

 **mitsubishi**

STEREO POWER AMPLIFIER

DA-A10DC/DA-A15DC

INSTRUCTION BOOK

Congratulations on your choice of the Mitsubishi Stereo Power Amplifier Model DA-A10DC/DA-A15DC. For best performance results, please read this instruction book carefully before use.

WARNING—TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

For future reference a space has been provided below for recording the serial number of your stereo power amplifier.

Serial #

AB 7101532

FRONT PANEL TERMINOLOGY AND FUNCTIONS

eg. $\frac{8 \times 8}{8 + 8} = 4$ (ohms)

A: Nominal impedance of speaker A

B: Nominal impedance of speaker B

Please consult your audio dealer for additional information.

4. OPERATIONS

BEFORE PLACING THE POWER SWITCH IN THE ON OR OFF POSITION OR OPERATING SWITCHES, ALWAYS TURN THE PREAMPLIFIER'S VOLUME (ATTENUATOR) CONTROL ALL THE WAY DOWN

This is to protect the speakers from damage, that can occur if the volume level is set high and the power is turned on.

THERE WILL BE NO SOUND FOR A FEW SECONDS AFTER YOU TURN ON THE POWER. THIS IS NOT A MALFUNCTION

This unit is equipped with a power supply muting circuit which prevents popping noise when the power switch is turned on or off.

5. CARE

Wipe the cabinet with a soft cloth when it becomes dusty. If it should get really dirty, dampen a soft cloth in a weak solution of mild soap and water, wring it out dry and wipe off. When finished, dry completely with a soft dry cloth. Any volatile materials such as alcohol, thinner, benzine, insecticides, etc, may remove the paint or damage the luster and should not be used.

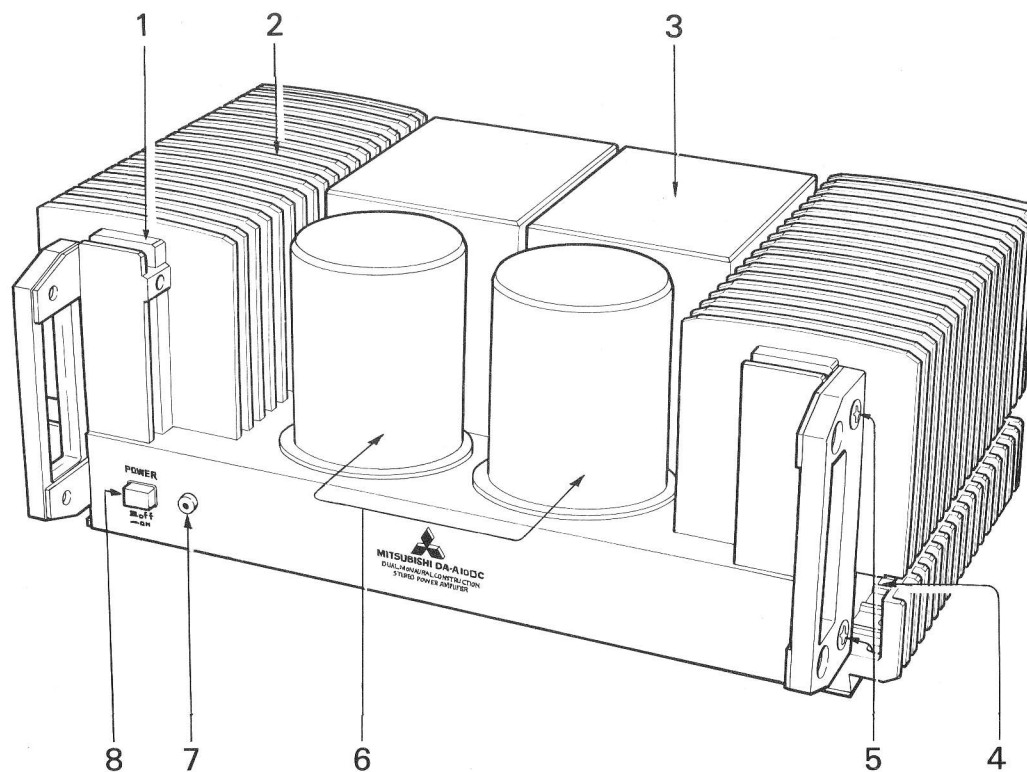
1. THERMAL INDICATORS

If the temperature of the heat sink reaches 60°C (140°F), the thermal indicators change in color from red to black. If the indicators turn black, turn the power off and allow time for the amplifier to cool. Resume operation when the amplifier cools to normal temperature.

