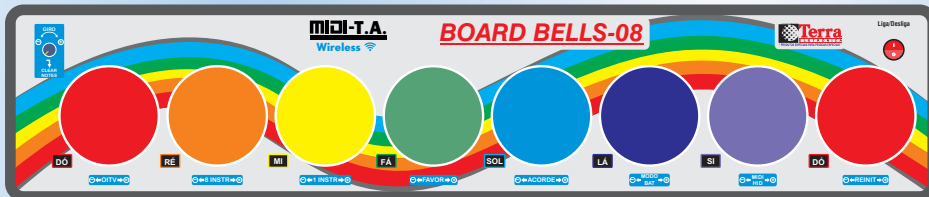
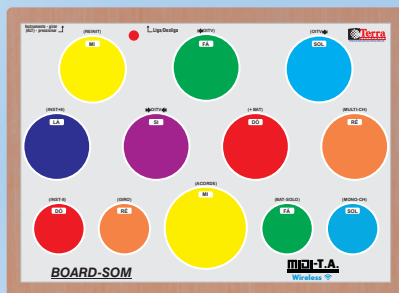


# Instruction manual

## **NET** **MIDI-T.A.** *Wireless MIDI Instruments* *for Assistive Technology*



"Instrumento mágico"



RX-USB-NET-MIDI-TA



# Board-Som

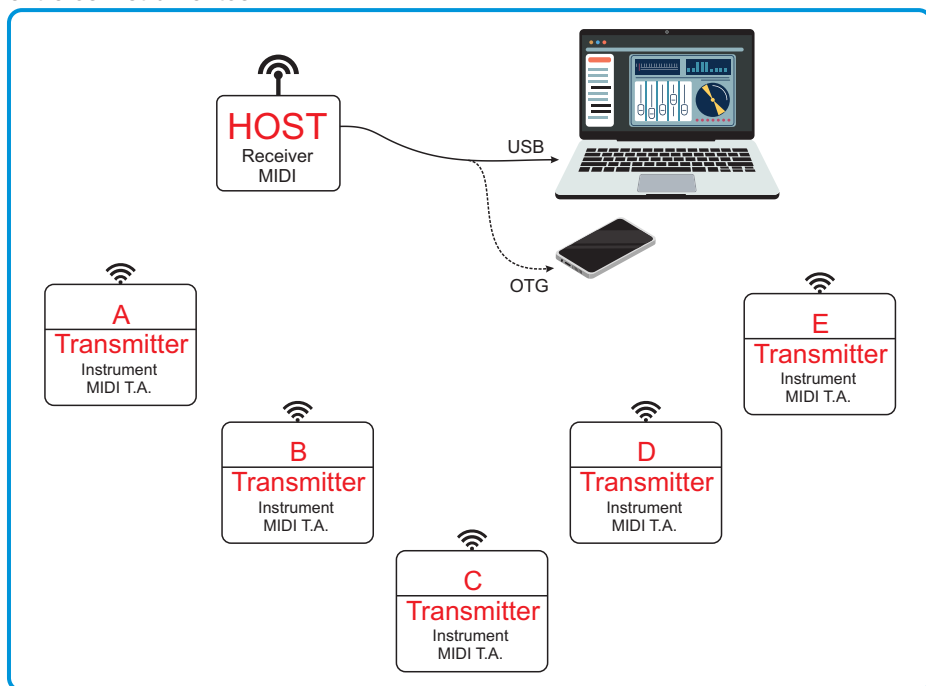
## Overview:

The MIDI T.A. instruments work on a wireless network as shown in the figure below. This figure represents a group containing a HOST (receiver) and 5 Instruments (A, B, C, D and E).

Each HOST can process a group with up to 5 instruments simultaneously.

You can create up to 4 groups within the same environment and place up to 5 instruments within each of these groups, but to do this you need to have 4 HOSTs, one for each group and 4 computers or cell phones, one for each HOST, to run the instruments.

