Roland

MD MIDI DISPLAY



Owner's Manual





The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTION

WARNING When using electric products, basic precautions should always be followed, including the following;

- Read all the instructions before using the product.
- 2. To reduce the risk of injury, close supervision is necessary when a product is used near children.
- 3. Do not use this product near water- for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
- 4. This product should be used only with a cart or stand that is recommended by the manufacture.
- 5. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss.
 - Do not operate for a long period of time at a high volume level or at level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist
- 6. The product should be located so that its location or position does not interfere with its proper ventilation.
- 7. The product should be located away from heat sources such as radiators, heat registers or other products that produce heat.
- 8. The product should avoid using in where it may be effected by dust.
- 9. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

- 10. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time
- 11. Do not tread on the power-supply cord
- 12. Do not pull the cord but hold the plug when unpluaging.
- When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
- 14. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 15. The product should be serviced by qualified service personnel when:
 - A: The power-supply cord or the plug has been
 - damaged; or B: Objects have fallen, or liquid has been spilled into the product; or
 - C: The product has been exposed to rain; or
 - D: The product does not appear to operate normally or exhibits a marked change in performance: or
 - E: The product has been dropped, or the enclosure damaged.
- Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service

SAVE THESE INSTRUCTIONS

WARNING

THIS APPARATUS MUST BE EARTH GROUNDED.

The three conductors of the mains lead attached to this apparatus are identified with color as shown in the table below, together with the matching terminal on the UK type power plug. When connecting the mains lead to a plug, be sure to connect each conductor to the correct terminal, as indicated.

"This instruction applies to the product for United Kingdom.

MAINS LEADS		PLUG		
Conductor	Color	Mark on the matching terminal		
Live	Brown	Red or letter L		
Neutral	Blue	Black or letter N		
		Green, Green-Yellow, letter E or symbol		

Bescheinigung des Herstellers /Importeurs

Hiermit wird bescheinigt, daß der/die/das

ROLAND MIDI DISPLAY A-110

(Gerat, Typ Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046 / 1984

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeraumt.

Roland Corporation Osaka / Japan

RADIO AND TELEVISION INTERFERENCE

"Warning - This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equip-ment is likely to result in interference to ratio and TV reception.

ment is leally to result in interference to radio and TV reception."

The assument described in his manual generates and user radio-frequency energy if it is not installed and used property, that is, in strict accordance with our instructions, if may cause interference with radio and relevation receptions (formula company) with the limits for a Close B composition of the second control of the limits of th

IV.

If necessary, you should consult your dealer or an experienced radio television technical not auditional suggestions. You may find helpful the following booklet prepared by the federal Communications Commission Records Hadio TV interference Problems.

This booklet is available from the U.S. Government Printing Office. Washington D.C. 20402 Stock No.0340.00.0345-4.

Please read the separate volume "MIDI", before reading this owner's manual.

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OUTLINE

The A-110 features 88 indicators (Ao to Cs) that light when corresponding Key On messages are received on the MIDI Channel(s) currently selected (1 to 16, or All). The Display shows the MIDI Channel number or Program Change number currently in use. The Hold Indicator is also provided to tell you whether the Hold effect is on or off in the selected Channel(s).

SPECIFICATIONS

Indicators and Display

Key Indicators (88 keys: A₀ to C₈) Hold Indicator Octave Indicators Display (Channel/Program Change)

Switches

Channel Selector (1 to 16, ALL-PGM, ALL-CH)

Connectors

MIDI IN×1 MIDI THRU×5 AC IN

Dimension: $482(W) \times 44(H) \times 274(D)mm$

 $19" \times 1 - 3/4" \times 10 - 13/16"$

Weight: 2.9kg/6lb 6oz Consumption: 13W

Accessory: Power Cord×1

IMPORTANT NOTES

Power Supply

- The appropriate power supply for this unit is shown on its name plate. Please make sure that the line voltage in your country meets that
- Please do not use the same socket used for any noise generating device (such as motor, variable lighting system).
- Before setting up the A-110 with other units, turn them off.
- This unit might not work properly if you connect the power cable to the socket without turning the unit off. If this happens, simply turn it off and turn it on again a few seconds later.
- This unit might get hot while operating, but there is no need to worry about it.

Cleaning

- Use a soft cloth and clean only with a mild detergent.
- Do not use alcohol or solvents such as paint thinner.

Location

 Avoid using the A-110 in excessive heat or humidity or where it may be affected by direct sunlight or dust.

