

**Pioneer** *sound.vision.soul*

**BRIDGEABLE POWER AMPLIFIER**

**AMPLIFICATEUR DE PUISSANCE  
PONTABLE**

# Owner's Manual

# GM-X962 GM-X862

# Mode d'emploi

## **PIONEER CORPORATION**

4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654, JAPAN

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<HRD0186-A> UC



## Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

### To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

### Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

## We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

### Decibel

<u>Level</u>	<u>Example</u>
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

### THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.



# Before Using This Product

Thank you for purchasing this PIONEER product. It is designed to give you many years of enjoyment.

**PIONEER SUGGESTS USING A PROFESSIONAL INSTALLER DUE TO THE COMPLEXITY OF THIS PRODUCT.**

Please read all instructions and **WARNINGS** in this manual before attempting operation. Should you have any questions, contact your nearest Pioneer authorized dealer or installation specialist.

## Important

The serial number of this amplifier is written on the bottom of the unit. For your own security and convenience, write it down on the enclosed warranty card. Keep the card handy for future reference.

## After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased the product for its after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below:

Please do not ship your product to the companies at the addresses listed below for repair without advance contact.

### ■ U.S.A.

Pioneer Electronics (USA) Inc.  
CUSTOMER SUPPORT DIVISION  
P.O. Box 1760  
Long Beach, CA 90801-1760  
800-421-1404

### ■ CANADA

Pioneer Electronics of Canada, Inc.  
CUSTOMER SATISFACTION  
DEPARTMENT  
300 Allstate Parkway  
Markham, Ontario L3R 0P2  
(905) 479-4411  
1-877-283-5901

For warranty information please see the Limited Warranty sheet included with your product.

## Composition of Manual

This manual applies to the GM-X962 and GM-X862. However, the illustrations show the GM-X962.

## WARNING

- Always use the special red battery and ground wire [RD-223], which is sold separately. Connect the battery wire directly to the car battery positive terminal (+) and the ground wire to the car body.
- Do not touch the amplifier with wet hands. Otherwise you may get an electric shock. Also, do not touch the amplifier when it is wet.
- For traffic safety and to maintain safe driving conditions, keep the volume low enough so that you can still hear normal traffic sound.
- Check the connections of the power supply and speakers if the fuse of the separately sold battery wire or the amplifier fuse blows. Detect the cause and solve the problem, then replace the fuse with another one of the same size and rating.
- To prevent malfunction of the amplifier and speakers, the protective circuit will cut the power supply to the amplifier (sound will stop) when an abnormal condition occurs. In such a case, switch the power to the system OFF and check the connection of the power supply and speakers. Detect the cause and solve the problem.
- Contact the dealer if you cannot detect the cause.
- To prevent an electric shock or short-circuit during connection and installation, be sure to disconnect the negative (-) terminal of the battery beforehand.
- Confirm that no parts are behind the panel when drilling a hole for installation of the amplifier. Be sure to protect all cables and important equipment such as fuel lines, brake lines and the electrical wiring from damage.

## Gain Control

If the sound level is too low, even when the volume of the car stereo used along with this power amplifier is turned up, turn gain control on the front of the power amplifier clockwise. If the sound distorts when the volume is turned up, turn the gain control counter-clockwise.

- When using with an RCA equipped car stereo (standard output of 500 mV), set to the NORMAL position. When using with an RCA equipped Pioneer car stereo with max. output of 4 V or more, adjust level to match the car stereo output level.

## Power Indicator

The power indicator lights when the power is switched on.



## LPF (Low-Pass Filter) Select Switch

Set the LPF select switch as follows according to the type of speaker that is connected to the speaker output connector and the car stereo system:

LPF Select Switch	Audio frequency range to be output	Speaker Type	Remarks
LPF (left)	Very Low Frequency range	Subwoofer	Connect a subwoofer.
OFF (right)	Full range	Full range	

# Connecting the Unit

## CAUTION

- Disconnect the negative (–) terminal of the battery to avoid the risk of short-circuit and damage to the unit.
- Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap adhesive tape around it where they lie against metal parts.
- Do not route wires where they will get hot, for example where the heater will blow over them. If the insulation heats up, it may become damaged, resulting in a short-circuit through the vehicle body.
- Make sure that wires will not interfere with moving parts of the vehicle, such as the gearshift, handbrake or seat sliding mechanism.
- Do not shorten any wires. Otherwise the protection circuit may fail to work when it should.
- Never feed power to other equipment by cutting the insulation of the power supply wire to tap from the wire. The current capacity of the wire will be exceeded, causing overheating.

## To prevent damage

- Do not ground the speaker wire directly or connect a negative (–) lead wire for several speakers.
  - This unit is for vehicles with a 12-volt battery and negative grounding. Before installing it in a recreational vehicle, truck or bus, check the battery voltage.
  - If the car stereo is kept on for a long time while the engine is at rest or idling, the battery may go dead. Turn the car stereo off when the engine is at rest or idling.
  - If the system remote control wire of the amplifier is connected to the power terminal through the ignition switch (12 V DC), the amplifier will always be on when the ignition is on— regardless of whether the car stereo is on or off. Because of this, the battery could go dead if the engine is at rest or idling.
  - Speakers to be connected to the amplifier should conform with the standards listed below. If they do not conform, they may catch fire, emit smoke or become damaged. The speaker impedance must be 2 to 8 ohms for stereo connection, and 4 to 8 ohms for monaural and other bridge connection.
  - Install and route the separately sold battery wire as far away as possible from the speaker wires. Install and route the separately sold battery wire, ground wire, speaker wires and the amplifier as far away as possible from the antenna, antenna cable and tuner.
- Cords for this product and those for other products may be different colors even if they have the same function. When connecting this product to another product, refer to the supplied Installation manuals of both products and connect cords that have the same function.

