Intermec

Quick Reference Guide

1550 Laser Scanner

Intermec Technologies Corporation 6001 36th Avenue West P.O. Box 4280 Everett, WA 98203-9280

U.S. service and technical support: 1-800-755-5505 U.S. media supplies ordering information: 1-800-227-9947

Canadian service and technical support: 1-800-688-7043 Canadian media supplies ordering information: 1-800-268-6936

Outside U.S. and Canada: Contact your local Intermec service supplier.

The information contained herein is proprietary and is provided solely for the purpose of allowing customers to operate and/or service Intermec manufactured equipment and is not to be released, reproduced, or used for any other purpose without the written permission of Intermec.

Information and specifications in this manual are subject to change without notice.

 $\ \, {\odot} \,$  1998 by Intermec Technologies Corporation All Rights Reserved

The word Intermec, the Intermec logo, JANUS, IRL, TRAKKER, Antares, Adara, Duratherm, EZBuilder, Precision Print, PrintSet, Virtual Wedge, and CrossBar are either trademarks or registered trademarks of Intermec Technologies Corporation.

Throughout this manual, trademarked names may be used. Rather than put a trademark ( $^{\text{TM}}$  or  $^{\text{R}}$ ) symbol in every occurrence of a trademarked name, we state that we are using the names only in an editorial fashion, and to the benefit of the trademark owner, with no intention of infringement.

## **Contents**

Overview of the 1550 Laser Scanner 1

Unpacking the 1550 Laser Scanner 2

Understanding the 1550 Features 3
Light 3
Electrical Rating 3

Connecting to an Intermec Product 4

Operating the 1550 Laser Scanner 7 Scanning Tips 7 Hands-Free Scanning 9

Troubleshooting the 1550 Laser Scanner 10

Maintaining the 1550 Laser Scanner 11

Accessories 12

# Regulatory Statements for Canada and the United States 13

Industry Canada Compliance 13
Federal Communications Commission
Compliance 13
Laser Compliance and Precaution 14
Nonincendive Information for Canada and the US 15

# Regulatory Statements For Users Outside of Canada and the United States 17

European Union Compliance 17 Agency Approvals 17 Additional EMI/RFI Compliance 17 Laser Compliance and Precaution 17

#### Patents 19

This quick reference guide provides basic operating procedures and safety instructions. Keep this guide near your scanner for reference.

## Overview of the 1550 Laser Scanner

The Intermec 1550 laser scanner delivers quick, effortless bar code scanning. These colors and configurations are available:

Model	Color and Configuration
1550B0100	Blue with Intermec interface and standard optics.
1550B0102	Blue with Intermec interface and long-range optics.
1550B0104	Blue with Intermec interface and high-visibility optics.
1550B0105	Blue with Intermec interface and high density optics.
1550B0200	Blue with Intermec interface, standard optics, and configured for auto-trigger mode.
1550B0300	Light gray with Intermec interface and standard optics.
1550B0400	Light gray with Intermec interface, standard optics, and configured for auto-trigger mode.

Colors and Configurations (continued)
---------------------------------------

Model	Color and Configuration
1550B0500	Blue with other manufacturer's interface and standard optics.
1550B0502	Blue with other manufacturer's interface and long-range optics.
1550B0504	Blue with other manufacturer's interface and high-visibility optics.
1550B0505	Blue with other manufacturer's interface and high-density optics.
1550B5100	Blue with Intermec interface, standard optics, and a nonincendive certification for use with Intermec models J2010NI and JG2010NI.

## **Unpacking the 1550 Laser Scanner**

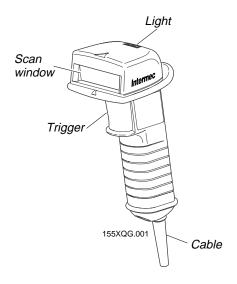
Your 1550 laser scanner was thoroughly tested and inspected before it was shipped from the factory. The shipping box contains the laser scanner and this guide.

**Note:** You must order the appropriate interface cables separately. See "Connecting to an Intermec Product" later in this document.

If any of these items are missing or damaged, please contact your local Intermec representative. Retain the shipping box in case you need to return the scanner for service.

# **Understanding the 1550 Features**

The 1550 laser scanner is easy to install and operate. Please acquaint yourself with the important parts of the scanner before continuing.



## Light

The light indicates the status of the scanner.

Color	Description
Yellow	The device is scanning.
Green	The bar code has been successfully scanned.
None	The device is not scanning.

### **Electrical Rating**

The 1550B01XX, 02XX, 03XX, 04XX, and 51XX laser scanner electrical ratings are = 4,5 to 5,5V; 125 mA.