For Canada

CLASS B

NOTICE

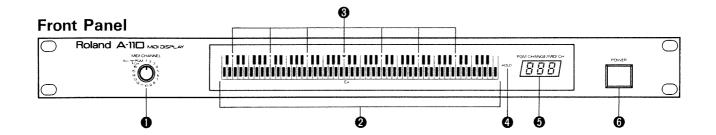
This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASSE B

AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

PANEL DESCRIPTION



Rear Panel O O O O O

OChannel Selector

1 to 16: Select the MIDI Channel whose

Program change messages you

wish the A-110 to display.

ALL-PGM: Messages of all the MIDI Channels

will be seen on the A-110. The Display shows the newest Program Change number which has been

sent.

ALL-CH: Messages of all the MIDI Channels

will be seen on the A-110. The Display shows the Channel on which the newest messages have

been sent.

2Key Indicator

This indicates Key On/Off of the MIDI messages of the selected Channel.

6Octave Indicator

OHold Indicator

If the Hold effect (Damper) is on in the selected Channel, this indicator lights up.

6Display

This shows the current MIDI Channel or Program Change number depending on which is selected with the Channel Selector. When the Channel Selector is set to "ALL-PGM", the Display shows "- - -" until Program Change messages are actually received.

6Power Switch

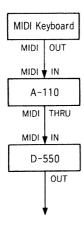
MIDI IN Connector

3MIDI THRU Connectors

The exact copy of the signal fed into the MIDI IN will be sent out from this socket.

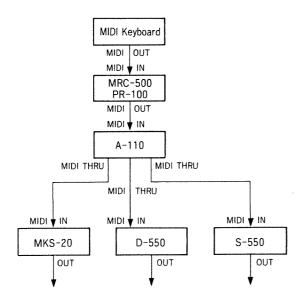
CONNECTIONS

Example Setup ①



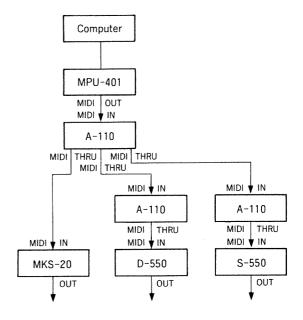
This is the most basic setup example. Set the Channel Selector to "ALL-PGM", "ALL-CH" or to the MIDI Channel number you wish to use. When the Channel Selector is set to "ALL-PGM" or to the Channel number you wish to use, the Display Window will show the program change number 1 to 128. If, however, "---" is shown, there is no Program Change message transmitted.

Example Setup 2



In this setup, a sequencer is used, and several MIDI channels are sent to the A-110. Set the Channel Selector Switch to the MIDI Channel number you like. The part of each instrument can be visually glasped without affecting the performance.

Example Setup 3



The A-110's are assigned to the sound modules which are to be driven by the computer. Set the Channel Selector of each A-110 to the appropriate Channel number that belongs to the connected sound module. Now, the performance of each sound module can be respectively glasped on the A-110.

MIDI Implementation Chart

Date : Sep. 10. 1987

Version: 1.00

	Function	Transmitted	Recognized	Remarks
Basic Channel	Default Changed		1-16 1-16	
Mode	Default Messages Altered	******	1, 3 ×	
Note Number	True Voice	*****	21-108 21-108	
Velocity	Note ON Note OFF		×	
After Touch	Key's Ch's		×	
Pitch Bende	r		×	
	0-63 64 65-121		X O X	Hold 1
Control Change				
Prog Change	True #	*****	○ (0−127) 0−127	
System Exc	lusive		×	
System Common	Song Pos Song sel Tune		× × ×	
System Real Time	Clock Commands		×	
Aux Message	Local ON/OFF All Notes OFF Active Sense Reset		X O O X	(123-127)
Notes				

Mode 1: OMNI ON, POLY Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO Mode 4: OMNI OFF, MONO ○ : Yes
× : No

MIDI Implementation

Date: Sep. 10. 1987

Version: 1.00

1. RECOGNIZED DATA

■ Note event

Note off

Status 8nH Second kkH vvH 9nH kkH 0011

kkH: Note number 15H-6CH (21-108)

vvH:ignored

Note on

Status-Third vvll Second kkll 9nH

kkH: Note number 15H-6CH (21-108) vvH: velocity 01H-7FH (1-127)

■ Control change

Continuous controller (7 bits)

Status Second Third BnH mmH vvH

Hold 1 mmH=40H vvH=00H-3FH (0-63) OFF

40II-7FH (64-127) ON

■Program change

Status Second

ppH:Program number 00H-7FH (0-127)

■Channel mode message

Status BnH Second mmll

mmH: All Notes Off 7BH (123) OMNI OFF 7CH (124) OMNI ON 7DH (125) MONO ON 7EH (126) POLY ON 7FH (127)

Recognized as only All Notes Off.

■ Active sensing

Status FEH

UPC 11064