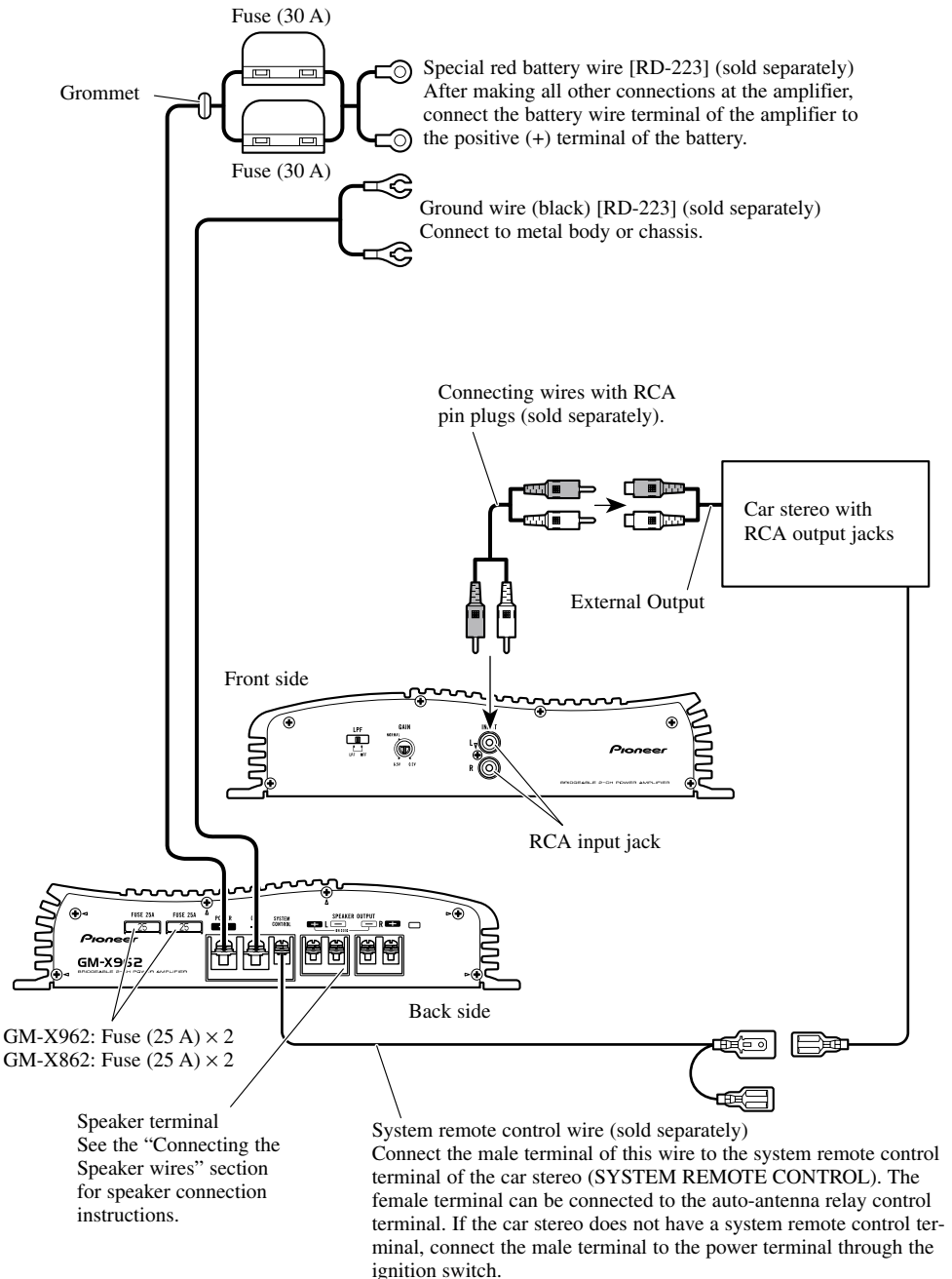
## GM-X962

Speaker Channel	Speaker Type	Power
Two-channel	Subwoofer	Nominal input: Min. 145 W
	Other than subwoofer	Max. input: Min. 250 W
One-channel	Subwoofer	Nominal input: Min. 440 W
	Other than subwoofer	Max. input: Min. 760 W

## GM-X862

Speaker Channel	Speaker Type	Power
Two-channel	Subwoofer	Nominal input: Min. 145 W
	Other than subwoofer	Max. input: Min. 250 W
One-channel	Subwoofer	Nominal input: Min. 440 W
	Other than subwoofer	Max. input: Min. 760 W

# Connection Diagram



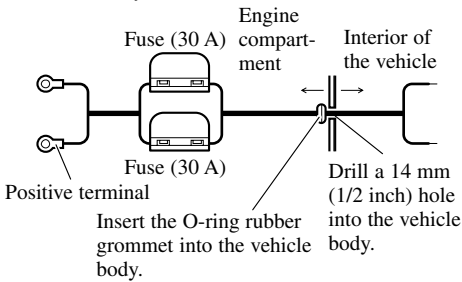
# Connecting the Unit

## Connecting the Power Terminal

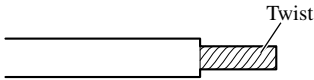
- Always use the special red battery and ground wire [RD-223], which is sold separately. Connect the battery wire directly to the car battery positive terminal (+) and the ground wire to the car body.