The 1550B05XX laser scanner electrical rating is = 4,5 to 12,0V; 125 mA.

# **Connecting to an Intermec Product**

You can connect the 1550 laser scanner to these Intermec products:

- 9450 RF Vehicle-Mount Terminals
- 95XX Network Terminals
- 97XX Wedge Readers
- JANUS™ 2010 Hand-Held Computers (J2010 and JG2010)
- JANUS<sup>TM</sup> 2050 Vehicle-Mount Computers (J2050 and JG2050)
- TRAKKER® Antares™ 242X Terminals (T242X)
- TRAKKER® 944X Portable Terminals
- TRAKKER® 9465 RF Portable Terminals

You must purchase an interface cable to connect the scanner to a reader/terminal. Use this table to determine the cable to order:

P/N
063694
063698
064045
063697
064047
063695
065601
064044
064029
064043
0640 0640

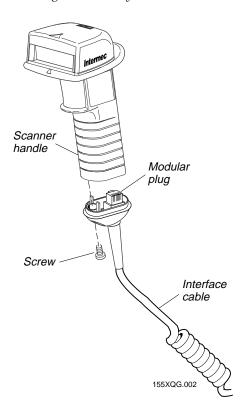
## Cable Connectors (continued)

Reader/Terminal	Length	Cable Connector	P/N
J2050, JG2050	6 ft (1.83m)	11-Pin Sealed, Blue Cap	064051
J2050, JG2050	25 ft (7.63m)	11-Pin Sealed, Blue Cap	064052
MaxiLAN CX, MaxiLAN DX, MicroBAR NX, MaxiBAR, and other manufacturer reader/terminal	6 ft (1.83m)	9 Pin Squeeze D-Sub, Blue Cap	063696
MaxiLAN CX, MaxiLAN DX, MicroBAR NX, MaxiBAR, and other manufacturer reader/terminal	25 ft (7.63m)	9 Pin Squeeze D-Sub, Blue Cap	064046

#### To connect the scanner to a reader/terminal

- 1. Turn off the reader/terminal.
- 2. Connect the modular plug on the interface cable into the bottom of the scanner handle.
- 3. Tighten the screw using a medium-sized, straight-slot screwdriver to secure the plug in the scanner handle.
- 4. Connect the other end of the cable to the reader/terminal.

**Note:** The cable connector plug for the reader/terminal will vary according to the cable you ordered.



See "Operating the 1550 Laser Scanner" in the next section to learn basic scanning operation, scanning tips, and how to scan hands-free using the scanner stand.

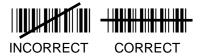
## Operating the 1550 Laser Scanner

Before you start scanning, make sure the power to the reader/terminal is on and all cable connections are secure.

- 1. Aim the scanner at a slight angle or pitch to the bar code and press the trigger. To help you center the laser beam on the correct bar code, the scanners with long-range or high-visibility optics have a marker beam that will appear when you pull the trigger.
- 2. When you get a successful read the laser beam turns off, the scanner beeps once, and the light turns green.

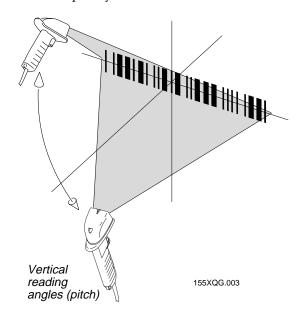
## **Scanning Tips**

Adjust the scanner distance to the bar code and the position of the laser beam to make sure every bar and space is scanned.



155XQG.006

Hold the scanner at a slight angle or pitch to the bar code. The laser beam will quickly read the bar code.



For scanners with long-range or high-visibility optics, use the marker beam to center the scanner's laser beam on the bar code you want to scan.

## **Hands-Free Scanning**

If you have an auto-trigger scanner (1550B0200 or 1550B0400), you can use the scanner stand for hands-free scanning. To order a scanner stand, see "Accessories" later in this guide.

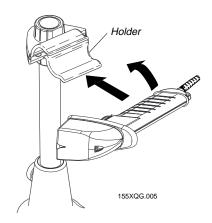
**Note:** Using the IRL Z command for remote triggering will not work with the 1550 scanner.

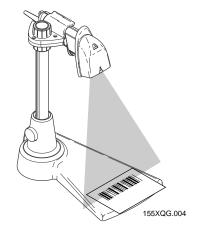
#### To scan a bar code using the scanner stand

- 1. Place the scanner handle on the bottom ledge of the holder and then rotate the handle in the holder until it locks into place.
- 2. Align the scanner and adjust the column height so that the pulsating laser beam covers the entire label on the base of the stand.
- 3. To scan a bar code, place it right-side up over the label on the base of the stand.

