Bookcheck Unit Model 940 Series

and

Staff Workstation Model 946

Owner's Manual

3M Library Systems
3M Center, Building 225-4N-14
St. Paul, Minnesota 55144-1000
www.3M.com/library

Copyright © 2014 3M. All rights reserved.

Bookcheck Unit Model 940 Series and Staff Workstation Model 946 Owner’s Manual

78-8126-8471-6 Rev. E

3M and Tattle-Tape are trademarks of 3M.

Contents

Safety 5
Intended use 5
Explanation of signal word consequences 5
Explanation of product safety label symbols 5
Warnings 6
Cautions 6
Japan 6
Label locations (Models 942 and 943) 7
Label locations (Model 946) 8

EMC compliance — USA and Canada 9
FCC radio frequency rules and regulations 9
FCC intentional radiator certification (Model 946 only) 9
Industry Canada radio frequency rules and regulations 9

Introduction 10
About the unit 10
Models 10
Model 943 and Model 946 software 10
Features 10
Environmental specifications 11
Electrical specifications 11
Dimensions and weight 11
Scanner specifications (Models 943 and 946) 11
Cable lengths (Models 943 and 946) 11
Stability requirements 12
Magnetic media warning 12
Voltage selection warning 12
Introduction to the hardware interface 13
Overview 13
About magnetic media mode 13
About the verifier 13

Using the hardware interface 14
Processing items 14
Turning off the verifier 15

Troubleshooting 16

Calling 3M Service 17
3M Service phone numbers 17
System information 17

Safety

Read, understand, and follow all safety information contained in these instructions prior to installation and use of the 3M™ Bookcheck Unit Model 940 Series and Staff Workstation Model 946. Retain these instructions for future reference.

Intended use

The Bookcheck Unit Model 940 Series and Staff Workstation Model 946 are intended for use by library staff in the check-in and checkout of library materials that use electromagnetic (EM) or radio frequency identification (RFID) tags. They may be used on desktops or built into customized counter tops.

These units are intended for use in an indoor library environment and have not been evaluated for other uses or locations. The location in which a unit is installed must meet the requirements specified in the *Bookcheck Unit Model 940 Series and Staff Workstation Model 946 Site Planning and Installation Guide.*

Explanation of signal word consequences

⚠ WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
⚠ CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

Explanation of product safety label symbols

	Attention: Read accompanying documentation
	Risk of electric shock
	Disposal hazard
	Laser scanner: Laser exposure

Warnings

⚠ WARNING
To reduce the risk associated with fire or hazardous voltage: ▪ Do not attempt to repair or modify — no user serviceable parts — contact 3M Service for repair; ▪ Install system components into desk or enclosure in accordance with instructions and specifications given in the *Bookcheck Unit Model 940 Series and Staff Workstation Model 946 Site Planning and Installation Guide*.
To reduce the risk associated with fire due to incorrect installation of service parts or use of non-approved replacement components: ▪ Do not attempt to repair or modify — no user serviceable parts — contact 3M Service for repair; ▪ Use approved service parts, installed by 3M Service personnel only.
To reduce the risk associated with hazardous voltage: ▪ Do not use the Bookcheck or Staff Workstation systems if damage has occurred to any system enclosures or power cords — contact 3M Service for repair.
To reduce the risk associated with back strain: ▪ The Bookcheck or Staff Workstation main units weigh more than 20 pounds – use proper lifting procedures.
To reduce the risk associated with tipping or falling of any system components: ▪ Install system components into desk or enclosure in accordance with instructions and specifications given in the *Bookcheck Unit Model 940 Series and Staff Workstation Model 946 Site Planning and Installation Guide*.

Cautions

⚠ CAUTION
To reduce the risk associated with exposure to laser light: ▪ Do not look directly into laser scanner accessory; ▪ At the end of service life, dispose of laser scanner accessory in accordance with federal, state and local requirements.
To reduce the risk associated with repetitive strain injury from repeated lifting of library materials: ▪ Operation of this product may involve repeated body movements. To minimize possibility of Repetitive Stress Injury, avoid prolonged repetitive movements, rest when becoming fatigued and, when possible, alternate job functions with other people. Avoid awkward reaching for items.