### 1. Pass the battery wire from the engine compartment to the interior of the vehicle.

- After making all other connections to the amplifier, connect the battery wire terminal of the amplifier to the positive (+) terminal of the battery.

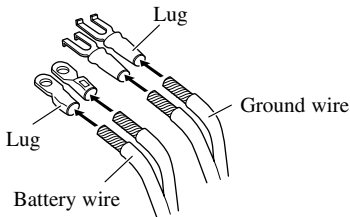


### 2. Twist the battery wire, ground wire and system remote control wire.



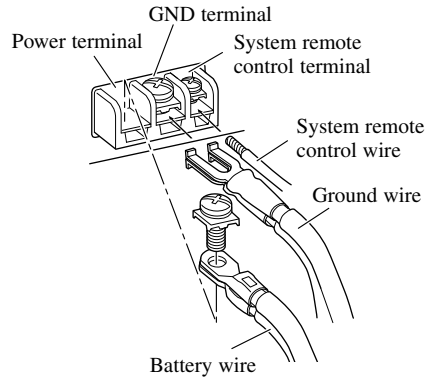
### 3. Attach lugs to wire ends. Lugs not supplied.

- Use pliers, etc., to crimp lugs to wires.



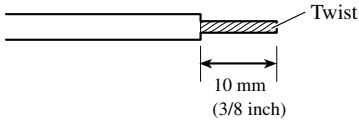
### 4. Connect the wires to the terminal.

- Fix the wires securely with the terminal screws.



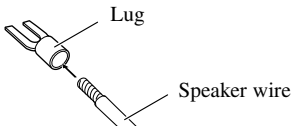
## Connecting the Speaker Terminals

1. Expose the end of the speaker wires using nippers or a cutter by about 10 mm (3/8 inch) and twist.



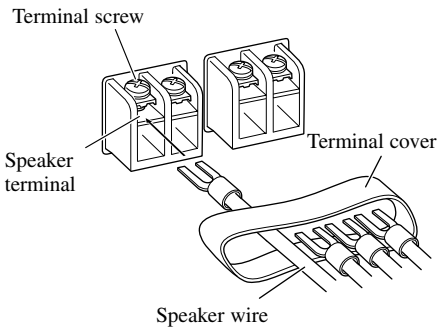
2. Attach lugs to speaker wire ends.  
**Lugs not supplied.**

- Use pliers, etc., to crimp lugs to wires.

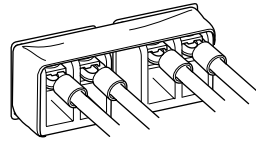


3. Connect the speaker wires to the speaker terminals.

- Connect the speaker wires, passing them through the terminal cover.
- Fix the speaker wires securely with the terminal screws.



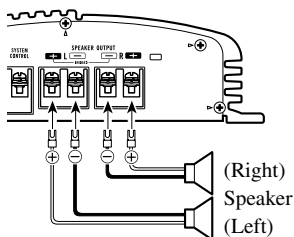
4. Push on the terminal cover.



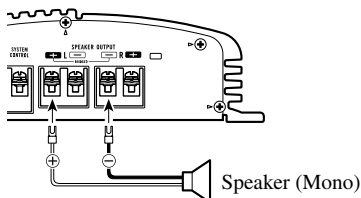
## Connecting the Speaker wires

The speaker output mode can be two-channel (stereo), one-channel (mono), or three-channel (stereo + mono). Connect the speaker leads to suit the mode according to the figures shown below.

### Two-channel mode (stereo)



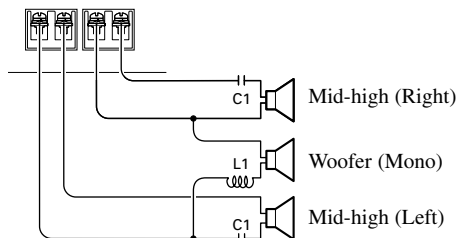
### One-channel mode (mono)



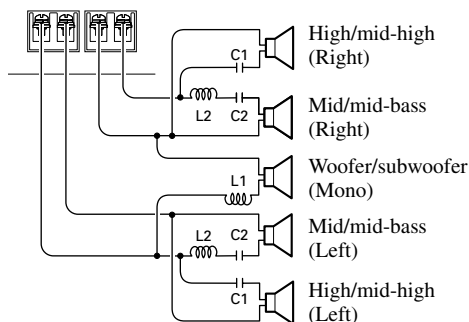
### Three-channel mode (stereo + mono)

The power amplifier is basically a two-channel/one-channel bridgeable amplifier, but three channels can be achieved by combining the stereo and mono modes using inductors and capacitors.

