

SCANNER OPERATION

TWO DEFAULT MODES OF OPERATION*

CodeGate, Out of Stand

1. The IR detects an object in the IR activation range and automatically turns on linear illumination.
2. Aim the scanner's line of light over the bar code.
3. Pull the trigger to initiate scanning. The scanner's light output will start to flash as it attempts to scan the bar code.



If the trigger is released the scanner will stop trying to scan.

4. When scanner successfully reads the bar code it will beep once, the white LED will flash and the decoded data will be transmitted to the host.

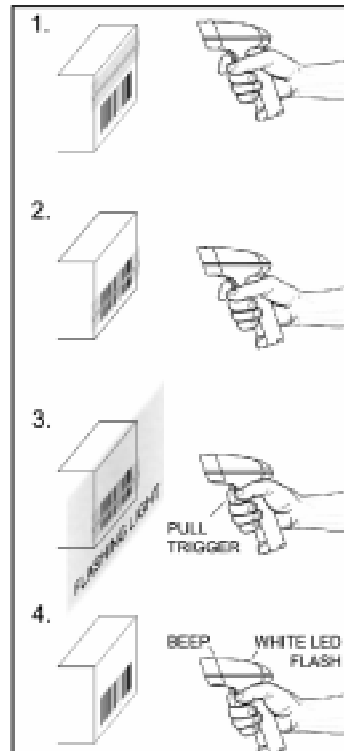


Figure 22. CodeGate, Out-of-Stand

Presentation, In-Stand

1. The IR detects an object in the IR activation range and the scanner's light output automatically starts to flash as it attempts to scan the bar code.
2. The scanner continuously attempts to scan the bar code until either it succeeds or the bar code is removed from the scanner's field of view.
3. When scanner successfully reads the bar code it will beep once, the white LED will flash and the decoded data will be transmitted to the host.

* For additional configurable modes of operation, please refer to the FocusB7 Supplemental Configuration Guide (MLPN 00-02281A).

SCANNER OPERATION

Audible Indicators

When the FocusBT is in operation, it provides audible feedback. These sounds indicate the status of the scanner. Eight settings are available for the tone of the beep (normal, 6 alternate tones and no tone). To change the tone, refer to the MetroSelect Single-Line Configuration Guide, MPN 00-02544 or MetroSet2's help files.

One Beep

When the scanner *successfully* reads a bar code it will beep once and the white LED will turn on indicating data is being transmitted.

If the scanner does not beep once and the white light does not turn on, then the bar code has *not* been successfully read.

Short Razzberry Tone

This tone is a failure indicator (see Failure Modes on page 24).

Long Razzberry Tone

This tone is a failure indicator (see Failure Modes on page 24).

Three Beeps - At Power Up

When FocusBT first receives power it will start an initialization sequence. All LEDs (yellow, white, and blue) will light for approximately 2 seconds then start to alternately flash. When the scanner has finished initializing the LEDs will stop flashing and the unit will beep 3 times indicating that the scanner is ready for use.

Three Beeps - Configuration Mode

When entering configuration mode, the white LED will flash while the scanner simultaneously beeps three times. The white and blue LEDs will continue to flash while in this mode. Upon exiting configuration mode, the scanner will beep three times, and the LEDs will stop flashing.

When configured, 3 beeps can also indicate a communications timeout during normal scanning mode.

When using single-code-configuring, the scanner will beep three times: a normal tone followed by a short pause, a high tone and then a low tone. This indicates that the single configuration bar code has successfully configured the scanner.

Low Battery Tone

When the battery is low the unit will add an additional beep after the *good* scan beep. The additional beep alerts the user when there is less than 10% of a charge left on the battery.

SCANNER OPERATION

Audible Indicators

Low to High Beep

This tone indicates the Bluetooth connection has been made.

High to Low Beep

This tone indicates the Bluetooth connection is disconnected.

