

## Bluetooth® Membrane Keyboard TK-FBM023E series User's Manual

Thank you for purchasing the ELECOM Bluetooth® Membrane Keyboard. This product employs an English keyboard layout and Bluetooth® wireless technology.

This manual describes the operating instructions and safety precautions for using this product. Ensure that you have read this manual before using the product. After reading this manual, store it somewhere safe for future reference.

\* Except in certain cases, the TK-FBM023E Series is referred to as "this product" in this manual.

### ■ Meaning of symbols

	<b>WARNING</b>	Failure to observe precautions may result in serious personal injury or death due to fire, electric shock, or other causes.
	<b>CAUTION</b>	Failure to observe precautions may result in personal injury due to electric shock or other causes, and may damage other equipment.

- Prohibited action
- Mandatory action
- Situation that needs attention
- Notes and reference information

### Package Contents

This product's packaging contains the items listed below. Before using the product, check that all items are present. We make every effort to ensure that all products are packaged correctly. However, in the event that an item is missing or damaged, contact the retailer from whom you purchased the product.

- Keyboard x1
- AAA alkaline battery x2
- Stand x1
- User's Manual x1

### Safety Precautions

Observe these precautions carefully to avoid personal injury, damage, fire, and other problems.

	WARNING
	If a foreign object (water, metal chip, etc.) enters the product, immediately stop using the product and remove the batteries from the keyboard. If you continue to use the product under these conditions, it may cause a fire or electric shock.
	If an abnormality is found with this product (emission of heat, smoke or abnormal smell from the product), immediately stop using the product, shut down connected devices, and after thoroughly checking that heat from the product will not cause burns, remove the batteries from the keyboard. After doing this, contact the retailer from whom you purchased the product. If you continue to use the product under these conditions, it may cause a fire or electric shock.
	Do not drop or hit this product. If this product is damaged, immediately stop using it, turn it off, and remove the batteries. If you continue to use the product in a damaged condition, it may cause a fire or electric shock.
	Do not attempt to disassemble, modify or repair this product by yourself. Doing so may cause a fire, electric shock, or product damage and may void the warranty.
	Do not put this product in fire, as the product may burst, resulting in a fire or injury.

	CAUTION
	Do not place this product in any of the following environments: <ul style="list-style-type: none"><li>• In a car exposed to sunlight, a place exposed to direct sunlight, or a place that becomes hot (around a heater, etc.)</li><li>• In a moist place or a place where condensation may occur</li><li>• In an uneven place or a place exposed to vibration</li><li>• In a place where a magnetic field is generated (near a magnet, etc.)</li><li>• In a dusty place</li></ul>
	This product does not have a waterproof structure. Use and store this product in a place where the product body will not be splashed with water or other liquid. Rain, water mist, juice, coffee, steam or sweat may also cause product damage.
	<ul style="list-style-type: none"><li>• Do not use this product with any device that may have a serious impact in the event this product fails.</li><li>• When you no longer need to use this product, be sure to dispose of it in accordance with the local ordinances and laws of your area.</li></ul>

### ■ Batteries

	CAUTION
	Use AAA alkaline batteries, AAA manganese batteries, or rechargeable AAA nickel hydride batteries with this product.
	If this product will be unused for a long period of time, remove the batteries to avoid battery leakage and failure.

### ■ Cleaning the Keyboard

If the product becomes dirty, wipe it with a soft, dry cloth.

	Use of a volatile liquid (paint thinner, benzene, alcohol, etc.) may affect the material quality and colour of the product.
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### Cautions for Wireless Equipment

This product is wireless equipment using the entire range of the 2.4 GHz band and it is possible to avoid the band of mobile object identification systems. FH-SS is used for the radio wave method. The interference distance is 10 m. The 2.4 GHz band is also used by medical equipment, and wireless LAN equipment conforming to the IEEE 802.11b/11g/11n standard.

