

# OWNER'S MANUAL



RP-800.1DM  
RP-1500.1DM  
RP-75.4ABM  
RP-150.4ABM

HIGH PERFORMANCE MARINE AMPLIFIER

## INTRODUCTION

CONGRATULATIONS AND THANK YOU FOR PURCHASING SKAR AUDIO MARINE AMPLIFIERS. THE LOGICAL CHOICE IN MOBILE AUDIO AMPLIFICATION.

YOUR MARINE AMPLIFIERS HAVE BEEN DESIGNED AND ENGINEERED WITH THE HIGHEST QUALITY COMPONENTS AND TOP OF THE LINE WORKMANSHIP TO HELP YOU REACH THE SUPERIOR SOUND YOU ARE AFTER.

TO ACHIEVE OPTIMAL PERFORMANCE OF YOUR SYSTEM, PLEASE TAKE A FEW MOMENTS TO READ OVER THIS OWNER'S MANUAL OR VISIT AUTHORIZED DEALER IF NEEDED BEFORE STARTING YOUR INSTALLATION.

## DIGITAL MONOBLOCK FEATURES

- STABLE INTO 10OHM LOAD
- HIGH SPEED MOSFET POWER SUPPLY
- 24DB/OCT. VARIABLE CROSSOVER
- VARIABLE LOW PASS FILTER
- VARIABLE SUBSONIC FILTER
- 60B / 120B SELECTABLE BASS BOOST
- REMOTE CONTROL
- COMPACT DESIGN
- WATER-PROOF COATING ON PCB
- RUST-PROOF PAINTING ON MECHANICAL CASES

## DIGITAL MONOBLOCK SPECIFICATIONS

RATED POWER OUTPUT	RP-800.1DM	RP-1500.1DM
- RMS POWER @ 4 OHM	370 WATTS X 1	550 WATTS X 1
- RMS POWER @ 2 OHM	600 WATTS X 1	930 WATTS X 1
- RMS POWER @ 1 OHM	800 WATTS X 1	1500 WATTS X 1
WORKING IMPEDANCE	10OHM STABLE	10OHM STABLE
INPUT SENSITIVITY	6V - 0.2V	6V - 0.2V
LOW PASS FILTER	50HZ - 220HZ	50HZ - 220HZ
SUBSONIC FILTER	OFF - 50HZ	OFF - 50HZ
BASS BOOST	60B / 120B	60B / 120B
FREQUENCY RESPONSE	20 - 250HZ	20 - 250HZ
SIGNAL TO NOISE RATIO	85 <	85 <
EFFICIENCY @ 40HM	OVER 90%	OVER 90%
THD @ 40HM	< 0.1%	< 0.1%
DAMPING FACTOR	150 <	150 <
FUSE RATING	80A	150A
DIMENSIONS ( L INCHES )	10.13 INCHES	13.267 INCHES
6.30 W X 2.20 H INCHES		

ALL FEATURES ARE SUBJECT TO CHANGE IN THE CONTINUING EFFORT TO IMPROVE THE PRODUCTS WITHOUT NOTICE.

## MULTI-CHANNEL FEATURES

- \* STABLE INTO 2 OHM STEREO OR 4 OHM MONO
- \* HIGH SPEED MOSFET POWER SUPPLY
- \* 120DB/OCT, HIGH PASS FILTER
- \* 120DB/OCT, LOW PASS FILTER
- \* 60B / 120B SELECTABLE BASS BOOST
- \* BAND-PASS CAPABLE
- \* SMT TECHNOLOGY
- \* HEAVY DUTY PRINTED CIRCUIT BOARD
- \* COMPACT DESIGN
- \* WATER-PROOF COATING ON PCB
- \* RUST-PROOF PAINTING ON MECHANICAL CASES

