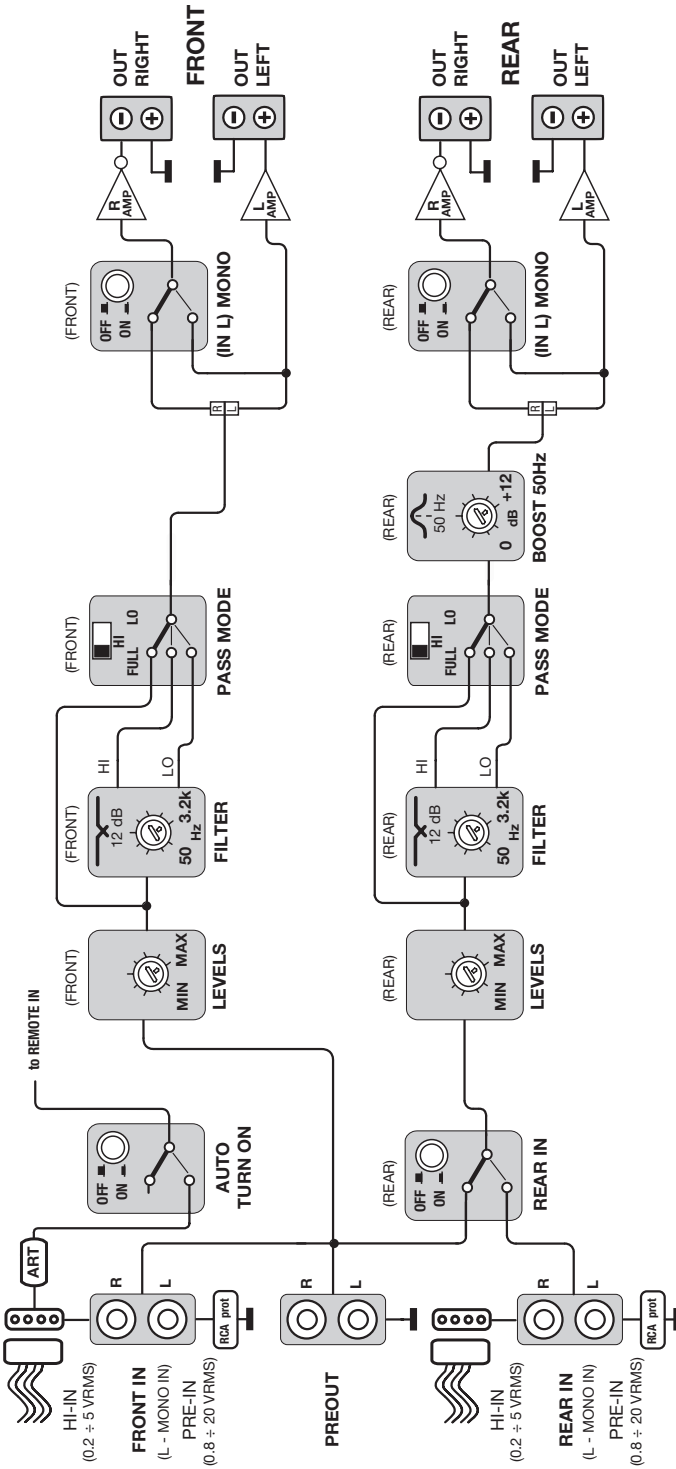
HCP 2MX



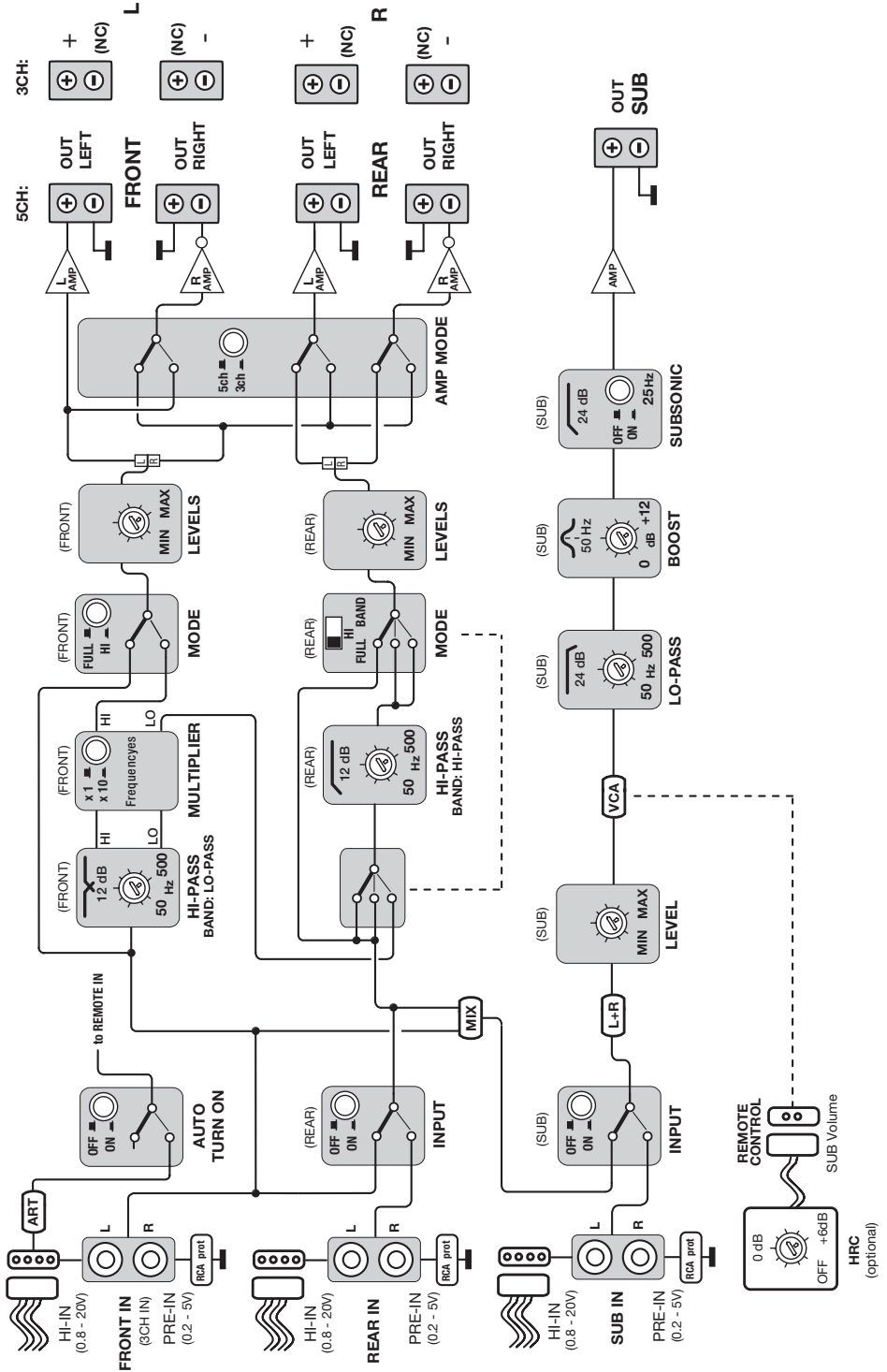
HCP 4M



HCP 4MDK



HCP 5MD / HCP 5MD-24V



11 TECHNICAL SPECIFICATIONS

HCP 1MDK

Power Supply

Power supply voltage / fuse:	11±15 VDC / 3 x 30 A
Idling current (power ON/OFF):	0.8 A / 1 mA
Consumption @ 20, 14.4 VDC (Max Musical Power):	45 A
Remote In:	7 ± 15 VDC - 1 mA
ART:	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage

Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.25 %
Bandwidth:	10 ÷ 500 Hz
S/N Ratio (A weighted @ 1 V):	100 dB
Damping factor (100 Hz @ 4Ω):	> 100
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (33 Ω)
Load impedance (MIN):	2Ω
Output Power (RMS) @ 14.4 VDC, THD 1%	
1 Ch:	600 W x 1 (4Ω)
1 Ch:	1100 W x 1 (2Ω)
Output Power (RMS) @ 14.4 VDC, THD 10%	
1 Ch:	740 W x 1 (4Ω)
1 Ch:	1240 W x 1 (2Ω)
CEA 2006-A Ratings:	
RMS Power (4Ω, ≤1 %THD+N, 14.4 V):	600 W x 1 Ch
S/N Ratio (ref. 1 W output):	80 dBA



INPUTS / OUTPUTS / FILTERS

INPUTS:	PRE IN / SPEAKER IN
Preout Hi-Pass:	50 ÷ 250 Hz @ 12 dB/Oct.
Filters FULL:	Yes
Lo-Pass:	50 ÷ 250 Hz @ 24 dB/Oct.
SUBSONIC (on/off):	25 Hz @ 24 dB/Oct.
BOOST 50 Hz (adjust):	(0 ÷ 6) dB
PHASE (adjust):	(0 ÷ 180) deg
Remote Volume Control (adjust):	(-50 ÷ 6) dB

SIZE / WEIGHT

Max size (mm / in.):	315 x 190 x 50 / 12.40 x 7.48 x 1.97
Weight (kg / lb.):	3 / 6.61

HCP 2MX

Power Supply

Power supply voltage / fuse:	11±15 VDC / 2 x 20 A
Idling current (power ON/OFF):	0.6 A / 0.4 mA
Consumption @ 20, 14.4 VDC (Max Musical Power):	20 A
Remote In:	7 ± 15 VDC - 1 mA
ART:	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage

Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.03 %
Bandwidth:	10 ÷ 65k Hz
S/N Ratio (A weighted @ 1 V):	105 dB
Damping factor (100 Hz @ 4Ω):	300
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (33 Ω)
Load impedance (MIN) @ 2 Ch:	2Ω:
@ 1 Ch:	4Ω

Output Power (RMS) @ 14.4 VDC, THD 1%:

2 Ch:	100 W x 2 (4Ω)
2 Ch:	160 W x 2 (2Ω)
1 Ch:	320 W x 1 (4Ω)

Output Power (RMS) @ 14.4 VDC, THD 10%:

2 Ch:	120 W x 2 (4Ω)
2 Ch:	200 W x 2 (2Ω)
1 Ch:	400 W x 1 (4Ω)

CEA 2006-A Ratings:

RMS Power (4Ω, ≤1 %THD+N, 14.4 V):	100 W x 2 Ch
S/N Ratio (ref. 1 W output):	83 dBA



Inputs / Outputs / Filter

INPUTS:	PRE IN / SPEAKER IN
Preout FULL:	Yes
Hi-Pass:	50 ÷ 3200 Hz @ 12 dB/Oct.
Lo-Pass:	50 ÷ 3200 Hz @ 12 dB/Oct.
Filters FULL:	Yes
Hi-Pass:	50 ÷ 3200 Hz @ 12 dB/Oct.
Lo-Pass:	50 ÷ 3200 Hz @ 12 dB/Oct.
MONO (on/off):	Yes
BOOST 50 Hz (select):	(0 / 3 / 6) dB

Size / Weight

Max size (mm / in.):	315 x 190 x 50 / 12.40 x 7.48 x 1.97
Weight (kg / lb.):	2,57 / 5.66