A Double Razz Tone

When the Bluetooth communication link is not active, the scanner will emit a double razz tone and the Blue LED will start to flash. This can occur when the scanner is out of Bluetooth communication range from the host system and the RangeGate feature is disabled.

Visual Indicators

The MS1633 has three LED indicators (yellow, white and blue) located on the top of the scanner. When the scanner is on, the flashing or stationary activity of the LEDs indicates the status of the current scan and the scanner.

No LEDs are Illuminated

The LEDs will not be illuminated if the scanner is not receiving power from the host or transformer.

The scanner is in stand-by mode. Present a bar code to the scanner and the blue LED will turn on when the IR detects the object.

Steady Yellow

The yellow LED is illuminated when the scanner is in the stand.

Steady Blue

The blue LED is illuminated when the scanner is active and linear illumination is on or when the scanner is attempting to decode a barcode.

Steady Blue and Single White Flash

When the scanner successfully reads a bar code it will beep once and the white LED will turn on indicating data is being transmitted.

If the scanner does not beep once and the white light does not turn on, then the bar code has not been successfully read.

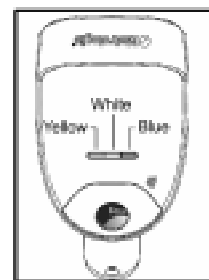


Figure 23.

SCANNER OPERATION

Steady White

When the scanner successfully reads a bar code it will beep once and the white LED will turn on indicating data is being transmitted.



After a successful scan, the scanner transmits the data to the host device. Some communication modes require that the host inform the scanner when data is ready to be received. If the host is not ready to accept the information, the scanner's white LED will remain on until the data can be transmitted.

Alternating Flashing of Blue and White

This indicates the scanner is in configuration mode. A short razzberry tone indicates that an invalid bar code has been scanned while in this mode.

Flashing Blue

The blue LED will flash if the trigger is pressed while the scanner is in the in-stand presentation mode. The blue LED will stop flashing after a brief period of time.

The operation range of Bluetooth communication is approximately 10 meters between the scanner and host system. If the unit is out of range, the communication link will break, the blue LED will start to flash, and the unit will emit a double razz tone. The blue LED will continue to blink for 30 seconds while the unit is out of range. If RangeGate or Inventory mode are not enabled, the scanner will enter sleep mode to conserve battery power after 30 seconds.

Failure Modes

Long Razzberry Tone – During Power Up

Failed to initialize or configure the scanner. If the scanner does not respond after reprogramming, return the scanner for repair.

Short Razzberry Tone – During Scanning

An Invalid bar code has been scanned when in configuration mode or the trigger has been pulled too fast.

