3M™ RFID Tracking Pad Model 770

Owners Manual

3M Information and Materials Security

3M Center, Building 225-4N-14

St. Paul, Minnesota 55144-1000

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Safety Information

Introduction

We provide important safety information and warnings to assist you in understanding and avoiding potential harm to yourself, and possible damage to equipment, during the installation and use of the 3M™ RFID Tracking Pad Model 770.

- Although this manual describes potential hazards you may encounter during installation and operation of this product, we cannot predict all of the possible hazards and this list should not be a substitute for your judgment and experience.
- Before you install and use this equipment, please read and observe all safety information and instructions in this manual.
- If you are unsure about any part of this installation or of the potential hazards discussed, please contact your supervisor immediately.

BEFORE YOU PROCEED WITH THE INSTALLATION, PLEASE READ THE INTENDED USE STATEMENT AND ALL SAFETY MESSAGES.

Intended Use Statement

The 3M™ RFID Tracking Pad Model 770 is designed and tested for use with other equipment and software to read and/or program 3M™ RFID Tags. These tags are used to identify files, folders, and other items such as books. When used in conjunction with 3M software, the unit can track, monitor, and assist in locating various items equipped with 3M RFID Tags.

The product has not been tested or proven safe for other uses.

Safety Messages

We include safety messages and safety labels in this manual to help you protect your safety and the safety of others. This section contains important information to help you recognize and understand these safety messages.

Safety Message Format

Safety messages are designed to alert you to potential hazards that can cause personal injury to you or others. They can also indicate the possibility of property damage.

Each safety message box contains a safety alert symbol (⚠); one of three signal words: **DANGER**, **WARNING**, or **CAUTION**; and a safety message. The signal words and symbols, and their meanings, are shown below.

In addition to the symbols and words explained previously, each safety message:

- Identifies the hazard.
- Describes what you can and should do to avoid the risk of exposure to the hazard.
- Describes the probable consequences of not avoiding the hazard.
-

DANGER means you and/or someone else WILL be KILLED or SERIOUSLY HURT if you do not follow these instructions.

WARNING means you and/or someone else MAY be KILLED or SERIOUSLY HURT if you do not follow these instructions.

CAUTION means you and/or someone else MAY be HURT or property damage may result if you do not follow these instructions.

The (**I**nformation) icon is used in this manual to draw your attention to other important information.

Safety Messages Contained in this Manual

The following safety messages appear in this manual:

⚠ WARNING

To reduce the risks associated with hazardous voltage contained within the power supply, which, if not avoided, could result in death or serious injury:

- Do not use the power supply if the case or cord are damaged;
- Do not use power supply in outdoor or wet environments;
- Do not attempt to service or repair the RFID circuitry or power supply — no user serviceable parts inside

⚠ CAUTION

To reduce the risks associated with repeated body movement, which, if not avoided, may result in minor or moderate injury:

- Operation of the RFID Pad 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.

To reduce the risks associated with environmental contamination from circuit boards containing lead-bearing solder within the tracking pad and RFID reader, which, if not avoided, may result in minor or moderate injury:

- At the end of service life, dispose of the **tracking pad and RFID reader**according to federal, state and local requirements.

Safety Labels

We include safety labels on the devices for your safety and the safety of others. Safety labels are designed to alert you to potential hazards associated with a piece of equipment that can cause personal injury to you or others. Safety labels can also indicate the possibility of property damage.

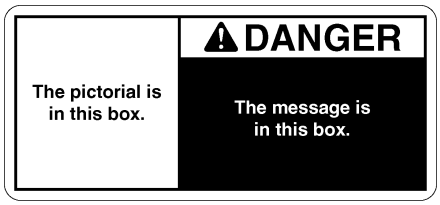
Please read all safety labels.

Explanation of Labels and Symbols

Each safety label contains a safety alert symbol (⚠); one of three signal words: **DANGER**, **WARNING**, or **CAUTION**; a pictorial showing the nature of the hazard; and a safety message.

