

# **ZEBRA MC945x Handheld Mobile Computer User Guide**

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MC945x Regulatory Guide

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# **Regulatory Information**

This device is approved under Zebra Technologies Corporation. This guide applies to the following model numbers:

- MC945A
- MC945B

All Zebra devices are designed to be compliant with the rules and regulations in the locations they are sold and will be labeled as required.

Local language translation **zebra.com/support** 

Any changes or modifications to Zebra equipment not expressly approved by Zebra could void the user's authority to operate the equipment.

Declared maximum operating temperature: 50°C

For use only with Zebra approved and UL Listed mobile devices, Zebra approved, and UL Listed/Recognized battery packs.

CAUTION: Only use Zebra approved and NRTL-certified accessories, battery packs, and battery chargers. Do NOT attempt to charge damp/wet mobile computers, printers or batteries. All components must be dry before connecting to an external power source.

# Bluetooth® Wireless Technology

This is an approved Bluetooth® product. For more information on the Bluetooth SIG listing, please visit bluetooth.com.

# **Regulatory Markings**

Regulatory markings subject to certification are applied to the device signifying the radio(s) is/are approved for use. Refer to the Declaration of Conformity (DoC) for details of other country markings. The DOC is available at: zebra.com/doc.

The regulatory marks specific to this device (including FCC and ISED) are available on the screen of the device by following these instructions: Go to Settings > Regulatory.

# **Health and Safety Recommendations**

# **Ergonomic Recommendations**

In order to avoid or minimize the potential risk of ergonomic injury, always follow good ergonomic workplace practices. Consult with your local Health and Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

## **Vehicle Installation**

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (including safety systems). Check with the manufacturer or its representative regarding your vehicle.

Ensure the equipment is installed to avoid driver distractions. You should also consult the manufacturer about any equipment that has been added to your vehicle.

Position the device within easy reach. User should be able to access the device without removing their eyes from the road.

(IMPORTANT: Before installing or using, check national and local laws regarding distracted driving.

# Safety on the Road

Give your full attention to driving. Obey the laws and regulations on the use of wireless devices in the areas where you drive.

The wireless industry reminds you to use your device / phone safely when driving.

#### **Restricted Use Locations**

Remember to observe restrictions and obey all signs and instructions on the use of electronic devices in restricted use locations.

# Safety in Hospitals and Aircraft

Wireless devices transmit radio frequency energy that may affect medical electrical equipment and aircraft's operation. Wireless devices should be switched off wherever you are requested to do so in hospitals, clinics, healthcare facilities or by airline staff. These requests are designed to prevent possible interference with sensitive equipments.

# **RF Exposure Guidelines**



# Safety Information

Reducing RF Exposure – Use Properly

Only operate the device in accordance with the instructions supplied.

The device complies with internationally recognized standards covering human exposure to electromagnetic fields. For information on international human exposure to electromagnetic fields, refer to the Zebra Declaration of Conformity (DoC) at zebra.com/doc.

Use only Zebra tested and approved headset, belt-clips, holsters, and similar accessories to ensure RF exposure compliance. If applicable, follow the instructions for use as detailed in the accessory guide.

The use of third-party belt clips, holsters, and similar accessories may not comply with RF exposure compliance requirements and should be avoided.

For further information on the safety of RF energy from wireless devices, refer to RF exposure and assessment standards section at **zebra.com/responsibility**.

To satisfy RF exposure requirements, this device must operate with a minimum separation distance of xxxx cm or more from a user's body and nearby persons.

To satisfy RF exposure requirements, this device must be hand-held only and, where applicable use only with Zebra tested and approved accessories.

# **Optical Devices**



Class 2 laser scanners use a low power, visible light diode. As with any very bright light source such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

CAUTION: Use of controls, adjustments, or the performance of procedures other than those specified in the supplied product documentation may result in hazardous laser light exposure.

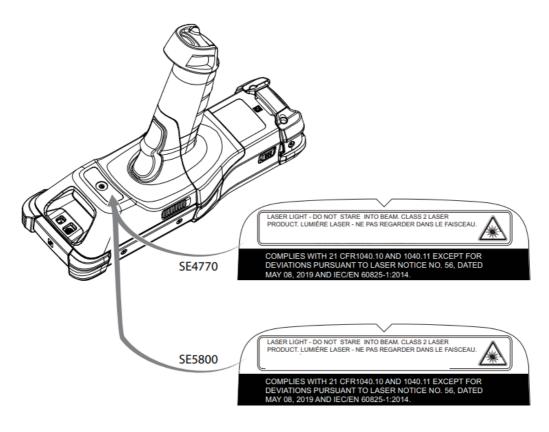
SE4770 Wavelength: 630-680 nm

Maximum output: 1 mW Pulse duration: 12.5 ms Beam divergence: 42.7 ° Repetition rate: 16.9 ms

SE5800 Wavelength: 500-570 nm

Maximum output: 2 mW Pulse duration: 4 ms Beam divergence: 42 ° Repetition rate: 16.7 ms

# Scanner Labeling



# Labels read:

1. Laser Light — do not stare into beam.

Class 2 Laser product. 630-680 nm, 1mW (applied to SE4770)

1. Laser Light — do not stare into beam.

Class 2 Laser product. 500-570 nm, 2mW (applied to ZE5800)

- 2. Complies with 21 CFR1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 56, dated May 08, 2019 and IEC/EN 60825-1:2014.
  - \* **CAUTION:** Laser light emitted from this aperture.

