



Global Traffic  
Technologies

Installation Manual

February 2008

Opticom<sup>™</sup> Infrared System

Model 575 Confirmation Light Kit

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## 1. About This Manual

### 1.1 Purpose of Manual

This manual provides instructions for installing the Opticom™ Infrared System Model 575 Confirmation Light Kit. It is intended for use by installers, maintenance personnel, and others who are responsible for the installation and maintenance of the system.

### 1.2 Manual Conventions

The conventions listed in Table 1-1 help to make this manual easier to use by presenting a uniform approach to the descriptions, phrases, and nomenclature.

### 1.3

## Manual Organization

This manual is divided into four sections.

### Section 1. About This Manual

Contains information about the organization and content of this manual.

### Section 2. Safety Information

Contains important information about the safety messages, safety labels, safety precautions, and procedures for installation of this device.

### Section 3. Installation

Contains step-by-step installation instructions.

### Section 4. System Test

Contains information on how to test the installed system.

Table 1-1. Manual Conventions

Element	Convention	Example
Model names	First or formal reference: initial caps Subsequent use or informal reference: Initial caps for <i>Model</i> , lowercase for remainder	Opticom Infrared System Model 575 Confirmation Light Kit Model 575 confirmation light kit
Feature names	Initial caps	the Disable feature
Switch position	Uppercase	the OFF position

## 2. Safety Information

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 of the Opticom™ Infrared System equipment. Although we have included many potential hazards you may encounter during the installation of this equipment, we cannot predict all of the possible hazards and this list should not be a substitute for your judgment and experience.

**Please read and observe all safety information and instructions in this manual before installing the system equipment. Also, save this installation manual and keep it near the equipment.**

If you are unsure about any part of this installation or of the potential hazards discussed, please contact your supervisor immediately.

### 2.1 Intended Use

The system is intended to assist authorized priority vehicles through signalized intersections by providing temporary right-of-way through vehicle operator interface to the system and through the use of common traffic controller functions.

The Model 575 Confirmation Light Kit is intended to contain the electrical connections for one or two PAR 38 lamps to be used as confirmation lights.

### 2.2 Technical Support

If you have questions about the system, its use, or operation, please contact your dealer or call the Global Traffic Technologies Technical Service department at 1-800-258-4610.


### 2.3 Safety Messages and Safety Labels

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.

**Please read all messages before proceeding with the installation.**

#### 2.3.1 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:

 **DANGER**

The safety message is in this box.

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

 **WARNING**

The safety message is in this box.

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

 **CAUTION**

The safety message is in this box.

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

In addition to the symbols and words explained above, each safety message identifies the hazard, describes what you can and should do to avoid the risk of exposure to the hazard, and tells the probable consequences of not avoiding the hazard.

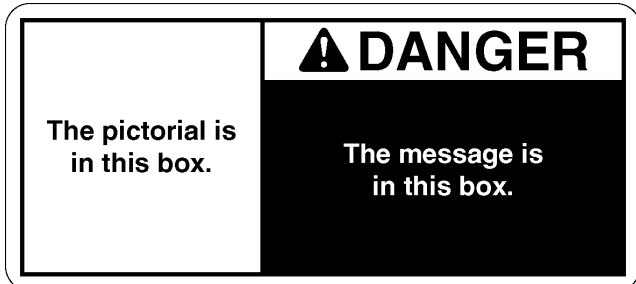
### 2.3.2 Safety Label Format

We include safety labels on the devices to help you protect 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. They can also indicate the possibility of property damage.