SCANNER OPERATION

Depth of Field by Minimum Bar Code Element Width

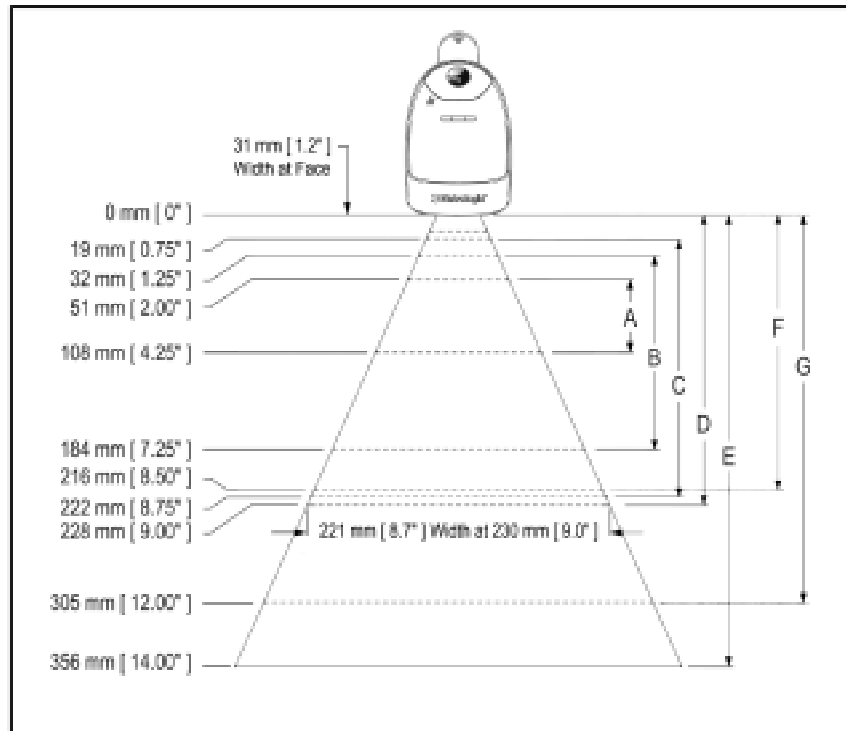


Figure 24. Depth of Field by Minimum Bar Code Element Width

MINIMUM BAR CODE ELEMENT WIDTH							
	1D					PDF	
	A	B	C	D	E	F	G
mm	.132	.19	.254	.33	.533	.254	.381
mils	5.2	7.5	10.4	13	21	10	15.9

Specifications are subject to change without notice.

SCANNER OPERATION

IR Activation Range

The MS1633 has a built in object detection sensor that instantly turns on the scanner when an object is presented within the scanner's IR activation Area.

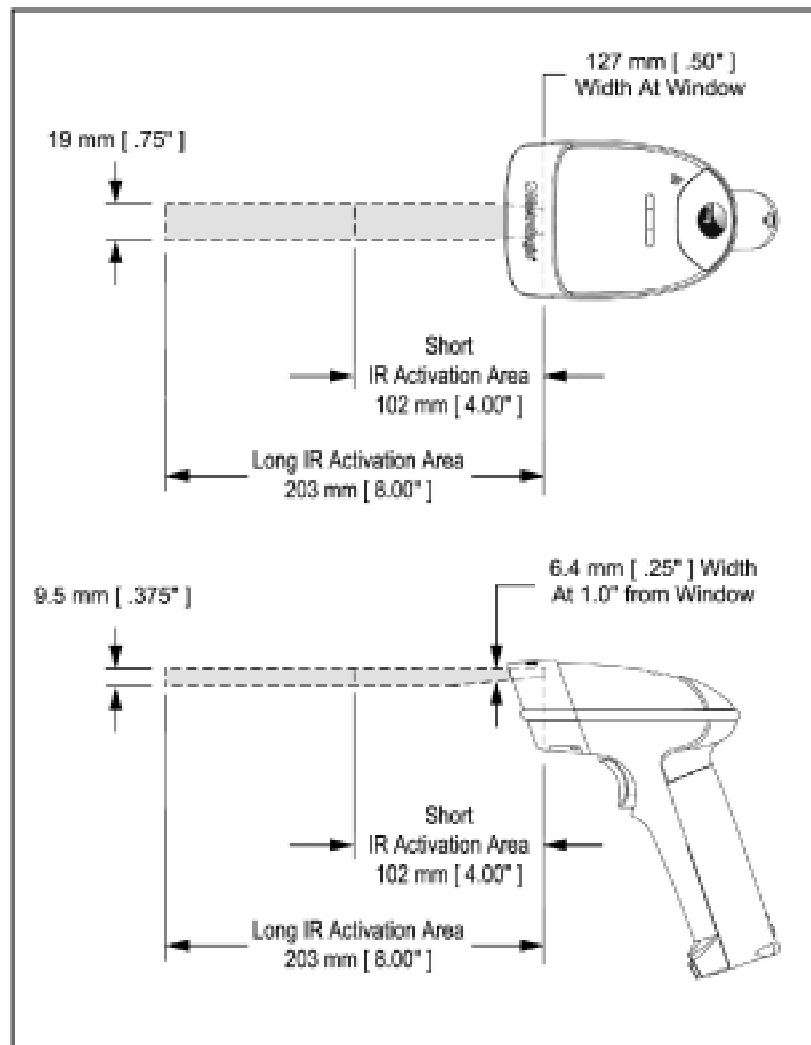


Figure 25. IR Activation Area

Specifications are subject to change without notice.

