# 3M<sup>™</sup> Intelligent Return and Sorter System

**Owner's Manual** 





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3M<sup>™</sup> Intelligent Return and Sorter System Owner's Manual 78-8129-3605–8 Preliminary 3M and Tattle-Tape are trademarks of 3M.



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## Safety information

The 3M<sup>TM</sup> Intelligent Return and Sorter System is a complex machine requiring strict observance of relevant safety rules and guidelines. Before working with the machine, ensure that you are familiar with the machine and its operating parts, and with the specific safety instructions included in this manual.

- This manual describes potential hazards you may encounter during operation of this product, but we cannot predict all possible hazards. Safety messages included in this manual may not represent an exhaustive list, and the guidelines included in this manual should be applied using your judgment and experience.
- Prior to using this equipment, read and observe all safety information and instructions included in this manual.
- If you are unsure about any of the potential hazards discussed, contact your supervisor immediately.

Read, understand, and follow all safety information contained in these instructions before using your 3M<sup>TM</sup> Intelligent Return and Sorter System. Retain these instructions for future reference.

### Intended use

The 3M<sup>TM</sup> Intelligent Return and Sorter System consists of modular components. Capabilities include guided check-in and return of library materials and automatic item sortation when library patrons return materials unassisted by staff.

The system is designed to be mounted into an interior or exterior wall. The 3M<sup>TM</sup> Intelligent Return and Sorter System is designed for an indoor library environment and has not been evaluated for other locations or uses.

## **Explanation of signal word consequences**

<b>⚠</b> WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
<b>⚠</b> 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 labels**



Attention: Read accompanying documentation



Risk of electric shock



Hand entrapment risk



#### Guard removal warning

BACKLIGHT CONTAINS MERCURY, DISPOSE ACCORDING TO LOCAL, STATE, AND FEDERAL LAWS

Display unit: Mercury disposal hazard



Laser Scanner: Laser Exposure

## **Warnings**

**To reduce the risks listed in this document**: Read, understand, follow and retain for future reference all safety statements in the service and user documentation, as applicable, prior to use of the system.

### To reduce the risks associated with fire and hazardous voltage:

- Ensure that each Intelligent Return and Sorter System modular design is approved by 3M Library Systems Technical Service, St. Paul, MN, USA.
- Ensure that the system is installed per the Field Service Handbook by 3M authorized service providers only.

### To reduce the risks associated with hazardous voltage:

- After installation, ensure that ground continuity of each component in the system is checked prior to start up.
- Always turn off all system power and disconnect all power cords prior to performing any service or maintenance on this system.

### **Cautions**

To reduce the risks associated with exposure to eye injury: Always wear safety glasses while installing or servicing any part of the system.

#### To reduce the risk associated with sorter sweep unit pinch points/entanglement:

- Keep all bystanders and children out of the system sorter work area.
- Never reach hands or allow hair or loose clothing inside the sorter sweep unit while the system is running.

To reduce the risks associated with handling system components during installation: Always follow safe handling procedures when handling system components during installation.

To reduce the risks associated with falling/impact: Do not lean on any top edge of a partially loaded book bin.

To reduce the risks associated with environmental contamination: Dispose of all system components in accordance with all applicable regulations.

