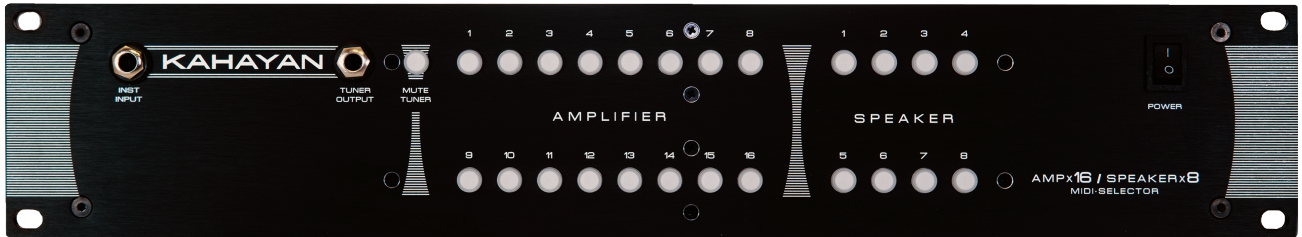


# 16X8 MIDI SELECTOR

16 AMPLIFIERS/ 8 SPEAKER SELECTOR



## OPERATOR'S MANUAL

Version 1.0

**KAHAYAN**<sup>®</sup>  
P R O A U D I O

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## IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water
6. Clean only with dry cloth
7. Install in accordance with the manufacturer's instructions
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
9. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the apparatus
10. Unplug this apparatus during lightning storms or when unused for long periods of time
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped

## INTRODUCTION

The 16x8 MIDI Amplifier/Speaker Selector is a handmade and custom system which allows you to connect **16 amplifiers to 8 speakers, providing the possibility of easily selecting combinations of amplifiers and speakers.** Thus avoiding waste of time and making work easier. Useful for studio recording as well as live performance.

Thanks to the Kahayan 16x8 MIDI Selector we can select/choose any amplifier and speaker combination with the front panel buttons, with a MIDI pedalboard and also with your Tablet using a MIDI/Bluetooth® interface (see MIDI chapter). That means, if everything is connected correctly and our recommendations are followed, you can link the amplifier that you want with the speaker that you choose in many modes.

For more information visit: [www.kahayan.es](http://www.kahayan.es)



## RECOMMENDATIONS

**Listed below are the most important recommendations for the use of the 16x8 Selector:**

1- To avoid any equipment failures its vital **to connect to the 16x8 Selector the following things:** the instrument, the amplifier inputs, the amplifier outputs and the speakers. The initial connection should be with the amplifiers turned off or Stand by.

2- Once **everything has been connected with cables with soldered connectors** you can use the 16x8 MIDI Selector with all the **amplifiers permanently switched on**. Its not necessary to use the Stand By mode each time that you want to change the amplifier.