TROUBLESHOOTING GUIDE

The following guide is for reference purposes only. Contact a Metrologic representative at 1-800-ID-Metro or 1-800-436-3876 to preserve the limited warranty terms.

All Interfaces

MS1633 Series Troubleshooting Guide		
Symptoms	Possible Causes	Solution
No LEDs, beep or illumination	No power is being supplied to the scanner.	Check to make sure the battery is turned on. Check to make sure the battery is properly installed. The battery may need to be charged.
Long Razz tone on power up	There has been a RAM or ROM failure.	Contact a Metrologic service representative, if the unit will not function.
Long Razz tone when exiting configuration mode	There was a failure to save the new configuration.	Re-try to configure the scanner. Contact a Metrologic Service Representative if the unit will not hold the saved configuration.
Long Razz tone	There is a scanning mechanism failure.	Contact a Metrologic service representative.
Short Razz tone in configuration mode	An invalid bar code has been scanned.	Scan a valid bar code or quit configuration mode.

TROUBLESHOOTING GUIDE

Symptoms	Possible Causes	Solution
The unit powers up, but does not beep when bar code is scanned.	The beeper is disabled and no tone is selected.	Enable the beeper and select a tone.
The unit powers up, but does not scan and/or beep.	The bar code symbology trying to be scanned is not enabled.	UPC/EAN, Code 39, Interleaved 2 of 5, Code 93, Code 128, Codabar and PDF are enabled by default. Verify that the type of bar code being read has been selected.
The unit powers up, but does not scan and/or beep.	The scanner is trying to scan a barcode that does not match the configured criteria.	Verify that the bar code being scanned falls into the configured criteria (i.e. character length lock or minimum bar code length settings).
The unit scans a bar code, but locks up after the first scan and the white LED stays on.	The scanner is configured to support some form of host handshaking but is not receiving the signal.	If the scanner is setup to support ACK/NAK, check to make sure the host is supporting the handshaking properly.
The unit scans, but the data transmitted to the host is incorrect.	The scanner's data format does not match the host system requirements.	Verify that the scanner's data format matches that required by the host.

TROUBLESHOOTING GUIDE

Symptoms	Possible Causes	Solution
The unit beeps at some bar codes and NOT for others of the same bar code symbology.	The print quality of the bar code is suspect.	Check print mode. The type of printer could be the problem. Change print settings to improve bar code quality.
	The aspect ratio of the bar code is out of tolerance.	
	The bar code may have been printed incorrectly.	Check if it is a check digit/character/or border problem.
	The scanner is not configured correctly for this type of bar code.	Check if check digits are set properly.
	The minimum symbol length setting does not work with the bar code.	Check if the correct minimum symbol length is set.
The unit scans the bar code but there is no data.	The configuration is not set correctly.	Make sure the scanner is configured for the appropriate mode.
The unit scans the bar code but the data is not correct.		

TROUBLESHOOTING GUIDE

Symptoms	Possible Causes	Solution
The unit is transmitting each character twice.	The configuration is not set correctly.	Increase interscan code delay setting. Adjust whether the F0 break is transmitted. It may be necessary to try this in both settings.
Alpha characters show as lower case.	The computer is in Caps Lock mode.	Enable Caps Lock detect setting of the scanner to detect if the PC is operating in Caps Lock.
Everything works except for a couple of characters.	These characters may not be supported by that country's key look up table.	Try operating the scanner in Alt mode.
The unit powers up OK and scans OK but does not communicate properly with the host.	The USB adapter may not be connected properly	Check to make sure the USB adapter is connected properly.
Characters are being dropped.	Inter-character delay needs to be added to the transmitted output.	Add some inter-character delay to the transmitted output by using the Configuration Guides (MLPN 00-02544 and 00-02065).