Japan

同梱の電源コードは当該製品専用です。

Label locations (Models 942 and 943)

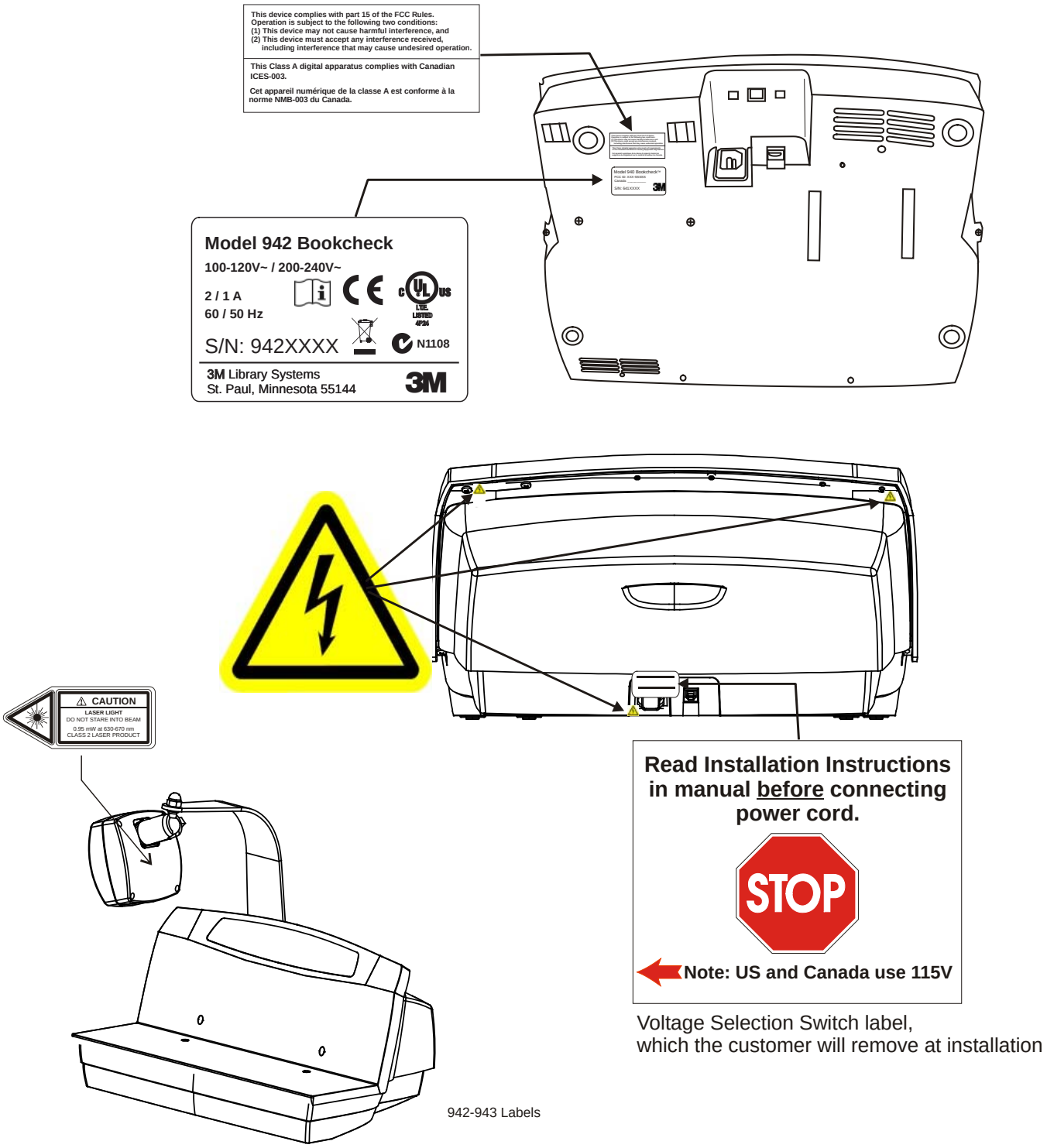
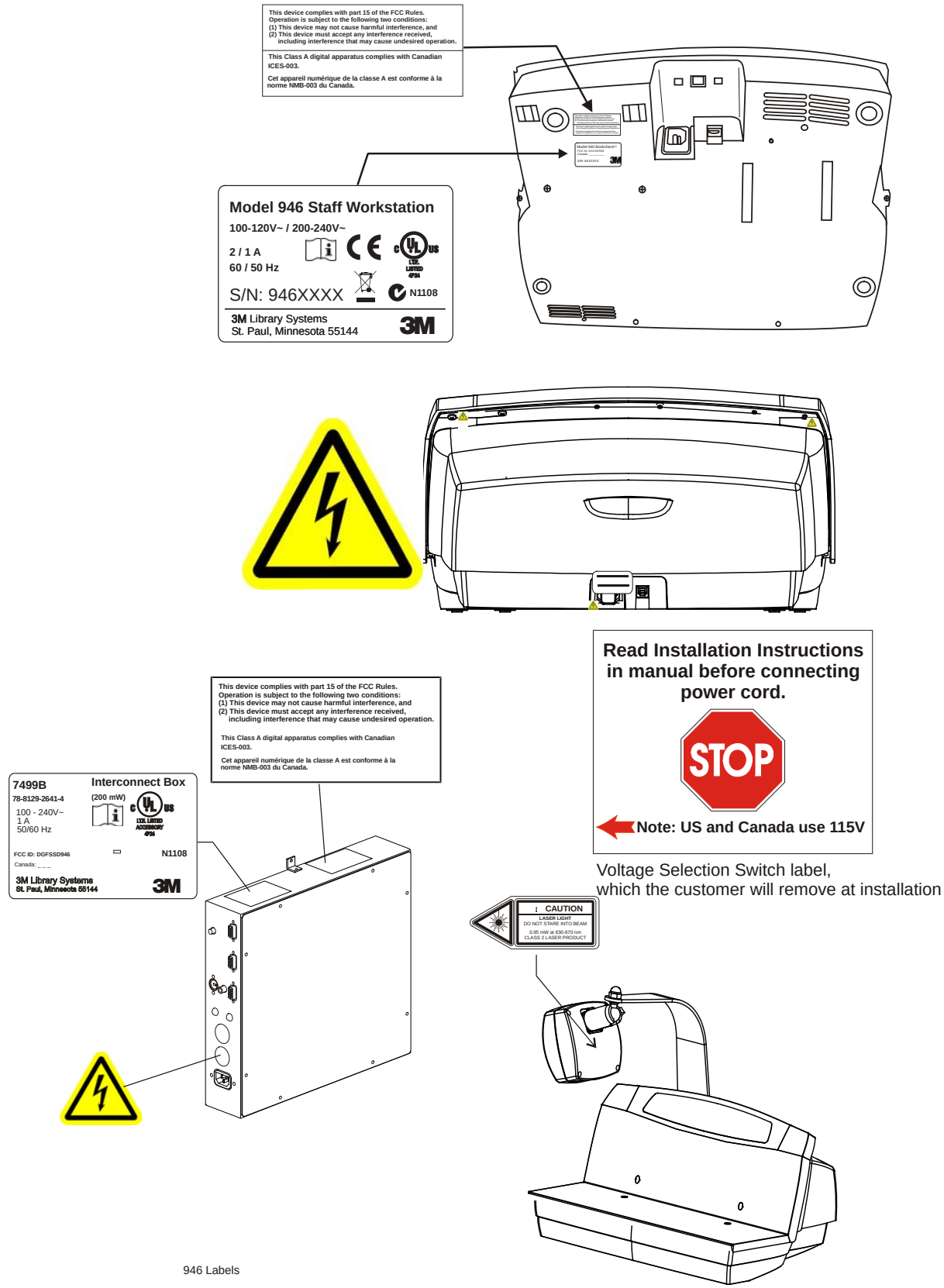


