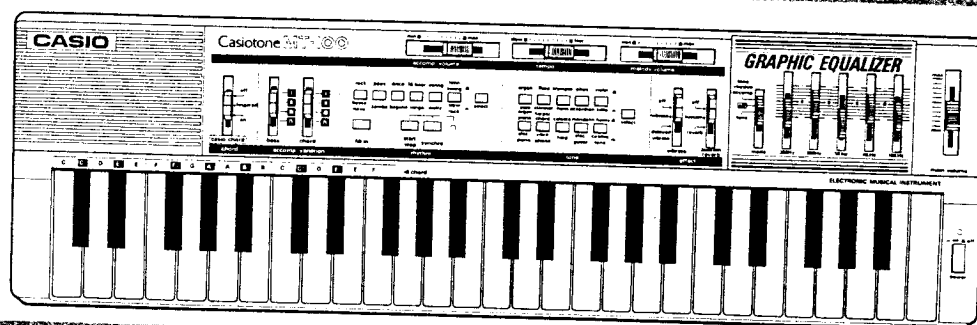


SPARE PARTS MASTER

Casiotone MT-100

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CASIO®

Casiotone MT-100

ELECTRONIC MUSICAL INSTRUMENT

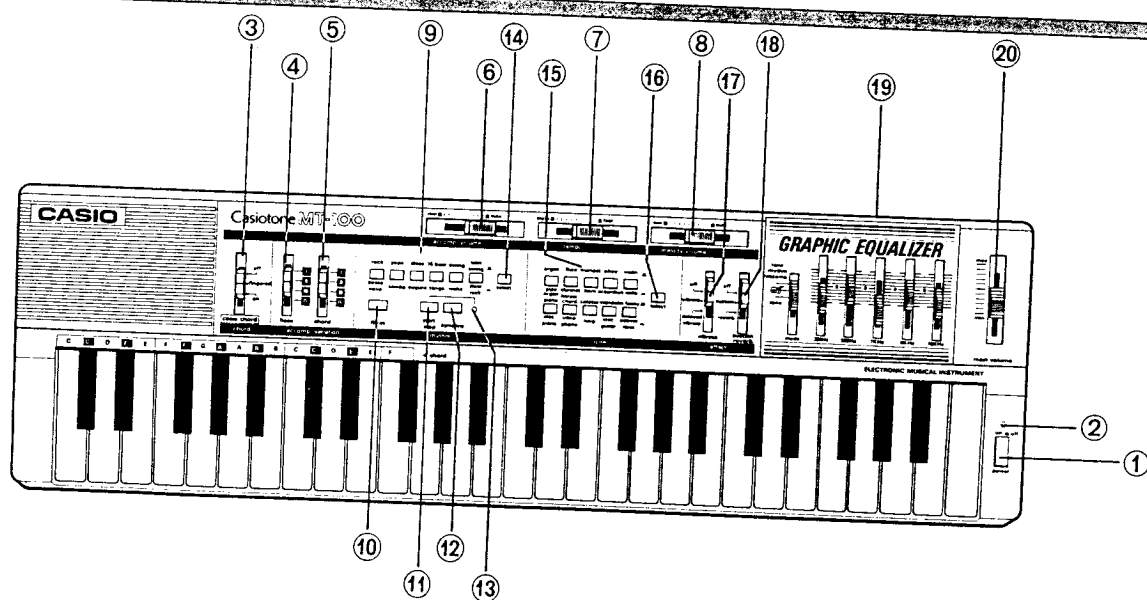
Thank you for purchasing a Casiotone MT-100 electronic musical instrument. Besides all of the fine innovations found on all of CASIO's musical instruments, the Casiotone MT-100 also features a built-in graphic equalizer that lets you adjust any of the 20 preset tones to just the shade you want. A selection of 12 auto-rhythms and 4 bass/chord patterns provides versatile back up arrangements. The compact design of the MT-100 together with a 3-way AC/DC power source means that you can play your MT-100 wherever you go.

In order to obtain full enjoyment of this instrument and to ensure troublefree operation, be sure to read this manual thoroughly, and carefully follow the instructions given.