DESIGN SPECIFICATIONS

MS1633 DESIGN SPECIFICATIONS		
OPERATIONAL		
Light Source:	LED 645 nm	
Pulse Duration:	1 ms to 8 ms	
Maximum Output of an Osram LED:	Maximum 85 mA emits 3,120 mlm	
Depth of Scan Field:	0 mm – 230 mm (0" – 9") for 0.330 mm (13 mil) Bar Code at Default Setting	
Field of View:	49 mm W x 19 mm H (1.9" W x 0.8" H) at 20 mm (0.8")	
	264 mm x 106 mm (10.4" W x 4.2" H) at 280 mm (11.0")	
Minimum Bar Width:	0.127 mm (5.0 mil)	
Infrared Activation:	Long Range: 0 mm – 203 mm (0" – 8") from Window	
	Short Range: 0 mm – 101 mm (0" – 4") from Window	
Decode Capability:	Autodiscriminates All Standard 1-D, RSS, PDF417, microPDF, MaxiCode, Data Matrix, QR Code, UCC, EAN Composites, Postals, Aztec (Image Transfer) – BMP, TIFF, or JPEG output	
Print Contrast:	20% Minimum Reflectance Difference	
Number Characters Read:	Up to 80 Data Characters on 1D; 1650 Text Characters for PDF417	
Beeper Operation:	7 tones or no beep	
Indicators (LED) Default Settings:	Blue	Unit Powered, Ready to Scan
	White	Good Read
	Yellow	In Stand
MECHANICAL		
Height:	183 mm (7.2")	
Width:	Handle	- 30 mm (1.2")
	Head	- 79 mm (3.1")
Depth:	111 mm (4.9")	
Weight:	225 g (8.0 oz)	

Specifications are subject to change without notice.

DESIGN SPECIFICATIONS

	MS1633 DESIGN SPECIFICATIONS
ELECTRICAL	
Input Voltage:	5.0VDC \pm 0.25V
Power:	Peak = 2.15 W (Typical)
	Operating = 1.65 W (Typical)
	Idle / Standby = 850 mW (Typical)
Current:	Peak = 430 mA (Typical)
	Operating = 370 mA (Typical)
	Idle / Standby = 170 mA (Typical)
DC Transformer:	Class 2; 5.2VDC @ 2A
For regulatory compliance information see pages 37– 38.	
ENVIRONMENTAL	
Temperature:	Operating = 0°C to 40° (32° to 104°F)
	Storage = -20°C to 50°C (-20°F to 130°F)
Humidity:	5% to 95% Relative Humidity, Non-Condensing
Light Levels:	Up to 4842 Lux (450 Footcandles)
Shock:	Designed to withstand 1.5 m (5') drops
Contaminants:	Sealed to resist airborne particulate contaminants
Ventilation:	None required

Specifications are subject to change without notice.

DEFAULT SETTINGS – COMMUNICATION PARAMETERS

Many functions of the scanner can be "configured" – that is, enabled or disabled. The scanner is shipped from the factory configured to a set of default conditions. The default parameter of the scanner has an asterisk (*) in the charts on the following pages. If an asterisk is not in the default column then the default setting is OFF or DISABLED.

PARAMETER	DEFAULT
Multi-Try Trigger Out-of-Stand	*
Presentation Mode In-Stand	*
Continuous Trigger	
Single Trigger	
Aiming in Trigger and Continuous Modes	*
Aiming in Presentation Mode	
Long-Range In-Stand	*
Short-Range In-Stand	
Long-Range Out-of-Stand	*
Short-Range Out-of-Stand	
RangeGate Mode	
Inventory Mode	
UPC/EAN	*
Code 128	*
Code 93	*
Codabar	*
Interleaved 2 of 5 (ITF)	*
MCD 10 check on ITF	
Code 11	
Code 39	*
Full ASCII Code 39	
PDF	*