Pode-se trabalhar, em uma mesma sala, com até 4 grupos de forma simultânea, sendo que cada grupo pode ter até 5 instrumentos, sem que haja interferência entre os instrumentos



## System description:

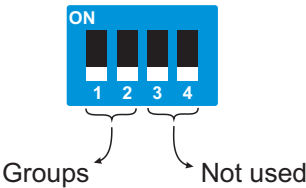
- Computer or Cell Phone, where you can run a “MIDI player” program/app, such as MIDI Player, Ableton, Walk Band, Garage Band, etc., to process the notes and commands and send them to an amplifier.
- MIDI T.A. USB receiver (Terra) responsible for receiving the commands sent by the MIDI T.A. instruments (Terra) and forwarding them to the computer or cell phone (MIDI player).
- Up to 5 MIDI T.A. instruments (A, B, C, D, E) where the notes and commands are generated on the MIDI T.A. network to be executed by the MIDI player.

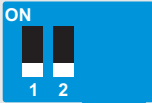
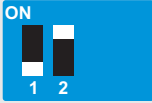
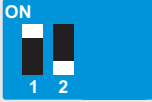

Note: The MIDI T.A. receiver (HOST) and the MIDI T.A. instruments (transmitter) are exclusive products developed by Terra Indústria Eletrônica.

# System configuration

## HOST Configuration

To configure the USB HOST (Terra) there is a 4-position switch where it will be determined from which group the HOST will receive the commands and instrument notes (A, B, C, D, E).



	Select group 1
	Select group 2
	Select group 3
	Select group 4

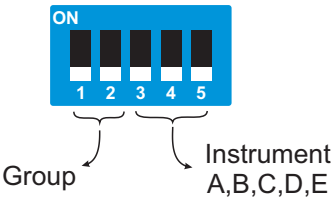
Each HOST works with only one group and must be connected to a computer or cell phone with a MIDI player program/app.

To use more than one group in the same environment, you need to have more HOST(s) and more computers or cell phones and configure each HOST to work in a different group (remembering that each group can contain up to 5 instruments).



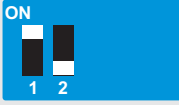

Note: For the HOST to receive commands and notes from the instruments, keys 1 and 2 on the HOST and the Instruments must be in the same position, as this indicates that they belong to the same group.

# Instrument Configuration:

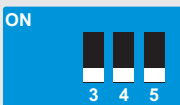
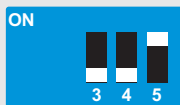

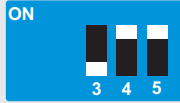

The configuration of the instruments is similar to that of the Host, but the configuration switch has 5 positions, confirm the figure below, with the first 2 indicating which group the instrument belongs to and the last 3 indicating whether the instrument is A, B, C, D or E.



Switches 1 and 2 define which group the instrument belongs to.

	Select group 1		Selecciona o grupo 2
	Select group 3		Select group 4

Switches 3,4 and 5 define whether the instrument is A,B,C,D or E.

	Select Instrument A		Select Instrument B
	Select Instrument C		Select Instrument D
	Select Instrument E		

Note: For the HOST to receive commands and notes from the instruments, switches 1 and 2 on the HOST and the Instruments must be in the same position, as this indicates that they belong to the same group.

## Software tocador de MIDI

Terra Eletrônica MIDI T.A products are compatible with software that accepts MIDI commands, such as MIDI Player, Ableton, Walk Band, Garage Band, etc. Basic functions such as notes or keys are supported automatically, but some special functions may work differently depending on how each player works.. It is up to the user to choose the software that they find most interesting or with which they are most familiar.

If this is your first time using MIDI player software for Windows computers, we recommend using MIDI Player because it is lightweight, free, easy to use and fully integrated with all commands of the T.A. Terra MIDI system. Therefore, we will use MIDI Player as a reference to guide installation and configuration.