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1. Nomenclature

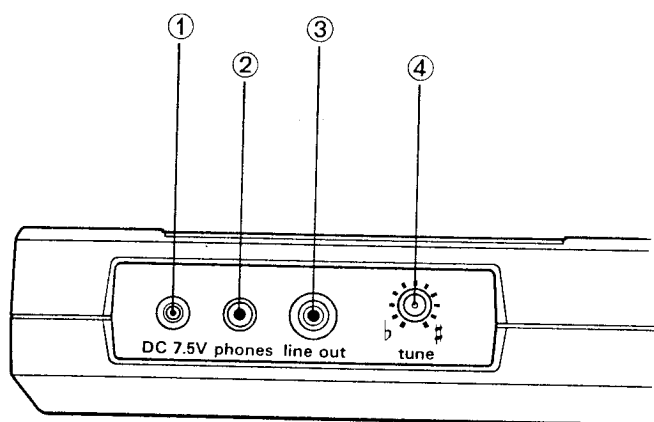


- ① Main power indicator
- ② Main power switch
- ③ Casio Chord switch
- ④ Bass selector
- ⑤ Chord selector
- ⑥ Accomp. volume control
- ⑦ Tempo control

- ⑧ Melody volume control
- ⑨ Rhythm selection buttons
- ⑩ Fill-in button
- ⑪ Start/Stop button
- ⑫ Synchro Start button
- ⑬ Tempo lamp
- ⑭ Select button

- ⑮ Tone color selection buttons
- ⑯ Select button
- ⑰ Vibrato switch
- ⑱ Sustain/Reverb. switch
- ⑲ Graphic Equalizer section
- ⑳ Main volume control

2. Rear Panel (Connection jacks & Pitch control)



① AC adaptor jack

For connection of AC adaptor AD-1 or car battery adaptor CA-1.

② Headphone jack

For connection of headphone (optional).

③ Output jack

For connection of audio equipment or keyboard amplifier. Volume can be adjusted using keyboard volume control on.

④ Pitch control knob

Adjusts pitch of entire keyboard within $\pm 1/4$ tone to facilitate tuning with other instruments.

3. Power Supply

The unit operates on both AC and DC power.

(DC power)

Dry batteries:

The unit can be powered five D size (SUM-1) manganese dry batteries. Weakened batteries will result in lower volume or poor tonal quality. The power indicator lamp will gradually lose its brightness when battery power weakens. At this time, change batteries or switch to one of the alternate power sources mentioned below.

Battery replacement:

1. Slide open the battery compartment cover on the bottom of the unit and take out used batteries.

2. Insert new batteries, taking care that polarity is correct.

* It is advisable to replace all five batteries at the same time for longer battery life.

* Refer to the specifications for standard battery life.

Car battery adaptor:

With the car battery adaptor (CA-1, optional), DC power is supplied from a car battery through the cigarette lighter socket.

(AC power)

An AC adaptor (AD-1, optional) is required to connect to an AC outlet.

Use only an adaptor with the same voltage rating (100, 117, 220, or 240V) as the power supply in your area to prevent component damage. Using an adaptor will automatically cut off the battery power supply.

* Remove batteries from the battery compartment when the unit is not used for extended periods. (Battery leakage can damage electrical parts.)

• Auto power-off function

An automatic power cut-off function activates approximately 6 minutes, after the last operation of the unit.

Power supply can be restored by switching the main power switch off and then on again.

CAUTION

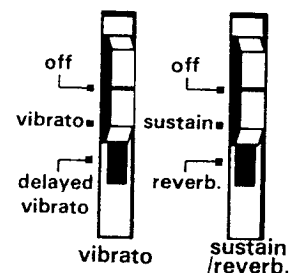
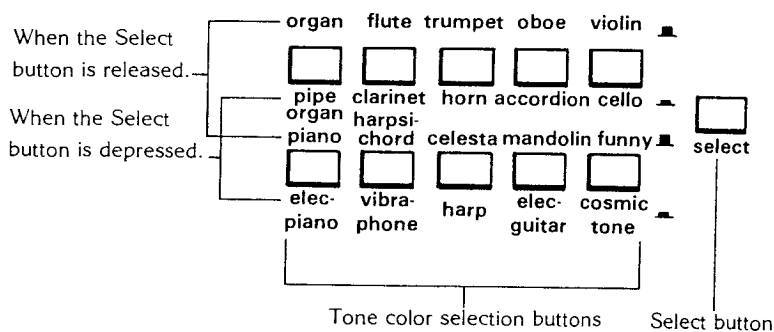
* ONLY USE A CASIO AC ADAPTOR TO PREVENT DAMAGE TO THE UNIT.