PARAMETER	DEFAULT
Data Matrix	
QR Code	
Maxicode	
Aztec	
Postals	
Mod 43 Check on Code 39	
MSI-Plessey 10/10 Check Digit	
MSI-Plessey Mod 10 Check Digit	*
Paraf-Support ITF	
ITF Symbol Lengths	Variable
Symbol Length Lock	None
Beeper tone	Normal
Beep/transmit sequence	Before transmit
Communication timeout	None
Razberry tone on timeout	
Three beeps on timeout	
Same symbol rescan timeout: 1000 msec	*
Same symbol rescan timeout configurable in 50 msec steps (maximum of 6.35 sec.)	
No Same symbol timeout	
Infinite Same symbol timeout	

DEFAULT SETTINGS – COMMUNICATION PARAMETERS

PARAMETER	DEFAULT	PARAMETER	DEFAULT
Inter-character delay configurable in 1 msec steps (maximum of 255 msec)	1 msec 10 msec in KBW	Tab Suffix	
Number of scan buffers (maximum)	8	"DE" Disable Command	
Transmit UPC-A check digit	*	Enable Command	
Transmit UPC-E check digit		ACK/NAK	
Expand UPC-E		Two Digit Supplements	
Convert UPC-A to EAN-13		Five Digit Supplements	
Transmit lead zero on UPC-E		Bookland	
Transmit UPC-A number system	*	977 (2 digit) Supplemental Requirement	
Transmit UPC-A Manufacturer ID#	*	Supplements are not Required	*
Transmit UPC-A Item ID#	*	Two Digit Redundancy	*
Transmit Codabar Start/Stop Characters		Five digit Redundancy	
GLSI Editing (Enable)		Coupon Code 128	
Transmit Mod 43 Check digit on Code 39		† Configurable Code Lengths	7 avail
Transmit Mod 10/ITF		† Code Selects with configurable Code Length Locks	3 avail
Transmit MSI-Plessey		Configurable Prefix characters	10 avail
Transmit Sanyo ID Characters		Suffix characters	10 avail
Nixdorf ID		Prefixes for Individual Code types	
LRC Enabled		Editing	
UPC Prefix		Function/Control Key Support	*
UPC Suffix		Omnidirectional Scanning	*
Carriage Return	*	Linear Only Scanning	
Tab Prefix		Linear 1D / Omni 2D	

† These options are mutually exclusive. One can not be used in conjunction with the other.

CONFIGURATION MODES

The MS1633 FocusB7 Series has three modes of configuration.

- **Bar Codes**
The MS1633 can be configured by scanning the bar codes included in the Metrologic Single-Line Configuration Guide (MLPN 00-02544). This manual can be downloaded for FREE from Metrologic's website (www.metrologic.com).
- **MetroSet2**
This user-friendly Windows-based configuration program allows you to simply 'point-and-click' at the desired scanner options. This program can be downloaded for FREE from Metrologic's website (www.metrologic.com) or set-up disks can be ordered by calling 1-800-ID-METRO.
- **Serial Programming**
This mode of configuration is ideal for OEM applications. This mode gives the end-user the ability to send a series of commands using the serial port of the host system. The commands are equivalent to the numerical values of the bar codes located in the MetroSelect Single-Line Configuration Guide (MLPN 00-02544).

UPGRADING THE FLASH ROM FIRMWARE

The MetroSet2 program is a functional component of Metrologic's new line of Flash- based scanners. This program allows the user to quickly upgrade the FocusB7 to a new or custom version of firmware. It requires the use of a personal computer running Windows 95 or greater.

The program guides the user with its simplistic one click approach. The user must first select the file. Once the file is selected and verified, the scanner is ready to be upgraded. Press the "Flash Scanner" button to upgrade the scanner. The unit will go into a "flash mode" – the blue and white LEDs will be flashing alternately. The user can follow the progress of the upgrade by watching the screen for details. When the upgrade is complete, the scanner will reset itself. If a razz/beep occurs, the scanner did not upgrade properly. Contact a Metrologic service representative for additional assistance.