## **Label locations**

Figure 1 Induction System Model 28xx label locations

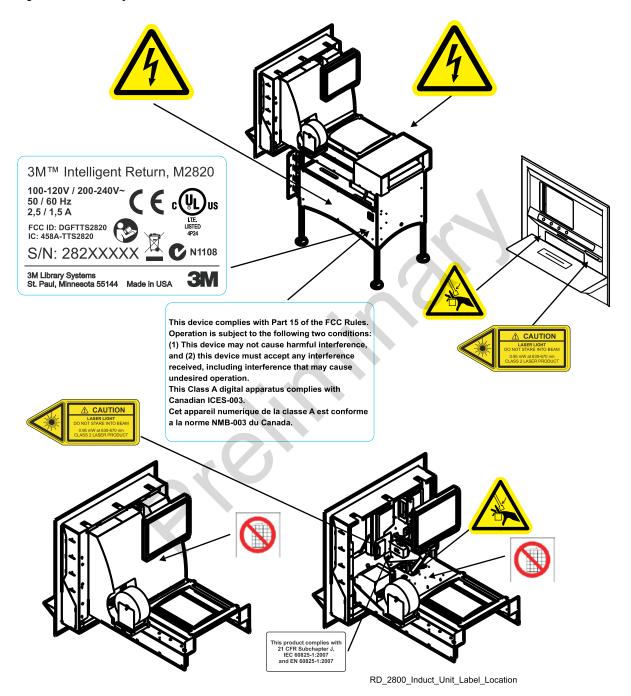
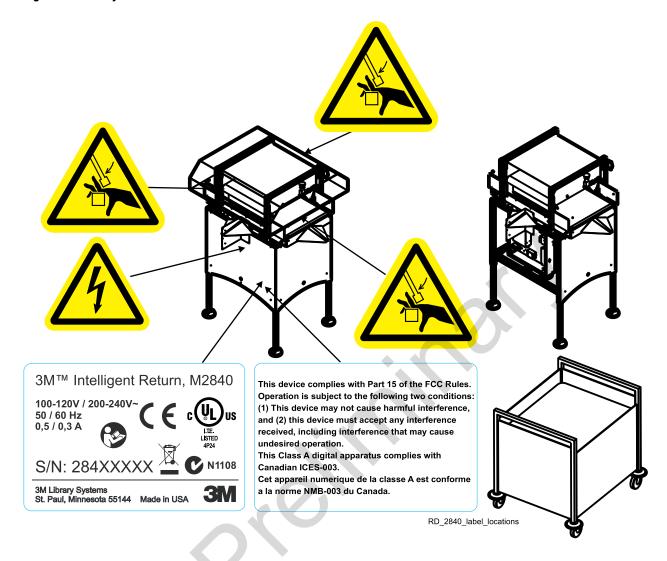


Figure 2 Sorter System Model 2840 label locations



## Regulatory compliance

## **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 his own expense.

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

### FCC intentional radiator certification

FCC ID: DGFTTS2820

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 complies with Canadian ICES-003.

Cet appareil numerique de la classe A est conforme a la norme NMB-003 du Canada.

IC: 458A-TTS2820

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

### **EMC** compliance Europe

This equipment meets the requirements of the RTTE and EMC directives.

### **CE Conformity**

This equipment has been developed and constructed in conformance with the current CE regulations and guidelines:

2006/42/EC Machine Directive

2006/95/EC Low Voltage Directive

2004/108/EC EMC Directive 1999/5/EC R&TTE Directive

### **Environmental instructions**

This equipment consists of 100% of recyclable materials. The recycling of those materials should be carried out by professional service companies. All individual components can be easily separated for an efficient recycling process.

Please consider the local requirements for recycling materials.

## Noise levels (machinery directive)

The equivalent continuous A-weighted sound pressure from the machine is lower than 70 dB(A). Measurements were obtained with the machine running in full load conditions, with all belts running. Normal operation will never have all belts running. All measurements were taken at 1 meter distance, measured from all sides of the machine at a height of 1.6 meters.

## Introduction

## System overview

The 3M<sup>TM</sup> Intelligent Return and Sorter System enables library patrons to return items unassisted by library staff. The system communicates with your ILS to perform check-in procedures that would otherwise be performed by a librarian, and can be configured to sort returned materials based on information provided by the circulation system. An offline mode is used when the library's automated circulation system is unavailable, and communications are supported over the library's local area network (LAN) using 3M Standard Interface Protocol (SIP) 2.0 with extensions for sortation.

The system can be configured to use one or two radio-frequency identification (RFID) readers to identify RFID-tagged items being checked into the library. With the optional barcode scanner, the system can also be configured to use barcode information with or without RFID. The system sends item information to the library's circulation system to perform an immediate check-in transaction, secures the item's RFID tag or  $3M^{TM}$  Tattle-Tape<sup>TM</sup> Security Strip (EM), and then sorts the item to the proper location.