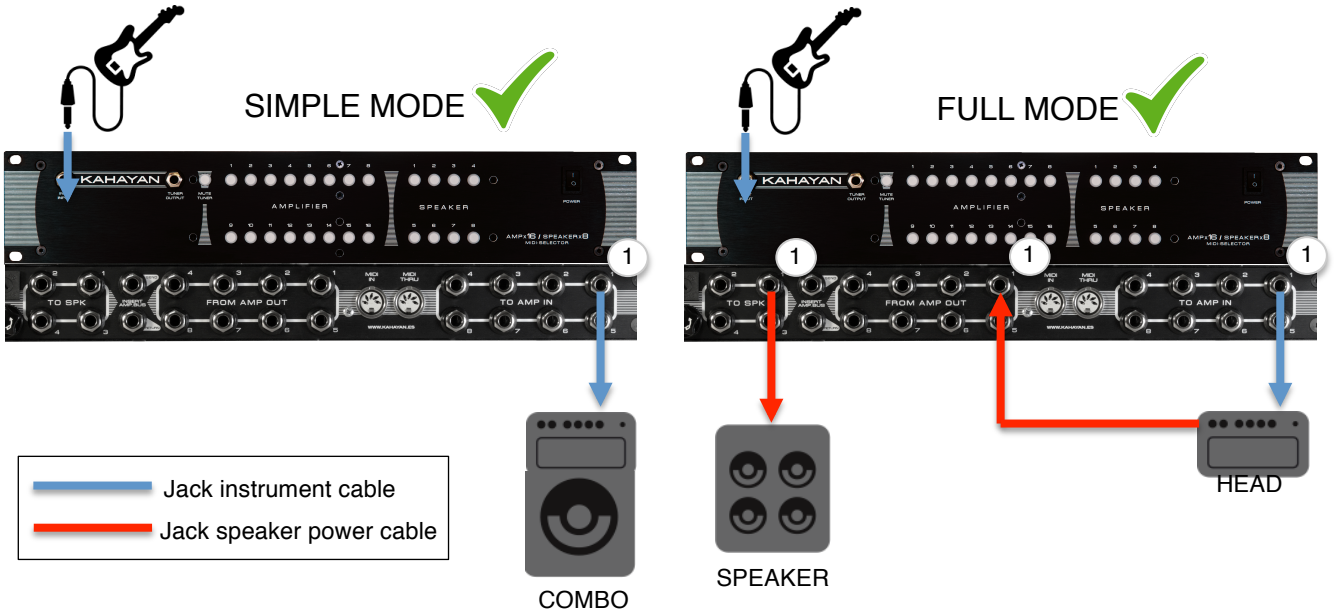
3- In the case where **some speaker outputs are not being used**, be carefull **not to select them** to avoid the amplifiers functioning without being charged.

4- This Selector contains an **input mute** system and phantom charge for the amplifiers which have not been selected.

## WARNING OF SETUP

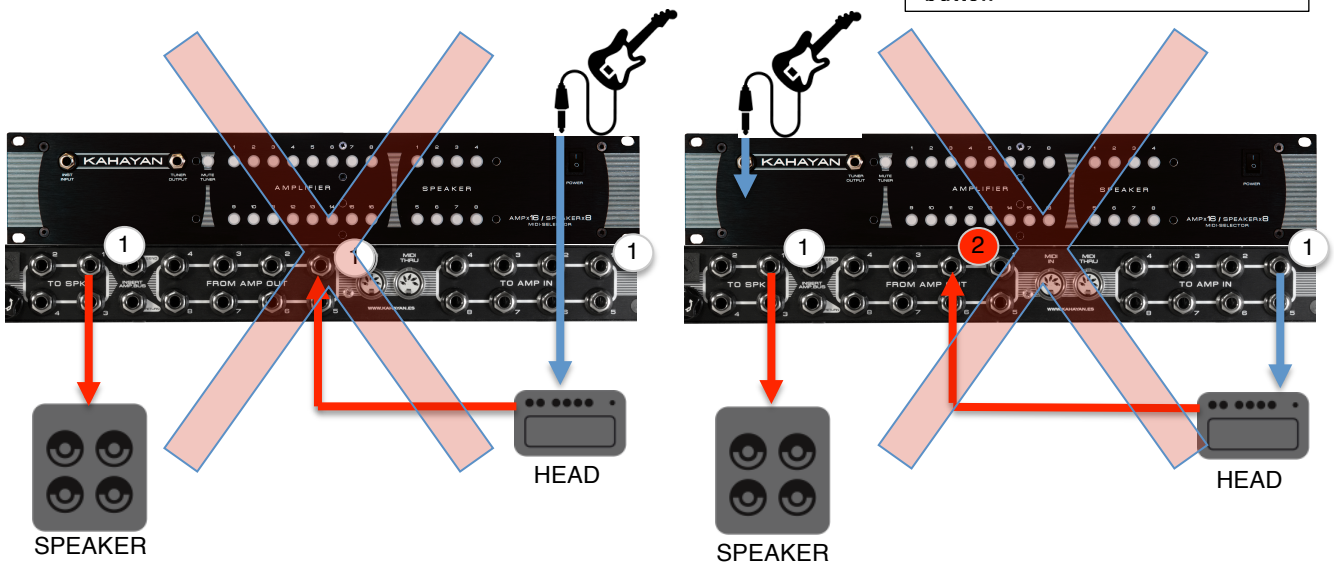
Install in accordance with the manufacturer's instructions/manual because a wrong setup could **damage** any unit of the setup including the selector:

