Now your security system can make a statement and blend seamlessly with your library's décor. Designed for use with 3M™ Tattle-Tape™ Security Strips, the Detection System offers you the performance you need and security you can count on to protect your library items from loss. Along with a built-in red LED alarm light and a low frequency signal to minimize separation needed between the detection system and nearby metal objects, it also features an audible alarm and is completely safe for all magnetic media. This unit provides the flexibility to keep up with the changing look of your library without replacing your security system.

The 3M Electromagnetic system has several features libraries find valuable. These include:

- **ISO Compliance.** Our system complies with ISO standards 18000-3, Mode 1, and 15693-3, which provide for interoperability between RFID tags and readers. 3M also intends to implement the ISO tag data format standard when one is approved. Recently, we introduced the 3M Tag Data Manager. This allows users to read existing and future Library ISO-Compliant RFID tag data formats.

- **Underwriters Laboratory Certification.** Products that comprise the 3M Electromagnetic and RFID system are certified at the product level by Underwriters Laboratory. This can help you comply with local building and fire safety laws and provides assurance that you have a safe environment for patrons and staff. Our UL file number is E166068 and you can review our certificate at [http://www.ul.com](http://www.ul.com).

- **ADA Compliance.** 3M strives to design all of its Library Systems products so that they comply with ADA standards. However, how a product is installed can also impact ADA compliance. This is why 3M takes the extra step of providing our customers with information packages that include guidance on how to install a product at your library.

- **Commitment to the Environment.** One of 3M's core values is to respect our environment and this is an integral part of our business process. This is why we ensure that all our library hardware products meet the European Union's RoHS and WEEE directives. These directives restrict the use of certain hazardous materials in the manufacture of products and address the disposal of waste electrical and electronic equipment respectively. By selecting RFID products that comply with these standards, you may reduce your future disposal costs.
3M Electromagnetic Overview

Description of System Components

A 3M Electromagnetic system consists of several components that work together to provide a solution for your security needs. Descriptions of this system’s key components follow.

### 3M Tattle Tapes (security strips)

3M Tattle Tapes (security strips) are designed to provide covert security to library material i.e. books, journals, bound periodicals, audio cassettes, video cassettes etc. These strips can be efficiently applied on the library items and once applied are difficult to be identified and thus providing covert security to the library material.

The security strips are one-piece, flexible, thin, non-rusting metallic alloy coated with an adhesive film. The film does not discolor or lose its adhesive or cohesive strength with age. The strips do not require moisture, heat or additional glue, or adhesive for affixing to library materials.

3M Tattle tapes are not shielded by gum or cigarette wrappers.

### 3M Staff Workstation

The 3M Staff Workstation is a versatile unit that can operate as a circulation desk or tag programming station. The Workstation is dual functional, processing both barcodes, tattle tapes and RFID tags in the same circulation transaction, which allows for a gradual migration to RFID. You can also use the workstation as a tag conversion station because it contains the full suite of application software to perform this function. This enables you to easily tag new acquisitions and any items not tagged during the initial conversion. The unit provides the additional advantage of allowing the operator to weed the library’s collection during the conversion process. This saves time and the cost of placing a tag on an item the library is planning to remove from their collection.
3M Electromagnetic Overview

3M Detection Systems

The 3M Electromagnetic Detection System Model 3501 offers state-of-the-art protection to help secure valuable library materials marked with 3M Tattle tapes security strips. The 3501 uses two antennas in each lattice that creates overlapping detection fields which improve system performance. This detection system is safe for all media types, and provides corridor-specific audible and visible alarms that identify offending patrons.

This system starts looking for library items when activated by exiting patrons. The system contains a built-in, highly accurate patron counter. The system provides both an audible and visible alarm when responding to an active strip in the corridor.
The 3M™ RFID System solution opens up totally new ways in which a library may enhance inventory collection, shelf order management, optimize staff efficiency, lower the risk of repetitive motion injuries, reduce material losses, and increase service capacity. Rather than simply retrofitting existing RFID technology that has been used for years in other applications and industries, we designed this system specifically for use in libraries. Each product in the system works in concert with each other to provide optimal performance and maximum benefit in a library environment. Examples of this include the long life of our tags, tattle tapes and read ranges based on library-specific applications.