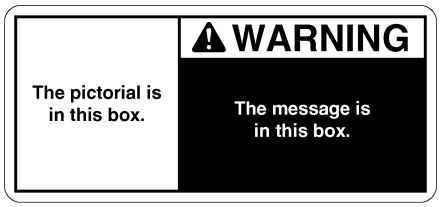
The signal words and symbols, and their meanings, are shown below:

DANGER means you and/or someone else WILL be KILLED or SERIOUSLY HURT if you do not follow these instructions.



Opticom-242A

WARNING means you and/or someone else MAY be KILLED or SERIOUSLY HURT if you do not follow these instructions.



Opticom-243A

The following labels are applied to the equipment:


Refer to accompanying documents.

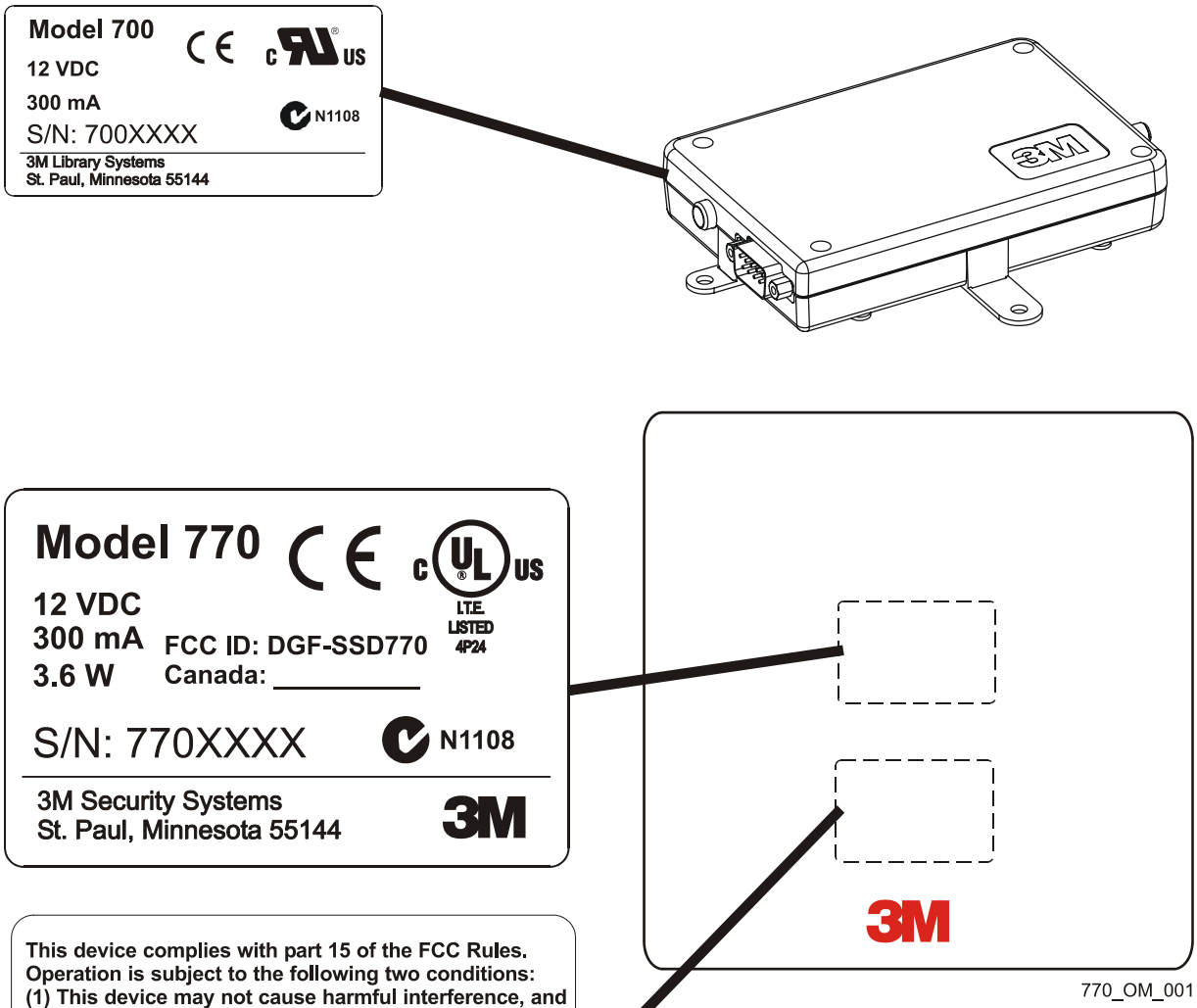

Risk of electric shock. Refer all servicing to manufacturer.

Safety Label Replacement

We consider safety labels to be an important part of all devices. Safety labels should be replaced immediately if they become hard to read.

If any of the safety labels are missing or cannot be read, please contact 3M Library Systems Technical Service for a replacement label.

Safety Label Locations



EMC, USA, and Canada Compliance

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.

FCC Intentional Radiator Certification

FCC ID: xxxxxxxxxxxxxx

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.