2. HEAT SINKS

The heat given off by the transistors is radiated into the air by the heat sinks.

3. TRANSFORMERS



PRECAUTIONS

1. GENERAL

BE SURE TO USE YOUR A.C. POWER SOURCE

Your A.C. power is marked on the rear panel of this unit. Connection to any other power source may cause damage to this unit and/or severe electrical shock.

DO NOT PLUG IN OR UNPLUG THE POWER CORD WITH WET HANDS

There is a great danger of severe electrical shock if the power cord is plugged in or unplugged with wet hands. Do not attempt to unplug the cord from an A.C. outlet by pulling the cord. Firmly grasp the plug to remove it from the A.C. outlet.

DO NOT ALLOW WATER OR ANY FOREIGN MATTER TO GET INSIDE THIS UNIT

Should water or a metallic object accidentally fall into this unit, immediately disconnect the power cord and consult your authorized service dealer.

HANDLE THE POWER CORD WITH CARE

Do not bend sharply or twist the power cord. If the insulation becomes damaged, the conductor breaks, or poor contacts occur, request service from your authorized service dealer. Continued use under these conditions, may cause fire or electrical shock.

DO NOT TOUCH THE INSIDE OF THIS UNIT

There are high voltages inside this unit. Never remove the top or bottom cover. All inspections and repair including fuse replacement, should be carried out by your authorized service dealer.

DISCONNECT THE POWER CORD AT THE FIRST SIGN OF TROUBLE

At the first sign of unusual noise, odor, or malfunction, disconnect the power cord and consult your authorized service dealer. Continued use under these conditions, may increase damage or cause additional problems.

2. LOCATION

AVOID PLACEMENT IN DIRECT SUNLIGHT, NEAR AIR CONDITIONER ETC.

This unit can become unstable if operated in extremely high or low temperatures. Place it in a well ventilated area for proper heat dissipation. Avoid placement in direct sunlight, near air conditioners, poorly ventilated areas or in areas of excess humidity or dust. Do not block the ventilation holes.

3. CONNECTIONS

BE SURE TO TURN OFF THE POWER BEFORE MAKING CONNECTIONS

This is to prevent damage to the speakers from the popping noise which occurs when plugging and unplugging cords.

USE EXTREME CARE IN MAKING THE CORRECT CONNECTIONS

If you reverse the R (right) and L (left) leads, you will reverse the stereo location of R and L channels.

MAKE CONNECTIONS SECURELY

If any of the plugs should become loose or disconnected, a hum may develop. If this is not corrected,

deterioration of sound quality and possible damage to the speakers may result.

USE ONLY SHIELDED CORD FOR THE LEADS

Use only shielded cords for interconnecting components. Do not use cords longer than 2 m (6'). Excessive lead lengths can deteriorate high frequency response and are subject to interference that can result in hum or noise.

DO NOT SHORT THE OUTPUT OF THE POWER AMPLIFIER

This unit incorporates a protection circuit so that power transistors will be protected in case of a short. Shorts can reduce the life of the transistors and should be avoided.

USE SPEAKERS WITH NOMINAL IMPEDANCE OF 4-16 OHMS

If you use speakers with a load impedance of less than 4 ohms, the protection circuit may be triggered and the amplifier output muted.

WHEN CONTROLLING TWO PAIRS OF SPEAKERS SELECTION FROM THE COMPANION PREAMPLIFIER, ENSURE THAT THE COMBINED IMPEDANCE (BOTH PAIRS OF SPEAKERS OPERATING) IS 4 OHMS OR ABOVE

If the combined impedance is below 4 ohms, the load impedance detector circuit may operate and mute the power amplifier output.