- Before using this product, check that there are no other "radio stations" operating nearby.
- If electromagnetic interference occurs between this product and other "radio stations", move this product to another location or stop using this product.
- \* Other "radio stations" refer to industrial, scientific and medical devices using the 2.4 GHz band like this product, other radio stations of this type, licensed radio station premises for mobile object identification system that is used in factory production lines, certain non-licensed low power radio stations and amateur radio stations.

	WARNING
	<ul style="list-style-type: none"><li>• Do not use this product with any device that may have a serious impact in the event of a malfunction. There are rare cases where an external radio wave at the same frequency or the radio wave emitted from a mobile phone causes this product to malfunction, slow down, or fail to operate.</li><li>• Do not use this product in a hospital or other locations where the use of radio waves is prohibited. The radio waves of this product may affect electronic and medical devices (e.g. pacemaker).</li><li>• The use of a wireless keyboard in an aircraft is prohibited by aviation law because doing so may interfere with flight safety. Turn off the keyboard before boarding an aircraft and do not use it in the aircraft.</li></ul> <p>* ELECOM is not liable for any accident or social damages incurred by the failure of this product.</p>

### Initial Setup Procedure

When using this product for the first time, operate and configure this product and the PC in the order shown below.

- 1 Installing/Replacing the Batteries
- 2 Turning on the Keyboard
- 3 Pairing the Keyboard with a Connected Device

Refer to the back of this sheet.

### 1 Installing/Replacing the Batteries

Before using this product, install two AAA batteries in the keyboard.

- 1 Remove the battery compartment cover on the back of the product.

- 2 Insert the batteries.

- Make sure that the polarity is correct.
- Do not mix different types of batteries or use old batteries with new batteries to avoid battery leakage and failure.

- 3 Install the battery compartment cover.

### 2 Turning on the Keyboard

Turn on the keyboard to use it.

- 1 Slide the power switch on the back of the product to the ON position.

The Connect/Battery lamp lights for about 3 seconds.

- When not using the product, turn the keyboard off to save battery power. Slide the power switch to the OFF position.

- **Power save mode**  
When key input does not occur for approximately 2 hours, this product will automatically switch to power save mode. It will return to normal mode once any key is pressed. Enter characters after this has occurred.

### 3 Pairing the Keyboard with a Connected Device

To connect this product to a connected device using Bluetooth, you need to pair the product with the connected device.

- Pairing involves registering Bluetooth devices (in this case, this product and connected device) with each other, and authorizing a connection with a registered device.
- This product supports pairing registration of multiple Bluetooth devices (up to 4 devices). Repeat the pairing process in the same way to add the 2nd to 4th devices.
- \* If another device is registered after 4 devices have been already registered, the settings for the first registered device will be deleted.

### Using iPhone/iPad/iPod touch

- \* The instructions below are based on iPhone 4S (iOS 5.0.1) user interface. The procedure is the same for other models.
- \* When using iPhone 3GS or 3G iPod touch, you must update the software to iOS 4.0 or later.
- For instructions on updating software, refer to iPhone 3GS or 3G iPod touch manual.
- \* This product cannot be used with iPhone 3G or with first and second generation iPod touch.

- 1 Touch [Settings].

- 2 Touch [General].

- 3 Touch [Bluetooth].

- 4 During a device search, press the CONNECT button on the back of the product.

- 5 Touch [TK-FBM023 Series Not Paired].

- If iPhone 3GS or iPod touch cannot find the keyboard, check that the software has been updated to iOS 4.0 or later.

- 6 Use this product to enter the PIN code that displays on the screen.

Enter the PIN code using the keyboard numerical keys, and press the "Enter" key.

- If the PIN code was not entered correctly, the screen shown to the right will display. Touch "OK", and repeat from step 3.

- 7 Connect/Battery indicator lamp rapidly flashes and then turns off.

Pairing is completed successfully when [TK-FBM023 Series] is shown as [Connected].

You can now use the keyboard.

If connection fails

Connection may fail depending on iPad/iPhone/iPod touch status. In such cases, re-connect by following the procedure below.

- 1 Touch [Settings].

- 2 Touch [General].