### Three-channel mode, two-way system



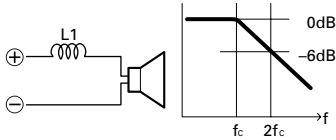
### Three-channel mode, three-way system



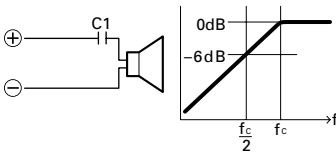
- Inductors (L1 and L2 in the diagrams) act as low-pass filters. Capacitors (C1 and C2 in the diagrams) act as high-pass filters. Inductors (L) are used for the woofer/subwoofer, and capacitors (C) are used for the high/mid-high.
- Remember when bridging an amplifier it will see only half of the original speaker impedance. Therefore, you must use speakers that have ratings of 4 ohms or higher. If you use speakers that have lower impedance ratings it may cause damage to the amplifier.
- When the inductors and capacitors are connected to the speaker wires, secure or solder them so they cannot be pulled loose. Tape or use heat shrink on the joints to prevent short circuits.

## Setting the Filter Constant

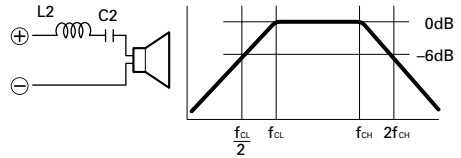
### Low-pass filter (for subwoofer/woofer): 6 dB/octave



### High-pass filter (for mid/mid-high): 6 dB/octave



### Band-pass filter (combination of low-pass filter and high-pass filter for mid-bass/mid): 6 dB/octave



- A multi-channel system can be set up using a combination of filters. The inductance (L) and capacitance (C) will determine the frequency ( $f_c$ ) that the speaker will reproduce. Refer to the chart below to determine the components required.
- Use the capacitors specified. Non-polarized capacitors rated at over  $\pm 25$  V should be used for C1 and C2 in the diagram. Because of the voltage output of the amplifier, it is very important to use non-polarized capacitors rated at or over 25 V. This will prevent a safety hazard.

## Component Guide

Speaker load Impedance	2 $\Omega$		4 $\Omega$		8 $\Omega$	
	L (mH)	C ( $\mu$ F)	L (mH)	C ( $\mu$ F)	L (mH)	C ( $\mu$ F)
$f_c$ (Hz)						
50	6.4	1,600	12.7	800	25.5	400
80	4.0	1,000	8.0	500	16.0	250
125	2.5	640	5.1	300	10.0	160
200	1.6	400	3.2	200	6.4	100
320	1.0	250	2.0	125	4.0	62
500	0.64	160	1.3	80	2.6	40
800	0.4	100	0.8	50	1.6	25
1,250	0.25	64	0.5	30	1.0	16
2,000	0.16	40	0.3	20	0.64	10
3,200	0.1	25	0.2	12.5	0.4	6.2
5,000	0.06	16	0.13	8	0.26	4
8,000	0.04	10	0.08	5	0.16	2.5
10,000	0.03	8	0.06	4	0.13	2

## CAUTION

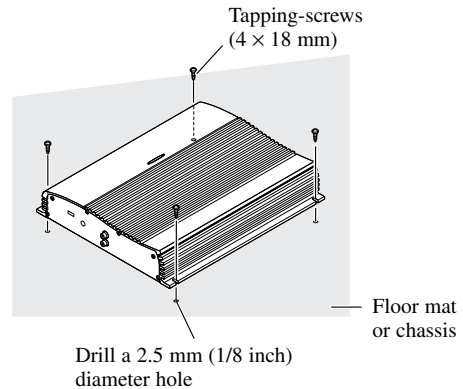
- Do not install in:
  - Places where it could injure the driver or passengers if the vehicle stops suddenly.
  - Places where it may interfere with the driver, such as on the floor in front of the driver's seat.
- Make sure that wires are not caught in the sliding mechanism of the seats, resulting in a short-circuit.
- Confirm that no parts are behind the panel when drilling a hole for installation of the amplifier. Protect all cables and important equipment such as fuel lines, brake lines and electrical wiring from damage.
- Install tapping screws in such a way that the screw tip does not touch any wire. This is important to prevent wires from being cut by vibration of the car, which can result in fire.
- To prevent electric shock, do not install the amplifier in places where it might come in contact with liquids.
- To ensure proper installation, use the supplied parts in the manner specified. If any parts other than the supplied ones are used, they may damage internal parts of the amplifier, or they may become loose causing the amplifier to shut down.

## To prevent malfunction

- To ensure proper heat dissipation of the amplifier, be sure of the following during installation.
  - Allow adequate space above the amplifier for proper ventilation.
  - Do not cover the amplifier with a floor mat or carpet.
- Do not install the amplifier near a door where it may get wet.
- Do not install the amplifier on unstable places such as the spare tire board.
- The best location for installation differs with the car model and installation location. Secure the amplifier at a sufficiently rigid location.
- Make temporary connections first and check that the amplifier and the system operate properly.
- After installing the amplifier, confirm that the spare tire, jack and tools can be easily removed.

## Example of installation on the floor mat or on the chassis

1. Place the amplifier where it is to be installed. Insert the supplied tapping screws (4 × 18 mm) into the screw holes. Push on the screws with a screwdriver so they make marks where the installation holes are to be located.
2. Drill 2.5 mm (1/8 inch) diameter holes at the point marked, and install the amplifier, either on the carpet or directly to the chassis.