3M systems can read most barcode formats used by libraries around the world. The Intelligent Return and Sorter System barcode scanner can be configured to read several different barcode formats at one time. The system supports 18 different barcode formats, which can be configured to enable the system to read your library barcodes.

The 3M<sup>TM</sup> Intelligent Return and Sorter System is a modular system. Modular components described in this manual include:

- Induction System Model 2822 This system is designed specifically for installation in an exterior wall, enabling patrons to check-in and return library items from outside the library building.
- Induction System Model 2820 This system is designed specifically for installation in an interior wall, enabling patrons to check-in and return library items, unassisted by staff, inside the library building.
- Sorter System Model 2840 (SL) This sorter system is an optional unit that enables unassisted 3-way sorting of returned items.
- Standard Bin Model 2899 This four-wheel sort bin is equipped with a spring-supported floor that reduces the distance between the sorter conveyor and the bin floor, reducing excess wear on library items.

This *Owner's Manual* contains safety information, machine specifications, commonly used procedures, and other information useful in the day-to-day operations of library staff.

Please take time to read this manual. It will help you understand how your system works. Keep it accessible when the system is in use. It will serve as a reference guide when questions arise.

## Introducing the system to library staff and patrons

The introduction of a self-service system fundamentally changes the material flow within the library. Therefore, 3M strongly recommends that all library personnel be involved during the preparation phase. 3M recommends using this guide for periodic training sessions with library staff.

Although the system is designed for intuitive use, 3M recommends that your staff should be prepared to assist library patrons during system introduction.



## **Specifications**

## **Environmental requirements**

### Indoor environmental requirements

Temperature	50° F to 104° F [10° C to 40° C]
Humidity	20% to 60% relative humidity (non-condensing)

**Note:** If the sun shines directly on the monitor screen of an exterior wall unit (Model 2822), patrons may have difficulty reading the screen. To prevent this, the library may have to take steps to shade the screen.

## **Electrical requirements**

The structure that houses the Intelligent Return and Sorter System must meet the following electrical requirements.

Component	Specification
Induction System Model 2820 (Intelligent Return Plus, interior wall mount)	These models require the following:
	Noise-free and reliable power
Induction System Model 2822 (Intelligent Return Plus, exterior wall mount)	A dedicated power source located on the same wall as the opening for the unit
	An outlet within 6 feet [1.82 m] of the unit
	A second outlet for the staff monitor
	Service that conforms to the following specifications:
	- 100-120 VAC, 1-phase, 60 Hz, 2.5 amps
	<ul> <li>200–240 VAC, 1–phase, 50Hz, 1.5 amps</li> </ul>
	- 15–20 Amp line
Sorter System Model 2840 (SL)	The Model 2840 requires the following:
	An outlet within 6 feet [1.82 m] of the unit
	Service that conforms to the following specifications:
	- 100-120 VAC, 1-phase, 60 Hz, 0.5 amps
	- 200–240 VAC, 1–phase, 50Hz, 0.3 amps

## **Network requirements**

The Intelligent Return and Sorter System communicates with the circulation system over a wired Ethernet connection. The Ethernet cable must:

- Meet as a minimum the Cat 5e standard and be terminated with an RJ45 modular plug
- Be long enough to extend from the jack to the induction system with at least two feet (61 cm) of slack
- · Be routed away from all traffic areas

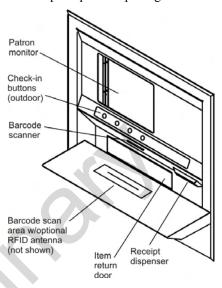
## System components

## Induction system patron interface

Intelligent Return and Sorter System patron interfaces include all the tools needed to check-in and return items unassisted by library staff:

- The Induction System Model 2822 (exterior wall unit) includes a color monitor mounted behind a transparent protective shield. A panel of four check-in pushbuttons is mounted directly below the monitor for patron interaction with the system.
- The Induction System Model 2820 (interior wall unit) includes a touchscreen color monitor. Four onscreen check-in buttons enable patrons to interact with the system.
- The barcode scanner is mounted directly behind the patron monitor, enabling patrons to scan items on the front shelf scan area.
- The antenna for an optional front shelf RFID reader also is located in the barcode scan area, enabling both barcode scanning and RFID recognition on the front shelf. (The standard internal RFID antenna is located under the induction system conveyor belt.) This capability is especially useful when converting from barcode to RFID technology.
- The motor-driven item return door opens to receive items, then closes and locks when the check-in process is complete.

