

# *User's Guide*



Model: F3



## **FCC Certification Requirements**

**Caution:** Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and  
(2) This device must accept any interference received, including interference that may cause undesired operation.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### 3. How this product works

When the user presses a key on the projected keyboard, the infrared layer is interrupted. This produces IR reflections that are recognized by the sensor in three dimensions, allowing the system to assign a coordinate.

#### Conditions to avoid

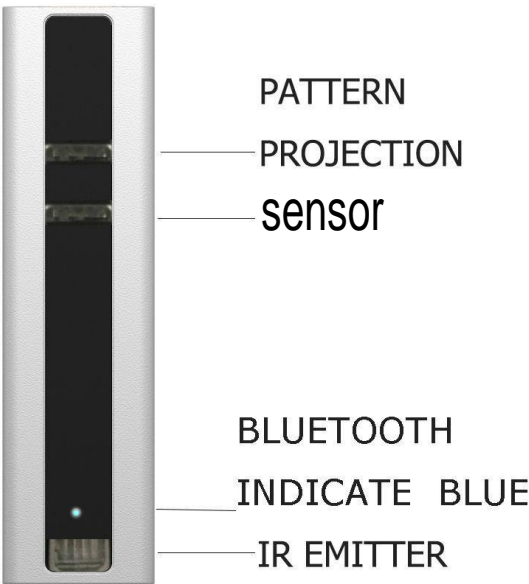
1. Avoid direct sunlight
2. Avoid low color temperature light source, such as tungsten, halogen, or incandescent lamp.
3. Avoid uneven or irregular surface, Put the product on flat, opaque surface.
4. Avoid putting any objects within the space between the main unit and the laser projected keyboard layout.

#### Note:

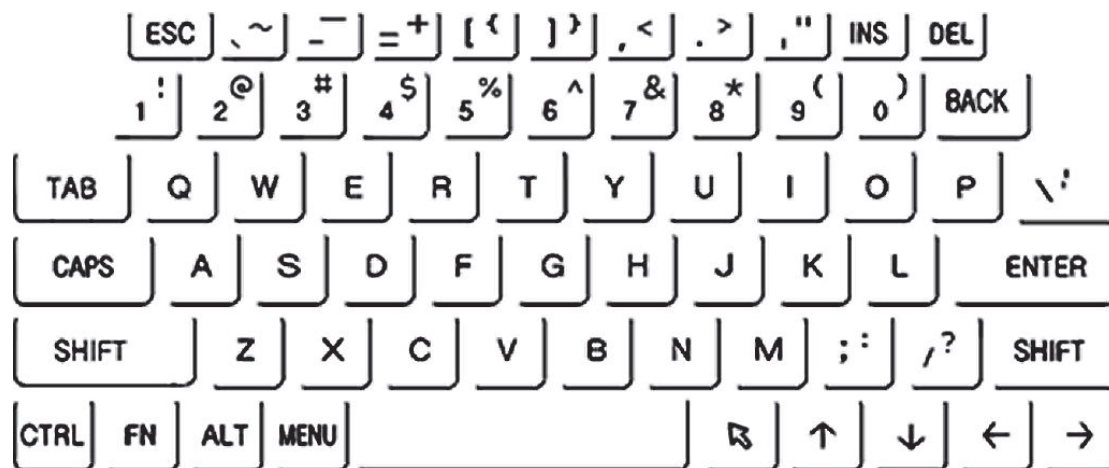
Because this product uses infrared rays, strong infrared radiation from direct or reflected sunlight or from tungsten (halogen or incandescent) lighting may cause operating error.

4. Appearance and Function

4 Red Indicators		
Press down power volume button	1-4 LED lights represents respectively:	25%, 50%, 75% and 100% remaining power.
	The first LED light blinks:	Battery low, charging needed
Charging for power bank	1-4 LED lights keep blinking: charging in process	progress is about 25%, 50%, 75% and 100%
	4 LED lights long on	Charging completed
Blue indicator		
	Blinking	Ready for pairing
	Off	Pairing done



### Virtual Laser Keyboard Use:



- FN+B Clear the current Bluetooth pair and search status

Note: Please restart the device after clearing the current Bluetooth search status so that Bluetooth start new scanning.

- FN+P Switch on/off key stroke sound

Adjusting keyboard brightness:

- FN+↑ Increase the keyboard brightness
- FN+↓ Lower the keyboard brightness

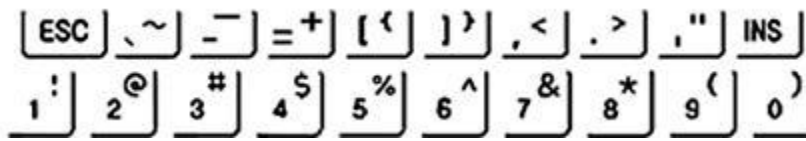
Note: when users press every key on the projected keyboard, the device will make "beep" key stroke sound.