Figure 1 Label locations (Models 942 and 943)

Label locations (Model 946)



Voltage Selection Switch label, which the customer will remove at installation

946 Labels

Figure 2 Model 946 label locations

EMC compliance — USA and Canada

FCC radio frequency rules and regulations

This equipment has been tested and found to comply with the limits for a Class A 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 emit radiated 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 their own expense.

NO MODIFICATIONS. Modifications to this device shall not be made without the written consent of The 3M Company. Unauthorized modifications may void the authority granted under Federal Communications Commission Rules permitting the operation of this device.

FCC intentional radiator certification (Model 946 only)

FCC ID: DGFSSD946

This equipment contains an intentional radiator approved by the FCC under the FCC ID number shown above. 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.

Industry Canada radio frequency rules and regulations

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

ICES-003

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

NMB-003

Canada IC: 458A-TTS946

This device contains an intentional radiator. Operation is subject to the following two conditions: (1) this device may cause harmful interference, and (2) this device must accept any interference, including interference that may cause undesired operation.

Introduction

About the unit

The 3M™ Bookcheck Unit Model 940 Series and Staff Workstation Model 946 sensitize and desensitize the 3M™ Tattle-Tape™ Security Strips that secure a library's materials. These units can be placed on a counter top or embedded in a desk, enabling efficient processing of library materials.

Models

The sleek, durable Model 942 is a standalone Bookcheck unit that safely desensitizes and resensitizes security strips on print materials, CDs and DVDs. The Model 943 consists of this same Bookcheck unit but adds a state-of-the-art barcode scanner that communicates with the unit's software and the integrated library system (ILS). The Staff Workstation Model 946 adds RFID capabilities.

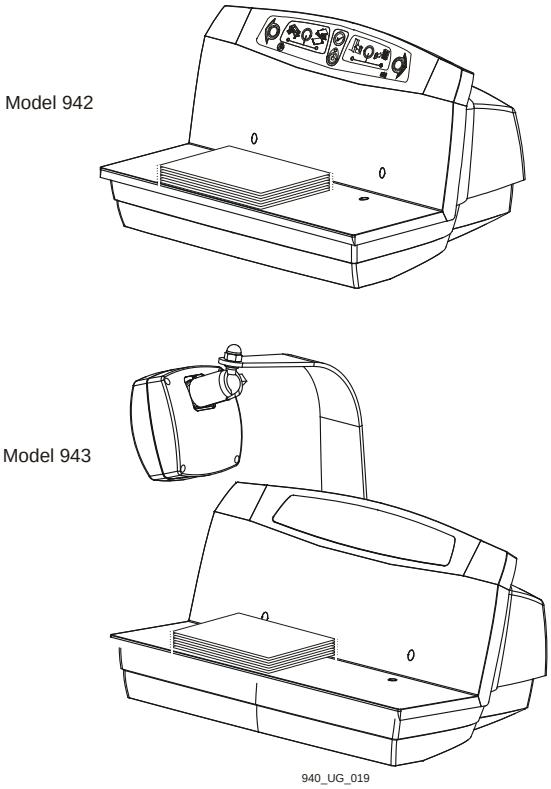


Figure 3 Bookcheck Model 940 Series

Model 943 and Model 946 software

For Model 943 and Model 946 users, the Staff Workstation software integrates and streamlines the various tasks required to check library materials in and out while increasing the reliability of this process.

The software provides an interface between the scanner and the integrated library system (ILS), automates the identification of missing and out-of-circulation items, and provides error checking mechanisms that reduce barcode reading errors. For more information on the software, see the related administrator's guide and staff guide.

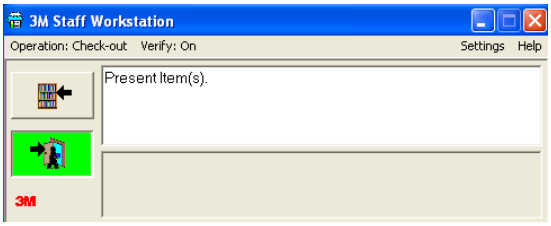


Figure 4 Staff Workstation software

Features

Key features include the following:

- Efficient check-in and checkout of materials by library staff
- Selectable processing flow, from right-to-left or left-to-right
- Audible feedback, a "thump" that informs the staff that a check-in or checkout operation is complete
- Security status verification, a light that tells the staff when the unit detects a sensitized strip
- Easy to use indicators and buttons

Environmental specifications

Humidity	0% to 85% RH, non-condensing
Operating temperature	50° F to 104° F (10° C to 40° C)
Storage temperature	−40° F to 131° F (−40° C to 55° C)

Electrical specifications

100 to 120 VAC, 2.0 A, 50/60 Hz, single phase or
200 to 240 VAC, 1.0 A, 50/60 Hz, single phase

Dimensions and weight

Dimensions	Length: 16.4 in. (416.1 mm) Height: 8.9 in. (226.8 mm) Depth: 12.9 in. (327.4 mm)
Weight	24 lb (10.9 kg)

Scanner specifications (Models 943 and 946)