• The receipt printer is located directly behind the faceplate, and printed receipts are presented to patrons through the receipt dispenser opening.



### **A** CAUTION

To reduce the risks associated with exposure to laser light due to a person looking into the laser scanner:

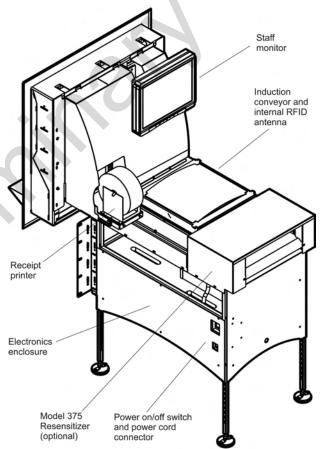
- Do not look directly into laser scanner device.
- At the end of service life, dispose of laser scanner in accordance with applicable government regulations.

## Induction system components

The Intelligent Return induction system is equipped to perform all system functions except for sortation of checked-in items. Primary components are described below:

- The staff monitor is a standard LCD color monitor mounted on the vertical induction unit cover. When connected to the system computer and used with a mouse and keyboard, this monitor is used by staff to configure, monitor, and control the system.
- When activated, the induction conveyor carries a checked-in item from the scanning area on the front shelf into the induction system. The item then travels over the internal RFID antenna, through the optional 3M Tunnel Resensitizer Model 375, if used, and into a book bin or sortation system.
- Mounted below the induction system conveyor belt, the internal RFID antenna communicates with radio-frequency identification (RFID) tags attached to library items. Tags are encoded with item identifiers using a 3M Staff Workstation or Conversion Station, and this information is used by the Intelligent Return system to check-in items.
- The power on/off switch and power cord connector are mounted on a side panel of the induction system electronics enclosure. The switch controls power to all components except for the staff monitor and optional sorter.
- When an item with a desensitized 3M Tattle-Tape<sup>TM</sup>
   Security Strip attached passes through the optional 3M
   Tunnel Resensitizer Model 375 on the conveyor, the item
   will automatically be resensitized.
- The induction system electronics enclosure houses all primary control components:
  - The system computer is a personal computer that contains all system software, and is used to configure and control all check-in and sortation functions. The system computer is connected to a keyboard, mouse, and the staff monitor.

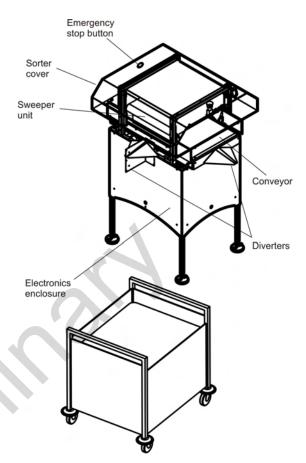
- The network interface card is installed in the system computer mounted in the induction system. This card is used to connect the system to the library's automated circulation system via the library's local area network (LAN).
- An interconnect box installed in the induction system electronics enclosure contains an RFID reader for the standard antenna installed below the conveyor belt, as well as power supplies for various components. A separate RFID reader for the optional front shelf RFID antenna is also located in the electronics enclosure.
- The check-in receipt printer is a thermal printer that does not require toner or ribbons, but does require a specific type of paper. The appearance of check-in receipts can be customized by your system administrator to specifically suit your library.



## Sorter system components

The Sorter System Model 2840 (SL) includes all the tools needed to sort checked-in items unassisted by library staff. Up to three Standard Bins Model 2899 can be docked next to the sorter for automatic sortation of checked-in items.