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.

Industry Canada Radio Frequency Rules and Regulations

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

Cet appareil numerique de la classe A respecte toutes les exigences du Reglement sur le materiel brouilleur du Canada.

CANADA: Pending

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 complies with the requirements of the RTTE and EMC directives.

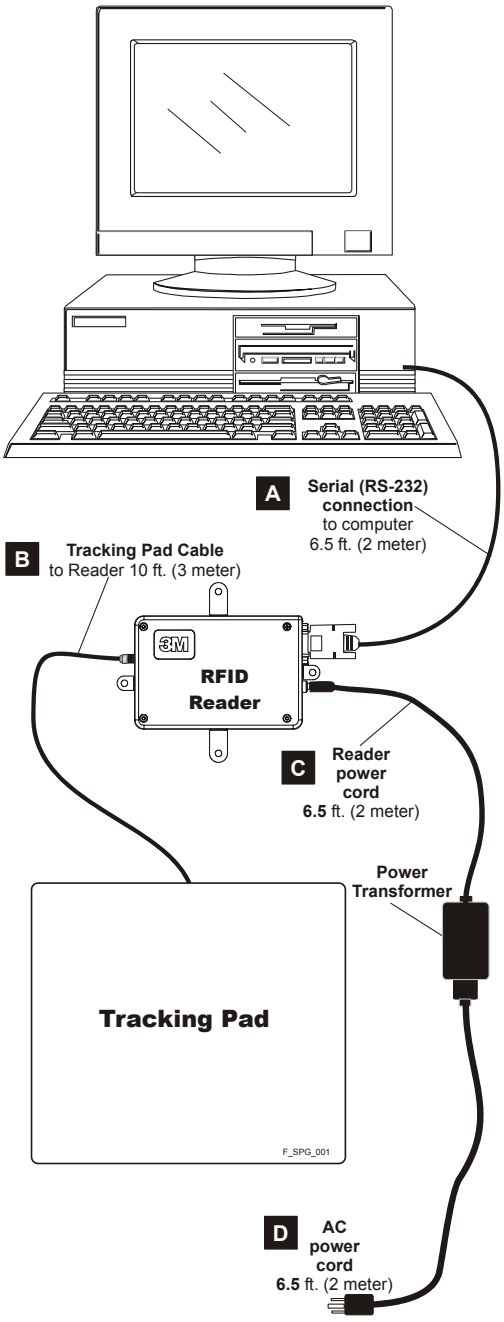
Section 1 - Overview

The 3M™ RFID Tracking Pad Model 770 is used with other equipment and software to read and/or program 3M™ RFID Tags. These tags are used to identify files, folders, and other items such as books. When used in conjunction with the 3M software, the unit can track, monitor, and assist in locating various items equipped with 3M RFID Tags.

The tracking pad consists of the following components:

- 3M Reader Pad
- 3M RFID Reader
- Cabling to connect the reader pad to the reader
- Cabling to connect the reader to a computer

3M software that runs on a computer can send commands and share information with the reader using an RS-232 interface.