- 3 Touch [Bluetooth].

- 4 Touch [TK-FBM023 Series Not Connected].

- 5 Connect/Battery indicator lamp rapidly flashes and then turns off.

Reconnection is completed successfully when [TK-FBM023 Series] is shown as [Connected].

### Part Names

#### Function key



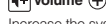
**Mute**

Turns off all output sound for the system. Press again to take off mute.



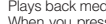
**Volume**

Decrease the system volume.



**Volume**

Increase the system volume



**Playback/Pause**

Plays back media such as music. When you press this button during playback, playback is stopped temporarily. \*



**To previous track**

When you press this button during playback of music or other media, you move to the previous track. \*



**To next track**

When you press this button during playback of music or other media, you move to the next track. \*



**Search (iPad, iPhone, iPod touch only)**

Displays the search screen and allows you to search for a file or image.

\* When a program such as iTunes is active

Depending on the device used, the key label and the actual character that is output when pressed may differ.

#### Home key

Works the same as the Home button on an iPad, iPhone, or iPod touch.

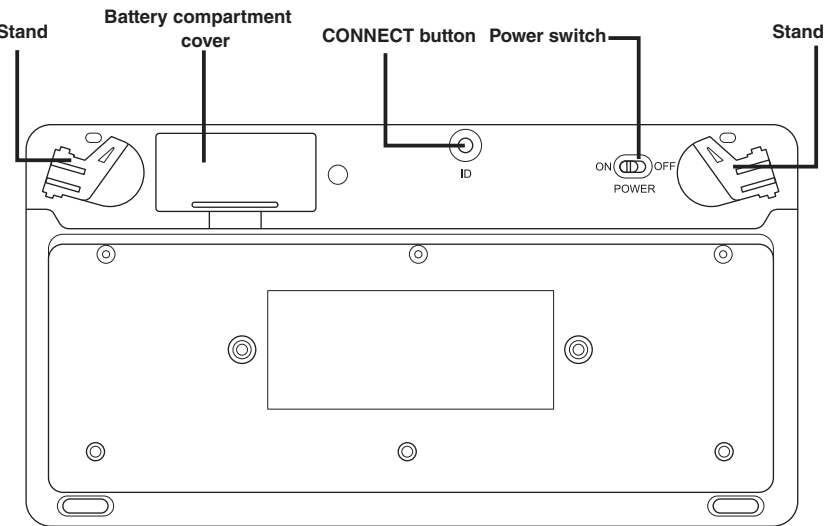
The behavior of the system may be different from the above depending on your environment.

#### Connect/Battery indicator lamp

- Flashes green when the keyboard is in a pairing standby state.
- Indicates when to replace the batteries. Turns red when the remaining battery level gets low during use.

#### Fn key (Function key)

While the Fn key is held down, the functions indicated in the on the bottom of other keys can be used.



#### Space bar

- Inserts a space.
- Converts characters when using two-byte fonts.

#### Alphanumeric/Kana key

Switches the character input mode for the iPad/iPhone/iPod touch to [Alphanumeric] English input or [Kana] Japanese input.

Enter an underscore (\_) character by pressing [Shift]+[ ]

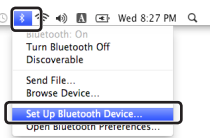
### 3 Pairing the Keyboard with a Connected Device

#### When using Mac OS X

##### ■When using Mac OS 10.6.x, 10.7.x

###### 1 From the Bluetooth menu, click [Set up Bluetooth Device...].

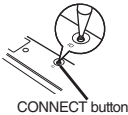
The Bluetooth Setup Assistant is displayed.



If the Bluetooth menu is not displayed, from the Apple menu, click [System Preferences]. When the [System Preferences] window is displayed, click [Bluetooth], and then click **+** on the [Bluetooth] window.

###### 2 Press the CONNECT button on the back of the product.

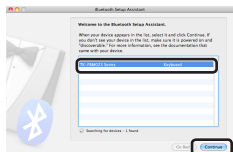
The Connect/Battery indicator lamp flashes during the pairing procedure and turns off when the procedure is complete (step 5).



