Hands-Free Imager

User Guide

MOTOROLA

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Welcome

The Hands-free Imager is a hand-warn device that enables image capturing and barcode decoding. The Imager transmits the captured 640 x 480 pixels gray scale VGA images to a portable terminal (or computer) with the convenience and freedom from cables and wires. Bluetooth wireless technology makes all connections to the terminal quickly and without any cables.

All Motorola wireless products are designed and manufactured to meet Motorola's rigorous specifications and world-class quality standards. During development, our testing team took the Motorola Hands-free Imager through rigorous durability tests including temperature, humidity, shock, dust, vibration, and drop tests.

We are confident that you will find your Hands-free Imager to be a convenient and secure way to make clear, crisp images.

Contents

Safety and General Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR HANDS FREE IMAGER.

Users are not permitted to make changes or modify the device in any way. Changes or modifications 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.

Electromagnetic Interference/Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your Hands-free Imager in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your Hands-free Imager when on board an aircraft. Any use of a Hands-free Imager must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a handheld Hands-free Imager and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of, Wireless Technology Research.

Persons with pacemakers should:

- ALWAYS keep the Hands-free Imager and Bluetooth data terminal more than six inches (15 centimeters) from your pacemaker when the Hands-free Imager is turned ON.

- NOT carry the Hands-free Imager and Bluetooth data terminal in the breast pocket.

- Turn OFF the data terminal immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless devices may interfere with some hearing aids. In the event of such interference, you may want to consult with your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

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<td>⚠️
WARNING</td>
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OPERATIONAL WARNINGS

Potentially Explosive Atmospheres (Explosive atmospheres refers to hazard classified locations that may contain hazardous gas, vapors, or dusts.)

Turn off your wireless device prior to entering any area with a potentially explosive atmosphere, unless it is a wireless device type especially qualified for use in such areas as "Intrinsically Safe" (for example, Factory Mutual, CSA, UL, CENELEC or ATEX Approved). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

The areas with potentially explosive atmospheres referred to above include fuelling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps And Blasting Areas

To avoid possible interference with blasting operations, turn off your wireless device when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two- way radio". Obey all signs and instructions.

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Accessory Safety Information

IMPORTANT: SAVE THESE ACCESSORY SAFETY INSTRUCTIONS

- Before using any battery or battery charger, read all the instructions for and cautionary markings on (1) the battery, (2) the battery charger, which may include a separate power supply or transformer, and (3) the wireless device using the battery.

- Do not expose any battery charger to water, rain, or snow.

⚠ **WARNING**	Do not replace or change accessories in a hazardous atmosphere. Contact sparking may occur while installing or removing accessories and cause an explosion or fire.

⚠ **Caution**	**OPERATIONAL CAUTION** **Batteries** All batteries can cause property damage and / or bodily injury such as burns if a conductive material such as jewellery, keys, or beaded chains touch exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

- To reduce the risk of damage to the cord or plug, pull by the plug rather than the cord when you disconnect the battery charger from the power source outlet.

- Do not operate any battery charger with a damaged cord or plug – replace them immediately.

- Battery chargers may become warm during operation, but not hot. If it becomes hot to the touch, unplug it from the power outlet immediately and discontinue its use.

- Use of a non-recommended attachment to a battery charger may result in a risk of fire, electric shock, or injury to persons.

- Make sure the battery charger power cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.

- An extension cord should not be used with any battery charger unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:

- The pins on the plug of the extension cord are the same number, size, and shape as those on the plug of the charger.

- The extension cord is properly wired and in good electrical condition.

- The cord size is 18AWG for lengths up to 100 feet and 16AWG for lengths up to 150 feet.

- To reduce the risk of injury, charge only the rechargeable batteries listed in the Accessories section of this manual. Other types of batteries may burst, causing personal injury and damage.

Introduction

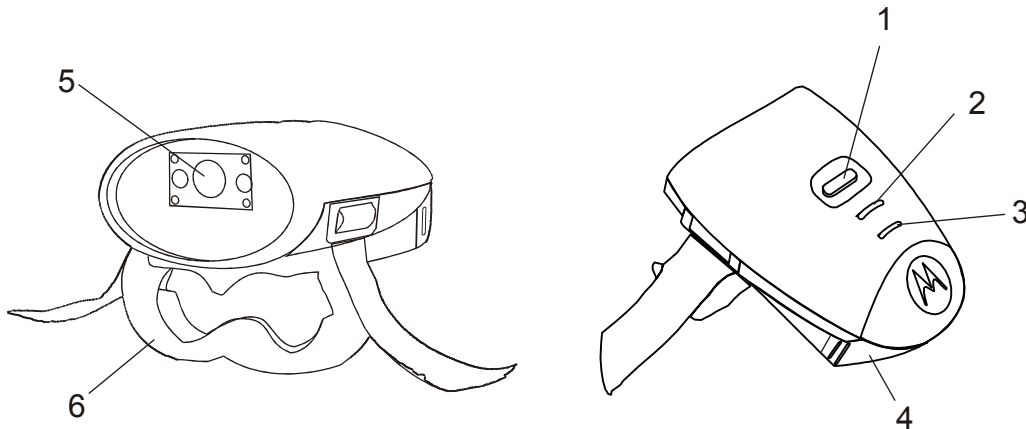### What Is Bluetooth Wireless Technology?

