LAND
infrared

LIPS-F & LIPS-T

Software

Installation Guide

Land Infrared
Dronfield, S18 1DJ
England
Telephone: (01246) 417691
Facsimile: (01246) 410585
Email: infrared.sales@landinst.com
URL: http://www.landinst.com

Land Infrared
2525 Pearl Buck Road
Bristol PA 19007
U.S.A.
Telephone: (215) 781 0700
Facsimile: (215) 781 0723
Email: ussales@land-infrared.com

© Land Infrared, 1999

Publication Nº: TI198162
Issue A 05/99

LAND
infrared

LIPS-F & LIPS-T

Software

Installation Guide

Land Infrared
Dronfield, S18 1DJ
England
Telephone: (01246) 417691
Facsimile: (01246) 410585
Email: infrared.sales@landinst.com
URL: http://www.landinst.com

Land Infrared
2525 Pearl Buck Road
Bristol PA 19007
U.S.A.
Telephone: (215) 781 0700
Facsimile: (215) 781 0723
Email: ussales@land-infrared.com

© Land Infrared, 1999

Publication Nº: TI198162
Issue A 05/99

Land Infrared Quality Management System is approved to BS EN ISO 9001: 1994 for the design, manufacture, repair and on-site servicing of non contact infrared temperature measuring equipment with associated software designed and developed in accordance with TickIT. NAMAS Calibration certificates are available from our UKAS accredited calibration laboratory Nº 0034.

CE

This product complies with current European directives relating to electromagnetic compatibility and safety (EMC directive 89/336/EEC; Low voltage directive 73/23/EEC).

LIPS-F & LIPS-T **Installation Guide**

Land Infrared Quality Management System is approved to BS EN ISO 9001: 1994 for the design, manufacture, repair and on-site servicing of non contact infrared temperature measuring equipment with associated software designed and developed in accordance with TickIT. NAMAS Calibration certificates are available from our UKAS accredited calibration laboratory Nº 0034.

CE

This product complies with current European directives relating to electromagnetic compatibility and safety (EMC directive 89/336/EEC; Low voltage directive 73/23/EEC).

Quality assurance

SAFETY INFORMATION

Symbol	Publication	Description
	IEC 417, No. 5031	Direct current
	IEC 417, No. 5032	Alternating current
	IEC 417, No. 5033	Both direct and alternating current
	IEC 617-2, No. 02-02-06	Three-phase alternating current
	IEC 417, No. 5017	Earth (ground) terminal
	IEC 417, No. 5019	Protective conductor terminal
	IEC 417, No. 5020	Frame or chassis terminal
	IEC 417, No. 5021	Equipotentiality
	IEC 417, No. 5007	On (Supply)
	IEC 417, No. 5008	Off (Supply)
	IEC 417, No. 5172	Equipment protected throughout by double insulation or reinforced insulation (equivalent to Class II of IEC 536)

Installation Guide *LIPS-F & LIPS-T*

SAFETY INFORMATION

Symbol	Publication	Description
	IEC 417, No. 5031	Direct current
	IEC 417, No. 5032	Alternating current
	IEC 417, No. 5033	Both direct and alternating current
	IEC 617-2, No. 02-02-06	Three-phase alternating current
	IEC 417, No. 5017	Earth (ground) terminal
	IEC 417, No. 5019	Protective conductor terminal
	IEC 417, No. 5020	Frame or chassis terminal
	IEC 417, No. 5021	Equipotentiality
	IEC 417, No. 5007	On (Supply)
	IEC 417, No. 5008	Off (Supply)
	IEC 417, No. 5172	Equipment protected throughout by double insulation or reinforced insulation (equivalent to Class II of IEC 536)

Safety information

SAFETY INFORMATION (CONTINUED...)

Symbol	Publication	Description
	ISO 3864, No. B.3.6	Caution, risk of electric shock
	ISO 3864, No. B.3.1	Caution
	BS EN 100015	Observe precautions for handling electrostatic discharge sensitive devices
	BS EN 60825: 1992	Warning, laser radiation
		Warning, hot surface
		Refer to the Operating Instructions.

LIPS-F & LIPS-T **Installation Guide**

SAFETY INFORMATION (CONTINUED...)

Symbol	Publication	Description
	ISO 3864, No. B.3.6	Caution, risk of electric shock
	ISO 3864, No. B.3.1	Caution
	BS EN 100015	Observe precautions for handling electrostatic discharge sensitive devices
	BS EN 60825: 1992	Warning, laser radiation
		Warning, hot surface
		Refer to the Operating Instructions.