Site Planning

Computer Requirements

System Requirements	Client – Tracking (customer supplied)
Operating System	Win2000 service pack 3 or Windows XP
RAM	128 MB (256 MB recommended)
Install space	5 MB
Additional space	15 MB disk space
Monitor	SVGA 800 x 600
Media	CD-ROM
Other	Serial port (for Pad) Wall power (for Pad) USB to serial adaptor to be supplied and installed by customer's IT department in the event there are no serial ports available.
Processor	750 MHz Pentium (min.) 1 GHz or faster recommended
Sound Card	Required for audible
Network	As required
Security Policy?	Local Admin Priviledges

Reader Pad Specifications

Dimensions	Length: 8.5 in. (21.6 cm) Width: 8.5 in. (21.6 m) Height: 0.4 in. (1.02 cm)
Weight	16 oz. (450 g)
Environmental	Typical ambient temperature range: 50 °F to 104 °F (10 °C to 40 °C) Humidity: 0% to 85% RH, non-condensing

Reader

Dimensions	Length: 5.625 in. (14.29 cm) Width: 5.0 in. (12.7 cm) Height: 1.0 in. (2.54 cm)
Weight	3.64 oz. (103.3 g)
Environmental	Typical ambient temperature range: 50 °F to 104 °F (10 °C to 40 °C) Humidity: 0% to 85% RH, non-condensing
Electrical	100 to 120 Vac, ?? A, 50/60 Hz, single phase, approximately??? Watts

Section 2 - Installation

Step 1 – Install software on your computer

1 Exit all programs.

2 Insert the floppy disk into your computer.

3 Double-click on the **setup.exe** file.
- The installation program starts.

Step 2 – Connect the hardware components

Tracking Pad/Reader cable lengths

Note: If required, you can snap off (remove) the reader's plastic mounting flanges.

A RFID Reader to computer (serial)

- 6.5-foot (2-meter) serial cable standard (delivered with each tracking pad)
- Customer can purchase standard serial cables up to 50 ft.
- USB to serial adaptor to be supplied and installed by customer's IT department in the event there are no serial ports available.

B Tracking Pad to RFID Reader (coax)

- 10 ft. (3 meter)
- 20-foot (6 meter) extension cables available, 50-foot (15.24 meter) maximum cable length.

C RFID reader power cord

- RFID Reader to power transformer 6.5-foot (2-meter)

D Power Transformer AC Power cord

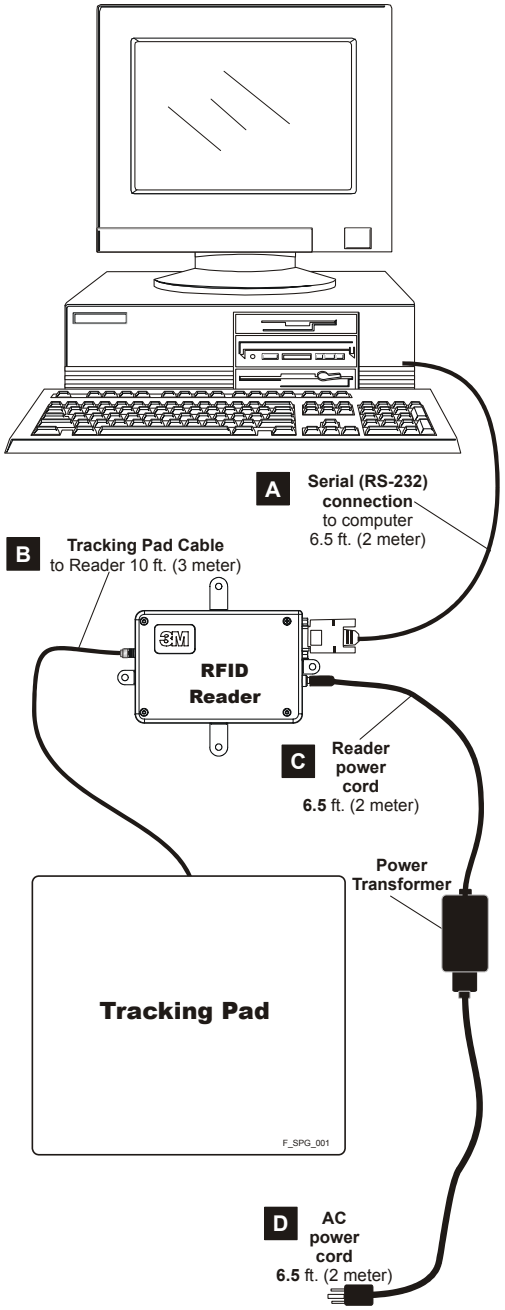
- Power transformer to AC power outlet 6.5-foot (2-meter)