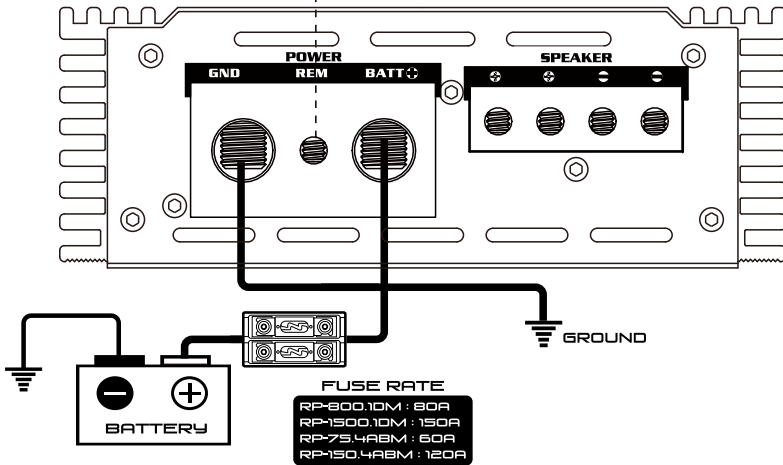
## MULTI-CHANNEL SPECIFICATIONS

RATED POWER OUTPUT	RP-75.4ABM	RP-150.4ABM
- RMS POWER @ 4 OHM	75 WATTS X 4	150 WATTS X 4
- RMS POWER @ 2 OHM	115 WATTS X 4	250 WATTS X 4
- RMS POWER @ 1 OHM	NA	NA
- RMS POWER @ 4 OHM MONO	250 WATTS X 2	500 WATTS X 2
WORKING IMPEDANCE	2 OHM STABLE	2 OHM STABLE
INPUT SENSITIVITY	6V - 0.2V	6V - 0.2V
HIGH PASS FILTER	20HZ - 5KHZ	20HZ - 5KHZ
LOW PASS FILTER	50HZ - 500HZ	50HZ - 500HZ
SUBSONIC FILTER	NA	NA
BASS BOOST	60B / 120B	60B / 120B
FREQUENCY RESPONSE	20HZ - 20KHZ	20HZ - 20KHZ
SIGNAL TO NOISE RATIO	105 <	105 <
EFFICIENCY @ 4OHM	OVER 65%	OVER 65%
THD @ 4OHM	< 0.1%	< 0.1%
DAMPING FACTOR	150 <	150 <
FUSE RATING	60A	120A
DIMENSIONS ( L INCHES )	13.78 INCHES	17.72 INCHES
6.30 W X 2.20 H INCHES		

ALL FEATURES ARE SUBJECT TO CHANGE IN THE CONTINUING EFFORT TO IMPROVE THE PRODUCTS WITHOUT NOTICE.

## POWER CONNECTION

HEAD UNIT



### ⚠ CAUTION !!

RP-800.1DM, RP-1500.1DM, RP-75.4ABM, RP-150.4ABM  
WORKING VOLTAGE IS 8.5V - 16 VOLTS

#### **BATT + (+12V POWER )**

BEFORE MOUNTING AMPLIFIERS, DISCONNECT THE NEGATIVE CABLE FROM THE BATTERY TO PROTECT ANY ACCIDENTAL DAMAGE TO YOUR AWESOME AMPLIFIERS AND AUDIO SYSTEM.

ALL AMPLIFIERS ARE DESIGNED TO USE 4 GAUGE POWER AND GROUND CONNECTION.

CONNECT THE POWER CABLES TO POWER TERMINAL +12V.

ALL RP MARINE SERIES AMPLIFIERS ARE NOT EQUIPPED WITH FUSES SO THAT EXTERNAL FUSES SHOULD BE USED.

CONNECT ONE END OF FUSE HOLDER TO THE POWER CABLE GOING INTO THE AMPLIFIERS AND THE OTHER END OF FUSE HOLDER TO POSITIVE BATTERY. THIS FUSE LOCATION WILL PROTECT THE SYSTEM AND THE VEHICLE AGAINST THE POSSIBILITY OF A SHORT CIRCUIT IN THE POWER CABLE. BE SURE TO USE FUSES AND FUSE HOLDER ADEQUATE FOR THE APPLICATION.

#### **GND ( GROUND )**

LOCATE A SECURE GROUNDING CONNECTION AS CLOSE TO AMPLIFIER AS POSSIBLE.

MAKE SURE THE LOCATION IS CLEAN AND PROVIDES A DIRECT ELECTRICAL CONNECTION TO THE FRAME OF THE VEHICLE.

THE GROUND NEEDS TO HAVE AS LOW OF A RESISTANCE AS POSSIBLE.

CONNECT ONE END OF A SHORT PIECE OF THE SAME SIZE CABLE AS THE POWER CABLE TO THE GROUNDING POINT OR TO ONE OF YOUR BATTERIES OR BATTERY BANK. RUN THE OTHER END OF 4 GA CABLE TO THE MOUNTING LOCATION OF THE AMPLIFIERS' GROUND TERMINALS AND CONNECT THE GROUND CABLE TO THE GND.