#### Please read all safety labels.

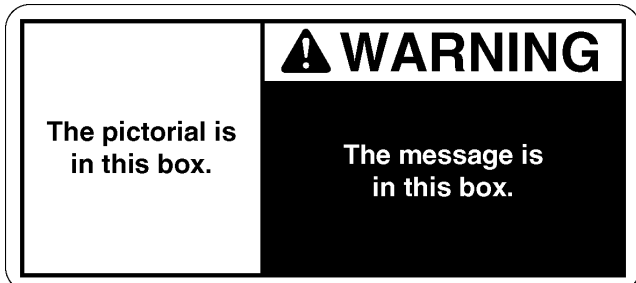
Each safety label contains a safety alert symbol (⚠️); one of three signal words: DANGER, WARNING, or CAUTION; a pictorial showing the nature of the hazard; and a safety message.

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



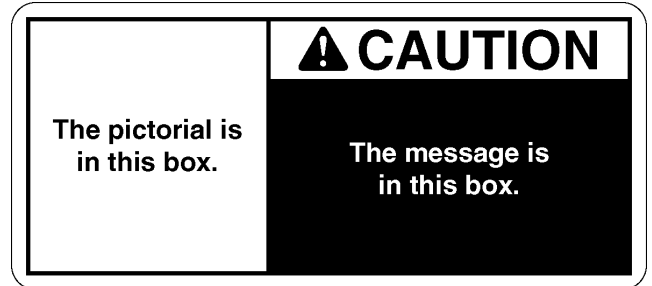
Opticom-242A

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



Opticom-243A

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



Opticom-244A

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

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

If any of the safety labels are missing, or cannot be read, please contact your dealer or the GTT Repair department for a replacement.

## 2.4 Safety Messages Contained in this Manual

The following safety messages appear in this manual:

### WARNING

The confirmation light must be connected so that the light is lighted only when the Opticom™ Infrared System is active and the desired Green(s) is lighted. The light is intended to confirm to the priority vehicle operator that the system is active. It is not intended to replace or supplement the traffic control system or signal lights. To ensure proper operation of the confirmation light, the completed installation must be carefully tested with an Opticom™ Infrared system emitter. Failure to properly install and test the confirmation light may result in bodily injury.

### WARNING

A completed installation that is not tested may result in improper system operation, which may result in accidents and/or injuries. **To avoid this problem, test the system to verify proper operation.** Improper system operation may result in unsafe driver action.

## **2.5 Safety Considerations**

Please consider the following safety issues before beginning the installation.

Although we have compiled this list of common safety considerations, it should not be considered as complete. It is not intended to take the place of your good judgment, training, and experience.

### **2.5.1 Personal Safety Equipment and Clothing**

Personal safety equipment and clothing including high visibility vests, hard hats, gloves, electrical shock or electrocution protection clothing and equipment, safety shoes, safety glasses, face shields, goggles, and hearing protection devices are just some of the items available to you.

Choose the right equipment for the job. If you are unsure of which safety equipment is recommended or appropriate for the job, ask your supervisor or foreman.

### **2.5.2 Electric Shock**

As a trained installer of electrical equipment you are aware of the dangers associated with

installation of electrical devices. Always be sure that the power to the equipment, and all associated equipment, is turned off and the vehicle battery is disconnected. We also recommend that you wait for the period of time specified in the warning message before beginning any procedure. This waiting period is required to allow electrically charged components to discharge and minimize your exposure to the risk of electric shock and electrocution. Use the equipment, techniques, and procedures that you learned during your training or apprenticeship or other electrical industry recognized safety procedures.

If you are unsure of which techniques, procedures, and protective equipment are recommended or appropriate for the job, ask your supervisor or foreman.

## **2.6 Disposal of Device**

Please dispose of the device and installation materials in accordance with all local, state, and federal laws and regulations.