The combined impedance is determined with the following formula.

$$\text{COMBINED IMPEDANCE} = \frac{A \times B}{A + B} \text{ (OHMS)}$$

REAR PANEL TERMINOLOGY AND CONNECTIONS

4. DUCTS

The power cord and connecting cords pass through this ducts.

5. HANDLE MOUNTING SCREW HOLES

These holes are provided for mounting the handles. For more details, see page 5 and 6.

6. ELECTROLYTIC CAPACITORS

7. POWER INDICATOR

This indicator illuminates when the POWER switch is placed in the ON position.

8. POWER (Power Switch)

This switch is for turning this unit on and off. When in the ON position, the power indicator is illuminated.

INPUT LEVEL (Input Level Controls)

The input level from the preamplifier can be adjusted by these screws. To increase the input level, turn these screws clockwise. These screws are normally turned fully clockwise.

INPUT (Power Amplifier Inputs)

Connect the leads from the preamplifier's outputs to these inputs.

SPEAKERS (Speaker Terminals)

Two pairs of speakers may be connected to these terminals. Turn the screws fully counterclockwise, insert the speaker leads and tighten the screws firmly.

SPEAKER SELECTOR (Speaker Selection Switch)

This switch controls speaker selection. The speaker systems can be selected from the preamplifier by placing this switch in the OFF position and connecting the supplied SPEAKER CONTROL CABLE to the preamplifier. For more details, see page 6.

REMOTE (Remote Terminal)

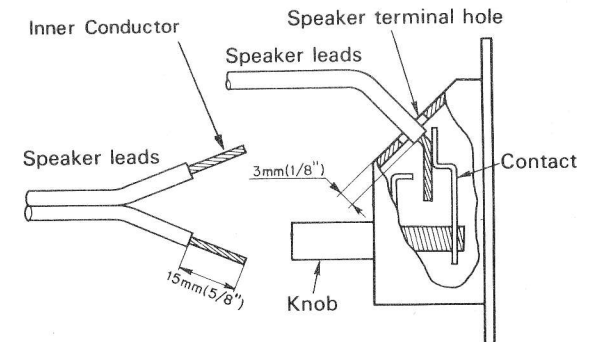
The connection for one end of the SPEAKER CONTROL CABLE. The other end is plugged into the "speaker control" terminal of a companion preamplifier. For more details, see page 6.