[Language input Switch:](#)

[IOS system:](#) Press and hold "MENU" key + Space key

[ANDROID system:](#) Press and hold "SHIFT" key + Space key

“ SHIFT ” Key Combination



**IOS system:** Press and hold “SHIFT” key +press any of the above shift keys.

**ANDROID system:** it depends on input method, normally Press and hold “SHIFT” key +press any of the above shift keys. In a few case that press “SHIFT” key, then loose and press any of the above shift keys.

Note: when press “ SHIFT ” key combination with any of the above shift keys, please press and hold them both with your fingers of right and left hands at the same time, as two fingers from one hand pressing and hold two key at the same time easily block sensor light.

## USB Connection Terminal

Interface Specification: USB HID keyboard

Input Power: 1A 5V USB charge

## 5. Using Laser Keyboard

This product is used as keyboard via Bluetooth HID and USB HID connection.

This device is compatible with all USB HID capable operation system, USB HID connection allows plug-n-play without installing a separate driver.

### 5.1 USB HID Connection Instruction

- Connect laser keyboard and host device using supplied USB cable, and your host device must support USB HID.
- Turn on laser keyboard.
- Green LED indicates proper connection. If LED indicates blinking red, it is charging.

### 5.2 Bluetooth HID Connection Instruction

Connection via Bluetooth HID

Compatible with All Microsoft OS,

IOS4/5/6(iPhone and iPad), Android 3.1 Up, Mac OS X

Laser keyboard support Bluetooth HID, it's connection does not require installation of

separate driver. It only needs pairing with your device for one time and automatically register it, if the user wants to connect it with another device, it requires to clear the previous paired device by pressing and hold " FN+B " on the projection keyboard, meanwhile click unpair on the previous paired device to cancel pair.

- Power on device
- Press and hold "FN+B", device become pairing status after beep sound , then shutdown and restart this device once, it can be researched by other host.
- Blue LED with flash fast indicates that the device is ready to pair
- Scan Bluetooth device from your host(phone or PC or PAD)
- On IOS, tap on Settings-General-Bluetooth



- Turn on Bluetooth by tapping the ON button. iPhone/iPad will now search for pairing device ⇒ Laser Keyboard shown as follows:



- Click " Laser keyboard " to pair
- Successful pairing will be indicated by "Connected" message, and blue LED stop flash.

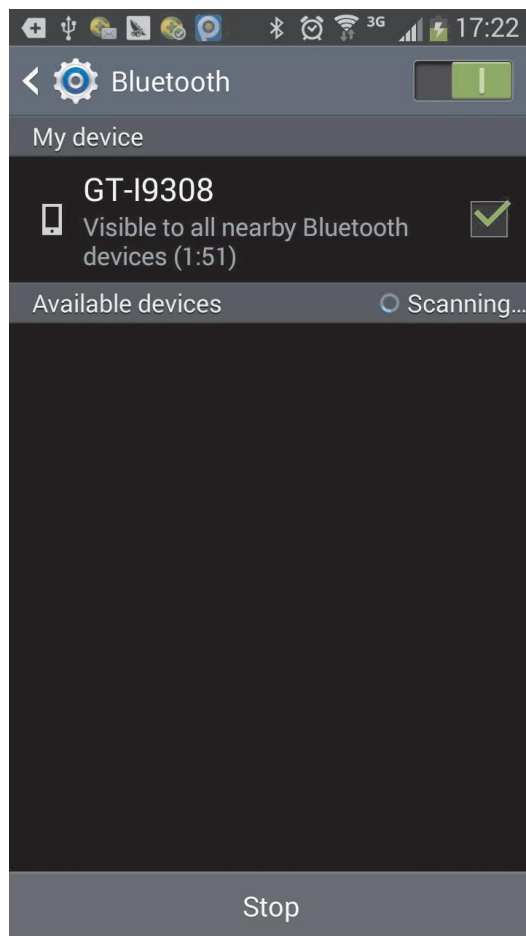


### 5.3 Connection to Android devices

- Navigate through Android as follows:  
Home → Main Menu→ Settings→ WIRELESS & NETWORKS→ Bluetooth.