- A red Emergency Stop button is mounted on the sorter cover. Pressing this button will immediately stop all processes in both the induction system and sorter.
- The sorter cover is completely transparent, providing both protection and a clear view of the sortation process.
- The sorter conveyor can be configured to operate in sync with the induction system conveyor, providing a fully automated process.
- The sweeper unit is positioned perpendicular to the conveyor, and two sweepers attached to the belt push checked-in items into the appropriate book bins (to the left or right). A third bin collects items from the end of the conveyor.
- A diverter between the conveyor and each book bin spreads items evenly in the bins.
- Sorter system electronics are located in the electronics enclosure beneath the conveyor.
- Sorter System Model 2840 power is independent from the induction system, requiring its own power cable connection to a power outlet.
- Up to three easily transportable book bins (Model 2899)
  can be simultaneously docked at the sorter. Library items
  are not subjected to excess wear since each bin is equipped
  with a spring-supported floor that greatly reduces the
  distance between the conveyor and the bin floor.



### **⚠** CAUTION

To reduce the risks associated with handling heavy system components:

· Always follow safe handling procedures when moving loaded rolling book bins.

To reduce the risks associated with falling/impact:

Do not lean on any top edge of a partially loaded rolling book bin.

### $oldsymbol{\Lambda}$ caution

To reduce the risk associated with environmental contamination due to the incorrect disposal of the lithium battery in the PC, mercury in monitor/display, and/or any circuitry that contains lead in the solder:

• At the end of service life, dispose of common box, appliance coupler, PC, monitor, and laser scanner in accordance with applicable government regulations.

## Operating guidelines

## System startup

- 1. Plug in or turn on power to the staff monitor.
- 2. If a sorter is used, power on the sorter system.
- Move the power on/off switch located on the printer-side of the induction system electronics enclosure to the ON position. The computer operating system will start first, followed by system software.
- 4. When the software has loaded, follow instructions on the screen.

## Normal system shutdown

- 1. Before you start to shut down the system, make sure that no items are being processed by the system.
- 2. Scan the Barcode/RFID Admin Card, then go to the Administration screen and select Shutdown.
- 3. Wait until the monitors goes dark, then remove power from the staff monitor.
- 4. Use the induction system power on/off switch to remove power from the induction system.
- 5. Remove power from the sorter system.

## **Emergency stop and clearing jammed items**

1. In case of an emergency (jammed items, various system alarms, electrical problems, etc.), press the red **Emergency Stop** button mounted on the sorter cover. The button will lock in the *down* position and all processes in both the induction and sorter systems will immediately stop.

Note: Be sure to leave the Emergency Stop button locked in the *down* position for at least five (5) seconds before you proceed to Step 2.

2. To return the system to service, turn the **Emergency Stop** button clockwise until it unlocks and resets (moves back into the *up* position).

## **Barcode defaults and options**

The system identifies items by reading barcodes and/or RFID tags. Several barcode formats exist, and the following barcode formats are installed on the system by default:

- Codabar
- Code 39
- Plessey
- Telepen Numeric
- Code 128
- · Straight2of5
- UPCA12

**Note:** Other barcode formats are available for use with the system. If your library requires barcode formats that are not listed, your system administrator can install them using 3M Intelligent Return System Manager software.

## **General maintenance**

## Replacing printer paper

When printer paper runs out, use the following procedure to install a new roll of paper:

- 1. Turn induction system power OFF.
- If necessary, remove any covers or components obstructing access to the printer assembly.
- 3. Locate two pins (approx. 5 in. long each) mounted near the base of the outside paper holder. They are connected by a 0.75 in. long spring.
- 4. Gently lift up the upper pin until the outside paper holder disconnects from the paper spindle.
- Open the printer by moving the release lever 0.25 in. clockwise.
- 6. Remove any paper in the printer and then remove the old paper core from the spindle.

- 7. Install the new paper roll on the spindle so the paper will unwind from the top, then reconnect the outside paper holder.
- 8. Thread the front edge of the paper under the tension bar and then insert it approx. 3 in. into the printer.
- 9. Close the printer.
- 10. Replace any covers or components removed in Step 2.
- 11. Power on the induction system and run test prints before returning the system to service.