• CONNECTING THE SPEAKERS

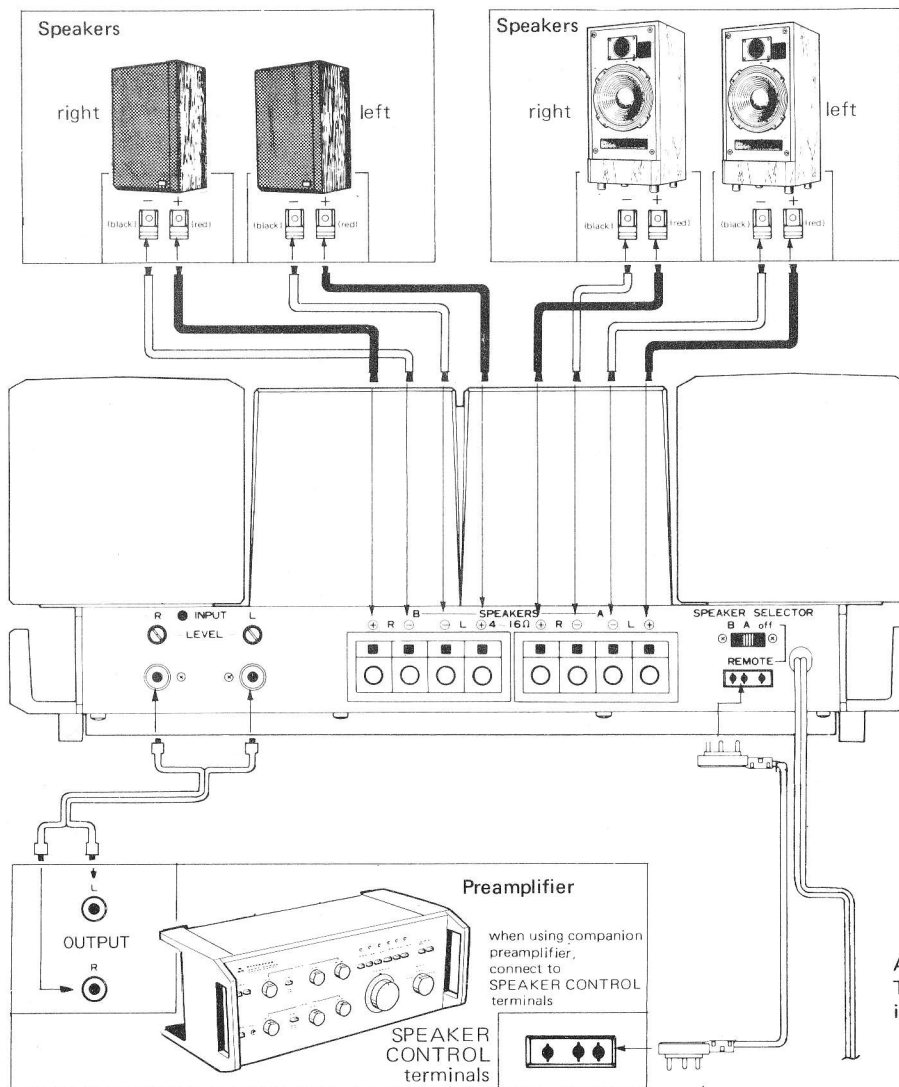
When connecting the speaker leads to the SPEAKERS terminals, there is danger of electrical shock or fire due to potentially high output voltages.

To avoid this danger, connect the speaker leads as follows.

- ① Cut back the outer insulation of the lead to a distance of 15 mm (5/8").
- ② Twist each inner conductor.
- ③ Turn the knob of the SPEAKERS terminal fully counterclockwise.
- ④ Insert the inner conductor into the hole of the SPEAKERS terminal. Be sure that the end of the insulation is inserted into the hole to a distance of 3 mm (1/8").
- ⑤ Fasten the speaker lead to the SPEAKERS terminal by tightening the knob clockwise.



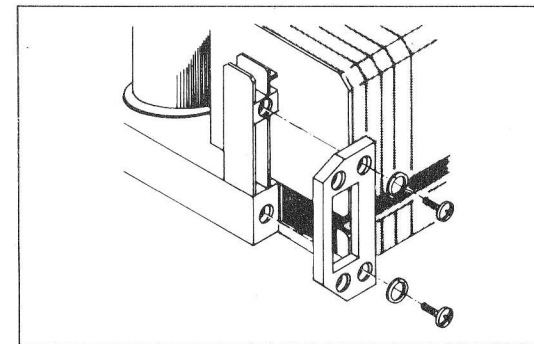
CAUTION: When using DA-A15DC, use more than 18AWG, SPT-2 cord with UL label for speaker leads.



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HOW TO MOUNT THE HANDLES

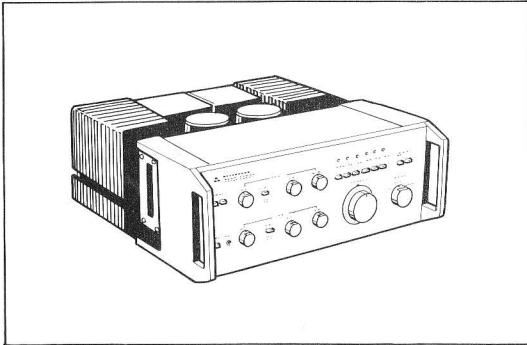
- 1 Remove the screws and washers that are fastened to the right and left side of this unit.
- 2 Mount the supplied handles to both side of this unit as shown in the diagram.