AC Power Requirements

- 100-240 Vac, 47 to 63 Hz, 0.5 A

Cabling routing

- Cabling recommendations (not affected by 120 Vac electrical or lighting)



Mounting the 3M Tracking Pad and RFID Reader

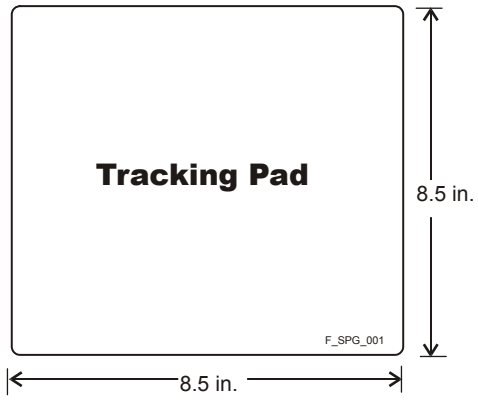
Tracking Pad Mounting

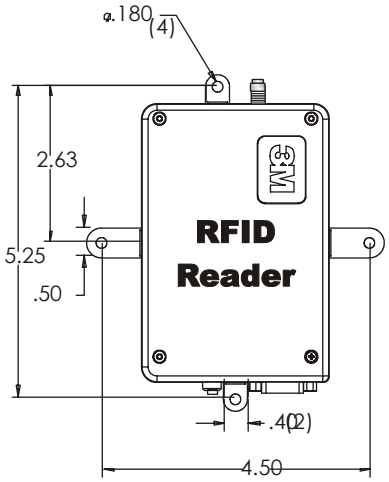
Will clean up these drawings and add wall mounting bracket when designs are finalized.

- 2 in. (5 cm) minimum distance between tracking pad and metal surface (recommended)
- Tracking pad can be as close as 1 in. (2.5 cm) to metal surface w/reduced read range)
- Wall mounting – use optional wall mounting bracket

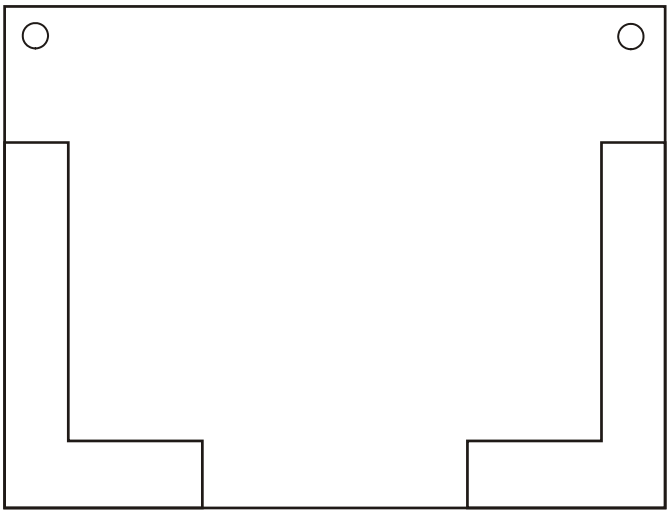
Footprint

- Tracking pad (8.5 in. x 8.5 in.)
- RFID reader





Mounting the Tracking Pad on the wall



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