## Ordering printer paper

Refer to the following information when ordering printer paper (see 3M Service for telephone numbers).

Part number	78-8129-3689-2
Width	3.15 inches [80 mm]
Diameter	8.0 inches [100 mm]

## **Cleaning system monitors**

Use pre-moistened towelettes that are sold specifically for monitor cleaning. If these are not available, you can use a non-solvent based cleaner to dampen a soft cloth, but use it very sparingly.

## **Cleaning outdoor components**

Use only approved cleaning products for faceplate components (metal, plastic, glass) exposed to outdoor environments.

## Cleaning component exteriors

System components can become dirty with normal use and may require cleaning. To clean component exteriors, dampen a soft cloth with water or a mild cleaning solution and gently wipe away dirt from the affected areas.



## Solving problems

Use the following procedures to perform basic troubleshooting on the 3M Intelligent Return and Sorter System:

## System not responding

Possible cause	Solutions
No AC power.	Make sure that the power switch is on.
	If the outlet is dead, have a qualified technician check the circuit breaker or fuse box.
There is a computer problem with the system.	Call 3M Technical Support or your local 3M office.

## Tag scanning/reading problems

If you know that a scanner or reader is functioning properly but an item is not accepted by the system, reasons can include:

- The tag is unreadable (worn, dirty, etc.)
- The item barcode or RFID information is not known by the library circulation system.
- The item is defined as a set but is incomplete.

## **Printer problems**

If the printer is not printing receipts, make sure that the printer is receiving power and that printer paper is loaded and properly aligned.

- · Verify that the printer has paper.
- Verify that the paper is properly installed. The paper must be installed with the thermal side up and threaded from the top of the roll.
- · Verify that the printer is installed in Windows/Settings/Printer and Faxes.
- · Verify that the correct printer is selected.
- Verify that the printer cable and power plugs are connected.
- Try printing a test page from Windows.

## Login and communication problems

Problems encountered during the login process can be caused by changes to the host computer installation setup and circulation system changes.

### Unable to login to the host computer

3M Software Support may ask you to monitor the login process to determine if the Intelligent Return and Sorter System is attempting to login to the host.

To set up session logging:

- 1. On the 3M Intelligent Return System Manager **Support** tab, click the **Log Level** box and then click the requested log level (**All** preferred).
- 2. Click Set Level, and then restart the system.

### Communications checklist

- Verify that the data cable is properly connected to the system network connector.
- Verify that the host is operating properly and is capable of accepting a connection from the system.
- If a terminal server is used, verify that it is running and is capable of accepting a connection from the system.
- · Check to see if any network passwords have changed.
- Check to see if the path or any other accesses to the network or the host have changed.
- Check whether the system was improperly turned off or otherwise disconnected from the host without properly logging
  off the system. This could leave the host connection active, which would prevent the system from logging in until the
  port is reset.
- Check whether the host port needs to be reset to allow a connection from the system.
- Check whether the system gets disconnected from the host without anyone initiating the log off process. The host computer may be dropping the connection.

## Warranty

*Effective 12-12-05* 

One Year Library Systems Product Performance Guarantee: Subject to the Limitation of Liability below, 3M guarantees your satisfaction with the performance of any 3M Library System Product for 12 months from the date of installation provided that a) you are the original purchaser: b) you have executed a one (1) year 3M Service Agreement for maintenance of the Library System product; and c) the product has not been subjected to abuse, misuse, accident or neglect. Performance means the product meets 3M published product specifications. If you are not completely satisfied with the performance of your Library System Product, you may return the Library System product for a prompt refund. 3M will pay all reasonable de-installation and shipping charges to return the product to 3M. Note that all claims under this guarantee must be submitted to 3M within 12 months from the date of installation of the 3M Library Systems Product. Failure to submit a claim within this time frame will invalidate this guarantee. IMPORTANT: Consumables and non-3M branded products are excluded from this Guarantee.