* The adaptor normally warms up when connected to an AC outlet. Disconnect the adaptor whenever possible, especially if the unit is not used for a extended periods.

The following may cause batteries to burst:

1. Use of an AC adaptor other than a genuine Casio adaptor.
2. Insertion of batteries with their polarities (+, -) reversed.

4. Preset Tone Colors & Sound Effects



- **Selecting a preset tone color**

Select one of the 20 tone colors by pressing the corresponding button. Each button has 2 tone colors. The tone color selected depends upon whether the Select button is depressed or released.

- **Adding sound effects**

VIBRATO, DELAYED VIBRATO, SUSTAIN and REVERBERATION effects can be added by sliding each switch to the corresponding position.

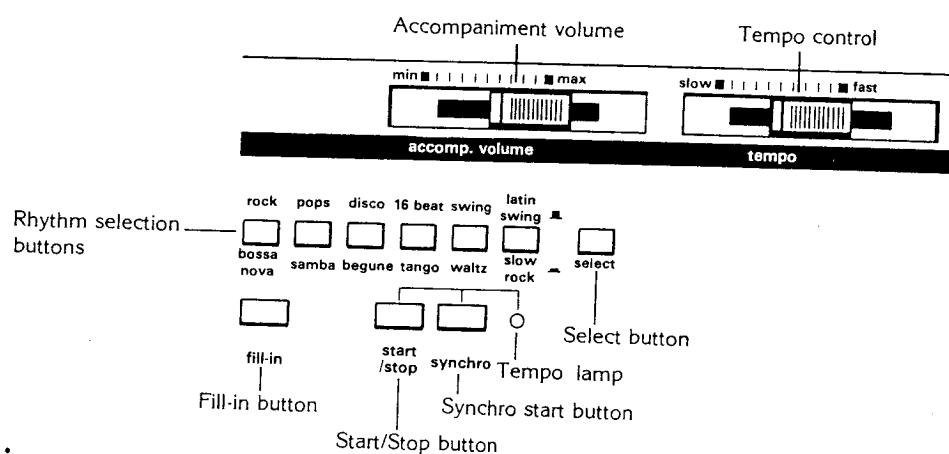
VibratoFor slight, rapid variations in the pitch of a sound.

Delayed vibratoFor a vibrato effect that is delayed for a slight interval after pressing a key.

Sustain.....For a sound that lingers after the keys are released.

Reverb.....For concert hall ambience.

5. Auto-rhythm



- **Selecting an auto-rhythm**

Select one of the 12 auto-rhythms by pressing a Rhythm selection button. When the Select button is released (■), the rhythm noted above the button is selected. When depressed (■), the rhythm noted below is selected.

- **Fill-in button**

Pressing during rhythm play will cause a fill-in (percussive ornament) to be performed.

- **Tempo lamp**

Blinks on first beat of each measure. When the Synchro button is pressed, this lamp stays lit to indicate that the instrument is ready to play.

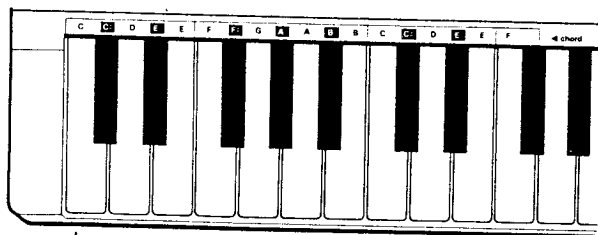
- **Start/Stop button**

Press to start or stop Rhythm.

- **Synchronizing auto-rhythm and auto-accompaniment**

[Using the Synchro button]

To synchronize auto-rhythm and auto-accompaniment, first select an auto-rhythm and then press the Synchro button. A red lamp will light above the Synchro button to indicate that the instrument is ready to play. When one of the accompaniment keyboard keys (see illustration below) is pressed, the rhythm, synchronized with auto-accompaniment will begin to play. (For auto-accompaniment, see next page.)



Accompaniment Keyboard keys
(Lower one-and-a-half octaves)

- **Accomp. volume control**

Adjusts volume of Auto-rhythm.

* If main volume control is at minimum setting, no rhythm sound can be heard.