### MIDI Player

The Software will be sent on a Pendrive, which comes with the product. No installation is necessary, just copy the files from the Pendrive to an easily accessible location and run the MidiPlayer. However, if for some reason you need to download it, just follow the steps below:

- 1 - The MIDI Player Software can be downloaded for free from the website <http://falcsoft.hu/software.html>.
- 2 - Once you access the site, scroll down the page until you find the link for Soundfont Midi Player 6.3. In this area of the site there will be 3 versions for download, all of which work, but we suggest the third link as shown in the image below:

#### [Soundfont Midi Player 6.3 \(without soundfont\)](#)

64 bit/unicode version. It's less tested but fully functional:

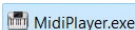
#### [Soundfont Midi Player 6.3 64-bit \(without soundfont\)](#)

I have made a preconfigured edition that uses a tiny 10MB ogg compressed version of Reality GMGS falcomod soundfont:

#### [Soundfont Midi Player 6.3 Bassmidi + Soundfont Edition](#)

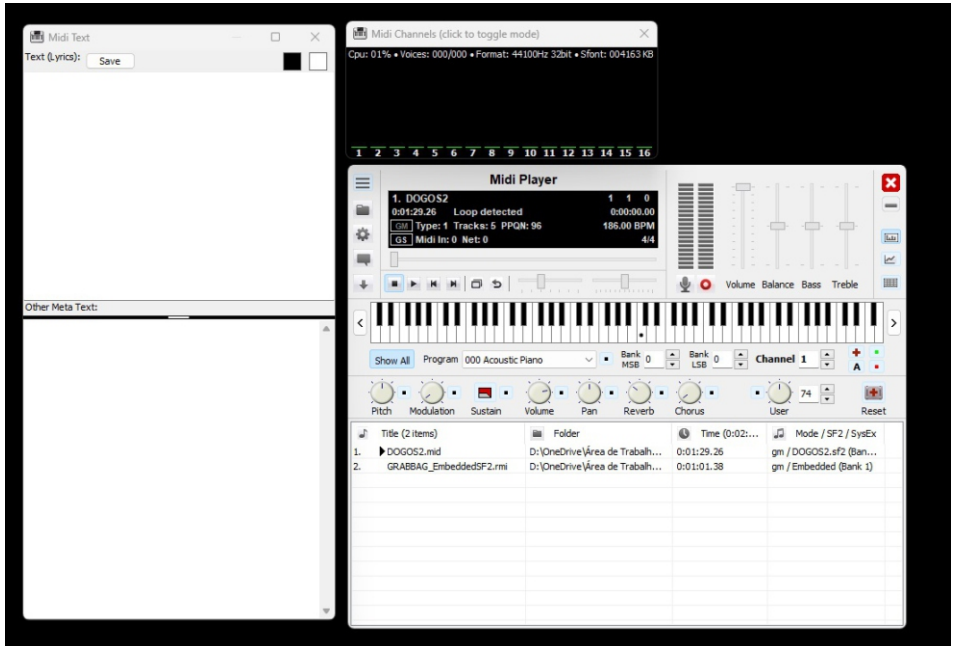


- 3 - Download the file and unzip the zip file to an easily accessible location.
- 4 - After unpacking, a folder named "MidiPlayer6" should have been created, inside which all the files for the program to work are contained.
- 5 - To run the MIDI Player, simply click on the MidiPlayer.exe file.



MidiPlayer.exe

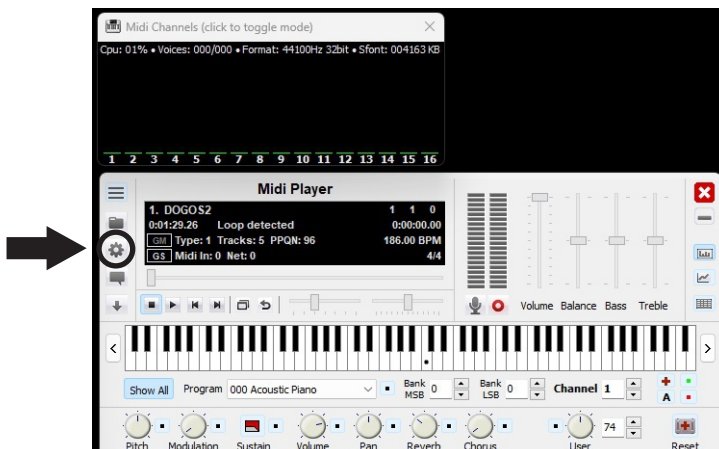
6 - The first time you run the program the screen should look similar to the image below.