The 3M RFID system has several features libraries find valuable. These include:

- **ISO Compliance.** Our system complies with ISO standards 18000-3, Mode 1, and 15693-3, which provide for interoperability between RFID tags and readers. 3M also intends to implement the ISO tag data format standard when one is approved. Recently, we introduced the 3M Tag Data Manager. This allows users to read existing and future Library ISO-Compliant RFID tag data formats.

- **Underwriters Laboratory Certification.** Products that comprise the 3M Electromagnetic and RFID system are certified at the product level by Underwriters Laboratory. This can help you comply with local building and fire safety laws and provides assurance that you have a safe environment for patrons and staff. Our UL file number is E166068 and you can review our certificate at [http://www.ul.com](http://www.ul.com).

- **ADA Compliance.** 3M strives to design all of its Library Systems products so that they comply with ADA standards. However, how a product is installed can also impact ADA compliance. This is why 3M takes the extra step of providing our customers with information packages that include guidance on how to install a product at your library.

- **Commitment to the Environment.** One of 3M’s core values is to respect our environment and this is an integral part of our business process. This is why we ensure that all our library hardware products meet the European Union’s RoHS and WEEE directives. These directives restrict the use of certain hazardous materials in the manufacture of products and address the disposal of waste electrical and electronic equipment respectively. By selecting RFID products that comply with these standards, you may reduce your future disposal costs.
3M RFID Overview

Description of System Components

A 3M RFID system consists of several components that work together to provide a solution for your collection management and security needs. Descriptions of this system’s key components follow.

3M RFID Tags

The 3M RFID Tags feature a tiny memory chip that contains unique information about the items they identify. These tags can be efficiently applied to library materials and can then be used to deliver the many benefits that are provided by the other components of the 3M™ RFID System. 3M’s RFID Tags requires no assembly, which expedites the application process and eliminates the possibility of losing tags that were improperly assembled. Tags and cover labels are integrated into a single piece, saving the time needed to apply a separate label.

The 3M RFID tags are ISO 15693-3 and 18000-3 Mode 1 compliant and contain either 1,024 or 2,048 bits of memory, providing plenty of room for future applications. Libraries can protect patron privacy by choosing to store minimal item identification information that can only be “read” in a meaningful way by dedicated library equipment.

3M Library Systems market research revealed that some librarians want to be able to change information contained on individual RFID tags. Thus, 3M developed a tag that is “rewriteable”, allowing for the change or addition of information on existing tags. This means that libraries do not have to replace the 3M RFID tag simply because they’re changing the item’s identification number or altering other data on the tag.

Quality and Durability

All 3M RFID tags are guaranteed for the life of the item to which they are originally affixed. We are able to do this because we flip-chip bond the 3M RFID tag for high durability and use low-acid adhesives to prevent damage to items. In addition, we inspect every 3M RFID at the factory before shipping to keep librarians from having to pay for, or struggle with defective tags.
3M RFID Overview

3M Staff Workstation
The 3M Staff Workstation is a versatile unit that can operate as a circulation desk or tag programming station. The Workstation is dual functional, processing both barcodes, tattle tapes and RFID tags in the same circulation transaction, which allows for a gradual migration to RFID. You can also use the workstation as a tag conversion station because it contains the full suite of application software to perform this function. This enables you to easily tag new acquisitions and any items not tagged during the initial conversion.

The unit provides the additional advantage of allowing the operator to weed the library’s collection during the conversion process. This saves time and the cost of placing a tag on an item the library is planning to remove from their collection.