Bluetooth wireless technology drives you into a new dimension in connectivity.
Bluetooth devices communicate without wires, using built-in radio transceivers that operate on a globally available radio frequency to ensure worldwide compatibility.
Your Hands-free Imager can communicate with other Bluetooth devices within a range of approximately 10 meters (33 feet).

What Is Included in This Kit?

This package includes the following:

- Hands-free Imager
- 3.6V, 780mAh Li-Ion rechargeable battery pack
- Hands-free Imager built-in finger strap

Hands Free Imager Features

1 — Multifunction Button Controls the On/Off power status of the Hands-free Imager and several Hands-free Imager functions.
2 — Beeper beeps to indicate the imager status.
3 — Hands Free Imager Indicator light Provides visual indication about the Hands-free Imager status.
4 — Battery Rechargeable battery that snaps into the Hands-free Imager. The battery has external charging contacts that receives the plug from your battery charger.
5 — Hands Free Imager Window Imager lens and aiming pattern LEDs. The aiming pattern LEDs assists you in positioning the imager lens on the target barcode, signature or object.
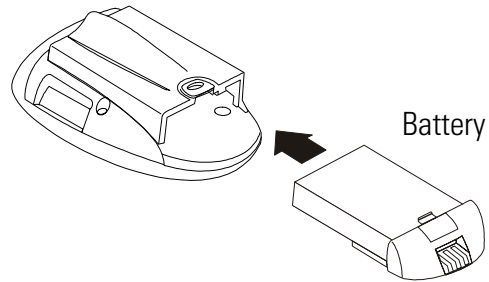**6 —Hand-strap** Attaches Hands-free Imager to the hand, so you can wear the Hands-free Imager around your fingers for continues work.

Using Your Hands Free Imager

Charging Your Hands Free Imager

Installing the Battery

1. Insert the battery, bottom end first, into the battery compartment.
2. Carefully slide the battery into the Hands-free Imager until it clicks into place.

Battery

Note: The battery is charged within the Hands-free Imager. Once installed, the battery should not be removed from the Hands-free Imager, unless it is damaged.

When to Charge

First-Time Use — Before you can use your Hands-free Imager, you need to charge its self-contained battery for four hours.
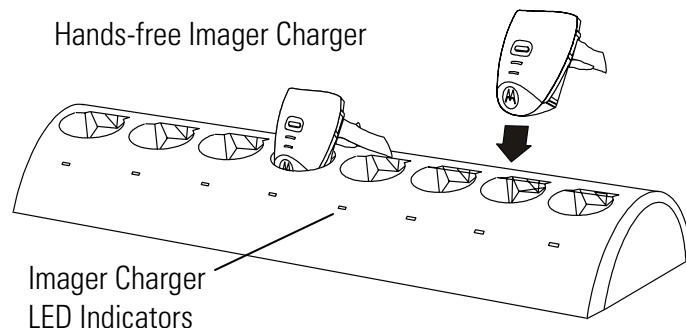
Recharging— When you hear five rapid high tones through the Hands-free Imager beeper, repeated at 20-second intervals, the Hands-free Imager battery needs to be recharged.

Over extended periods of time, batteries gradually wear down and require longer charging times. This is normal. The more you capture images with the Hands-free Imager, the less standby time your battery has.

The rechargeable batteries that power this product must be disposed of properly and may need to be recycled. Contact your local recycling center for proper disposal methods. Never dispose of batteries in a fire because they may explode.

How to Charge

A fully charged Hands-free Imager battery provides approximately:

Hands-free Imager Charger

- Image capture cycles—3000 Scans over 16 hours
- Standby time —70 hours
- Storage time—30 days

Imager Charger
LED Indicators

3. Connect the power supply of the Hands-free Imager Charger to the power outlet.
4. Place the Hands-free Imager into the charger, with the Hands-free Imager facing up. During charging, the Imager Charger LED indicator turns red and remains lit until charging is complete. Your Hands-free Imager requires approximately three hours receiving a full charge.
5. When charging is complete (indicator turns green), remove the Hands-free Imager from the charger.