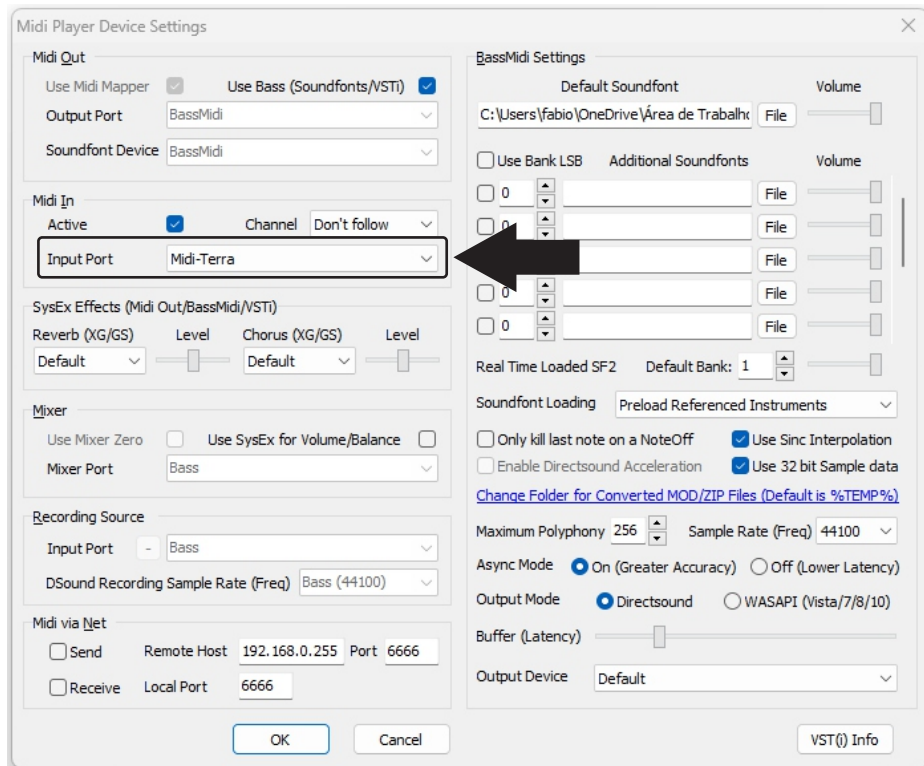
7 - The “Midi Text” window can be closed.

8 - Connect the USB HOST receiver (Terra) to the computer, no installation is required..

9 - If no MIDI device has been previously running on the computer, MidiPlayer should recognize the MIDI HOST Receiver (Terra) automatically, but if this does not happen it may be necessary to tell MidiPlayer to use the Receiver by clicking on the configuration icon.



10 - Check in the “Input Port” field whether Midi-Terra is selected, as shown in the figure below.



11 - If it is not, simply select it and leave it as shown in the image above. Remembering that for this procedure the HOST receiver (Terra) must be connected to the PC.

12 - You can close the configuration screen, the MidiPlayer is now configured.

If the HOST receivers and the Instrument are in the same group, that is, if the configuration switch 1 and 2 of the HOST and the Instrument are in the same position, everything should already be working.