3M Digital Library Assistant (DLA)
The Model 803 Digital Library Assistant (DLA) is a cordless hand-held device that is lightweight and features an ergonomic design. The DLA uses RFID technology to simplify many valuable collection and shelf management tasks in libraries. These are tasks that otherwise can often be too impractical or difficult to perform because of the tremendous labor involved. Tasks that library staff can accomplish using the DLA include:

- **Identify Check-in/Checkout Status of Library Materials.**
  You can identify the items that triggered a detection system alarm, so these items can be properly checked out.

- **Shelf-Reading.**
  Staff can use this function to easily correct shelf order problems. When the DLA reads an item that is not in the correct location, it provides immediate feedback to enable relocation of the item.
3M RFID Overview

- **Shelving Assistance.**
  The DLA provides a combination of visual and audible feedback to locate the exact position to re-shelve library materials and to relocate out of order items.

- **Searching.**
  Staff can use the DLA to look for items of interest, such as items: reported missing from the library, patrons claim to have returned, that have not been discharged properly, etc.

- **Collection of Data.**
  Data collected using the DLA can be used to update records on the library’s circulation system.

- **Pulling Items.**
  The 3M DLA can be used to search for a list of items that the library wishes to collect from the stacks for a particular purpose, such as satisfying patron holds.

- **Finding Items.**
  You can use the DLA to search for an item or items that meet search criteria the user enters into the DLA. This feature is useful for quickly searching for an item that a patron cannot locate.

3M Digital Data Manager

The Digital Data Manager consists of software that is loaded onto a PC and a memory card reader/writer that connects to this PC. The software accepts information downloaded from the circulation database and writes it to a memory card, which can be loaded into a 3M DLA to provide real-time, accurate item information to perform shelf-reading, item searching, weeding, finding lost and missing items, etc. in the stacks of the library. This can eliminate paper reports, running back and forth between a circulation system terminal and items in the stacks, and the need to set items aside for someone else to make the weeding decision. All of this helps maximize staff productivity and improve customer service.

RFID Solutions for Libraries 3M **Innovation**
3M RFID Overview

3M Detection Systems

The 3M RFID Detection System Model 9101 offers state-of-the-art protection to help secure valuable library materials marked with 3M Tattle tapes security strips. The 9100 uses two antennas in each lattice that creates overlapping detection fields which improve system performance. This detection system is safe for all media types, and provides corridor-specific audible and visible alarms that identify offending patrons.

This system starts looking for library items when activated by exiting patrons. The system contains a built-in, highly accurate patron counter. The system provides both an audible and visible alarm when responding to an active strip in the corridor.

3M SelfCheck™ System, V-Series

The V-Series SelfCheck™ is highly sophisticated and well designed system which is to be used by the members to check out the books without assistance of library staff. It offers an intuitive video instruction which guides the user, with help of touch screen, printer, audible cues and best system design to suit the library aesthetics, for checking out the material and helps library open up the library till late hours or 24 x 7.

3M SelfCheck™ System, C-Series (Book Drop)

The C-Series SelfCheck™ is one of the newest additions to our product line and is an optional item that you may want to consider for your library. The C-Series and its indoor/outdoor book drop options helps you increase circulation, and improve productivity and customer service. This system features real-time check-in and an easy to use interface. Like our Model 8800 detection systems and the R-Series, this system continues to function and retain information even if the network or ILS goes down.
This section provides information regarding standards that are relevant when considering the implementation of an RFID system for a library system.

**Electronic Waste Disposal - WEEE**

WEEE is a European directive that focuses on reducing the amount of electrical and electronic equipment entering landfills by encouraging reuse, recycling and separate collection. Like Europe, many states, such as Maine, Maryland, California and Washington have passed legislation, making it illegal to dispose of computers and monitors in the trash. According to the Environmental Protection Agency, the potential danger from discarded computers lies in CRT monitors that may contain lead, or the potential for mercury in the newer flat-panel models. These substances are safe as the product is being used, but can pose risk to the environment if the device is not properly disposed of.

3M is committed to sustaining the environment and to our customers. As part of this commitment we implemented the WEEE standard, which includes plans to help ensure that libraries recycle their machines safely instead of simply throwing them away. By selecting products that conform to the WEEE directive, our customers can help reduce future disposal costs and problems.