Hands Free Imager Charger LED Indicators

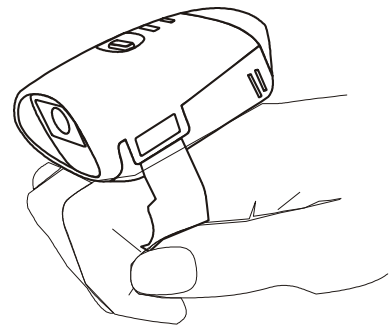| LED Color	Indication
No Light	Empty battery bay
Steady red	Battery charging
Steady Green	Battery charge complete
Flashing Red & Green	Defective battery
Flashing yellow	Battery charging had stopped. Battery temperature is either too high or low. Charging resumes once battery temperatures are within operating range.

Wearing the Hands Free Imager

Wearing the Hands Free Imager on Your Hand

The Hands-free Imager is configured for wear on the right or left hand.

Steps
1. Release the Finger-strap.
2. Insert your fingers into the Finger-strap.
3. Secure the straps, so the straps will not interfere with the Imager window

Connecting the Bluetooth Link

To start the Bluetooth connection between the Hands-free Imager and terminal (or computer), turn the Hands-free Imager on by pressing the Multifunction button. Your terminal should detect the Hands-free Imager automatically and establish communication.

Disconnecting the Bluetooth Link

To terminate the Bluetooth connection between the Hands-free Imager and terminal (or computer), turn the Hands-free Imager off by holding the Multifunction button pressed for more than three seconds.
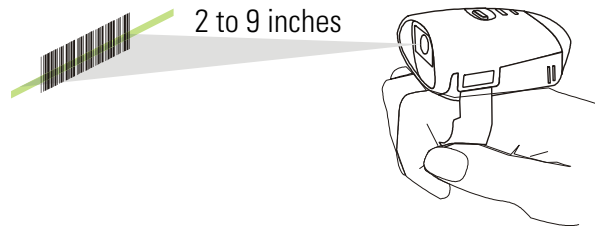
Capturing Images or Barcode Labels

The Hands-free Imager houses a digital camera (Imager) that captures the most commonly used 1D and 2D barcodes. The Hands-free Imager supports omni-directional operation for easy use in daily work. The Imager captures digital images, such as signatures or pictures of any mail object or form. The images are stored in the Hands-free Imager memory.

To capture an Image:

1. Aim and hold the Hands-free Imager at approximately 2 to 9 inches (5 to 22 cm) away from the target.
2. Press once the Multifunction button and aim the green line pattern light towards the barcode symbol. Release the button – A successful scan will be followed by green blinks of the LED indicator and three beep sounds.

   To initiate continues automatic scanning, press the Multifunction button twice – the imager will go to automatic scanning mode and will continue to scan barcode symbols that will be placed in front of it.

   Note that, when the Hands-free Imager is held closer to the barcode the green line is shown smaller, and larger when farther from the barcode. Barcode symbols with small elements should be read closer to the Hands-free Imager and large elements farther from the Hands-free Imager.

To capture a barcode symbol, position the green line of light in any angle, as shown in the following picture:

Note: When adjusting your position, you may move back and forth from the target to capture the entire object.

Using Your Hands Free Imager Indicators

Hands Free Imager Indicator

Hands Free Imager LED Indicator	Status
No light	Idle or capturing and decoding
One green pulse	Successful scan indication
Blinks Yellow	B.T disconnected
One red pulse	Unsuccessful scan host indication
One red pulse	B.T disconnecting
Steady Yellow	B.T is connecting
Three red pulses	No host acknowledge

Audio Tones
Audio Tone Hands Free Imager Status

Hands Free Imager Tone Indication	Status
1 beep	B.T connect
2 beeps	B.T disconnecting
3 beeps	Successfully scan host indication
4 beeps	Scan timeout
5 beeps	Unsuccessful scan Host indication
6 beeps	No host acknowledge

Resetting the Hands Free Imager

If the Hands-free Imager fails to communicate, you may need to reset the Hands-free Imager.

Step

1. Plug the Hands-free Imager into the charger.
2. Wait 5 seconds.
3. Detach the Hands-free Imager from the charger.

Note: Resetting the Hands-free Imager does not affect paired links or device data.

Troubleshooting

Whenever there is a problem, check the battery, power cable, and other physical items that might be loose, disconnected, or failing. It is also possible, though unlikely, that Hands-free Imager or charger, which once was operative, might become damaged.

In the case of charger operation failure, power supply is properly connected, and no physical item is visible, it is recommended to reset charger by unplugging the power supply, waiting a few second, and re-plugging it.

Defective battery - In this case try a different Hands-free Imager that once worked properly, if problem is solved, the Hands-free Imager has bad battery.

Approved Accessories

Accessory	Part Number
Battery	FNN7816A
Finger-strap	4202196C16
Hands-free Imager Charger	F3143A