# Specifications

## GM-X962

Power source .....	14.4 V DC (10.8 — 15.1 V allowable)
Grounding system .....	Negative type
Current consumption .....	25.0 A (at continuous power, 4 $\Omega$ )
Average current drawn* .....	9.6 A (4 $\Omega$ for two channels) 17.3 A (4 $\Omega$ for one channel)
Fuse .....	25 A $\times$ 2
Dimensions .....	279 (W) $\times$ 61 (H) $\times$ 324 (D) mm [11 (W) $\times$ 2-3/8 (H) $\times$ 12-3/4 (D) in]
Weight .....	5.0 kg (11.0 lbs) (Leads for wiring not included)
Maximum power output .....	250 W $\times$ 2 / 760 W $\times$ 1
Continuous power output .....	125 W $\times$ 2 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.08% THD) 380 W $\times$ 1 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.8% THD) 190 W $\times$ 2 (at 14.4 V, 2 $\Omega$ , 20 — 20,000 Hz, 0.8% THD)
Load impedance .....	4 $\Omega$ (2 — 8 $\Omega$ allowable) (Bridge connection: 4 — 8 $\Omega$ allowable)
Frequency response .....	10 — 50,000 Hz (+0 dB, -1 dB)
Signal-to-noise ratio .....	100 dB (IHF-A network)
Distortion .....	0.008% (10 W, 1 kHz)
Separation .....	65 dB (1 kHz)
Low pass filter .....	Cut off frequency: 80 Hz Cut off slope: -12 dB/oct
Maximum input level/impedance .....	RCA: 6.5 V/22 k $\Omega$ (0.2 — 6.5 V)

### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

## GM-X862

Power source .....	14.4 V DC (10.8 — 15.1 V allowable)
Grounding system .....	Negative type
Current consumption .....	25.0 A (at continuous power, 4 $\Omega$ )
Average current drawn* .....	9.6 A (4 $\Omega$ for two channels) 17.3 A (4 $\Omega$ for one channel)
Fuse .....	25 A $\times$ 2
Dimensions .....	279 (W) $\times$ 61 (H) $\times$ 324 (D) mm [11 (W) $\times$ 2-3/8 (H) $\times$ 12-3/4 (D) in]
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PIONEER ELECTRONICS (USA) INC. - PIONEER ELECTRONICS OF CANADA, INC.  
(PA) (POC)

### LIMITED WARRANTY

WARRANTY VALID ONLY IN COUNTRY OF PRODUCT PURCHASE

#### WARRANTY PERIOD

For the period specified below from date of original retail purchase (the warranty period) from an authorized Pioneer dealer, Pioneer Electronics (USA) Inc. (PA), and Pioneer Electronics Of Canada, Inc. (POC), warrant that products distributed by PA in the U.S.A., and by POC in Canada that fail to function properly under normal use due to a manufacturing defect when installed and operated according to the owner's manual enclosed with the unit will be repaired or replaced with a unit of comparable value, at the option of PA or POC, without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of PA or POC.

The warranty period for retail customers who rent the product commences upon the date product is first put into use (a) during the rental period or (b) retail sale, whichever occurs first.

The warranty does not cover any product which is used in any trade or business, or in an industrial or commercial application.

#### PRODUCT

WARRANTY PERIOD  
PARTS LABOR

Car Stereo Products ..... **ONE YEAR ONE YEAR**

This warranty covers the product during the warranty period whether in the possession of the original owner or any subsequent owner. In the event service is required, the product must be delivered within the warranty period, transportation prepaid, from within the country of purchase as explained in this document. You will be responsible for removal and installation of the product. PA or POC, as appropriate, will pay for the cost of returning the repaired or replacement product to you within the country of purchase.

#### WHAT'S NOT COVERED

This warranty does not apply to any speaker that has been subjected to power in excess of its published power rating.

This warranty does not cover the cabinet or any appearance item, user attached antennas, any damage to recordings or recording tapes or discs, any damage to the product resulting from alterations, modifications not authorized in writing by PA or POC, accident, misuse or abuse, damage due to lightning or to power surges, subsequent damage from leaking, damaged or inoperative batteries or the use of batteries not conforming to those specified in the owner's manual.

This warranty does not cover the cost of parts or labor which would be otherwise provided without charge under this warranty, obtained from any source other than a PA or POC Authorized Service Company or other designated location. This warranty does not cover defects or damage caused by the use of unauthorized parts or labor, or from improper maintenance.

**ALTERED, DEFACED OR REMOVED SERIAL NUMBERS VOID THIS WARRANTY.**

#### YOUR RIGHTS

PA and POC exclude any obligation on their part for incidental or consequential damages related to the failure of products each distributes to function properly under the conditions set forth above.

**IN THE U.S.A.** - PA LIMITS ITS OBLIGATIONS UNDER ANY IMPLIED WARRANTIES INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO A PERIOD NOT TO EXCEED THE WARRANTY PERIOD. NO WARRANTIES SHALL APPLY AFTER THE WARRANTY PERIOD. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, AND SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

**IN CANADA** - EXCEPT AS EXPRESSLY PROVIDED HEREIN, THERE ARE NO REPRESENTATIONS, WARRANTIES, OBLIGATIONS OR CONDITIONS, IMPLIED, STATUTORY OR OTHERWISE, APPLICABLE TO THIS PRODUCT.

#### TO OBTAIN SERVICE

##### CAR STEREO PRODUCTS (EXCEPT CAR SPEAKERS SOLD IN THE U.S.A. ONLY)

PA and POC have appointed a number of Authorized Service Companies throughout the U.S.A. and Canada should your product ever require service. To receive warranty service you will need to present your sales receipt or, if rented, your rental contract showing place and date of original owner's transaction.