### Approved setup examples for 1 Amp/Spk:



### Non-approved setup examples for 1 Amp/Spk:

**NOTE:** before unplug your guitar from frontal selector panel input, mute selector on **pedal rig/frontal button**

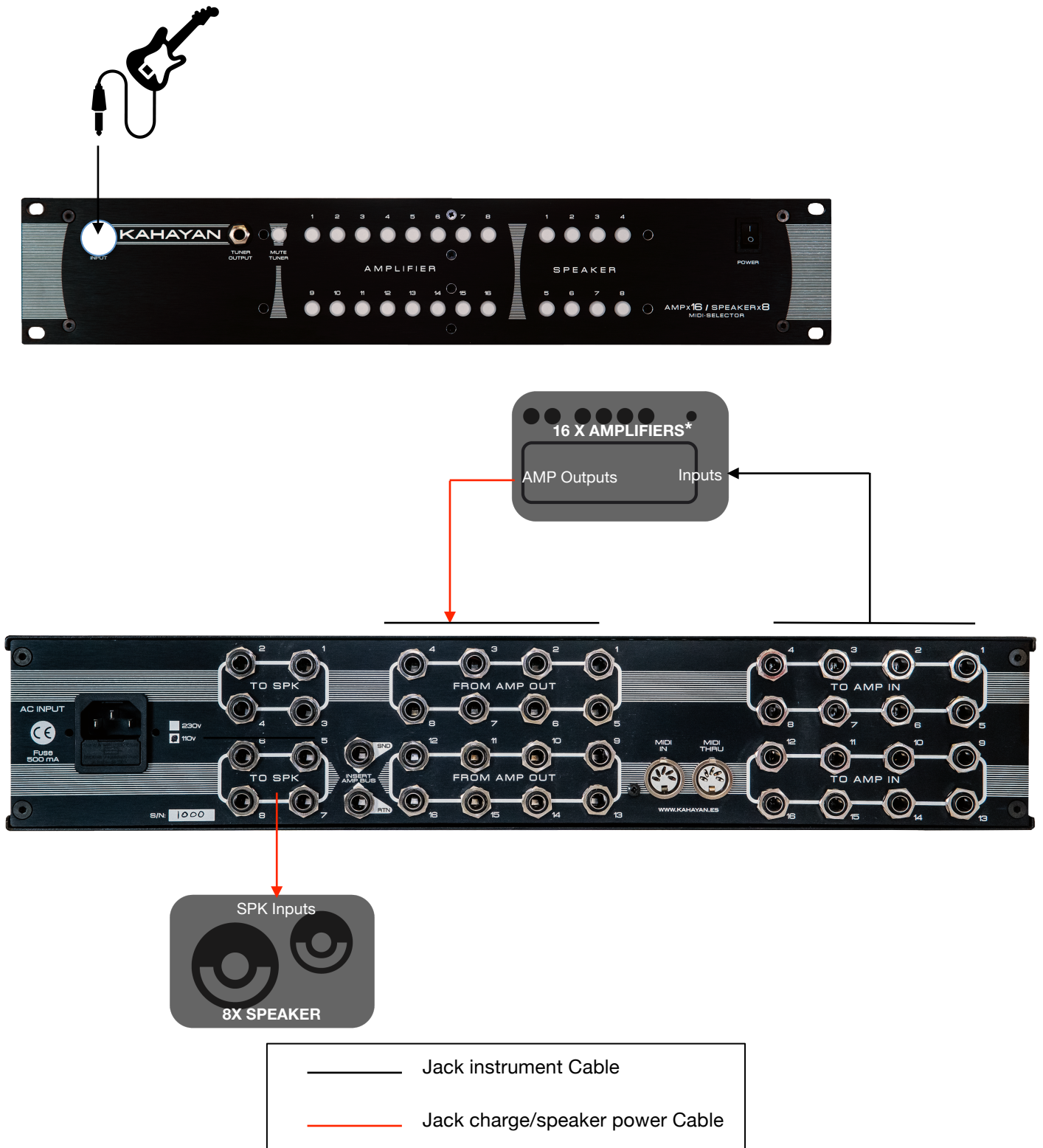


**NOTE:** In the case where one or some speaker outputs are not being used, be careful not to select them to avoid the amplifiers functioning without being charged.