Dimensions	2.59 in. × 1.38 in. × 3.47 in. 6.58 cm × 3.51 cm × 8.81 cm
Weight	7.5 oz 213 g
Electrical	24 VDC, 300 mA

Cable lengths (Models 943 and 946)

Serial cable (computer connection to the scanner)	6.5 feet (2 meters)
USB cable (computer connection to the unit)	6.5 feet (2 meters)
RF cable	6 feet (1.83 meters)

Stability requirements

Do not place these units on furniture that does not meet Underwriters Laboratories Inc. standards for stability. Ensure that the furniture meets the following UL standards:

- 60950 (North America)
- EN60950 (Europe).
- IEC 60950 (Countries outside North America and Europe)

Magnetic media warning

These units are not intended for magnetic media and can be harmful to the data on audiotapes, videotapes, credit cards, and computer disks.

Be sure to place the unit in magnetic media mode when you process magnetic media near the unit. This includes times when you process magnetic media with the scanner included with Model 943 and Model 946 units.

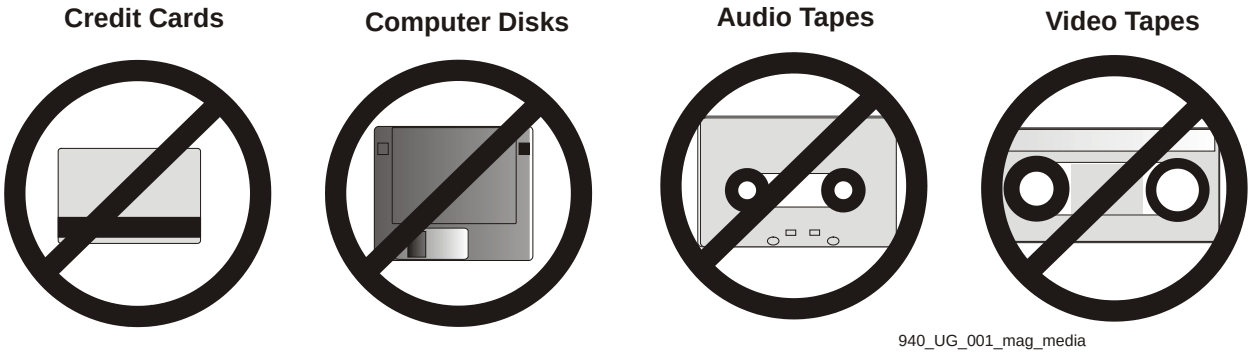


Figure 5 Magnetic media warning

Voltage selection warning

Slide the voltage selector switch on the unit to the correct voltage setting (115V or 240V).

The unit ships from the factory set to 240V.