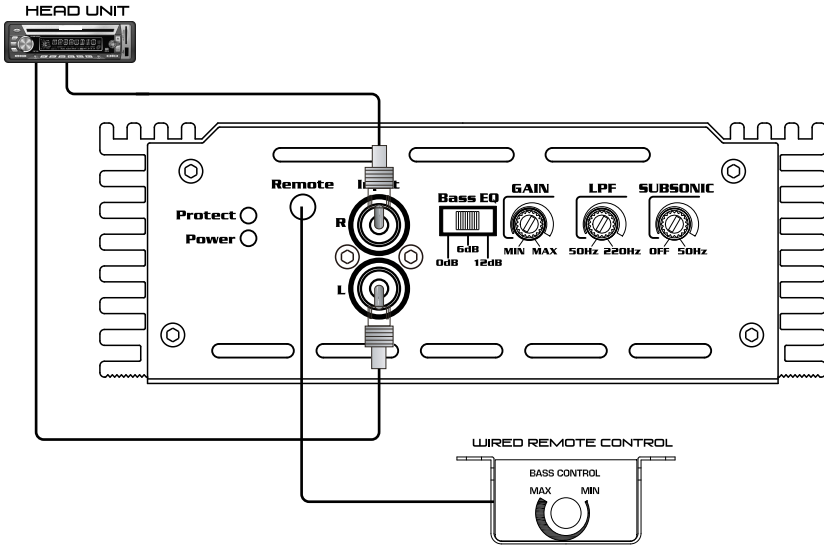
#### **REM ( REMOTE )**

RUN A REMOTE TURN ON CABLE FROM THE SWITCHED +12V SOURCE .

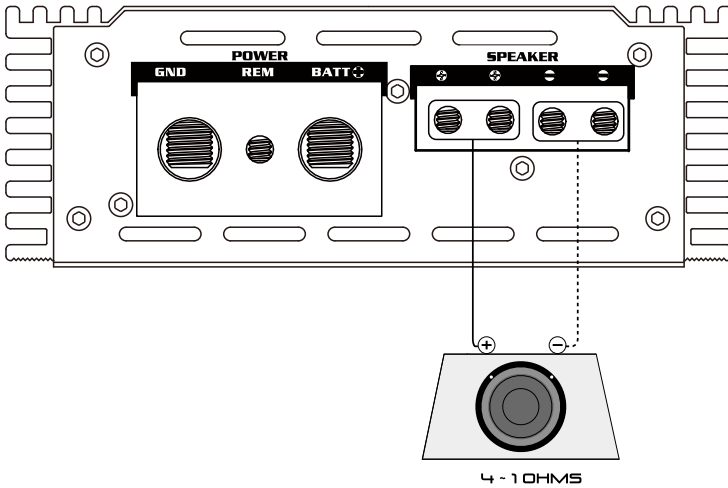
THIS MAY BE A TOGGLE SWITCH, A RELAY, YOUR SOURCE UNIT'S REMOTE TRIGGER CABLES, OR POWER ANTENNA TRIGGER CABLE.

CONNECT THE REMOTE TURN ON CABLE TO THE REM ( REMOTE ) TERMINAL.