For any alternative setup please contact us: [www.kahayan.es](http://www.kahayan.es)

## BASIC SET UP

The following diagram explains how to connect the equipment:



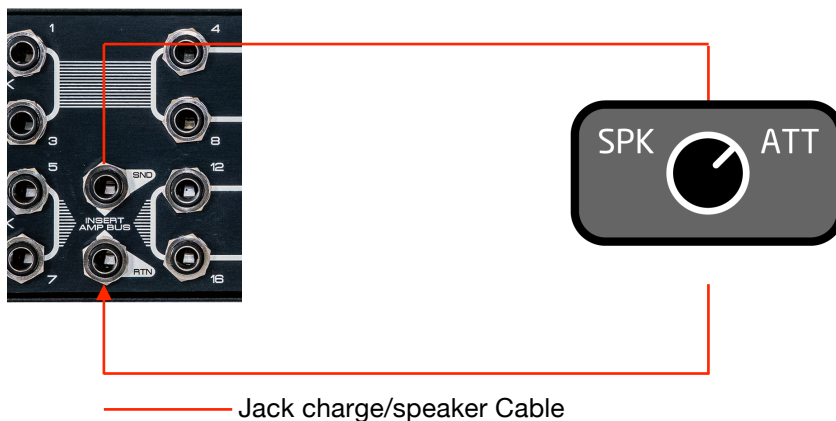
\*You can use all the kind of Amplifiers: Head or Combo (the Amp Power part)

## ADVANCED SETUP

### AMP BUS INSERT:

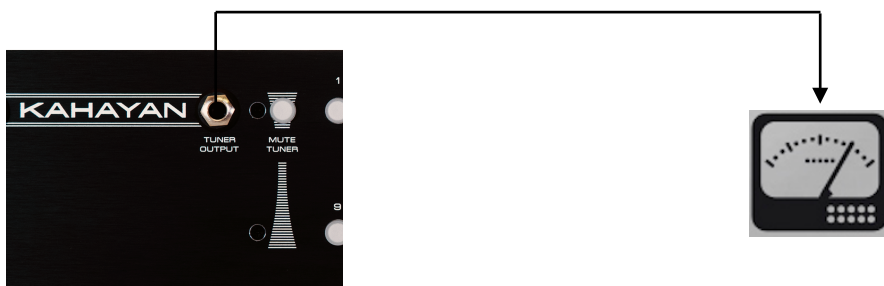
The 18x8 MIDI Selector allows you to **insert an Amp Attenuator or a Speaker Simulator**. In this way, **all the Amps and Speakers** connected to the Selector will be **working thru this attenuator or speaker simulator**. This insert opens the bus amp and is located electronically in between amp power inputs and speaker outputs of the Selector. The use of modern Speaker Simulator gives you an extra analog or digital output to a DAW or other applications.

**IMPORTANT NOTE:** Before connect any attenuator unit all the Amps and Selector must be turned off. The insert send and return must be properly connected before turn on any amp. If not, the Selector may be damaged internally. And also if the attenuator / speaker simulator load is erroneous or damaged, the Selector may suffer internal damage.