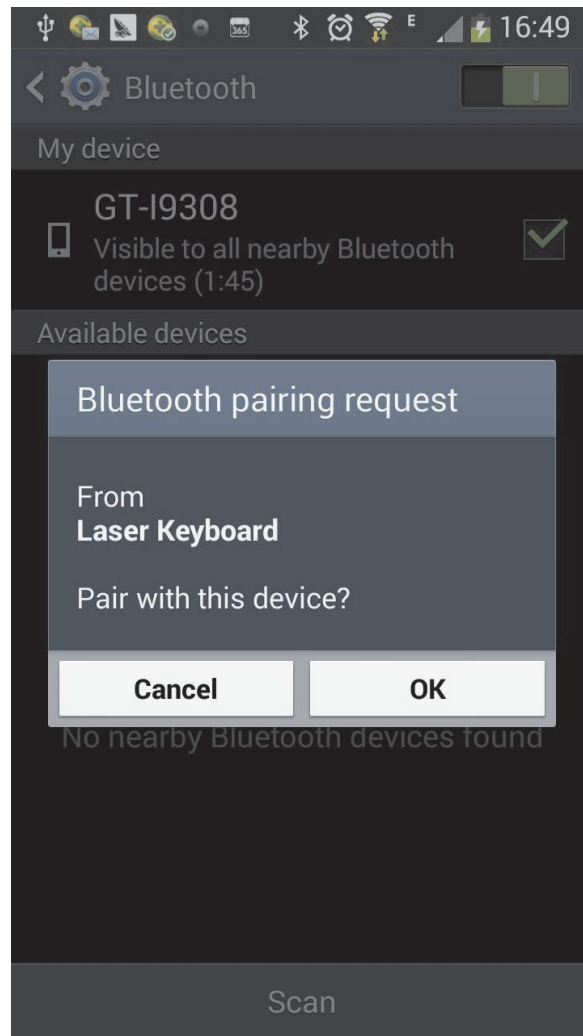


- Turn on the Bluetooth on Android, From the same screen, with Bluetooth ON, tap on Scan devices.

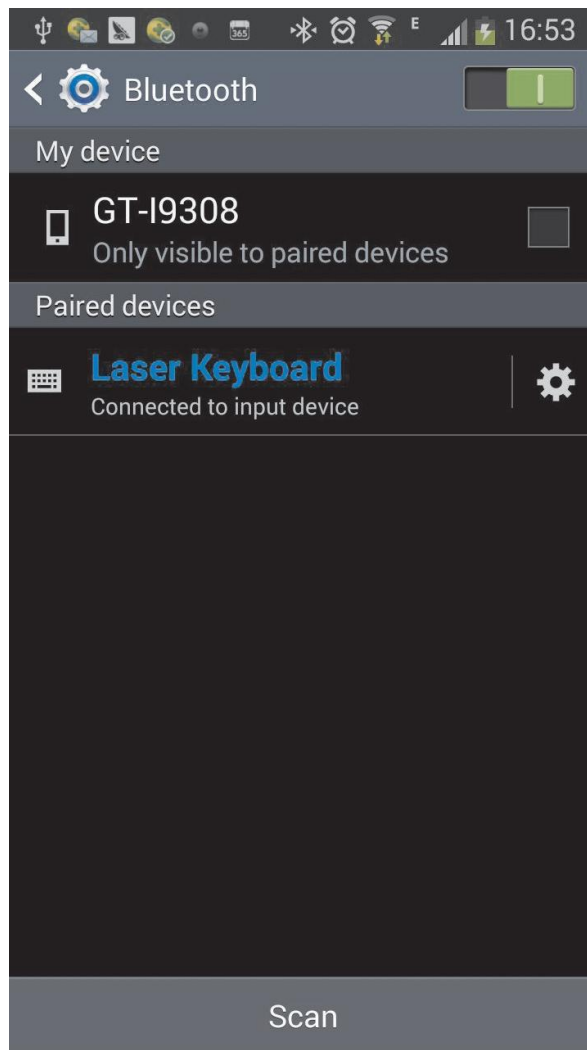


- Click " Laser keyboard " to pair

A new message will display on your Android device: "Bluetooth pairing request", and click " OK " to pair with the laser keyboard.



- Upon successful pairing, blue "Laser keyboard connected" will be displayed on your Android device.





#### 5.4 Laser keyboard key stroke sound adjustment

- Press and hold "FN" key and press left arrow key to increase volume
- Press and hold "FN" key and press right arrow key to decrease volume

## 5.5 Laser Projection Keyboard Multi-touch Mouse Function:

- mouse mode allows you to use your finger as a mouse.
- Added mouse feature tracks your natural movements and may reduce stress on your hands.
- Mouse Freely control by clicking the mouse arrow keys.

FN+  start mouse function while keyboard pattern dark.

FN+  exit mouse and switch keyboard function.

### Mouse move:

Control the cursor move your finger freely in any direction within operational area.



### Left mouse button :

one finger click.



### Right mouse button:

two fingers click simultaneously.



### Scroll mode:

Click and hold with two finger, slide and move up and down.



## 6. Usage of Power Bank

### (1) Remaining power display

A. Press down battery capacity button. There are four LED lights displaying power volume button on the bottom. The left first one is blue LED Bluetooth indicator. The following three show the remaining power, Each light means 1/4 power volume.

B. After pressing down power volume button, red LED light flash means low battery.

C. After pressing down power volume button, no LED light flash means no battery power.

### (2) Charging for smart phones and other smart devices

A. USB output ports on the side can charge for smart devices, current of the port is 2.1 A.

B. Connect mobile phone to power bank with USB cable, then charging begins.

### (3) Charging for power bank itself

A. Connect power bank to PC USB port to charge Or you need power adapter to charge for power bank, Power adapter needs additional purchase.

B. Four red LED lights blinking means that power bank is charging. One red LED light blinking means power below 25%; two means 50%. three LED lights being on means 75%, four LED lights show power full, Then Unplug cables to end charging.