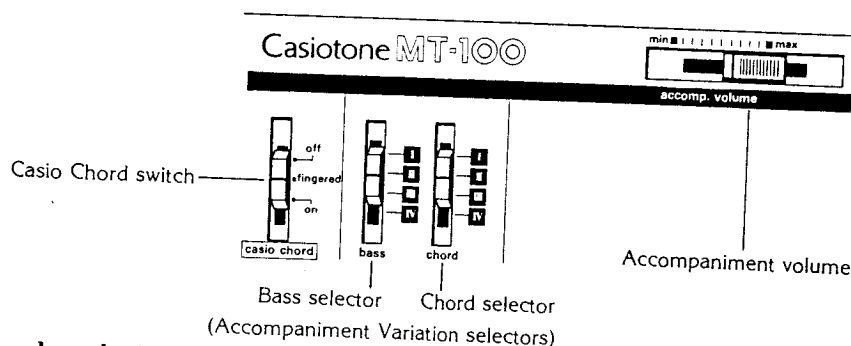
- **Tempo control**

Adjusts tempo of Auto-rhythm.

6. Auto-accompaniment

The auto-accompaniment function of this model offers two ways to play chords. One is the normal way in which three or four notes are played at the same time. The other

is an easier way known as the "One-finger method", which is accomplished using the Casio Chord system.



• Casio Chord switch

Turns auto-accompaniment on and off.

offFor normal play without auto-accompaniment.

fingeredFor auto-accompaniment playing chords as usual.

onFor auto-accompaniment using the Casio Chord system.

* If the Casio Chord switch is set to "fingered" or "on", the lower one-and-a-half octaves of the keyboard become accompaniment keyboard keys, and the upper part of the keyboard becomes 4-note polyphonic.

• Accompaniment Variation selectors

Four kinds (I to IV) of bass and chord patterns can be selected for each rhythm. Set each selector to any position according to your choice of accompaniment.

- * These selectors do not function if auto-accompaniment is not used, (i.e., if the Casio Chord switch is set to "off").
- * The sounds of bass and chords vary according to which one of the 12 auto-rhythms and which type of Accompaniment variation is selected.

- * Set the two selectors to position I for the basic accompaniment style for each rhythm.

• Accompaniment volume

Adjusts the volume of the accompaniment.

[1] Auto-accompaniment using the Casio Chord System (One-finger Method)

Casio Chord System

The Casio Chord system has been developed to facilitate the play of four main types of chords. Pressing one of the accompaniment keyboard keys produces the major chord corresponding to that note. Adding any key to the right (two keys at the same time) results in a minor chord. Pressing one more key to the right (three keys in all) produces a seventh chord, and pressing a fourth key (four keys in all) creates a minor seventh chord.

(Example)

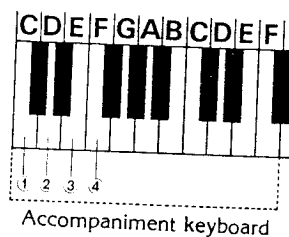
C (C major chord)—Press ①.

Cm (C minor chord)—Press ①, ② together.

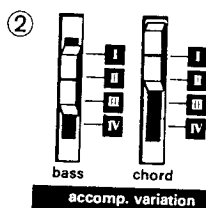
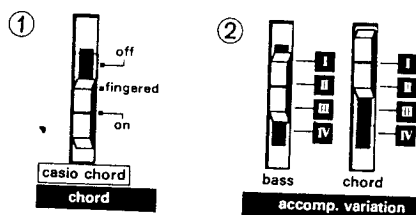
C₇ (C seventh chord)—Press ①, ②, ③ together.

Cm₇ (C minor seventh chord)—Press ①, ②, ③, ④ together.

- * Not only ②, ③ and ④, but any black or white keys can be used as long as they are to the right of ①.

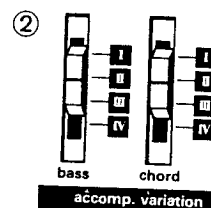
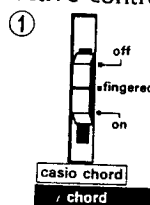


- ① Set the Casio Chord switch to "on".
- ② Set the Accompaniment Variation selectors (bass & chord) to any position.
- ③ Select one of the auto-rhythms and press the Synchro Start button.
 - * The lamp above the Synchro Start button lights up meaning that the accompaniment keyboard keys are ready for play.
- ④ Use the accompaniment keyboard keys to select the desired chords.
 - * Adjust the tempo and accompaniment volume using the respective controls.