Should it become necessary to ship the unit you will need to package the product carefully and send it, transportation prepaid by a traceable, pre-insured method, to an Authorized Service Company. Carefully package the product using adequate padding material to prevent damage in transit. The original container is ideal for this purpose. Include in the package your name, address, telephone number where you can be reached during business hours, a copy of your sales receipt and a detailed description of the problem.

#### TO OBTAIN SERVICE

##### CAR SPEAKERS SOLD IN THE U.S.A. ONLY

Should your car speaker require service, return defective car speaker to your retail dealer for exchange. To receive warranty service you will need to present your sales receipt showing place and date of original owner's retail purchase. If, for any reason, you cannot exchange the speakers at the selling dealer, call the Customer Service Department as given below.

#### - ADDITIONAL INFORMATION -

##### IN THE U.S.A.

For additional information on this warranty, please call or write:

CUSTOMER SERVICE DEPARTMENT  
PIONEER ELECTRONICS SERVICE, INC.  
P.O. BOX 1760  
LONG BEACH, CALIFORNIA 90801  
1-800-421-1404

##### INCANADA

Please contact a Pioneer authorized Dealer to find the nearest Pioneer authorized service location. For additional information on this warranty, please call or write:

CUSTOMER SERVICE DEPARTMENT  
PIONEER ELECTRONICS OF CANADA, INC.  
300 ALLSTATE PARKWAY  
MARKHAM, ON L3R 0P2  
(905) 479-4411

**IN THE U.S.A. DO NOT RETURN ANY PRODUCT TO THE ABOVE ADDRESS. IT IS NOT A SERVICE LOCATION.**

IN THE U.S.A.

RECORD THE PLACE AND DATE OF PURCHASE FOR FUTURE REFERENCE

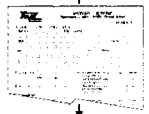
FOR PRODUCT INFORMATION, TO PURCHASE REPLACEMENT PARTS OR TO LOCATE AN AUTHORIZED SERVICE COMPANY  
CALL: 1-800-421-1404

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Purchase Date \_\_\_\_\_

Purchased From \_\_\_\_\_

KEEP THIS INFORMATION AND YOUR SALES RECEIPT IN A SAFE PLACE

Register your item



Then if you lose it



It can find you.

**Activate your FREE 6-month LOST & FOUND SERVICE today! Just fill out and return this product registration card to start your coverage.**

**Extend your BoomerangIt lost & found coverage and SAVE 50%.**

- Continue Your Coverage.** Extend your free 6-month service for 10 years for just \$4.95 (a \$9.95 value).
- Protect More Items.** Get a Mobile Pack (5 labels, 2 key tags and 1 luggage tag) and protect more valuables. Ten-year coverage is just \$9.95 (a \$19.95 value).

BoomerangIt will send your label(s) and invoice to you. Go to [www.BoomerangIt.com](http://www.BoomerangIt.com) for more information.

BoomerangIt cannot guarantee the return of lost or stolen property. Subscribers must pay shipping & handling fees to facilitate return of items. Reward provided to finders of lost or stolen property is 8 free BoomerangIt registrations. Complete details of BoomerangIt Terms of Service are listed at [www.BoomerangIt.com](http://www.BoomerangIt.com), or write us at 1776 Fairway Dr., San Leandro, CA 94577



**BoomerangIt works with the National Crime Prevention Council, local law enforcement agencies, and hospitality and transportation industry leaders to help return lost or stolen property to its rightful owner.**

All required fields (\*) of this registration form must be completed before BoomerangIt service can be provided.

- \*1. 1.  Mr. 2.  Mrs. 3.  Ms. 4.  Miss 5.  Dr.  
 First Name Initial Last Name

**IMPORTANT!**  
 Please complete and return within the next 10 days  
**K T D 0 1 - 0 1**

Street

Apt. No.

City

State

ZIP Code

E-mail Address:

2. Your date of birth: / /  
 Month Year
3. Marital status: 1.  Married 2.  Single

4. Telephone Number:  
 ( ) -

- \*5. Date of purchase: / /  
 Month Day Year

6. Model #: **G M - X**  
 or  
**P R S -**

7. Serial #:

8. BIN # (# on BoomerangIt label):

9. Where did you purchase your Pioneer Product?  
 Retailer Name:

1.  Received as gift

10. In what vehicle will this Pioneer product be used?  
 (make: e.g. Ford, Nissan; Model: e.g. Taurus SHO, Maxima SE)

Make:

Model:

Year:

- A.  Bought New B.  Bought Used C.  Lease

11. What three factors MOST influenced your purchase decision?  
 (check only three)

1.  Brand Name/Reputation 6.  Warranty/Guarantee  
 2.  Price/Value 7.  Magazine Test Report  
 3.  Salesperson 8.  Cosmetics  
 4.  In-Store Demonstration 9.  Other  
 5.  Friend/Relative

12. How did you first become aware of this Pioneer product?

01.  TV Ad 07.  Other Internet Source  
 02.  Radio Ad 08.  Salesperson  
 03.  Newspaper Ad 09.  Friend/Relative  
 04.  Stereo Magazine Ad 10.  Previous Experience with Pioneer  
 05.  Stereo Magazine Article  
 06.  Pioneer Website 11.  Other