If a message saying that registration failed is displayed, check that this product is turned on, and then click **Continue**.

###### 3 Select [TK-FBM023 Series], and click **Continue**.

The passkey is displayed on the screen.



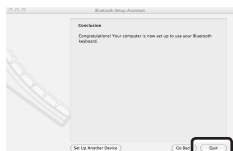
###### 4 Use this product to enter the passkey that displays on the screen.

Enter the passkey using the keyboard numerical keys, and press the "Enter" key.

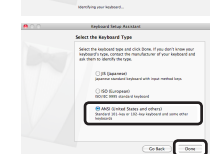
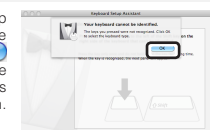
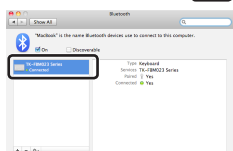


###### 5 Click **Quit**.

When registration is completed successfully, [TK-FBM023 Series] appears in the [Bluetooth] window.



If the keyboard setup assistant cannot detect the keyboard, click **OK** and select [ANSI] from the list of keyboards that is displayed on the screen. Then click **Done**.

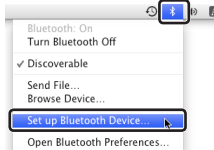


You can now use the keyboard.

##### ■When using Mac OS 10.5.x

###### 1 From the Bluetooth menu, click [Set up Bluetooth Device].

The Bluetooth Setup Assistant is displayed.



If the Bluetooth menu is not displayed, from the Apple menu, click [System Preferences]. When the [System Preferences] window is displayed, click [Bluetooth], and then click **+** on the [Bluetooth] window.

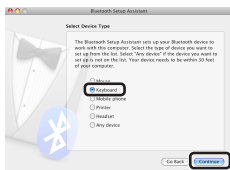
###### 2 Click **Continue**.

The system starts searching for Bluetooth devices to add.



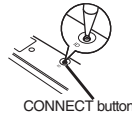
###### 3 Select [Keyboard], and click **Continue**.

The passkey is displayed on the screen.



###### 4 Press the CONNECT button on the back of the product.

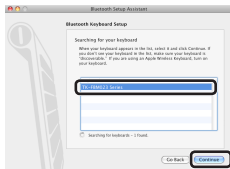
The Connect/Battery indicator lamp flashes during the pairing procedure and turns off when the procedure is complete (step 7).



If a message saying that registration failed is displayed, check that this product is turned on, and then click **Continue**.

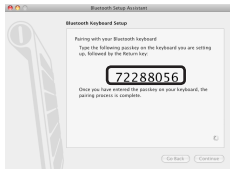
###### 5 Select [TK-FBM023 Series], and click **Continue**.

The passkey is displayed on the screen.



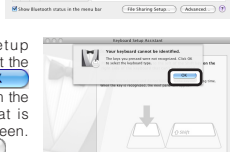
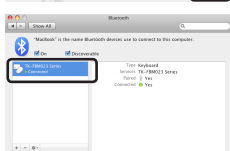
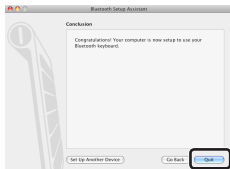
###### 6 Use this product to enter the passkey that displays on the screen.

Enter the passkey using the keyboard numerical keys, and press the "Enter" key.



###### 7 Click **Quit**.

When registration is completed successfully, [TK-FBM023 Series] appears in the [Bluetooth] window.



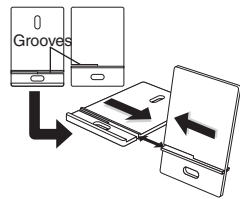
If the keyboard setup assistant cannot detect the keyboard, click **OK** and select [ANSI] from the list of keyboards that is displayed on the screen. Then click **Done**.

You can now use the keyboard.