### MUTED TUNER OUTPUT:

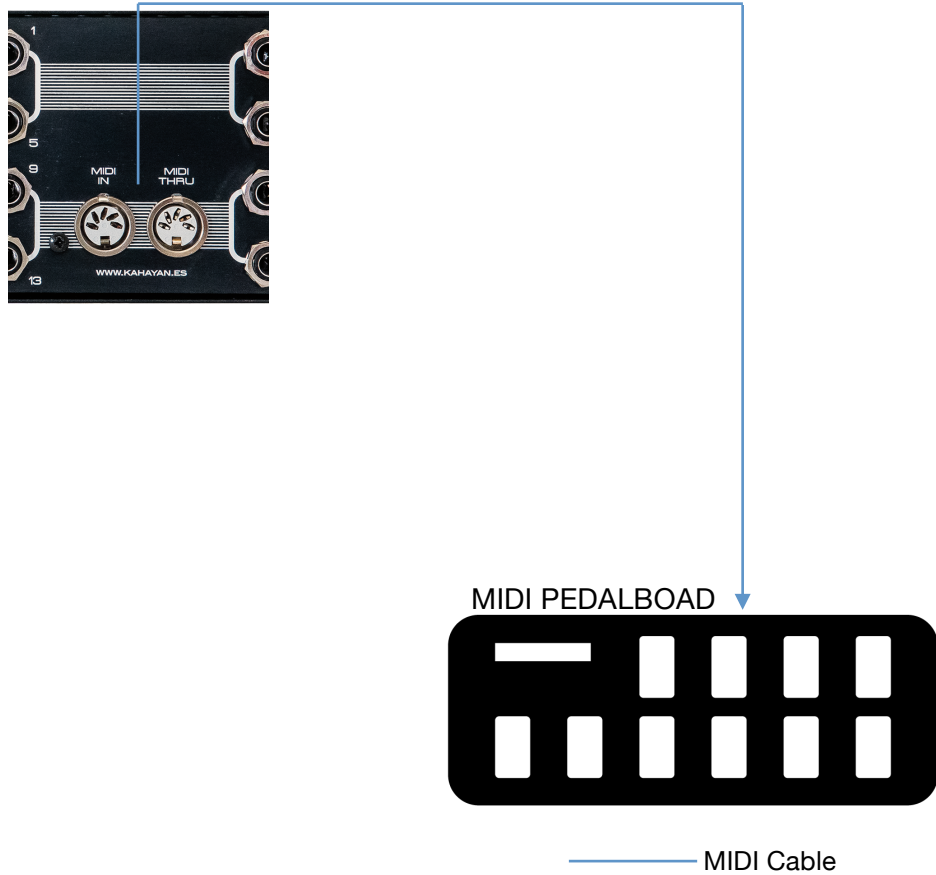
The 16x8 MIDI Selector allows you to connect an external **Tuner** using the Jack Output in the front panel. This Output only Works when you **press the MUTE TUNER switch**. This is a useful mode to have a more clean pedal rig routing. Also you can use this output to other functions: For example to connect in cascade a second selector unit, when you have a lot of Amps.



## MIDI INPUT/THRU:

The 16x8 MIDI Selector can be controlled by MIDI data. For this function you can use a MIDI Pedalboard or a MIDI/Bluetooth® interface (not included). Also the unit incorporates a MIDI thru output.

**1-MIDI PEDALBOARD:** Using a Pedalboard allows to control the 16x8 MIDI Selector and also many options for **Live** and **studio** applications: Recall and multi FX setups.



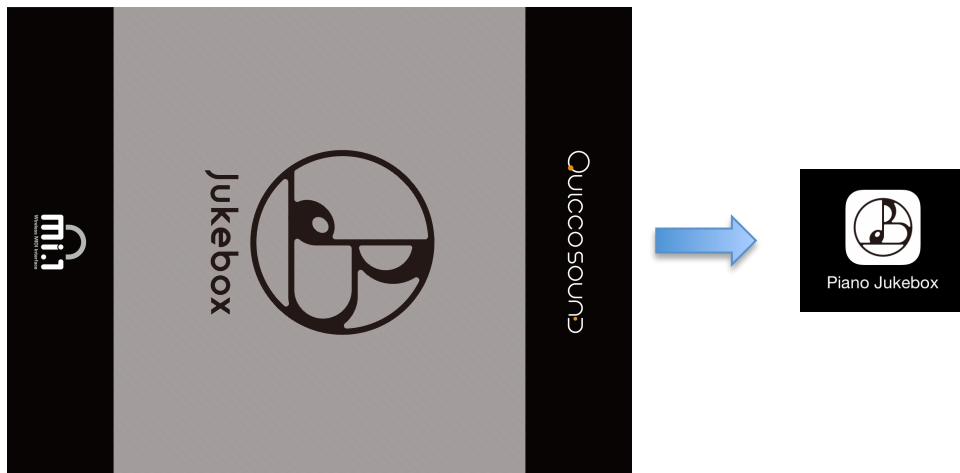
**2-MIDI/BLUETOOTH® INTERFACE:** When you connect a MIDI/Bluetooth® interface at the rear of the Selector, the world of the control by **Tablets** and **Smartphones** opens. This Means that you can use any MIDI app.