LIMITED WARRANTY

The MS1633 FocusBT™ scanners are manufactured by Metrologic at its Blackwood, New Jersey, U.S.A. facility. The MS1633 FocusBT scanners have a two (2) year limited warranty from the date of manufacture and the MS1633 FocusBT battery packs have a one (1) year limited warranty from the date of manufacture. Metrologic warrants and represents that all MS1633 FocusBT scanners are free of all defects in material, workmanship and design, and have been produced and labeled in compliance with all applicable U.S. Federal, state and local laws, regulations and ordinances pertaining to their production and labeling.

This warranty is limited to repair, replacement of product or refund of product price at the sole discretion of Metrologic. Faulty equipment must be returned to one of the following Metrologic repair facilities: Blackwood, New Jersey, USA; Madrid, Spain; or Suzhou, China. To do this, contact the appropriate Metrologic Customer Service/Repair Department to obtain a Returned Material Authorization (RMA) number.

In the event that it is determined the equipment failure is covered under this warranty, Metrologic shall, at its sole option, repair the Product or replace the Product with a functionally equivalent unit and return such repaired or replaced Product without charge for service or return freight, whether distributor, dealer/reseller, or retail consumer, or refund an amount equal to the original purchase price.

This limited warranty does not extend to any Product which, in the sole judgment of Metrologic, has been subjected to abuse, misuse, neglect, improper installation, or accident, nor any damage due to use or misuse produced from integration of the Product into any mechanical, electrical or computer system. The warranty is void if the case of Product is opened by anyone other than Metrologic's repair department or authorized repair centers.

THIS LIMITED WARRANTY, EXCEPT AS TO TITLE, IS IN LIEU OF ALL OTHER WARRANTIES OR GUARANTEES, EITHER EXPRESS OR IMPLIED, AND SPECIFICALLY EXCLUDES, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE UNDER THE UNIFORM COMMERCIAL CODE, OR ARISING OUT OF CUSTOM OR CONDUCT. THE RIGHTS AND REMEDIES PROVIDED HEREIN ARE EXCLUSIVE AND IN LIEU OF ANY OTHER RIGHTS OR REMEDIES. IN NO EVENT SHALL METROLOGIC BE LIABLE FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGES TO PERSON OR PROPERTY, OR EFFECT ON BUSINESS OR PROPERTY, OR OTHER DAMAGES OR EXPENSES DUE DIRECTLY OR INDIRECTLY TO THE PRODUCT, EXCEPT AS STATED IN THIS WARRANTY. IN NO EVENT SHALL ANY LIABILITY OF METROLOGIC EXCEED THE ACTUAL AMOUNT PAID TO METROLOGIC FOR THE PRODUCT. METROLOGIC RESERVES THE RIGHT TO MAKE ANY CHANGES TO THE PRODUCT DESCRIBED HEREIN.

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REGULATORY COMPLIANCE

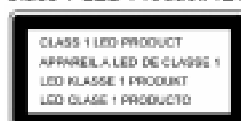
SAFETY

ITE Equipment

IEC 60950-1, EN 60950-1

LED

Class 1 LED Product: IEC 60825-1:1993+A1+A2, EN 60825-1:1994+A1+A2



Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Under no circumstances should the customer attempt to service the LED scanner. Never attempt to look at the LED beam, even if the scanner appears to be nonfunctional. Never open the scanner in an attempt to look into the device. Doing so could result in hazardous radiation exposure. The use of optical instruments with the LED equipment will increase eye hazard.

Atención

La modificación de los procedimientos, o la utilización de controles o ajustes distintos de los especificados aquí, pueden provocar una exposición de luz brillante peligrosa. Bajo ninguna circunstancia el usuario deberá realizar el mantenimiento del LED (Diodo Emisor de Luz) del lector. Ni intentar mirar al haz del LED incluso cuando este no esté operativo. Tampoco deberá abrir el lector para examinar el aparato. El hacerlo puede conllevar una exposición peligrosa a la luz del LED. El uso de instrumentos ópticos con el equipo LED puede incrementar el riesgo para la vista.