13. Which of the following magazines do you subscribe to or read frequently?

01.  Super Street 09.  Vibe  
 02.  Auto Sound & Security 10.  Maxim  
 03.  Car Sound 11.  ESPN The Magazine  
 04.  Sport Compact Car 12.  Motocross  
 05.  Mobile Entertainment 13.  FHM  
 06.  Rolling Stone 14.  Playboy  
 07.  Spin 15.  Dirt Rider  
 08.  The Source 16.  Other

14. Would you be willing to participate in future Pioneer surveys via email? 1.  Yes 2.  No

15. Gender: 1.  Male 2.  Female

16. Please rate the importance of the following features in your purchase decision:
- |                        | Not Important               | Somewhat Important          | Very Important              |
|------------------------|-----------------------------|-----------------------------|-----------------------------|
| A. Power               | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| B. High Pass Filter    | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| C. Low Pass Filter     | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| D. Speaker Level Input | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| E. Hi Volt Input       | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| F. RCA Output          | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| G. Cosmetics           | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |
| H. Bass Boost          | 1. <input type="checkbox"/> | 2. <input type="checkbox"/> | 3. <input type="checkbox"/> |

17. Not including yourself, what is the GENDER and AGE (in years) of children and other adults living in your household?

1.  No one else in household 2.  Child under 1 year

Male	Female	Age	Male	Female	Age
1. <input type="checkbox"/>	2. <input type="checkbox"/>	yrs.	1. <input type="checkbox"/>	2. <input type="checkbox"/>	yrs.
1. <input type="checkbox"/>	2. <input type="checkbox"/>	yrs.	1. <input type="checkbox"/>	2. <input type="checkbox"/>	yrs.

18. Occupation: (check all that apply)
- | You                                | Spouse   |
|------------------------------------|--|
| Professional/Technical             | <input type="checkbox"/> 1. <input type="checkbox"/> |
| Upper Management/Executive         | <input type="checkbox"/> 2. <input type="checkbox"/> |
| Middle Management                  | <input type="checkbox"/> 3. <input type="checkbox"/> |
| Sales/Marketing                    | <input type="checkbox"/> 4. <input type="checkbox"/> |
| Clerical/Service Worker            | <input type="checkbox"/> 5. <input type="checkbox"/> |
| Tradesman/Machine Operator/Laborer | <input type="checkbox"/> 6. <input type="checkbox"/> |

19. Are you or your spouse:
- | You                           | Spouse   |
|-------------------------------|--|
| A Homemaker?                  | <input type="checkbox"/> 1. <input type="checkbox"/> |
| Retired?                      | <input type="checkbox"/> 2. <input type="checkbox"/> |
| A Student?                    | <input type="checkbox"/> 3. <input type="checkbox"/> |
| Self Employed/Business Owner? | <input type="checkbox"/> 4. <input type="checkbox"/> |
| Working from a Home Office?   | <input type="checkbox"/> 5. <input type="checkbox"/> |
| In the Military?              | <input type="checkbox"/> 6. <input type="checkbox"/> |
| A Federal Employee?           | <input type="checkbox"/> 7. <input type="checkbox"/> |

20. Which group describes your annual family income?
- |  |  |
|--|--|
| 01. <input type="checkbox"/> Under \$15,000    | 08. <input type="checkbox"/> \$75,000-\$99,999   |
| 02. <input type="checkbox"/> \$15,000-\$19,999 | 09. <input type="checkbox"/> \$100,000-\$124,999 |
| 03. <input type="checkbox"/> \$20,000-\$29,999 | 10. <input type="checkbox"/> \$125,000-\$149,999 |
| 04. <input type="checkbox"/> \$30,000-\$39,999 | 11. <input type="checkbox"/> \$150,000-\$174,999 |
| 05. <input type="checkbox"/> \$40,000-\$49,999 | 12. <input type="checkbox"/> \$175,000-\$199,999 |
| 06. <input type="checkbox"/> \$50,000-\$59,999 | 13. <input type="checkbox"/> \$200,000-\$249,999 |
| 07. <input type="checkbox"/> \$60,000-\$74,999 | 14. <input type="checkbox"/> \$250,000 & over    |

21. Level of education: (check highest level completed)
1.  Completed High School  
 2.  Completed College  
 3.  Completed Graduate School

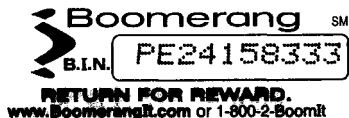
22. Which credit cards do you use regularly?
1.  American Express, Diners Club  
 2.  MasterCard, Visa, Discover  
 3.  Department Store, Oil Company, etc.  
 4.  Do not use credit cards

23. For your primary residence, do you: 1.  Own? 2.  Rent?

# Pioneer

## Return this card now for **FREE LOST & FOUND SERVICE**

- **Loss Protection.** If your Pioneer product is lost or stolen, BoomerangIt return service could help you get it back.
- **Easy Activation.** To activate your FREE 6-MONTH SERVICE, simply fill out and return this card. Then attach the enclosed BoomerangIt label to your Pioneer product. If your item is lost, whoever finds it can contact BoomerangIt using the instructions on the label. Then BoomerangIt uses the information you provide on this form to reach you and return your item.
- **Proof of Ownership.** Pioneer will keep the model #, serial # and date of purchase of your new Pioneer product on file to help you refer to this information in the event of an insurance claim such as loss or theft.