#### **LED**

Risk Group classified according to IEC 62471:2006 and EN 62471:2008.

- SE4770 Pulse Duration: 17.7 ms Exempt Group (RG0)
- SE5800 Pulse Duration: 6 ms Exempt Group (RG0)

# **Power Supply**

**WARNING ELECTRICAL SHOCK:** Use only a Zebra approved, Certified ITE LPS power supply with appropriate electrical ratings. Use of alternative power supply will invalidate any approvals given to this unit and may be dangerous.

#### **Batteries and Power Packs**

This information applies to Zebra-approved batteries and power packs containing batteries.

# **Battery Information**

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of batteries according to instructions.

Use only Zebra approved batteries. Accessories which have battery charging capability are approved for use with the following battery models:

- Model BT-000370 (3.6 VDC, 7000 mAh)
- Model BT-000371 (3.6 VDC, 5000 mAh)

Zebra approved rechargeable battery packs are designed and constructed to the highest standards within the industry.

However, there are limitations as to how long a battery can operate or be stored before needing replacement. Many factors affect the actual life cycle of a battery pack such as heat, cold, harsh environmental conditions, and severe drops.

When batteries are stored over six months, some irreversible deterioration in overall battery quality may occur. Store batteries at half charge in a dry, cool place, removed from the equipment to prevent loss of capacity, rusting of metallic parts, and electrolyte leakage. When storing batteries for one year or longer, the charge level should be verified at least once a year and charged to half charge.

Replace the battery when a significant loss of run time is detected.

Standard warranty period for all Zebra batteries is one year, regardless if the battery was purchased separately
or included as part of the host device.

For more information on Zebra batteries, please visit: <u>zebra.com/batterydocumentation</u> and select the Battery Best Practices link.

## **Battery Safety Guidelines**

(1) IMPORTANT - SAFETY INSTRUCTIONS - SAVE THESE INSTRUCTIONS

**WARNING** – When using this product basic safety precautions should always be followed, including the following:

The area in which the units are charged should be clear of debris and combustible materials or chemicals. Particular care should be taken where the device is charged in a non-commercial environment.

- Read all the instructions before using the product.
- Follow battery usage, storage, and charging guidelines found in the user's guide.
- Improper battery use may result in a fire, explosion, or other hazard.
- Batteries subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.
- To charge the mobile device battery, the battery and charger temperatures must be between 0°C and 40°C (32°F and 104°F).
- Do not use incompatible batteries and chargers. Use of an incompatible battery or charger may present a risk of fire, explosion, leakage, or other hazard. If you have any questions about the compatibility of a battery or a charger, contact Zebra support.
- Do not disassemble or open, crush, bend or deform, puncture, or shred. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.
- Severe impact from dropping any battery-operated device on a hard surface could cause the battery to overheat.
- Do not short circuit a battery or allow metallic or conductive objects to contact the battery terminals.
- Do not modify, disassemble, or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water, rain, snow or other liquids, or expose to fire, explosion, or other hazard.
- Do not leave or store the equipment in or near areas that might get very hot, such as in a parked vehicle or near a radiator or other heat source. Do not place battery into a microwave oven or dryer.
- To reduce the risk of injury, close supervision is necessary when used near children.
- Please follow local regulations to promptly dispose of used re-chargeable batteries.
- Do not dispose of batteries in fire. Exposure to temperatures over 100°C (212°F) may cause explosion.
- Seek medical advice immediately if a battery has been swallowed.
- In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with large amounts of water and seek medical advice.
- If you suspect damage to your equipment or battery, contact Zebra support to arrange for inspection.

# Marking and European Economic Area (EEA)

# **Statement of Compliance**

Zebra hereby declares that this radio equipment is in compliance with Directives 2014/53/EU and 2011/65/EU. Any radio operation limitations within EEA countries are identified in Appendix A of EU Declaration of Conformity. The full text of the EU Declaration of Conformity is available at: <a href="mailto:zebra.com/doc">zebra.com/doc</a>.

EU Importer : Zebra Technologies B.V

Address: Mercurius 12, 8448 GX Heerenveen, Netherlands

Waste Electrical and Electronic Equipment (WEEE)

For EU and UK Customers: For products at the end of their life, please refer to recycling/disposal advice at: **zebra.com/weee**.

## **United States and Canada Regulatory**

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.

NOTE: 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.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

#### Radio Frequency Interference Requirements - Canada

Innovation, Science and Econo mic Development Canada ICES-003 Compliance Label: CAN ICES-003 (B)/NMB-003(B)

This device complies with Innovation, Science and Economic Deve lopment Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This device is restricted to indoor use when operating in the 5150 to 5350 MHz frequency range.

Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems. Devices shall not be used for control of or communications with unmanned aircraft systems.

# RF Exposure Requirements – FCC and ISED

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated in compliance with the FCC RF emission guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of <a href="https://www.fcc.gov/oet/ea/fccid">www.fcc.gov/oet/ea/fccid</a>.

To satisfy RF exposure requirements, this device must operate with a minimum separation distance of 1 cm or more from a user's body and nearby persons.

To satisfy RF exposure requirements, this device must be hand-held only and, where applicable use only with Zebra tested and approved accessories.

# **Co-located Statement**

To comply with FCC RF exposure compliance requirement, the antenna used for this transmitter must not be colocated (within 20 cm) or operating in conjunction with any other transmitter/antenna except those already approved in this filling.

# **Hotspot ISED Notice**

When operating in hotspot mode, this device is restricted to indoor use when operating in the 5150 – 5350 MHz frequency range.

#### **UL Listed Products with GPS**

Underwriters Laboratories Inc. (UL) has not tested the performance or reliability of the Global Positioning System (GPS) hardware, operating software, or other aspects of this product. UL has only tested for fire, shock, or casualties as outlined in UL's Standard(s) for Safety for Information Technology Equipment. UL Certification does not cover the performance or reliability of the GPS hardware and GPS operating software. UL makes no representations, warranties, or certifications whatsoever regarding the performance or reliability of any GPS related functions of this product.

# **Hazardous Locations**

Class 1 Div 2 Product Regulatory Information

This Equipment is suitable for use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, and G; Class III, or Non-Hazardous Locations only.

▲ WARNING – EXPLOSION HAZARD: Substitution of components may impair suitability for Class I and II, Division 2, and Class III.

**WARNING** – EXPLOSION HAZARD: Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.

▲ WARNING - EXPLOSION HAZARD: BATTERIES MUST ONLY BE CHANGED IN AN AREA FREE OF IGNITIBLE CONCENTRATIONS. Use with battery model BT-000370, manufactured by TWS Technology (Guangzhou) Limited.

**WARNING** – EXPLOSION HAZARD: Docking port NOT FOR USE in hazardous locations.

CAUTION: Risk of Explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

**WARNING** – EXPLOSION HAZARD: DO NOT REMOVE OR REPLACE while circuit is live unless the area is free of ignitible concentrations.

# UK CA United Kingdom

# **Statement of Compliance**

Zebra hereby declares that this radio equipment is in compliance with the Radio Equipment Regulations 2017 and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

Any radio operation limitations within UK are identified in Appendix A of UK Declaration of Conformity.

The full text of the UK Declaration of Conformity is available at: zebra.com/doc.

UK Importer: Zebra Technologies Europe Limited

Address: Dukes Meadow, Millboard Rd, Bourne End, Buckinghamshire, SL8 5XF

# Warranty

For the complete Zebra hardware product warranty statement, go to: zebra.com\warranty.

## **Service Information**

Before you use the unit, it must be configured to operate in your facility's network and run your applications. If you have a problem running your unit or using your equipment, contact your facility's Technical or System Support. If there is a problem with the equipment, they will contact Zebra support at <a href="mailto:zebra.com/support">zebra.com/support</a>. For the latest version of the guide go to: <a href="mailto:zebra.com/support">zebra.com/support</a>.

# **Software Support**

Zebra wants to ensure that customers have the latest entitled software at the time of device purchase in order to keep the device operating at peak performance levels. To confirm that your Zebra device has the latest entitled software available at the time of purchase, go to <u>zebra.com/support</u>.

Check for the latest software from Support > Products, or search for the device and select Support > Software Downloads.

If your device does not have the latest entitled software as of your device purchase date, e-mail Zebra at <a href="mailto:entitlementservices@zebra.com">entitlementservices@zebra.com</a> and ensure you include the following essential device information:

- Model number
- · Serial number
- · Proof of purchase
- Title of the software download you are requesting.

If it is determined by Zebra that your device is entitled to the latest version of software, as of the date you purchased your device, you will receive an e-mail containing a link directing you to a Zebra Web site to download the appropriate software.

## **Product Support Information**

- For information on using this product, see the User Guide at <u>zebra.com/vanityURL</u>.
- To find quick answers to known product behaviors, access our knowledge articles at

# supportcommunity.zebra.com/s/knowledge-base.

- Ask your questions in our Support community at supportcommunity.zebra.com.
- Download product manuals, drivers, software, and view how-to videos at zebra.com/support.
- To request a repair for your product, go to zebra.com/repair.

#### **Patent Information**

To view Zebra patents, go to ip.zebra.com.



#### **Documents / Resources**



**ZEBRA MC945x Handheld Mobile Computer** [pdf] User Guide MC945x, MC945x Handheld Mobile Computer, Handheld Mobile Computer, Computer

# References

- ♣ Zebra Support Community
- N Zebra Support Community
- User Manual

#### Manuals+, Privacy Policy

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