## DIGITAL MONOBLOCK INPUT CONNECTION

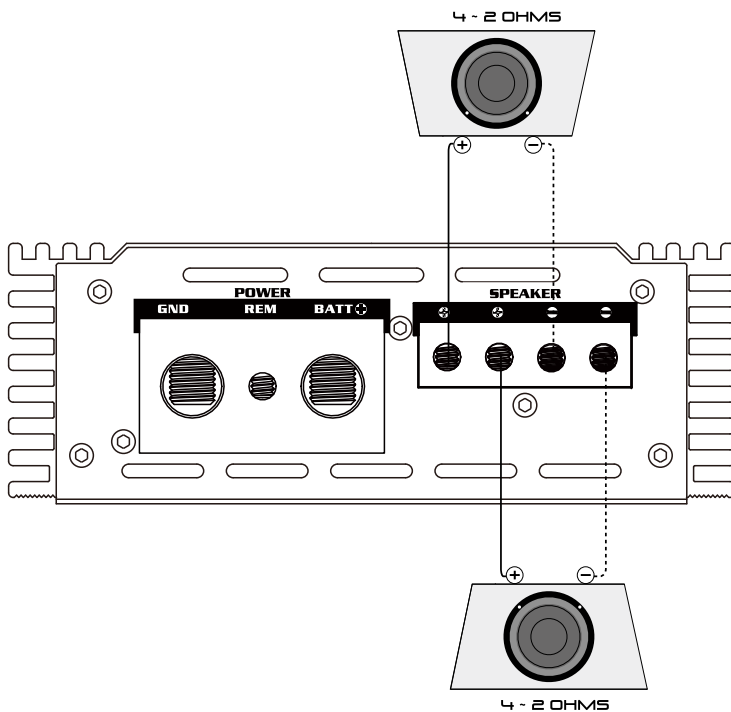


## DIGITAL MONOBLOCK SPEAKER CONNECTION

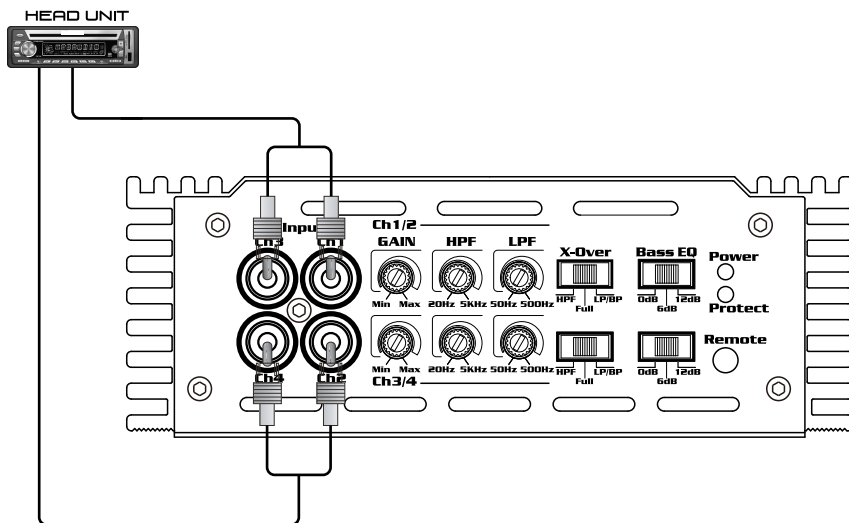


### **! CAUTION !!**

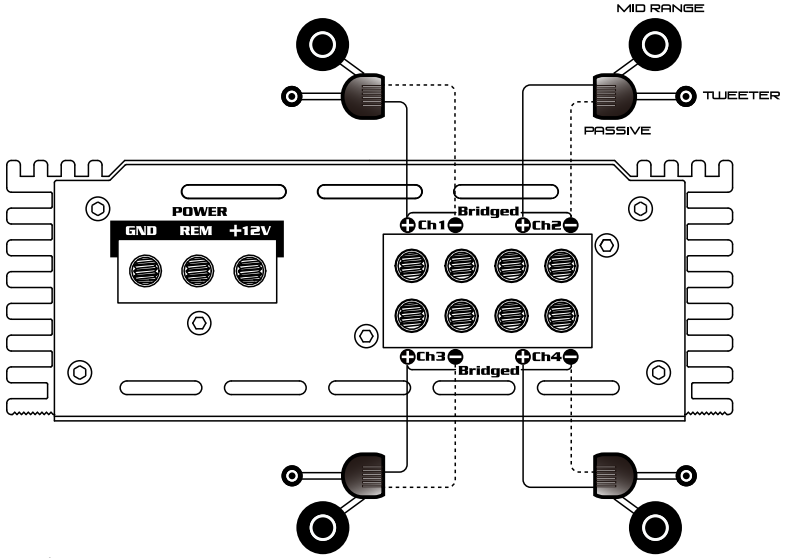
PR MARINE DIGITAL MONOBLOCK'S MINIMUM WORKING IMPEDANCE IS 10HM



**4 CHANNELS RCA INPUT CONNECTION**

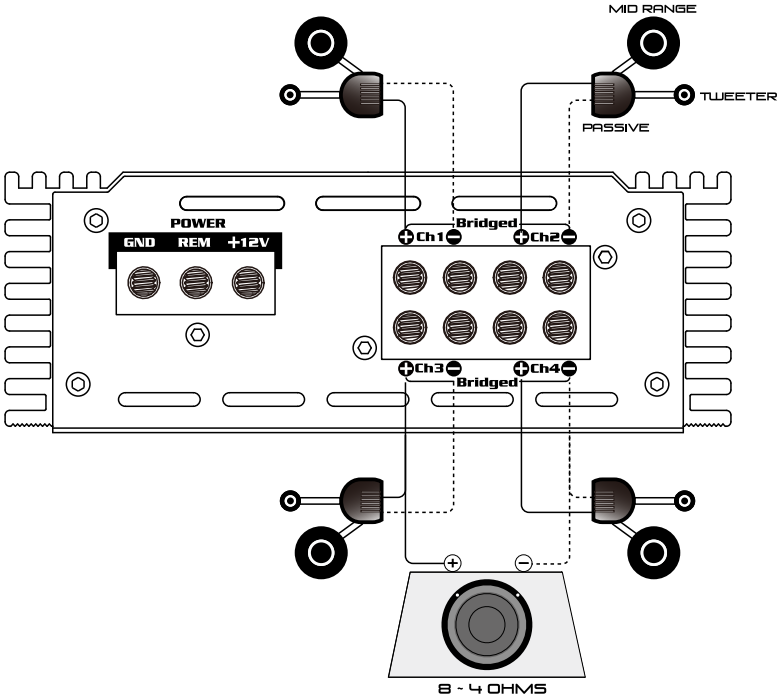


# 4 CHANNELS SPEAKER CONNECTIONS



## CAUTION !!

PR-75.4ABM & RP-150.4ABM MARINE 4CH MINIMUM WORKING IMPEDANCE IS 20HM STEREO OR 40HM MONO.



## TROUBLE SHOOTINGS

RP-MARINE SERIES AMPLIFIERS HAVE THE PROTECTION FEATURES TO PREVENT ANY DAMAGES FROM MISUSE OR FAULTY CONDITIONS.

IF RP-MARINE SERIES AMPLIFIERS SENSE EXCESSIVE HEAT, SHORT CIRCUITED SPEAKERS DC, OR VOLTAGE THE PROTECTION INDICATOR WILL LIGHT, AND THE SYSTEM WILL BE TURNED OFF.

IN ORDER TO CHECK THE PROBLEM, YOU SHOULD TURN ALL LEVELS DOWN AND ALL POWER OFF AND CAREFULLY CHECK THE INSTALLATION FOR WIRING MISTAKES OR SHORT.

IF RP-MARINE SERIES AMPLIFIERS SHUTS DOWN DUE TO EXCESSIVE HEAT, THEY WILL BE WORKING LATER WHEN IT IS COOLED DOWN  
BEFORE REMOVING YOUR AMPLIFIER, REFER TO THE LIST BELOW AND FOLLOW THE SUGGESTED PROCEDURES.

### NO SOUND ( NO OUTPUT )

@ PLEASE CHECK ALL CONNECTIONS, CABLES, ROUTING OF CABLES, SHORT & VOLTAGE.

@ PLEASE CHECK THE FUSES , IF THEY ARE BLOWN, PLEASE REPLACE WITH NEW ONE.