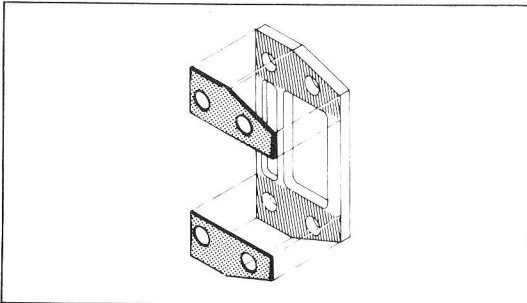
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HOW TO COMBINE THE POWER AMPLIFIER WITH THE PREAMPLIFIER OR POWER LEVEL METER

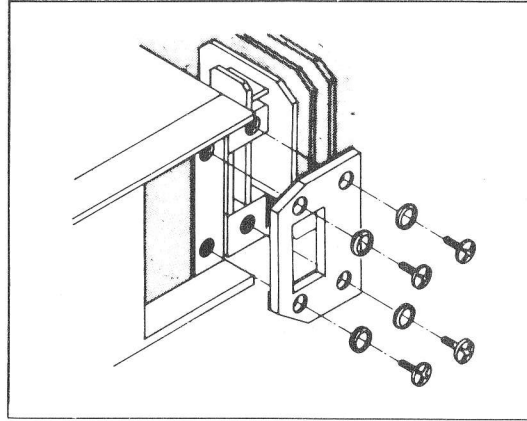
This power amplifier may be combined (docked) with either its companion preamplifier for use as an integrated amplifier or with its companion power level meter. The two units are combined in the following way.



- ① To avoid damage, mount the rubber pads supplied on the handles as shown in the diagram.



- ② Remove the two screws and washers from both the two units.
- ③ Unplug the power cord and place the POWER switch in the ON position.
- ④ Place the two units together and mount the handles to both side as shown in the diagram.



*

OPERATIONS

BEFORE OPERATING

Check the following items before placing the POWER switch in the ON position.

- All other components are properly connected.
- The position of the SPEAKER SELECTOR switch should correspond to the terminals to which the speakers are connected.
- The INPUT LEVEL control screws should be turned fully clockwise.

Then place the POWER switch in the ON position

1. OPERATION

Select the tuner, turntable or other source of program material and advance the "Volume (Attenuator)" control on the preamplifier. You should now be receiving the program from the speakers.

2. SPEAKER SELECTION FROM THE COMPANION PREAMPLIFIER

If you are using the companion preamplifier, speaker selection can be controlled from the preamplifier.

- ① Place the SPEAKER SELECTOR switch to the OFF position.
- ② Connect the SPEAKER CONTROL CABLE as shown in the diagram (see page 5).
- ③ Speaker selection may now be controlled from the preamplifier.

BEFORE TAKING YOUR POWER AMPLIFIER IN FOR SERVICING

First check to ensure that all other components are properly connected to this unit and are operating normally. Then check the following items.

SYMPTOM	CAUSE	REMEDY
<ul style="list-style-type: none"> ◇ Power does not come on when the POWER switch is turned on. 	<ul style="list-style-type: none"> ◇ Power cord not completely plugged in. ◇ Fuse has blown. 	<ul style="list-style-type: none"> ◇ Plug in completely. ◇ Consult your authorized service dealer.
<ul style="list-style-type: none"> ◇ No sound 	<ul style="list-style-type: none"> ◇ Improper SPEAKER SELECTOR switch positioning. ◇ Nominal speaker impedance is less than 4 ohms and protection circuit is operating. ◇ Speaker leads or plugs not completely plugged in. ◇ Speaker (+) and (-) leads are touching. 	<ul style="list-style-type: none"> ◇ Correct the switch position. ◇ Use speakers with nominal impedance of 4 ohms or above. ◇ Plug in completely. ◇ Separate the leads.
<ul style="list-style-type: none"> ◇ Noise 	<ul style="list-style-type: none"> ◇ Turntable output cord too close to power cord. ◇ Plugs not completely plugged in. 	<ul style="list-style-type: none"> ◇ Put the turntable output cord as far as possible from the power cord. ◇ Plug in completely.
<ul style="list-style-type: none"> ◇ Howling 	<ul style="list-style-type: none"> ◇ Caused by feedback. This occurs because speaker vibrations are being transmitted to the turntable. 	<ul style="list-style-type: none"> ◇ Place the speakers and the turntable as far apart as possible. It is also helpful to put an insulator under the turntable.
<ul style="list-style-type: none"> ◇ Poor sound quality 	<ul style="list-style-type: none"> ◇ Too much power applied to speakers. 	<ul style="list-style-type: none"> ◇ Adjust "Volume (Attenuator)" on your preamplifier.
<ul style="list-style-type: none"> ◇ No stereo effect and poor bass 	<ul style="list-style-type: none"> ◇ Speaker leads or plugs (+) and (-) are reversed. 	<ul style="list-style-type: none"> ◇ Correct the speaker leads or plugs connection.
<ul style="list-style-type: none"> ◇ No sound for 5 – 7 seconds after power is switched on. 	<ul style="list-style-type: none"> ◇ Muting circuit is operating to eliminate the popping noise when power is turned on. 	<ul style="list-style-type: none"> ◇ This is not a malfunction.