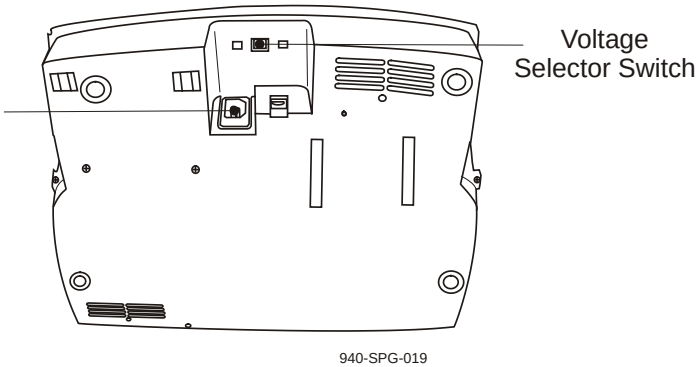


Figure 6 Voltage selection warning

Overview

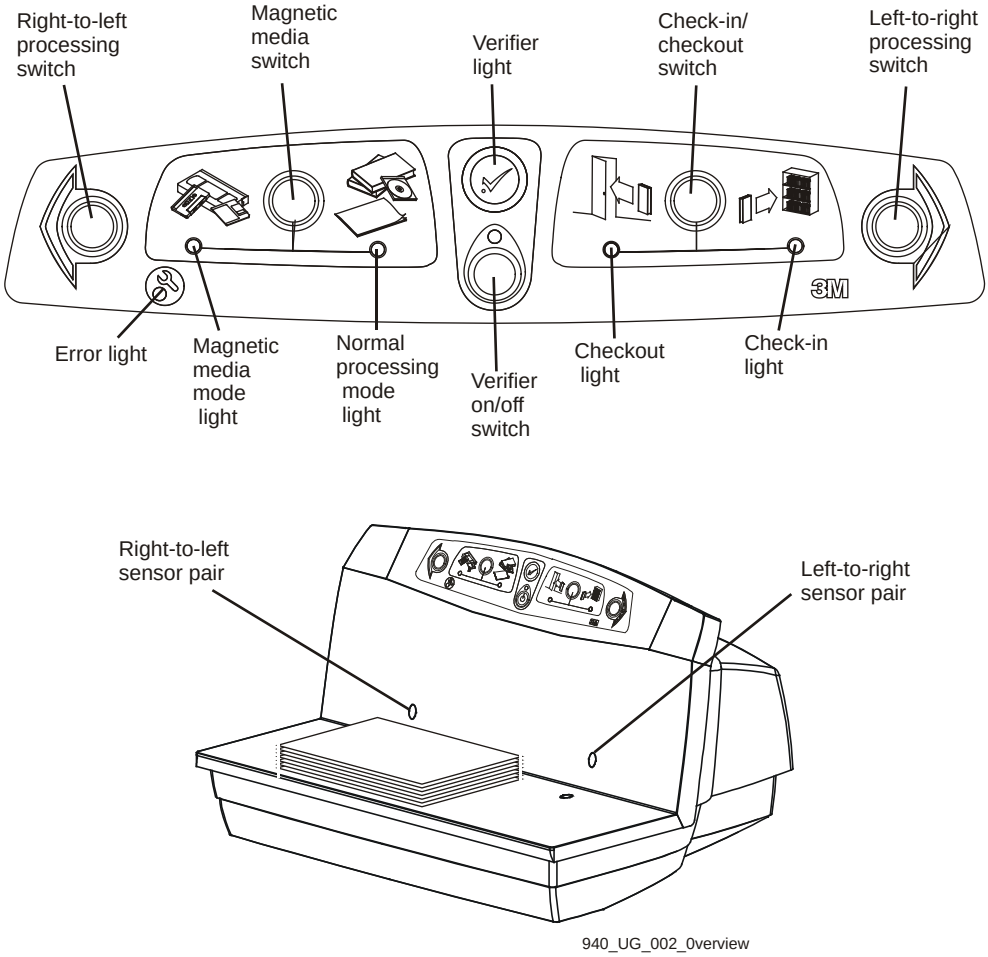


Figure 7 Overview of the interface

About magnetic media mode

When in magnetic media mode, the unit's magnetic field is off to protect magnetic media, which can be damaged when exposed to magnetic fields. Make sure that magnetic media mode is off and normal processing mode on when you want to check non-magnetic items in and out.

About the verifier

When enabled, the verifier light turns on when the unit detects a sensitized strip.

Using the hardware interface

Processing items

This procedure describes how to check items in and out. Do NOT use it to process magnetic media, such as video and audio tapes.

1 Set the unit's processing direction by pressing the right-to-left or left-to-right switch.

2 Make sure that the unit is in normal processing mode by ensuring that the normal processing mode light is on and pressing the magnetic media switch if it is not.

The unit cannot change the status of security strips in magnetic media mode.

3 Ensure that the unit is set for the correct type of processing (check-in or checkout) with the Check-in/Checkout switch.

4 Lay the library item over the active sensors, with the security strip as close to the back of the unit as possible. (Lay books with the spine against the back.)

The unit emits a thump, indicating that the strip has been sensitized (check-in) or desensitized (checkout).

5 To verify the status of the strip to ensure that processing was successful, do the following:

a If the verifier mode light is not on, press the verifier switch.

b Move the item left-to-right or right-to-left a few inches while watching the verifier light. If the light turns on, it means the unit has detected a sensitized strip (security on).