# Instruments

## Board Som

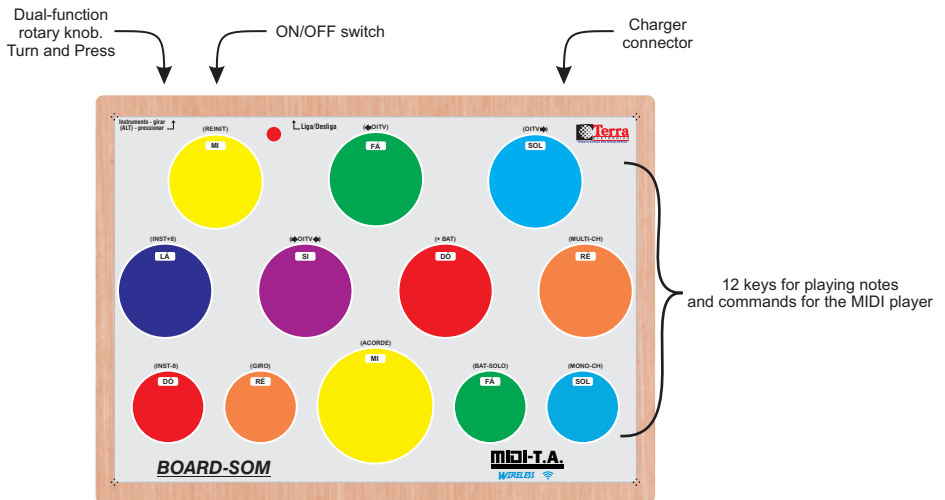
Soundboard is a MIDI controller in a frame format with 12 keys, which can be used to trigger musical notes for various instruments.

On the top there is a rotary knob with two functions (alternative function “alt”), the on/off switch and the charger input.

The rotary knob has 2 functions, rotating and pressing

1 - By turning this control you change the instrument that the Sound Board will control.













2 - When pressed, this button works like the “alt” key on a computer keyboard and activates the alternative functions present on the 12 keys



The BOARD-SOM is battery-powered and, with the cable provided, can be charged with 5V USB chargers, the same as those used on cell phones.



The alternative functions of the 12 Sound Board keys are described in the table below:

	ALT+REINIT - by holding down the “alt” button and clicking the REINIT key the instrument will return to the initial instrument configuration.
	ALT+ACORDE - by holding down the ‘alt’ button and clicking on the ACORDE key, the Soundboard activates/deactivates the playback of chords for the currently active instrument (note 1).
	ALT+GIRO - by holding down the ‘alt’ button and clicking on the GIRO key, the Soundboard activates/deactivates the gyroscope function that will make it react to the movement by changing the pitch and modulation of the instrument being controlled.
	ALT+BAT - holding down the “alt” button and clicking the +BAT key activates/deactivates the drums to be played along with the instruments being played.
	ALT+BAT-SOLO - by holding down the button and clicking on the BAT-SOLO key, the Soundboard activates and deactivates the playback of only the drums.
	ALT+INST-8 - holding down the ‘alt’ button and clicking the INST-8 key decrements the current instrument by -8 (note 1).
	ALT+INST+8 - mantendo pressionado o botão “alt”e clicando na tecla INST+8, incrementa o instrumento atual em +8 (nota1).
	ALT+INST+8 - holding down the “alt” button and clicking the INST+8 key, increases the current instrument by +8 (note 1).
	ALT+MONO-CH - by holding down the button and clicking on the MONO-CH key, the Soundboard will control only one instrument and clicking more times will increase the selection of the instrument to be controlled (note 1).
	ALT+◀OITV holding down the “alt” button and clicking on the OITV key the current instrument is one octave lower
	ALT+OITV➡holding down the “alt” button and clicking on the OITV key the current instrument is one octave higher
	ALT+➡OITV◀holding down the “alt” button and clicking on the OITV key the current instrument returns to the standard octave

Note 1 - these functions are only active if the Board-Som is in MONO-CH mode.