When the reader/terminal beeps, the bar code has been successfully read.

**Note:** If your scanner stand does not have a small magnet in the holder, you need to upgrade your stand using upgrade kit part number 066799.





# Troubleshooting the 1550 Laser Scanner

This table lists common scanner problems and their solutions.

Problem	Solution
Scanner cannot read certain bar codes.	The reader/terminal was not set up to read this type of bar code, or the bar code is damaged, covered up, or poor quality.
	Scan another bar code on a similar item. If it scans, clean the bar code giving you trouble.
	If you are still unable to scan the bar code, enable other bar code symbologies in the reader/terminal.
Scanner does not read bar codes quickly and sometimes requires	Clean the window with a cotton cloth moistened with an ammonia or water solution. Dry with a soft cotton cloth or allow to air dry.
multiple scans.	Make sure the bar code is free of dirt and grime. Then scan at a slight angle to the bar code (see "Scanning Tips" earlier in this guide). The laser beam will quickly read the bar code.
Scanner does not read "shiny" bar codes.	Scan at a slight angle or pitch to the bar code (see "Scanning Tips" earlier in this guide). The laser beam will quickly read the bar code.
Scanner does not emit a beam and does not operate.	The scanner is not receiving power. Make sure the scanner cables are securely plugged in and the terminal is on. Replace damaged cables.

If you continue to encounter problems operating your scanner, contact your local Intermec representative.

## Maintaining the 1550 Laser Scanner

Water or grime on the window of the scanner distorts the laser beam and may impair performance. Moving from one temperature extreme to another causes condensation to form on the optical surfaces and also affects scanner performance.

Follow these guidelines to maintain the scanner:

- Clean the window with a cotton cloth moistened with an ammonia or water solution. Dry with a soft cotton cloth or allow to air dry.
- Do not use a dry tissue to wipe the window. This causes small scratches on the window that will gradually affect performance.
- Do **not** immerse the unit in water.
- Operate and store in an environment with 5% to 95% relative humidity.
- Operate in temperatures within -22° to 122° F (-30° to 50° C) and store in temperatures within -40° to 158° F (-40° to 70° C).

## **Accessories**

These accessories are available for your 1550 laser scanner. To order an accessory, call your local Intermec representative.



#### Holster and Belt Part No. 063793

You can store your scanner on you when it is not in use. The holster can be used with the belt provided or with any regular belt.



#### Wall-Mount Scanner Holder Part No. 063909

The wall-mount is a convenient way to store your scanner when it is not in use.



#### Vehicle-Mount Scanner Holder Part No. 063910

You can attach the vehicle-mount to a post or surface of a vehicle with tie-wraps and double-stick tape.



#### Desk-Mount Scanner Holder Part No. 063812

The desk-mount is a convenient way to store your scanner on your desk.



#### Scanner Stand Part No. 063799

If you have an auto trigger scanner, you can use the scanner stand for hands-free scanning.

**Note:** If your scanner stand does not have a small magnet in the holder, you need to upgrade your stand using upgrade kit part number 066799.

# Regulatory Statements for Canada and the United States

These regulatory statements apply to the 1550 laser scanner.

#### Industry Canada Compliance

This Class B digital apparatus meets all requirements of the Canadian interference-causing equipment regulations.

Cet appareil numérique de la Classe B respecte routes les exigences du règlement sur le matérial du Canada.

## Federal Communications Commission Compliance

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 can cause undesired operation.

This equipment is intended for operation in a commercial environment, in compliance with the requirements for a Class A digital device, pursuant to Part 15 of the FCC Rules, and it must not be used in a residential environment; however, it has also been tested and found to comply with the more stringent requirements for a Class B device, pursuant to Part 15 of the FCC Rules. It generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, it may cause interference to radio communications. If this equipment causes interference, the user will be required to correct the interference at the user's own expense.

**Note:** In order to maintain compliance with FCC Rules, the I/O cables that interconnect between the device and any peripheral (such as a reader, etc.) must be as specified by Intermec.

## **Laser Compliance and Precaution**

The 1550 laser scanner complies with the following standards for laser safety:

CDRH - Class II Laser Product (CFR 21 Subpart J)

This product has a maximum output of 1 mW at 630-680 nm.



#### Warning

There are no user serviceable parts inside this laser scanner. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure of up to 1 mW at 630-680 nm.

#### Avertissement

Cette scanneur à laser ne contient pas de pièces révisibles par l'utilisateure. L'emploi de commandes ou d'ajustements ou de performances des procédures autres que ceux précisés dans cette documentation pourrait avoir comme résultat l'exposition à l'irradiation laser nuisible de jusqu' à 1 mW à 630-680 nm.