Warranty and Limited Remedy for Non-Software Library Systems Products Not Covered by Performance Guarantee: Unless stated otherwise in 3M product literature or packaging, 3M warrants that each 3M Library Systems Product meets the applicable specifications for a period of ninety (90) days from the date of shipment (or, in the case of hardware installed by 3M, from the date of installation). Any warranties related to 3M software are contained in separate 3M software licenses. Consumables and non-3M branded products are excluded from this Warranty and Limited Remedy.

3M MAKES NO OTHER GUARANTEES, WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. You are responsible for determining whether the 3M product is fit for a particular purpose and suitable for your application. If the 3M product is defective within the warranty period and provided that a) the product has not been subjected to abuse, misuse, accident or neglect and b) you have notified 3M within thirty (30) days after the defect was discovered, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace or repair the defective 3M product.

Limitation of Liability: EXCEPT WHERE PROHIBITED BY LAW, 3M AND SELLER WILL NOT BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM 3M LIBRARY SYSTEMS, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL, REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING WARRANTY, CONTRACT, NEGLIGENCE OR STRICT LIABILITY.

Guarantee and Warranty Claims: For guarantee and warranty claims, and for service, contact our service representatives at 1-800-328-0067

Track and Trace Solutions
3M Center Building 225-4N-14
St. Paul, MN 55144-1000

Ver121205



## **Declaration of Conformity**

```
Form 37097 - B - PWO
                                              Declaration of Conformity
The Company Name
 3M Company
The Company Address
                                                3M Center, St. Paul, Minnesota 55144 USA
              Declares that the product(s):
Product Name and/or Model Number(s)
Intelligent Book Return System
Type and/or Description
The 3M Intelligent Book Return System is designed and tested for use in automating the process of returning books in
libraries. System consists of models 2820 Induction Unit and model 2840 Sorting Unit
             Conform(s) to the following specifications:
Directives
2006/95/EC
                  Low Voltage Directive
2006/42/EC
                  Machinery Directive
2004/108/EC
                  EMC Directive
 99/5/EC
                  RTTE Directive
1999/519/EEC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)
                  Waste Electrical and Electronic Equipment (WEEE) Directive
2002/96/EC
2002/95/EC
                  Restriction of Hazardous Substances (RoHS) Directive
Year in which CE mark first affixed
2009
Standards
Safety:
IEC/EN 60950-1
                                     Information Technology Equipment - Safety
Safety of Machinery - Electrical Equipment of Machines
Safety of Machinery - Basic Concepts and Technical Principles
Risk Assessment Principles
   EN 60204-1:2006
   ISO/EN 12100-1/2:2001
   ISO/EN 14121-1:2001
   EN 50371:2002
                                     Human Exposure to Low Power Electronic and Electrical Apparatus
EMC:
   ETSI EN 300 330-2, V1.3.1 (2006-04)
ETSI EN 301 489-3, -1 V1.4.1 (2002-08)
IEC/EN 55022:2006 Radiated/Conducted Emissions
IEC EN 55024:2003 ITE Immunity
      61000-4-2 ESD
61000-4-3 Radiated Immunity
61000-4-4 EFT
61000-4-5 Surge
      61000-4-6 Conducted Immunity
   61000-4-11 Voltage Dips and Interruptions
IEC/EN 61000-3-2:2005 Harmonics
IEC/EN 61000-3-3:2005 Flicker
```

Quality System

Manufacturer qualified based on ISO9001:2000



## **3M Service**

## Information to gather

Before you call for service, please have following information available:

- · The name, address, and telephone number of your facility
- · A description of the problem or the issue you want addressed
- The model number and serial number of the equipment (located on the serial label), if the call is in regard to a system problem

Model Number	 
Serial Number	

## 3M Service phone numbers

For questions regarding your system, call one of the following 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.

## **3M Library Systems Web Site**

The 3M Library Systems Web site can be located at http://www.3M.com/library.

For additional information in the United States about 3M Library Systems, go to http://www.3M.com/us/library.

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