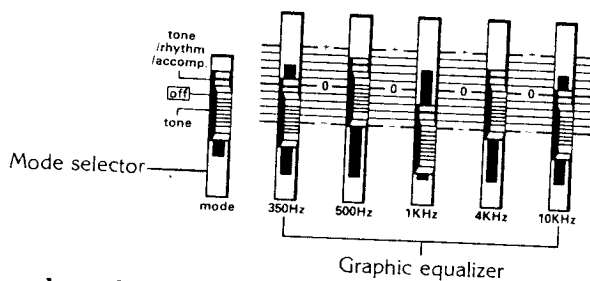
[2] Auto-accompaniment playing chords as usual.

- ① Set the Casio Chord switch to "fingered".
- ② Set the Accompaniment Variation selectors (bass & chord) to any position.
- ③ Select one of the auto-rhythms and press the Synchro Start button.
 - * The lamp above the Synchro Start button lights up meaning that the accompaniment keyboard keys are ready for play.
- ④ Play a chord using the accompaniment keyboard keys.
 - * Adjust the tempo and accompaniment volume using the respective controls.



7. Graphic Equalizer

The graphic equalizer function is used to make fine tone quality adjustments. It permits control of the frequency response through five sectors 350 Hz, 500 Hz, 1 KHz, 4 KHz and 10 KHz. "0" denotes the normal position. Sliding the switch up toward + increases the frequency response, and sliding it down toward - decreases the frequency response.



(mode selector)

OffFor normal tone quality without graphic equalizer.

Tone/Rhythm/Accomp. modeFor tone quality adjustment of melody, rhythm and accompaniment using graphic equalizer.

Tone modeFor tone quality adjustment of melody using graphic equalizer.

Effect in Each Band

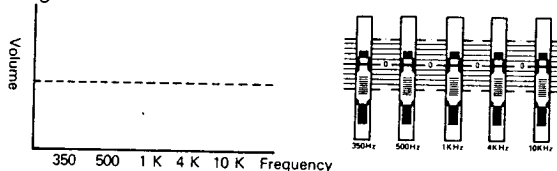
Graphic Equalizer	Overall (tone/rhythm/chord)	Melody (tone)
350 Hz	<ul style="list-style-type: none"> Strong effect on bass. 	<ul style="list-style-type: none"> Increased tone depth.
500 Hz	<ul style="list-style-type: none"> Strong effect on bass and melody. Raising too high may distort sound. 	<ul style="list-style-type: none"> Increased tone depth.
1 kHz	<ul style="list-style-type: none"> Melody, rhythm, chord and bass. Raising too high may distort sound. 	<ul style="list-style-type: none"> Increased tone depth. Unique tones.
4 kHz	<ul style="list-style-type: none"> Melody, rhythm, chord and bass all become sharp. Unique cymbal effect. Sounds like effector being used. 	<ul style="list-style-type: none"> Unique tone.
10 kHz	<ul style="list-style-type: none"> Strong effect on high hat. Increased brightness of such sounds as harpsichord and celesta. 	<ul style="list-style-type: none"> Unique tones. Noisy.

* The range of variations is ± 10 dB (approx.) in each band.

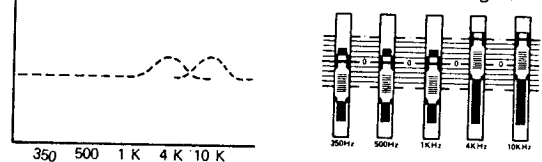
The Graphic Equalizer

The Graphic Equalizer is a device which emphasizes or suppresses sounds near the five set frequency bands.

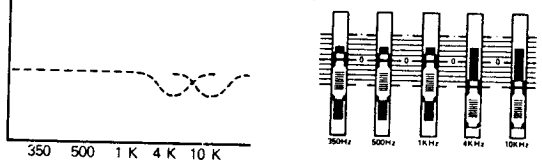
(1) Original sound



(2) The high range component is emphasized for a bright, hard tone.