HCP 4M

Power Supply	
Power supply voltage / fuse:	11÷15 VDC / 2 x 20 A
Idling current (power ON/OFF):	1 A / 0.04 mA
Consumption @ 2Ω, 14.4 VDC (Max Musical Power):	21 A
Remote In:	7 ÷ 15 VDC - 1 mA
ART :	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage	
Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.01 %
Bandwidth:	10 ÷ 45k Hz
S/N Ratio (A weighted @ 1 V):	103 dB
Damping factor (100 Hz @ 4Ω):	120
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (47 Ω)
Load impedance (MIN) @ 4 Ch:	2Ω:
@ 3 Ch:	2Ω + 2Ω + 4Ω
@ 2 Ch:	4Ω

Output Power (RMS) @ 14.4 VDC, THD 1%:	
4 Ch:	55 W x 4 (4Ω)
4 Ch:	85 W x 4 (2Ω)
3 Ch:	55 W x 2 (4Ω) + 170 W x 1 (4Ω)
3 Ch:	85 W x 2 (2Ω) + 170 W x 1 (4Ω)
2 Ch:	170 W x 2 (4Ω)

Output Power (RMS) @ 14.4 VDC, THD 10%:	
4 Ch:	65 W x 4 (4Ω)
4 Ch:	95 W x 4 (2Ω)
3 Ch:	65 W x 2 (4Ω) + 190 W x 1 (4Ω)
3 Ch:	95 W x 2 (2Ω) + 190 W x 1 (4Ω)
2 Ch:	190 W x 2 (4Ω)

CEA 2006-A Ratings:	
RMS Power (4Ω, ±1 %THD+N, 14.4 V):	50 W x 4 Ch
S/N Ratio (ref. 1 W output):	82 dBA



Inputs / Outputs / Filter	
INPUTS:	PRE IN / SPEAKER IN
Preout FULL range (FRONT):	Yes
FRONT Ch. filters FULL:	Yes
FRONT Ch. filters Hi-Pass:	80 Hz @ 12 dB/Oct.
FRONT Ch. filters Lo-Pass:	50 ÷ 500 Hz @ 12 dB/Oct.
REAR Ch. filters FULL:	Yes
REAR Ch. filters Hi-Pass:	80 Hz @ 12 dB/Oct.
REAR Ch. filters Lo-Pass:	50 ÷ 500 Hz @ 12 dB/Oct.
FRONT Ch. MONO (on/off):	Yes
REAR Ch. MONO (on/off):	Yes
BOOST 50 Hz (select):	(0 / 6 / 12) dB

Size / Weight	
Max size (mm / in.):	315 x 190 x 50 / 12.40" x 7.48" x 1.97"
Weight (kg / lb.):	2,62 / 5.77

HCP 4MDK

Power Supply	
Power supply voltage / fuse:	11÷15 VDC / 2 x 35 A
Idling current (power ON/OFF):	1.6 A / 0.05 mA
Consumption @ 2Ω, 14.4 VDC (Max Musical Power):	40 A
Remote In:	7 ÷ 15 VDC - 1 mA
ART:	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage	
Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.03 %
Bandwidth:	10 ÷ 35K Hz
S/N Ratio (A weighted @ 1 V):	105 dB
Damping factor (100 Hz @ 4Ω):	200
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (47Ω)
Load impedance (MIN) @ 4 Ch:	2Ω
@ 3 Ch:	2Ω + 2Ω + 4Ω
@ 2 Ch:	4Ω

Output Power (RMS) @ 14.4 VDC, THD 1%	
4 Ch:	120 W x 4 (4Ω)
4 Ch:	220 W x 4 (2Ω)
3 Ch:	120 W x 2 (4Ω) + 440 W x 1 (4Ω)
3 Ch:	220 W x 2 (2Ω) + 440 W x 1 (4Ω)
2 Ch:	440 W x 2 (4Ω)