**For more information on other Pioneer products,  
check out our website at [www.pioneerelectronics.com](http://www.pioneerelectronics.com)**

Please do not send products or other correspondence to this address.



First-Class Postage Required  
Post Office will not deliver without proper postage.

KTD01-01

## Amplifiers-3

# Pioneer

PO BOX 174303

DENVER CO 80217-4303



Please fold here.

### 24. Please check all that apply to your household.

- |   |  |  |
|---|--|--|
| 01. <input type="checkbox"/> Shop by Catalog/Mail             | 06. <input type="checkbox"/> Have a Cat                              | 09. <input type="checkbox"/> Own an IBM or Compatible Computer |
| 02. <input type="checkbox"/> Member of Frequent Flyer Program | 07. <input type="checkbox"/> Own a Cellular Phone                    | 10. <input type="checkbox"/> Own an Apple/Macintosh Computer   |
| 03. <input type="checkbox"/> Donate to Charitable Causes      | 08. <input type="checkbox"/> Subscribe to an Online/Internet Service | 11. <input type="checkbox"/> Own a CD-ROM                      |
| 04. <input type="checkbox"/> Own a Compact Disc Player        |  |  |
| 05. <input type="checkbox"/> Have a Dog                       |  |  |

### 25. To help us understand our customers' lifestyles, please indicate the interests and activities in which you or your spouse enjoy participating on a regular basis.

- |   |   |   |  |
|---|---|---|--|
| 01. <input type="checkbox"/> Bicycling                      | 15. <input type="checkbox"/> Flower Gardening                 | 28. <input type="checkbox"/> Photography                        | 41. <input type="checkbox"/> Stocks/Bonds/<br>Mutual Funds     |
| 02. <input type="checkbox"/> Golf                           | 16. <input type="checkbox"/> Vegetable Gardening              | 29. <input type="checkbox"/> Attending Cultural/<br>Arts Events | 42. <input type="checkbox"/> Entering Sweepstakes              |
| 03. <input type="checkbox"/> Physical Fitness/Exercise      | 17. <input type="checkbox"/> Crafts                           | 30. <input type="checkbox"/> Fashion Clothing                   | 43. <input type="checkbox"/> Casino Gambling                   |
| 04. <input type="checkbox"/> Running/Jogging                | 18. <input type="checkbox"/> Buy Prerecorded Videos           | 31. <input type="checkbox"/> Fine Art/Antiques                  | 44. <input type="checkbox"/> Science Fiction                   |
| 05. <input type="checkbox"/> Snow Skiing                    | 19. <input type="checkbox"/> Automotive Work                  | 32. <input type="checkbox"/> Foreign Travel                     | 45. <input type="checkbox"/> Wildlife/<br>Environmental Issues |
| 06. <input type="checkbox"/> Tennis                         | 20. <input type="checkbox"/> Electronics                      | 33. <input type="checkbox"/> Cruise Ship Vacations              | 46. <input type="checkbox"/> Dieting/Weight Control            |
| 07. <input type="checkbox"/> Camping/Hiking                 | 21. <input type="checkbox"/> Home Workshop/<br>Do-It-Yourself | 34. <input type="checkbox"/> Travel in USA                      | 47. <input type="checkbox"/> Science/<br>New Technology        |
| 08. <input type="checkbox"/> Fishing                        | 22. <input type="checkbox"/> Recreation Vehicles              | 35. <input type="checkbox"/> Gourmet Cooking/<br>Fine Foods     | 48. <input type="checkbox"/> Self-Improvement                  |
| 09. <input type="checkbox"/> Hunting/Shooting               | 23. <input type="checkbox"/> Listen to Records/<br>Tapes/CDs  | 36. <input type="checkbox"/> Wines                              | 49. <input type="checkbox"/> Walking for Health                |
| 10. <input type="checkbox"/> Horseback Riding               | 24. <input type="checkbox"/> Surf the Internet                | 37. <input type="checkbox"/> Coin/Stamp Collecting              | 50. <input type="checkbox"/> Watching Sports on TV             |
| 11. <input type="checkbox"/> Powerboating                   | 25. <input type="checkbox"/> Avid Book Reading                | 38. <input type="checkbox"/> Collectibles/Collections           | 51. <input type="checkbox"/> Home Video Recording              |
| 12. <input type="checkbox"/> Sailing                        | 26. <input type="checkbox"/> Bible/Devotional Reading         | 39. <input type="checkbox"/> Our Nation's Heritage              | 52. <input type="checkbox"/> Moneymaking<br>Opportunities      |
| 13. <input type="checkbox"/> Grandchildren                  | 27. <input type="checkbox"/> Health/Natural Foods             | 40. <input type="checkbox"/> Real Estate Investments            |  |
| 14. <input type="checkbox"/> Needlework/Knitting/<br>Sewing |   |   |  |

### 26. Using the numbers in the above list, please indicate your 3 most important activities:

Thanks for taking the time to fill out this questionnaire. Your answers will be used for market research studies and reports. They will also allow you to receive important mailings and special offers from a number of fine companies whose products and services relate directly to the specific interests, hobbies, and other information indicated above. Through this selective program, you will be able to obtain more information about activities in which you are involved and less about those in which you are not. Please check here if, for some reason, you would prefer *not* to participate in this opportunity

Please check here if you do not want to receive mailings and offers using your E-mail address