*Note*: There are no controls or adjustments provided for routine operation or maintenance of the 1550.

**Remarque:** Aucun appareil de contrôle ou d'ajustement n'est fourni pour les opérations de routine ou de maintenance de l'appareil 1550.

**UL Information.** The 1550 is UL Listed (UL 1950/C22.2 No. 950) when used with Intermec's other UL Listed readers.

#### Nonincendive Information for Canada and the US

The following information pertains only to 1550 when ordered with the Hazardous Location Protection option (1550B5100). These units are marked Model 1550NI. No other configuration of this product is suitable for use in Division 2 locations.

The 1550NI is UL Listed as Nonincendive (UL-1604 and C22.2 #213) only when connected to Intermec's models J2010NI and JG2010NI. This information is suitable for use in the following hazardous locations:

#### Division 2

Class I - Groups A, B, C, and D

Class II - Groups F and G

Class III

Temperature Code T4A

Maximum Operating Ambient: 50°C

**Note:** Hazardous Locations are defined in articles 500-503 of the National Electrical Code (NEC).

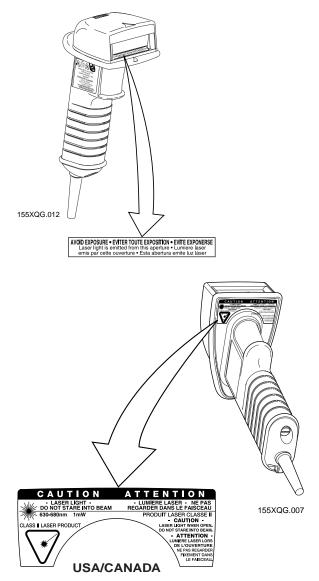


#### Warning

The 1550NI is rated Nonincendive as long as it is not abused or damaged and is used according to its operating instructions. If these conditions are not met, this device must not be operated in a Division 2 environment.

Le 1550NI est classé Non incendiaires aussi longtemps qu'il ne subit pas d'abus ou de dommages et qu'il est utilisé en conformité avec son mode d'emploi. Si ces conditions ne sont pas remplies, cet appareil ne doit pas être utilisé dans un environnement de Division 2.

These labels provide important laser safety information.



# Regulatory Statements For Users Outside of Canada and the United States

These regulatory statements apply to the 1550 laser scanner.

#### **European Union Compliance**



This product complies with EN 55022, EN 50082-1, EN 60950, and EN 60825-1 as required by the EMC Directive 89/336/EEC as amended by 92/31/EEC and by the Low Voltage Directive 73/23/EEC as amended by 93/68/EEC.

## **Agency Approvals**

The 1550 is UL Listed (UL 1950/C22.2 No. 950) and TÜV GS licensed (EN 60950 and EN 60825-1) for safety.

## Additional EMI/RFI Compliance

This device meets the Class B limit requirements of CISPR 22.

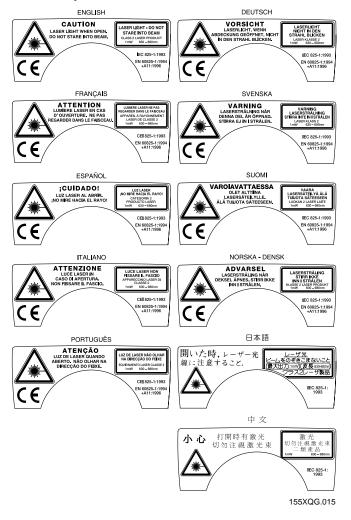
## **Laser Compliance and Precaution**

The 1550 laser scanner complies with the following standards for laser safety:

IEC 825-1 / EN 60825-1 - Class 2 Laser Product (1 mW, 630-680 nm)

The 1550 is provided with one of the labels illustrated later in this guide. If the appropriate label is not installed, locate the sheet of labels that was shipped with your 1550 and place the appropriate label over the existing label.

#### Laser Safety Labels



#### **Patents**

The 1550 laser scanner is covered by one or more of these U.S. Patents:

```
4,360,798; 4,369,361; 4,387,297; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,816,660; 4,845,350; 4,896,026; 4,923,281; 4,992,717; 5,017,765; 5,047,617; 5,113,445; 5,140,144; 5,149,950; 5,168,148; 5,168,149; 5,180,904; 5,247,162; 5,250,792; 5,262,627; 5,280,163; 5,280,164; 5,304,786; 5,304,788; 5,367,151; 5,373,148,; 5,396,053; 5,408,081; 5,410,139; 5,436,440; 5,468,949; 5,479,000.
```

Other U.S. and foreign patents pending.