Output Power (RMS) @ 14.4 VDC, THD 10%	
4 Ch:	150 W x 4 (4Ω)
4 Ch:	250 W x 4 (2Ω)
3 Ch:	150 W x 2 (4Ω) + 520 W x 1 (4Ω)
3 Ch:	250 W x 2 (2Ω) + 520 W x 1 (4Ω)
2 Ch:	520 W x 2 (4Ω)

CEA 2006-A Ratings:	
RMS Power (4Ω, ±1 %THD+N, 14.4 V):	110 W x 4 Ch
S/N Ratio (ref. 1 W output):	85 dBA



Inputs / Outputs / Filters	
INPUTS:	PRE IN / SPEAKER IN
Preout FULL range (FRONT):	Yes
FRONT Ch. filters FULL:	Yes
Hi-Pass:	50 ÷ 3.2k Hz @ 12 dB/Oct.
Lo-Pass:	50 ÷ 3.2k Hz @ 12 dB/Oct.
REAR Ch. filters FULL:	Yes
Hi-Pass:	50 ÷ 3.2k Hz @ 12 dB/Oct.
Lo-Pass:	50 ÷ 3.2k Hz @ 12 dB/Oct.
FRONT Ch. MONO (on/off):	Yes
REAR Ch. MONO (on/off):	Yes
BOOST 50 Hz (select):	(0 ÷ 12) dB

Size / Weight	
Max size (mm / in.):	315 x 190 x 50 / 12.40" x 7.48" x 1.97"
Weight (kg / lb.):	2,73 / 6.01

HCP 5MD

Power Supply	
Power supply voltage / fuse:	11÷15 VDC / 2 x 25 A
Idling current (power ON/OFF):	2 A / 0.04 mA
Consumption @ 20, 14.4 VDC (Max Musical Power):	30 A
Remote In:	7 ÷ 15 VDC - 1 mA
ART :	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage

Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.02 %
Bandwidth FRONT/REAR:	10 ÷ 50k Hz
Bandwidth SUB:	10 ÷ 500 Hz
S/N Ratio (A weighted @ 1 V):	100 dB
Damping factor (100 Hz @ 4Ω): FRONT/REAR	100
Damping factor (100 Hz @ 4Ω) SUB:	250
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (47 Ω)
Load impedance (MIN) @ 5 Ch: @ 3 Ch:	2Ω: 4Ω + 4Ω + 2Ω
Output Power (RMS) @ 14.4 VDC, THD 1%:	
5 Ch:	55 W x 4 + 160 W X 1 (4Ω)
5 Ch:	90 W x 4 + 280 W X 1 (2Ω)
3 Ch:	180 W x 2 (4Ω) + 160 W X 1 (4Ω)
3 Ch:	180 W x 2 (4Ω) + 280 W X 1 (2Ω)
Output Power (RMS) @ 14.4 VDC, THD 10%:	
5 Ch:	65 W x 4 + 200 W X 1 (4Ω)
5 Ch:	105 W x 4 + 330 W X 1 (2Ω)
3 Ch:	210 W x 2 (4Ω) + 200 W x 1 (4Ω)
3 Ch:	210 W x 2 (4Ω) + 330 W x 1 (2Ω)
CEA 2006-A Ratings:	
RMS Power (4Ω, ±1 %THD+N, 14.4 V):	50 W x 4 Ch + 1 Ch
S/N Ratio (ref. 1 W output):	(50 W Ch) 83 dB (150 W Ch) 83 dB

Inputs / Outputs / Filter

Inputs / Outputs / Filter	
INPUTS:	PRE IN / SPEAKER IN
FRONT Ch. filters FULL:	Yes
FRONT Ch. filters Hi-Pass:	50 ÷ 5k Hz @ 12 dB/Oct.
REAR Ch. filters FULL:	Yes
REAR Ch. filters Hi-Pass:	50 ÷ 500 Hz @ 12 dB/Oct.
REAR Ch. filters Band-Pass:	50 ÷ 500 Hz (hi) @ 12 dB/Oct. 50 ÷ 500 Hz (lo) @ 12 dB/Oct.
SUB Ch. filters LO-PASS:	50 ÷ 500 Hz @ 24 dB/Oct.
SUBSONIC (on/off):	25 Hz @ 24 dB/Oct.
BOOST 50 Hz (adjust):	(0 ÷ 12) dB
Remote Volume Control (adjust):	(-50 ÷ 6) dB