DA-A10DC / DA-A15DC SPECIFICATIONS

	DA-A10DC	DA-A15DC
Power output	100W continuous power per channel, both channels driven into 8 ohms from 15Hz to 30kHz, with 0.01% THD	150W continuous power per channel, both channels driven into 8 ohms from 15Hz to 30kHz, with 0.01% THD
Total harmonic distortion	0.005% at 50W per channel, both channels driven into 8 ohms from 20Hz to 20kHz	0.005% at 75W per channel, both channels driven into 8 ohms from 20Hz to 20kHz
Intermodulation distortion (70Hz and 7kHz 4 : 1)	0.008% at rated power, 8 ohms	0.008% at rated power, 8 ohms
Power bandwidth (IHF)	0.01% at 1W per channel, 8 ohms	0.01% at 1W per channel, 8 ohms
Frequency response	10Hz to 100kHz at 0.1% THD, 8 ohms	10Hz to 100kHz at 0.1% THD, 8 ohms
Input sensitivity/impedance	± 0.1 dB from 20Hz to 20kHz at rated power, 8 ohms	± 0.1 dB from 20Hz to 20kHz at rated power, 8 ohms
Damping factor	± 1 dB from DC to 150kHz at 0.5W per channel, 8 ohms	± 1 dB from DC to 150kHz at 0.5W per channel, 8 ohms
Channel separation	1V (variable)/50k ohms	1V (variable)/50k ohms
Hum and noise	100 from 20Hz to 20kHz, 8 ohms	100 from 20Hz to 20kHz, 8 ohms
Signal to noise ratio (at rated power)	100dB at 1kHz	100dB at 1kHz
	80dB at 20kHz	80dB at 20kHz
	0.12mV (unweighted, closed circuit)	0.15mV (unweighted, closed circuit)
	107dB (unweighted, closed circuit)	107dB (unweighted, closed circuit)
	122dB (IHF, A network, closed circuit)	123dB (IHF, A network, closed circuit)
	118dB (DIN, closed circuit)	119dB (DIN, closed circuit)
	109dB (DIN, 47k ohms//250pF terminated)	109dB (DIN, 47k ohms//250pF terminated)
Slew rate	30V/ μ s at 50V peak to peak, 8 ohms	30V/ μ s at 50V peak to peak, 8 ohms
Power consumption	600W (IEC nominal)	900W (IEC nominal)
	390W at rated power, 8 ohms	550W at rated power, 8 ohms
	240W (UL nominal)	320W (UL nominal)
Dimensions (W x H x D)	425 x 170 x 285mm	425 x 170 x 285mm
Weight	(16-3/4 x 6-3/4 x 11-1/4")	(16-3/4 x 6-3/4 x 11-1/4")
	16kg (35-1/4 lb)	17.7kg (39 lb)

Supplied with: pin plug cord
speaker control cable

Design and specifications are subject to change without notice for improvements.

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