#### Using the stand

When using this product with an iPad, iPhone or iPod Touch, you can use the stand included with this product.

Before use, assemble the stand as follows:



Orient the 2 included boards at a 90° angle and insert them fully along the grooves.

#### Troubleshooting

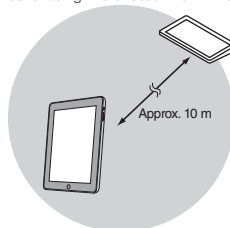
##### When the product appears to be malfunctioning

###### ■When text cannot be entered or keyboard does not work/is unstable

- When key input does not occur for approximately 2 hours, this product will automatically switch to power save mode. It will return to normal mode once any key is pressed. Enter characters after this has occurred.
- Check that this product and the connected device's Bluetooth function or Bluetooth adapter are turned on.
- Check pairing status to ensure that this product is paired correctly with the connected device and that pairing has not been cancelled.

- The Connect/Battery lamp flashes green during the pairing procedure and turns off when the procedure is complete.
- For details on the PC's Bluetooth function and Bluetooth adapter, refer to the relevant instruction manuals. Alternatively, contact the manufacturer.

- The connected device and the keyboard are too far apart or there is a possibility that the connected device is facing in a direction from which it cannot receive radio signals. Adjust the position of the connected device. The operable range of this product is the area within a circle with a radius of 10 m from the connected device. Depending on the usage environment, the keyboard may not operate even when it is within approximately 10 m of the connected device. In such cases, move the keyboard closer to the connected device until operation stabilizes.



- When using this product on a metallic surface such as a steel desk, radio wave outreach may be shortened. In such cases, move the keyboard closer to the connected device until keyboard operation stabilizes.
- Interference may occur if multiple units of this product are used together or if this product is used with other wireless devices. In this case, change the channel of other wireless devices.
- Operation becomes unstable when battery power is low. Refer to "Installing/Replacing the Batteries" on the reverse of this sheet, and replace the batteries as soon as possible.
- The alkaline batteries supplied with this product are for checking product operation. These batteries may discharge and drain during storing and shipping.
- When the remaining battery level gets low, the Connect/Battery lamp begins flashing green.
- When not using the product, turn the keyboard off to save battery power.

#### Basic Specifications

Product name	Bluetooth® Membrane Keyboard
Article No.	TK-FBM023E series
Supported devices	• iPad2, iPad, iPhone4/4S, 4G iPod touch • iPhone 3GS and 3G iPod touch (32GB/64GB) with software updated to iOS4.0 or later • Mac OS X(10.5-10.5.8, 10.6-10.6.8, 10.7-10.7.2) * Cannot be used with iPhone 3G or first and second generation iPod touch. * Depending on the model of the device being used, the assigned function for various keys and the actual functions which they perform when pressed may differ.
Connection method	Bluetooth® wireless
Compliant standard	Bluetooth® 3.0 Class 2
Bluetooth version	Bluetooth3.0/2.1+EDR/2.1/2.0+EDR/2.0
Profile	HID (Human Interface Device)
Radio frequency	2.4 GHz bandwidth
Radio wave method	FH-SS modulation
Radio wave outreach	Non-magnetic substance (e.g. wooden desk): Approx. 10 m Magnetic substance (e.g. metal desk): Approx. 3 m * Values indicated are those obtained by ELECOM and are not guaranteed.
No. of keys	82 (English layout)
Key type	Membrane
Key pitch	15.4 mm
Key stroke	2.5 mm
Dimensions	237.0 (W) x 123.5 (D) x 22.0 (H) mm
Operating temperature/humidity	5 to 40°C, 90% RH max. (no condensation)
Storing temperature/humidity	-10 to 60°C, 90% RH max. (no condensation)
Batteries	x2 AAA alkaline/manganese/rechargeable nickel hydride battery
Operating time	Measure of operating time when alkaline battery is used Approx. 4 months * Values indicated are those obtained by ELECOM and are not guaranteed.

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Bluetooth® Membrane Keyboard  
TK-FBM023E  
User's manual  
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