**Restriction of the Use of Certain Hazardous Substances - RoHS**
Manufacturers selling certain electrical/electronic products into the European Union, such as the Digital Library Assistant, were mandated by Directive, 2002/95/EC.1 the Restriction of Hazardous Substances (RoHS) to restrict the use of lead, mercury, cadmium, hexavalent chromium, PBB and PDBE in the manufacture of these products. Some U.S. states, like California have adopted similar RoHS laws that restrict products containing these substances from being sold into their state. In addition, twenty other states in the United States have bills pending for RoHS-like regulations.

The RoHS Directive is aimed at addressing global concerns regarding human health and environmental risks associated with handling, treatment and disposal of hazardous substances. 3M Library Systems can provide a RoHS certification for products meeting the RoHS directive. We demonstrated our commitment to delivering RoHS compliant products for libraries by providing input to the standard and by being one of the first companies to implement the directive. Furthermore, 3M has representatives on the standards board to ensure that we keep up with future developments.

Underwriters Laboratories

Underwriters Laboratories Inc. (UL) is a not-for-profit, privately owned and operated product safety testing and certification organization. UL standards for product safety are based on OSHA standards for safety in the workplace and they are a nationally recognized testing laboratory (NRTL) endorsed by OSHA to accurately certify products in compliance with OSHA requirements for the workplace. Thus, any product certified by UL complies with the safety issues in the workplace that are defined by OSHA standards.

Component manufacturers, such as a company that makes electrical power cords, will often submit their products to UL for certification. Manufacturers can incorporate certified components into their products, but this does not mean their product is UL certified. For example a product might use a UL certified power cord, but also use an uncertified, sub-standard power supply - creating a safety hazard. Companies that claim UL certification for their products should be able to provide documentation from UL (such as the one shown on the left) that clearly indicates a given product has obtained certification. All of 3M Library Systems products are completely certified at the product level.
Using UL-certified products can provide many benefits. Foremost among these is assurance that the library is providing patrons and staffs with a safer environment. Many local laws and regulations (typically those that deal with building and fire safety) mandate that only products with UL certification can be installed into buildings. This means that using UL-certified products can often help you better comply with local laws.

**Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act provides a variety of standards for products and their installation. These standards are intended to promote accessibility for all people. The standards can impact many aspects of product design. One design area that is commonly affected is the height of a product.

3M strives to design all its Library Systems products so that they will comply with ADA standards. Some examples of our ADA compliant products include our SelfCheck™ systems and Model 8900 Security gates. However, how a product is installed can also impact ADA compliance. This is why 3M takes the extra step of providing our customers with information packages that include information on how to install a product at a library, such as a C-Series Book Drop, so that it will be compliant with ADA standards.

**Privacy Standards**

The American Library Association (ALA) believes that protecting user privacy and confidentiality has long been an integral part of the mission of libraries. So, in 2005 the ALA endorsed the Book Industry Study Group (BISG) policy statement POL-002 on Radio Frequency
3M created the SIP protocol and provided it to the library industry as an open standard.

Identification. This contains the following statement on RFID privacy principles.

All businesses, organizations, libraries, educational institutions and non-profits that buy, sell, loan, or otherwise make available books and other content to the public utilizing RFID technologies shall:

1. Implement and enforce an up-to-date organizational privacy policy that gives notice and full disclosure as to the use, terms of use, and any change in the terms of use for data collected via new technologies and processes, including RFID.

2. Ensure that no personal information is recorded on RFID tags which, however, may contain a variety of transactional data.

3. Protect data by reasonable security safeguards against interpretation by any unauthorized third party.

4. Comply with relevant federal, state, and local laws as well as industry best practices and policies.

5. Ensure that the four principles outlined above must be verifiable by an independent audit.

At 3M we fully support and comply with the ALA best practices as outlined in the BISG Policy Statement and were a member of the RFID Task Force Participating Organization that provided input for the development of the statement. We can provide you with an electronic copy of this statement upon request.