@ PLEASE CHECK WHETHER SPEAKERS WORK WELL, YOU CAN TEST SPEAKERS BY CONNECTING TO ANOTHER AMPLIFIER

### PROTECTION

@ PLEASE CHECK OVERLOAD, OVERHEAT ( THERMAL ), SHORT AND VOLTAGE, DC OFFSET.

@ MINIMUM WORKING IMPEDANCE IS 1 OHM FOR RP-800.1DM AND RP-1500.1DM.

RP-75.4ABM AND RP-150.4ABM ARE 20HM STEREO OR 40HM MONO.

@ IF AMPLIFIERS ARE SHUT DOWN DUE TO HEAT, THEY WILL BE ON SOME MINUTES LATER AFTER COOLING DOWN. PLEASE MAKE BETTER AIRFLOW AND NO OBSTRUCTION AROUND AMPLIFIERS FOR THERMAL PROTECTION.

@ RP-800.1DM AND RP-1500.1DM'S WORKING VOLTAGE IS 8.5 - 16VOLTS.

@ WHEN OVER 4V DC COMES INTO AMPLIFIERS, THEN, THEY WILL BE DC PROTECTED. CHECK WHETHER AMPLIFIERS WORK AFTER REMOVING RCA-INPUT.

IF AMPLIFIERS WORK, THEN CHECK DC BY CHECKING RCA-INPUT .

WHEN DC IS OVER 4V AT INPUT, TRY BY REPLACING +12V SOURCE UNIT .

### DISTORTION & NOISE

@ READJUST INPUT LEVEL AND CHECK THE SPEAKER QUALITY AT ANOTHER AMPLIFIER  
REPLACE POOR QUALITY SPEAKERS WITH GOOD QUALITY ONES.

@ CHECK AMPLIFIERS AND HEAD UNIT'S GROUND CONTACT. ALL GROUNDS SHOULD BE COMMON.

@ CHECK RCA JACK, THEN REPLACE WITH NEW ONE OR REROUTE RCA JACK.

@ ENGINE NOISE IS CAUSED BY POOR GROUNDING OF AMPLIFIERS, HEAD UNIT, OTHER COMPONENTS, BATTERY OR ALTERNATOR, SO PLEASE CHECK ALL GROUNDING CONNECTION.

### POOR BASS RESPONSE

@ PLEASE CHECK SPEAKER CABLES AND REVERSE POLARITY.