Size / Weight

Max size (mm / in.):	355 x 190 x 50 / 13.58" x 7.48" x 1.97"
Weight (kg / lb.):	2,61 / 5.75

HCP 5MD-24V

Power Supply	
Power supply voltage / fuse:	22÷33 VDC / 2 x 15 A
Idling current (power ON/OFF):	1 A / 0.04 mA
Consumption @ 20, 14.4 VDC (Max Musical Power):	15 A
Remote In:	7 ÷ 33 VDC - 1 mA
ART :	Automatic Remote Turn-On/Off with Speaker-In

Amplifier Stage

Features:	
Distorsion - THD (100 Hz @ 4Ω):	0.02 %
Bandwidth FRONT/REAR:	10 ÷ 50k Hz
Bandwidth SUB:	10 ÷ 500 Hz
S/N Ratio (A weighted @ 1 V):	100 dB
Damping factor (100 Hz @ 4Ω): FRONT/REAR	100
Damping factor (100 Hz @ 4Ω) SUB:	250
Pre-In sensitivity:	0.2 ÷ 5 VRMS (15 kΩ)
Speaker-In sensitivity:	0.8 ÷ 20 VRMS (47 Ω)
Load impedance (MIN) @ 5 Ch: @ 3 Ch:	2Ω: 4Ω + 4Ω + 2Ω
Output Power (RMS) @ 28.8 VDC, THD 1%:	
5 Ch:	55 W x 4 + 160 W X 1 (4Ω)
5 Ch:	90 W x 4 + 280 W X 1 (2Ω)
3 Ch:	180 W x 2 (4Ω) + 160 W X 1 (4Ω)
3 Ch:	180 W x 2 (4Ω) + 280 W X 1 (2Ω)
Output Power (RMS) @ 28.8 VDC, THD 10%:	
5 Ch:	65 W x 4 + 200 W X 1 (4Ω)
5 Ch:	105 W x 4 + 330 W X 1 (2Ω)
3 Ch:	210 W x 2 (4Ω) + 200 W x 1 (4Ω)
3 Ch:	210 W x 2 (4Ω) + 330 W x 1 (2Ω)
CEA 2006-A Ratings:	
RMS Power (4Ω, ±1 %THD+N, 14.4 V):	50 W x 4 Ch + 1 Ch
S/N Ratio (ref. 1 W output):	(50 W Ch) 83 dB (150 W Ch) 83 dB

Inputs / Outputs / Filter

Inputs / Outputs / Filter	
INPUTS:	PRE IN / SPEAKER IN
FRONT Ch. filters FULL:	Yes
FRONT Ch. filters Hi-Pass:	50 ÷ 5k Hz @ 12 dB/Oct.
REAR Ch. filters FULL:	Yes
REAR Ch. filters Hi-Pass:	50 ÷ 500 Hz @ 12 dB/Oct.
REAR Ch. filters Band-Pass:	50 ÷ 500 Hz (hi) @ 12 dB/Oct. 50 ÷ 500 Hz (lo) @ 12 dB/Oct.
SUB Ch. filters LO-PASS:	50 ÷ 500 Hz @ 24 dB/Oct.
SUBSONIC (on/off):	25 Hz @ 24 dB/Oct.
BOOST 50 Hz (adjust):	(0 ÷ 12) dB
Remote Volume Control (adjust):	(-50 ÷ 6) dB

Size / Weight

Max size (mm / in.):	355 x 190 x 50 / 13.58" x 7.48" x 1.97"
Weight (kg / lb.):	3 / 6.61



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