Attention

L'emploi de commandes, réglages ou procédés autres que ceux décrits ici peut entraîner de graves irradiations. Le client ne doit en aucun cas essayer d'entretenir lui-même le scanner ou le LED. Ne regardez jamais directement le rayon LED, même si vous croyez que le scanner est inactif. N'ouvrez jamais le scanner pour regarder dans l'appareil. Ce faisant, vous vous exposez à un risque d'irradiation. L'emploi d'appareils optiques avec cet équipement à LED augmente le risque d'endommagement de la vision.

Achtung

Die Verwendung anderer als der hier beschriebenen Steuerungen, Einstellungen oder Verfahren kann eine gefährliche Licht emittierender Dioden strahlung hervorrufen. Der Kunde sollte unter keinen Umständen versuchen, den Licht emittierender Dioden-Scanner selbst zu warten. Sehen Sie niemals in den Licht emittierender Diodenstrahl, selbst wenn Sie glauben, daß der Scanner nicht aktiv ist. Öffnen Sie niemals den Scanner, um in das Gerät hineinzusehen. Wenn Sie dies tun, können Sie sich einer gefährlichen Licht emittierender Diodenstrahlung aussetzen. Der Einsatz optischer Geräte mit dieser Laserausrüstung erhöht das Risiko einer Sehschädigung.

Attenzione

L'utilizzo di sistemi di controllo, di regolazioni o di procedimenti diversi da quelli descritti nel presente Manuale può provocare delle rischiose esposizioni radiative. Il cliente non deve assolutamente tentare di riparare egli stesso lo scanner LED (o diodo emettitore di luce). Non guardate mai il raggio LED (d. emettitore di luce), anche se credete che lo scanner non sia attivo. Non aprite mai lo scanner per guardare dentro l'apparecchio. Facendolo potete esporvi ad una radiazione rischiosa. L'uso di apparecchi ottici, equipaggiati con raggi LED (d. emettitori di luce), aumenta il rischio di danni alla vista.

REGULATORY COMPLIANCE

EMC

Emissions: FCC Part 15, ICES-003, CISPR 22, EN 55022, EN300 328 V1.6.1,
EN301 489-17 V1.2.1

Immunity: CISPR 24, EN 55024

Radiators

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense. Any unauthorized changes or modifications to this equipment could void the users' authority to operate this device.

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 radiated output power of this intentional wireless radio is far below the FCC radio frequency exposure limits. The internal wireless radio operates within guidelines found in radio frequency safety standards and recommendations, which reflect the consensus of the scientific community. The level of energy emitted is far less than the electromagnetic energy emitted by wireless devices such as mobile phones. However, the use of wireless radios may be restricted in some situations or environments, such as aboard airplanes. If you are unsure of restrictions, you are encouraged to ask for authorization before turning on the wireless radio.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice

This Class A digital apparatus complies with Canadian ICES-003*.

* The IC before the certification/registration number signifies that the Industry Canada technical specifications were met.

Remarque

Cet appareil numérique de la classe A, conforme à la norme NMB-003 du Canada.

European Standard

Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Funkstöreigenschaften nach EN55022:1998

Warnung!

Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen. In diesem Fall kann vom Betreiber verlangt werden, angemessene Massnahmen durchzuführen.

Standard Europeo

Attenzione

Questo e' un prodotto di classe A. Se usato in vicinanza di residenze private potrebbe causare interferenze radio che potrebbero richiedere all'utilizzatore opportune misure.

Attention

Ce produit est de classe "A". Dans un environnement domestique, ce produit peut être la cause d'interférences radio. Dans ce cas l'utilisateur peut être amené à prendre les mesures adéquates.

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