We don't recommend any MIDI app in special but here you have an example:

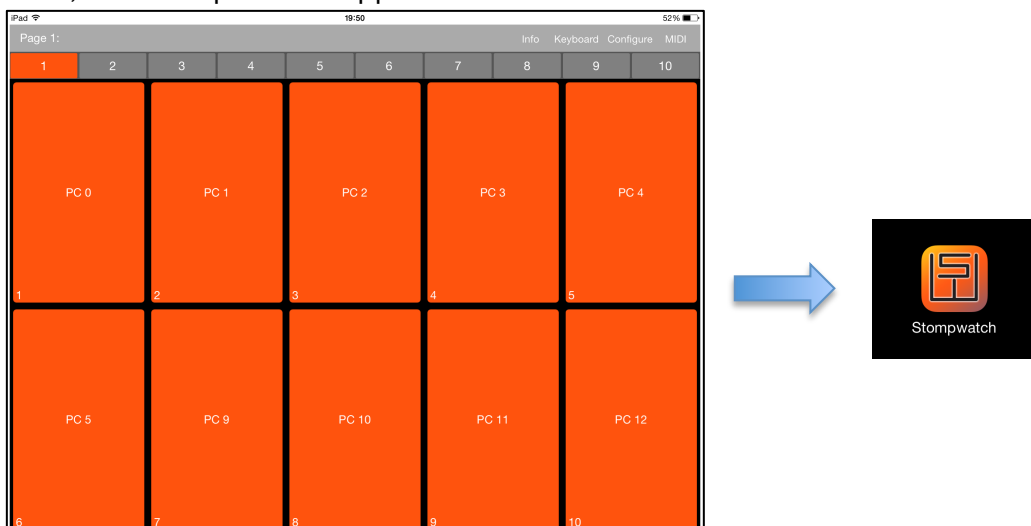
**Step1:** Connect your MIDI/Bluetooth® interface, in this case the M.1 Quiccosound®.



**Step 2:** Then download and install the Quiccosound® app just to control the Mi.1:



**Step 3:** Download and install any MIDI app to control the 16x8 MIDI selector. In this case, the Stompwatch® app:



### 3-MIDI LIST:

By default the 16x8 Selector is programmed to work in the MIDI channel 1. In this channel you have all this function list:

NOTE: Because the maximum of MIDI order is 128 (0 to 127), the MIDI program list is:

MIDI PROGRAM	SELECTS
Program Change 1	Mute/tuner out
Program Change 2	Amplifier 1
Program Change 3	Amplifier 2
Program Change 4	Amplifier 3
Program Change 5	Amplifier 4
Program Change 6	Amplifier 5
Program Change 7	Amplifier 6
Program Change 8	Amplifier 7
Program Change 9	Amplifier 8
Program Change 10	Amplifier 9
Program Change 11	Amplifier 10
Program Change 12	Amplifier 11
Program Change 13	Amplifier 12
Program Change 14	Amplifier 13
Program Change 15	Amplifier 14
Program Change 16	Amplifier 15
Program Change 17	Amplifier 16
Program Change 18	Speaker 1
Program Change 19	Speaker 2
Program Change 20	Speaker 3
Program Change 21	Speaker 4
Program Change 22	Speaker 5
Program Change 23	Speaker 6
Program Change 24	Speaker 7
Program Change 25	Speaker 8
Program Change 26	Amplifier 1 & Speaker 1
Program Change 27	Amplifier 1 & Speaker 2
Program Change 28	Amplifier 1 & Speaker 3
Program Change 29	Amplifier 1 & Speaker 4
Program Change 30	Amplifier 1 & Speaker 5
Program Change 31	Amplifier 1 & Speaker 6
Program Change 32	Amplifier 1 & Speaker 7
Program Change 33	Amplifier 1 & Speaker 8
Program Change 34	Amplifier 2 & Speaker 1
Program Change 35	Amplifier 2 & Speaker 2
Program Change 36	Amplifier 2 & Speaker 3