### 3. Installation

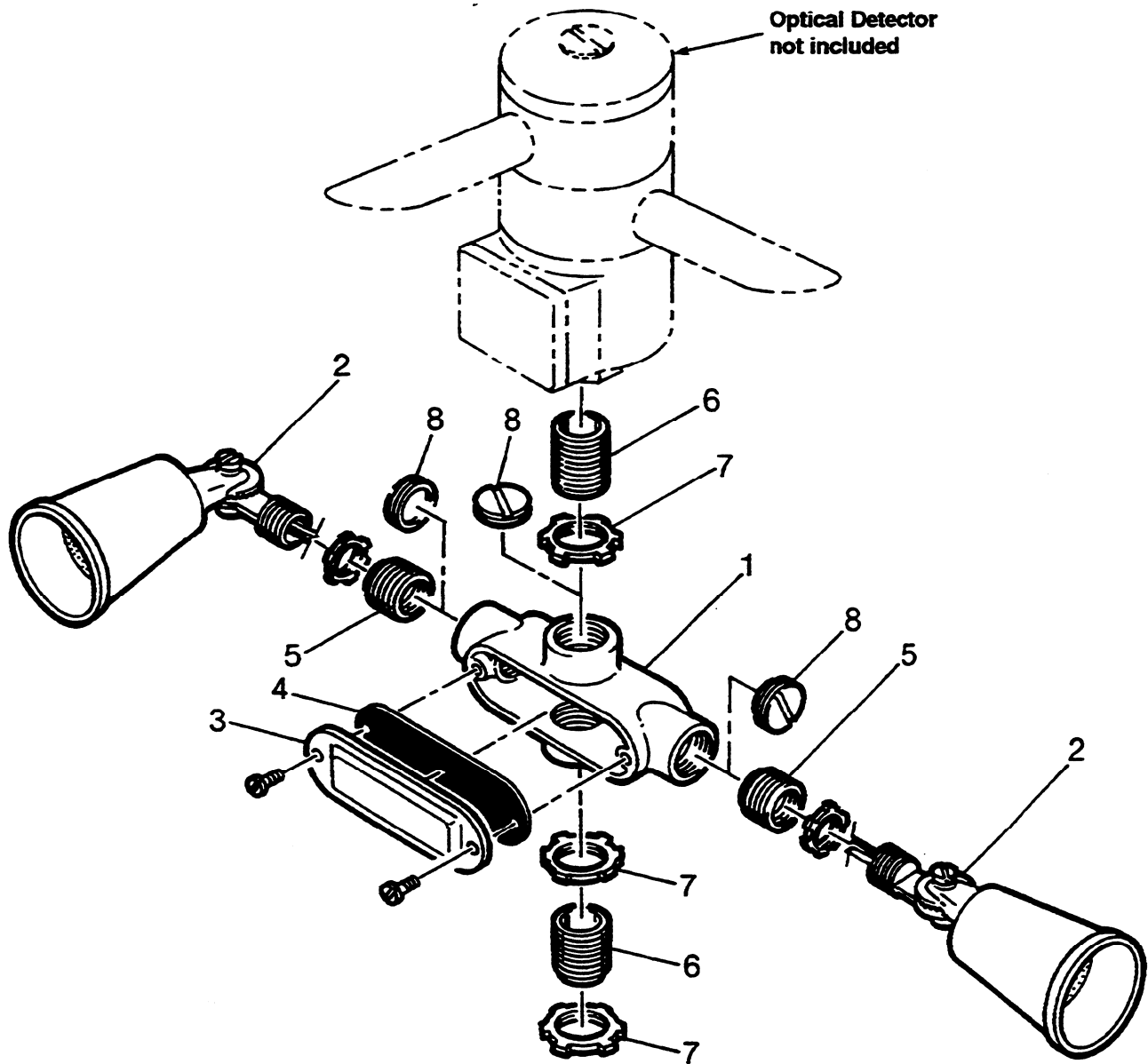
This section describes how to install the Opticom™ Infrared System Model 575 Confirmation light kit.

#### **WARNING**

The confirmation light must be connected so that the light is lighted only when the Opticom Infrared System is active and the desired Green(s) is lighted. The light is intended to confirm to the priority vehicle operator that the system is active. It is not intended to replace or supplement the traffic control system or signal lights. To ensure proper operation of the confirmation light, the completed installation must be carefully tested with an Opticom Infrared system emitter. Failure to properly install and test the confirmation light may result in bodily injury.