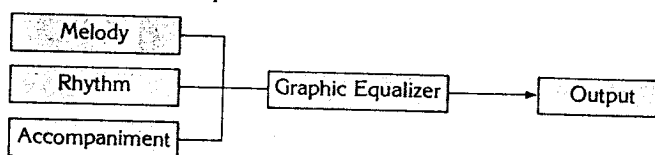


(3) The high range component is suppressed for a round, soft tone.

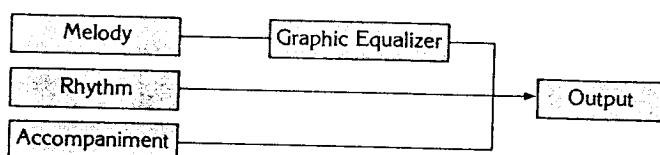


With the Casiotone MT-100, the Graphic Equalizer can be used to control tone for the melody, rhythm and accompaniment. Or the Graphic Equalizer can be used for the melody alone for more effective music making.

Tone rhythm accomp. mode



Tone mode

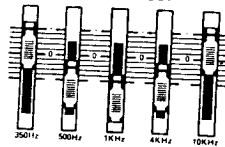


* When the graphic equalizer is used with the melody only, sound is produced without passing through the internal filter. Therefore, the sound is different when used with tone/rhythm/accomp.

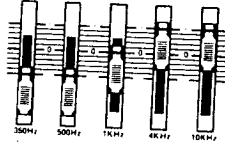
Basic Settings

The three types of settings shown below are often used, but with the MT-100, settings 1 and 2 can be most effectively used.

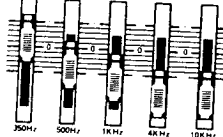
(1) Modulation emphasizing upper and lower tones.



(2) Light and sharp emphasizing upper tones.



(3) Increased intensity and depth emphasizing lower tones.

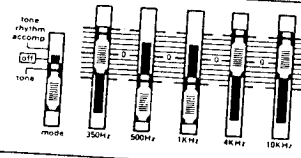
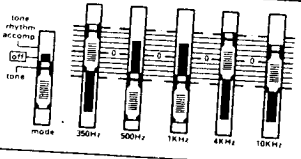
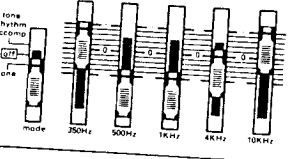
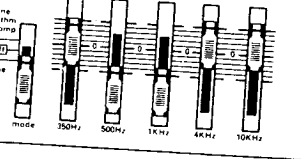


Example Applications

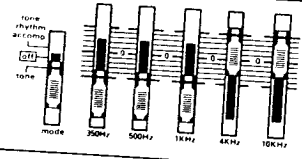
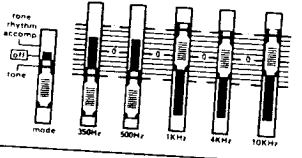
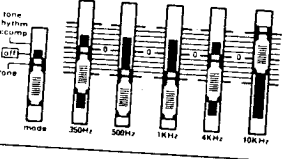
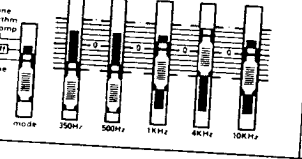
a) Overall (tone/rhythm/chord)

Setting	Graphic Equalizer	Remarks
Auto-accom-paniment		<ul style="list-style-type: none"> Lively rhythm and accompaniment.
Auto-accom-paniment		<ul style="list-style-type: none"> Subdued bass and accompaniment. Prominent melody and rhythm.

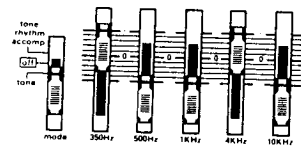
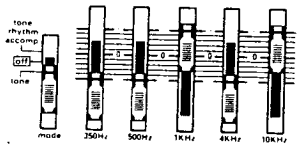
b) Melody
(b-1) Modulation

Setting	Graphic Equalizer	Remarks
harpischord		<ul style="list-style-type: none"> 4 kHz can also be set at 0.
trumpet		<ul style="list-style-type: none"> Delayed vibrato/on.
accordion		
cosmic tone		<ul style="list-style-type: none"> Delayed vibrato/on, sustain/on.