Program Change 37	Amplifier 2 & Speaker 4
Program Change 38	Amplifier 2 & Speaker 5
Program Change 39	Amplifier 2 & Speaker 6
Program Change 40	Amplifier 2 & Speaker 7
Program Change 41	Amplifier 2 & Speaker 8
Program Change 42	Amplifier 3 & Speaker 1
Program Change 43	Amplifier 3 & Speaker 2
Program Change 44	Amplifier 3 & Speaker 3
Program Change 45	Amplifier 3 & Speaker 4
Program Change 46	Amplifier 3 & Speaker 5
Program Change 47	Amplifier 3 & Speaker 6
Program Change 48	Amplifier 3 & Speaker 7
Program Change 49	Amplifier 3 & Speaker 8
Program Change 50	Amplifier 4 & Speaker 1
Program Change 51	Amplifier 4 & Speaker 2
Program Change 52	Amplifier 4 & Speaker 3
Program Change 53	Amplifier 4 & Speaker 4
Program Change 54	Amplifier 4 & Speaker 5
Program Change 55	Amplifier 4 & Speaker 6
Program Change 56	Amplifier 4 & Speaker 7
Program Change 57	Amplifier 4 & Speaker 8
Program Change 58	Amplifier 5 & Speaker 1
Program Change 59	Amplifier 5 & Speaker 2
Program Change 60	Amplifier 5 & Speaker 3
Program Change 61	Amplifier 5 & Speaker 4
Program Change 62	Amplifier 5 & Speaker 5
Program Change 63	Amplifier 5 & Speaker 6
Program Change 64	Amplifier 5 & Speaker 7
Program Change 65	Amplifier 5 & Speaker 8
Program Change 66	Amplifier 6 & Speaker 1
Program Change 67	Amplifier 6 & Speaker 2
Program Change 68	Amplifier 6 & Speaker 3
Program Change 69	Amplifier 6 & Speaker 4
Program Change 70	Amplifier 6 & Speaker 5
Program Change 71	Amplifier 6 & Speaker 6
Program Change 72	Amplifier 6 & Speaker 7
Program Change 73	Amplifier 6 & Speaker 8
Program Change 74	Amplifier 7 & Speaker 1
Program Change 75	Amplifier 7 & Speaker 2
Program Change 76	Amplifier 7 & Speaker 3
Program Change 77	Amplifier 7 & Speaker 4
Program Change 78	Amplifier 7 & Speaker 5
Program Change 79	Amplifier 7 & Speaker 6
Program Change 80	Amplifier 7 & Speaker 7



Program Change 81	Amplifier 7 & Speaker 8
Program Change 82	Amplifier 8 & Speaker 1
Program Change 83	Amplifier 8 & Speaker 2
Program Change 84	Amplifier 8 & Speaker 3
Program Change 85	Amplifier 8 & Speaker 4
Program Change 86	Amplifier 8 & Speaker 5
Program Change 87	Amplifier 8 & Speaker 6
Program Change 88	Amplifier 8 & Speaker 7
Program Change 89	Amplifier 8 & Speaker 8
Program Change 90	Amplifier 9 & Speaker 1
Program Change 91	Amplifier 9 & Speaker 2
Program Change 92	Amplifier 9 & Speaker 3
Program Change 93	Amplifier 9 & Speaker 4
Program Change 94	Amplifier 9 & Speaker 5
Program Change 95	Amplifier 9 & Speaker 6
Program Change 96	Amplifier 9 & Speaker 7
Program Change 97	Amplifier 9 & Speaker 8
Program Change 98	Amplifier 10 & Speaker 1
Program Change 99	Amplifier 10 & Speaker 2
Program Change 100	Amplifier 10 & Speaker 3
Program Change 101	Amplifier 10 & Speaker 4
Program Change 102	Amplifier 10 & Speaker 5
Program Change 103	Amplifier 10 & Speaker 6
Program Change 104	Amplifier 10 & Speaker 7
Program Change 105	Amplifier 10 & Speaker 8
Program Change 106	Amplifier 11 & Speaker 1
Program Change 107	Amplifier 11 & Speaker 2
Program Change 108	Amplifier 11 & Speaker 3
Program Change 109	Amplifier 11 & Speaker 4
Program Change 110	Amplifier 11 & Speaker 5
Program Change 111	Amplifier 11 & Speaker 6
Program Change 112	Amplifier 11 & Speaker 7
Program Change 113	Amplifier 11 & Speaker 8
Program Change 114	Amplifier 12 & Speaker 1
Program Change 115	Amplifier 12 & Speaker 2
Program Change 116	Amplifier 12 & Speaker 3
Program Change 117	Amplifier 12 & Speaker 4
Program Change 118	Amplifier 12 & Speaker 5
Program Change 119	Amplifier 12 & Speaker 6
Program Change 120	Amplifier 12 & Speaker 7
Program Change 121	Amplifier 12 & Speaker 8
Program Change 122	Amplifier 13 & Speaker 1
Program Change 123	Amplifier 13 & Speaker 2
Program Change 124	Amplifier 13 & Speaker 3