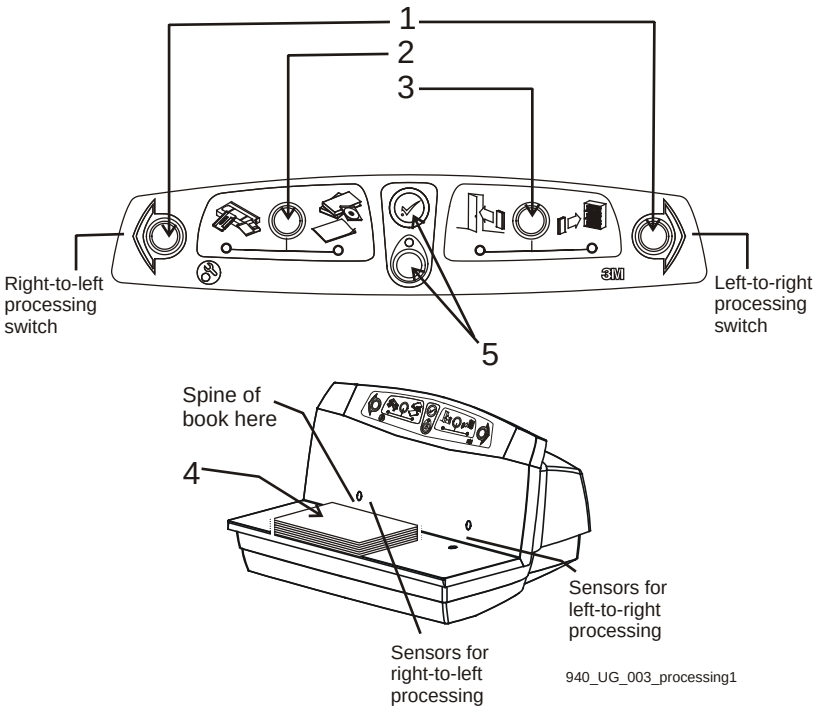
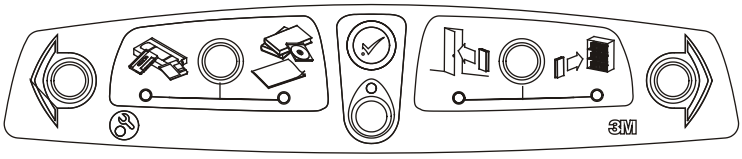


Figure 8 Processing an item

Turning off the verifier

This topic describes how to turn off the verifier.

If the verifier mode light is lit, press the button to turn off the function.



1

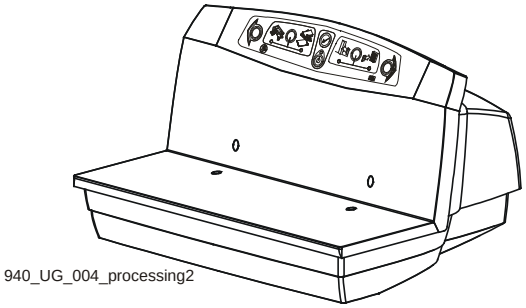


Figure 9 Turning off item security verifier

Troubleshooting

Most troubleshooting tasks must be completed by trained technicians. This section, however, provides a few troubleshooting procedures you should try to correct problems yourself.

Problem	Solution
Error light flashes at startup	• Check for an item covering the active sensors or dirty or scratched sensors. • To clean the sensors, use a soft, damp (not wet) cloth. Do not use cleaning chemicals of any kind.
Error light is solid red	• Check the voltage selection switch to ensure that the unit is set for the correct voltage. If that doesn't help, call 3M technical support.
Unit does not thump although the error light is not on.	• Ensure that the unit is not in magnetic media mode. • Ensure that the library item is covering the active sensors (not the inactive ones).
None of the lights turn on when power is supplied to the unit.	• Call 3M technical support.
Bookcheck Model 942 only **Error light repeatedly cycles through blinking twice, then pausing in the off position** **System does not thump**	• The external AC voltage detected is below the expected range. • This problem will probably clear or reset after a few seconds. • If the problem persists, the library will need to contact an electrician to address the problem.
Bookcheck Model 943 and Staff Workstation Model 946 **Error light stays on at startup** **System does not thump** **The workstation software displays error message "Bookcheck is not working (SCB: Coil Coil 0x80)**	• The external AC voltage detected is below the expected range. • This problem will probably clear or reset after a few seconds. • If the problem persists, the library will need to contact an electrician to address the problem.

Calling 3M Service

If you determine that the unit is not operating properly, call the appropriate service number listed below:

3M Service phone numbers

In the United States	In Canada	In other countries
1-800-328-0067	English 1-800-268-6235 Français 1-800-567-3193	Call your local 3M office.

System information

When you call, please provide the system model number and serial number located on the bottom of the unit.

Model number: _____

Serial number: _____