# Attachments

## GM System - Level 1 Sound Set

### General MIDI Sound Set Groupings: (all channels except 10)

Prog	Instrument Group
0-7	Piano
8-15	Chromatic Percussion
16-23	Organ
24-31	Guitar
32-39	Bass
40-47	Strings
48-55	Synthesizers
56-63	Brass
64-71	Reed
72-79	Pipe
80-87	Synth Lead
88-95	Synth Pad
96-103	Synth Effects
104-111	Cultural Ethnics
112-119	Percussion
120-127	Sound Effects

# General MIDI Sound Set:

0. Acoustic Grand Piano 1. Bright Acoustic Piano 2. Electric Grand Piano 3. Honky-tonk Piano 4. Electric Piano 1 5. Electric Piano 2 6. Harpsichord 7. Clavi	<b>Piano</b>	48. String Ensemble 1 49. String Ensemble 2 50. SynthStrings 1 51. SynthStrings 2 52. Choir Aahs 53. Voice Oohs 54. Synth Voice 55. Orchestra Hit	<b>Synthesizers</b>	96. FX 1 (rain) 97. FX 2 (soundtrack) 98. FX 3 (crystal) 99. FX 4 (atmosphere) 100. FX 5 (brightness) 101. FX 6 (goblins) 102. FX 7 (echoes) 103. FX 8 (sci-fi)	<b>Synth Effects</b>
8. Celesta 9. Glockenspiel 10. Music Box 11. Vibraphone 12. Marimba 13. Xylophone 14. Tubular Bells 15. Dulcimer	<b>Chromatic Percussion</b>	56. Trumpet 57. Trombone 58. Tuba 59. Muted Trumpet 60. French Horn 61. Brass Section 62. SynthBrass 1 63. SynthBrass 2	<b>Brass</b>	104. Sitar 105. Banjo 106. Shamisen 107. Koto 108. Kalimba 109. Bag pipe 110. Fiddle 111. Shanai	<b>Cultural Ethnics</b>
16. Drawbar Organ 17. Percussive Organ 18. Rock Organ 19. Church Organ 20. Reed Organ 21. Accordion 22. Harmonica 23. Tango Accordion	<b>Organ</b>	64. Soprano Sax 65. Alto Sax 66. Tenor Sax 67. Baritone Sax 68. Oboe 69. English Horn 70. Bassoon 71. Clarinet	<b>Reed</b>	112. Tinkle Bell 113. Agogo 114. Steel Drums 115. Woodblock 116. Taiko Drum 117. Melodic Tom 118. Synth Drum 119. Reverse Cymbal	<b>Percussão</b>
24. Acoustic Guitar (nylon) 25. Acoustic Guitar (steel) 26. Electric Guitar (jazz) 27. Electric Guitar (clean) 28. Electric Guitar (muted) 29. Overdriven Guitar 30. Distortion Guitar 31. Guitar harmonics	<b>Guitar</b>	72. Piccolo 73. Flute 74. Recorder 75. Pan Flute 76. Blown Bottle 77. Shakuhachi 78. Whistle 79. Ocarina	<b>Pipes</b>	120. Guitar Fret Noise 121. Breath Noise 122. Seashore 123. Bird Tweet 124. Telephone Ring 125. Helicopter 126. Applause 127. Gunshot	<b>Efeitos Sonoros</b>
32. Acoustic Bass 33. Electric Bass (finger) 34. Electric Bass (pick) 35. Fretless Bass 36. Slap Bass 1 37. Slap Bass 2 38. Synth Bass 1 39. Synth Bass 2	<b>Bass</b>	80. Lead 1 (square) 81. Lead 2 (sawtooth) 82. Lead 3 (calliope) 83. Lead 4 (chiff) 84. Lead 5 (charang) 85. Lead 6 (voice) 86. Lead 7 (fifths) 87. Lead 8 (bass + lead)	<b>Synth Lead</b>		
40. Violin 41. Viola 42. Cello 43. Contrabass 44. Tremolo Strings 45. Pizzicato Strings 46. Orchestral Harp 47. Timpani	<b>Strings</b>	88. Pad 1 (new age) 89. Pad 2 (warm) 90. Pad 3 (polysynth) 91. Pad 4 (choir) 92. Pad 5 (bowed) 93. Pad 6 (metallic) 94. Pad 7 (halo) 95. Pad 8 (sweep)	<b>Synth Pad</b>		

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