(b-2) Light and sharp

Setting	Graphic Equalizer	Remarks
celesta		<ul style="list-style-type: none"> Sustain/on. Bright celesta.
vibra- phone		<ul style="list-style-type: none"> Reverb/on. Sounds like synthesized glockenspiel.
elec. guitar		<ul style="list-style-type: none"> Sounds like clarinet.
violin		<ul style="list-style-type: none"> Bright, high violin tone.

(b-3) Other

Setting	Graphic Equalizer	Remarks
organ		<ul style="list-style-type: none"> • Reverb/on • Sounds like Pipe organ
oboe		<ul style="list-style-type: none"> • Unique oboe sound (lower tone)

8. Care of Your Unit

1. Avoid heat, humidity or direct sunlight.

Do not overexpose the unit to direct sunlight, place it near heater or in any area subject to high temperatures.

2. Take care not to drop the unit and avoid severe impacts.

Severe impacts can result in malfunction. When carrying or transporting the unit, protect the keyboard and switches by packing with soft cloth.

3. Keep the unit free of liquids, dust, particles etc.

Do not allow foreign matter to enter between the keys. Be especially careful of metallic objects such as hairpins, sewing needles or coins. Also, do not allow the unit to get wet.

4. Never attempt to modify any part of the unit.

Your keyboard is a precision musical instrument made up of sophisticated electronic parts. Any modification or tampering with internal components can cause trouble or malfunction.

5. Do not use a lacquer thinner or similar chemicals for cleaning.

Clean the keyboard with a soft cloth dampened with a mild detergent. (Soak the cloth in a detergent and squeeze until almost dry.)

6. In case of malfunction...

When the unit does not work properly, check whether switches, connections, etc. are set correctly as indicated in the troubleshooting chart on page 20 of this manual. If the unit still does not work, contact the original retailer or a nearby dealer. Never attempt to repair the unit yourself. This can result in serious damage of components.

9. Troubleshooting

* For any malfunction, always check battery condition first. (see page 6)

Trouble	Possible Cause	Remedy
No sound, even if keys are pressed.	1. Main volume turned down. 2. Headphones connected.	1. Turn up main volume. 2. Disconnect headphones.
No rhythm.	Rhythm volume turned down.	Turn up rhythm volume.
No accompaniment.	Bass and chord volume turned down.	Turn up bass and chord volume.
Occasional interference.	Refrigerators, washing machines and similar electric appliances.	Use outlet as far away as possible from appliance thought to be the cause.
No sound when connected to external amplifier.	1. Main keyboard volume turned down. 2. Defective connection cord.	1. Turn up main volume. 2. Replace connection cord.

10. Specifications

Model:	Casiotone MT-100
Number of keys:	49 keys (mini-key)
Preset tone colors:	20 kinds; organ, flute, trumpet, oboe, violin, piano, harpsichord, celesta, mandolin, funny, pipe organ, clarinet, horn, accordion, cello, elec. piano, vibraphone, harp, elec. guitar, cosmic tone
Sound effect:	Vibrato, Delayed vibrato, Sustain, Reverb, Graphic equalizer (350Hz, 500Hz, 1KHz, 4KHz and 10KHz)
Auto-rhythms:	12 kinds; rock, pops, disco, 16 beat, swing, latin swing, bossa nova, samba, beguine, tango, waltz, slow rock * Start/Stop button, Synchro start button, Fill-in button, Accompaniment volume, Tempo control
Auto-accompaniment function:	Casio Chord switch (fingered/on), Accompaniment variation selectors (bass & chord), Accompaniment volume
Pitch control:	$\pm 1/4$ tone (50 cents)
Speaker:	8.0 cm dia. \times 1 (output 1 W)
Output jack:	Output impedance = 6 K Ω , Output voltage = 2 V (RMS)

Power source:	3-way AC/DC power source; <ul style="list-style-type: none"> • Home AC outlet: 100, 117, 220 or 240 V (± 10 V), 50/60Hz, with optional AC adaptor AD-1 • DC: Batteries: Five D-size manganese dry batteries. Battery life = Approx. 18 hours. • Car battery: with car battery adaptor CA-1
Power consumption:	3 W
Auto power off function:	After 6 minutes
Dimensions:	62(H) \times 633(W) \times 188mm(D)
Weight:	2.6 Kg. (including batteries)
Standard accessories:	Five D-size manganese dry batteries

* Design and specifications are subject to change without notice.