1. Assemble the confirmation light hardware as shown in Diagram A.
2. If an Opticom Infrared System detector is to be mounted to the confirmation light, locate the assembly according to the guidelines listed in the Model 711/721/722 installation instructions.
3. Install the confirmation light at the location that enables the priority vehicle driver to readily identify the confirmation light for each direction of travel.
4. Aim each lamp socket and tighten the lock nuts.
5. Install the lamp(s)
6. Some models of Opticom Infrared System phase selectors have outputs which are designed to drive confirmation lights. These outputs are designed to drive a relay or load switch which in turn switch the high current load used to power the confirmation light. See the Installation instructions for the phase selector to see if these outputs are available and the proper way to connect them.





ITEM NO.	IDENTIFICATION	QUANTITY
1	"X" CONDULET BODY	1
2	PAR 38 LAMP HOLDER	2
3	CONDULET COVER	1
4	COVER GASKET	1
5	REDUCING BUSHING	2
6	3/4" CLOSE NIPPLE	2
7	3/4" LOCKNUT	3
8	3/4" HOLE PLUG	2

Diagram A

#### 4. System Test

### WARNING

A completed installation that is not tested may result in improper system operation, which may result in accidents and/or injuries. **To avoid this problem, test the system to verify proper operation.** Improper system operation may result in unsafe driver action.

These installation instructions are the result of tests performed in our laboratory and we believe these tests to be accurate and complete. However, each installation involves variables that cannot be controlled or predicted. These variables may affect the operational characteristics of the system.

To ensure proper system operation, GTT strongly recommends that, when the system is turned on, the installer functionally tests the Opticom™

Infrared System using an emitter-equipped vehicle.

To test the system, the installer drives the priority vehicle through the intersection to verify that the system is performing in accordance with customer requirements.

### NOTE

GTT strongly recommends periodic, routine inspection and maintenance of the system to ensure proper operation. Please refer to the Opticom infrared system *Operation Manual* for inspection and maintenance instructions.

### **Important Notice to Purchaser:**

EXCEPT FOR THE LIMITED WARRANTIES SET FORTH IN THIS DOCUMENT, GLOBAL TRAFFIC TECHNOLOGIES (GTT) MAKES NO OTHER WARRANTIES AND EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE.

GTT will, at its sole option, repair, replace or refund any amounts paid for any Opticom™ Infrared System component found to be defective in materials or manufacture within five (5) years from the date of shipment from GTT. See “Warranty and Extended Coverage” for details and limitations of the coverage plan. GTT will provide a functioning replacement component at a standard charge per unit for an additional five (5) years.

GTT warrants future system operability coverage as described herein. The warranties set forth in this document shall not apply to (A) incandescent lamps (confirmation lights) or (B) to any Opticom infrared system components which have been (1) repaired or modified by persons not authorized by GTT; (2) subjected to incorrect installation, misuse, neglect or accident; (3) damaged by extreme atmospheric or weather-related conditions; or (4) subjected to events or use outside the normal or anticipated course.

IN NO EVENT SHALL GTT BE LIABLE FOR ANY INJURY (INCLUDING, WITHOUT LIMITATION, PERSONAL INJURY), DEATH, LOSS, OR DAMAGE (INCLUDING, WITHOUT LIMITATION, PROPERTY DAMAGE), WHETHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR OTHERWISE, ARISING OUT OF THE USE OR INABILITY TO USE, REPAIR OR FAILURE TO REPAIR, ANY GTT PRODUCT. REGARDLESS OF THE LEGAL THEORY ASSERTED. THE REMEDIES SET FORTH IN THIS DOCUMENT ARE EXCLUSIVE.

Sale and use of the Opticom infrared system is expressly restricted to authorized agencies of government customers, within their specific jurisdictions. However, because the infrared signal generated by the Opticom infrared system is not exclusive, GTT does not warrant exclusive activation by purchaser.



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