Program Change 125	Amplifier 13 & Speaker 4
Program Change 126	Amplifier 13 & Speaker 5
Program Change 127	Amplifier 13 & Speaker 6
Program Change 128	Amplifier 13 & Speaker 7

## Q&A

Listed below are the most typical questions that we have received from the users of the 16x8 Selector:

**- Does the selector have an input buffer?**

No, this unit is a transparent amp/speaker selector, with no active electronics components in the signal path, just a very short high quality cable in the instrument input.

**- What impedance 16x8 selector uses? Can the 16x8 selector adjust the amp impedance?**

This is like a 'patchbay', you connect your amp with the speaker you want, we don't make adaptations. For example if you have an 8 ohm amp and you have 2 cabinets (16 and 8 ohm), you have to choose the 'correct' speaker.

**- What guitar cable do you recommend?** We don't have a preferable brand but the cables must **have good quality and good soldering**. We have detected that a configuration with no quality cables changes the sound, then users tends to think there is a problem in our 16x8 selector. Then, changes the cables and recovers the definition and sound quality.

**-Can I put all my amp heads in 'tower' configuration (One above the other)?** You can configure all your amp heads in the way you want but the users must take attention of the position of the power transformer (connected to the power grid) of the amps. Some amp brands put the power transformer in the left side of the head, and others in the right side. If you combine this two cases amp, probably the induction of this power transformer will affect to the second amp and you could have some noise. We recommend put the same head amps (transformer position) in one 'tower' and the others in a second 'tower'.

**- If I turn off the 16x8 selector and amps are on, is there a problem?** No, because all the amps go directly to the internal phantom load in that case, and all your amps will be loaded.

## SPECIFICATIONS

- 16 Amplifiers and 8 Speakers Selector
- 1 Jack instrument input and 1 Jack Tuner output (front panel)
- 16 Jack instrument outputs to Amplifiers
- 16 Jack charge (speaker) inputs from Amplifiers
- 8 Jack charge (speaker) outputs to Speaker
- 1 Jack charge output and 1 Jack charge input for Insert in the Amp-Bus
- 1 MIDI output and 1 MIDI thru
- Power Supply: 220/110V and 50/60 Hz. Consumption: 6W.
- Weight: 5Kg
- Max. Watt input from Amplifiers: 180W
- Dimensions: 84x435x285 mm (Height/Width/Depth)
- The manufacturer reserves the right to change the technical specification of the product without prior notice.

**Note:** To change the voltage, just open the top cover and select the voltage needed (220/110) in the internal voltage switcher in the power supply board close to the power socket. For more info please contact us.

## WARRANTY

These products are guaranteed for a period of two years from the date of shipment to the end user for countries of the European Union. For other countries, please refer to the law in effect.

During the warranty period Kahayan Pro-Audio will, at their discretion, either repair or replace products which prove to be defective, provided that the product is returned to an authorised Kahayan service facility. The warranty will not cover shipping the unit back to the Kahayan service facility, unless the customer determines otherwise with his dealer/distributor.

Defects caused by unauthorised modifications, accident, negligence or any misuse are not covered by this warranty. For further information please contact your dealer or the distributor in your country.

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