Safety information

TECHNICAL SUPPORT

Technical support for your LAND Thermal Imaging System can be obtained by either contacting the address/telephone number on the cover of this User Guide, or by Email to the following addresses:

LIPS.support@landinst.com
(For queries regarding ***LIPS*** Software)

FTI6.support@landinst.com
(For queries regarding ***FTI 6*** Thermal Imagers)

Installation Guide *LIPS-F & LIPS-T*

TECHNICAL SUPPORT

Technical support for your LAND Thermal Imaging System can be obtained by either contacting the address/telephone number on the cover of this User Guide, or by Email to the following addresses:

LIPS.support@landinst.com
(For queries regarding ***LIPS*** Software)

FTI6.support@landinst.com
(For queries regarding ***FTI 6*** Thermal Imagers)

Technical support

Blank

LIPS-F & LIPS-T **Installation Guide**

Blank

Contents

1.0 INTRODUCTION 1

2.0 ***LIPS-F*** HARDWARE INSTALLATION 3

- 2.1 Installing the Frame Grabber 5
- 2.2 System Interconnections 7
- 2.3 Viewing live images (no Frame Grabber Card fitted) 13
- 2.4 Digital link connections 13
- 2.5 Installing the Digital Input Card 15
- 2.6 Installing the Digital Output Card 17

3.0 SOFTWARE INSTALLATION 18

- 3.1 Minimum System Requirements 18
- 3.2 Installing the software 19
- 3.3 Completing the Setup (Restarting your PC) 20
- 3.4 Removing ('Uninstalling') the software 21

Installation Guide ***LIPS-F & LIPS-T***

Contents

1.0 INTRODUCTION 1

2.0 ***LIPS-F*** HARDWARE INSTALLATION 3

- 2.1 Installing the Frame Grabber 5
- 2.2 System Interconnections 7
- 2.3 Viewing live images (no Frame Grabber Card fitted) 13
- 2.4 Digital link connections 13
- 2.5 Installing the Digital Input Card 15
- 2.6 Installing the Digital Output Card 17

3.0 SOFTWARE INSTALLATION 18

- 3.1 Minimum System Requirements 18
- 3.2 Installing the software 19
- 3.3 Completing the Setup (Restarting your PC) 20
- 3.4 Removing ('Uninstalling') the software 21

Contents

Blank

LIPS-F & LIPS-T **Installation Guide**

Blank

1.0 INTRODUCTION

IMPORTANT NOTE ABOUT THIS GUIDE

The majority of information contained in this Guide is relevant to both ***LIPS-F*** and ***LIPS-T***.

In sections where the information is identical, the software is referred to simply as ***LIPS***.

In sections which are relevant to one variant only, the software is referred to as either ***LIPS-F*** or ***LIPS-T*** accordingly.

This Installation Guide gives instructions on how to install the ***LIPS*** software. The Guide is divided into two sections, Hardware Installation and Software Installation.

Hardware Installation (Section 2) is relevant to ***LIPS-F*** only. This section covers the installation of a Frame Grabber card in your personal computer (PC) and the interconnections between your PC and Land ***FTI 6*** Thermal Imagers. A Frame Grabber card is required if you wish to work on live thermal images. If you intend to use a Frame Grabber card, this must be installed in your PC before installing the ***LIPS-F*** software.

Section 2 also covers the installation of the following optional extras for ***LIPS-F***:

- Digital Input Card
- Digital Output Card

Software Installation (Section 3) is relevant to both ***LIPS-F*** and ***LIPS-T***. It covers the installation of the ***LIPS*** software on your PC. The program is supplied on CD ROM.

NOTE

Before installing the ***LIPS*** software, ensure that your computer system meets the requirements listed in Section 3.1 of this Installation Guide.

Installation Guide *LIPS-F & LIPS-T*

1.0 INTRODUCTION

IMPORTANT NOTE ABOUT THIS GUIDE

The majority of information contained in this Guide is relevant to both ***LIPS-F*** and ***LIPS-T***.

In sections where the information is identical, the software is referred to simply as ***LIPS***.

In sections which are relevant to one variant only, the software is referred to as either ***LIPS-F*** or ***LIPS-T*** accordingly.

This Installation Guide gives instructions on how to install the ***LIPS*** software. The Guide is divided into two sections, Hardware Installation and Software Installation.

Hardware Installation (Section 2) is relevant to ***LIPS-F*** only. This section covers the installation of a Frame Grabber card in your personal computer (PC) and the interconnections between your PC and Land ***FTI 6*** Thermal Imagers. A Frame Grabber card is required if you wish to work on live thermal images. If you intend to use a Frame Grabber card, this must be installed in your PC before installing the ***LIPS-F*** software.

Section 2 also covers the installation of the following optional extras for ***LIPS-F***:

- Digital Input Card
- Digital Output Card

Software Installation (Section 3) is relevant to both ***LIPS-F*** and ***LIPS-T***. It covers the installation of the ***LIPS*** software on your PC. The program is supplied on CD ROM.

NOTE

Before installing the ***LIPS*** software, ensure that your computer system meets the requirements listed in Section 3.1 of this Installation Guide.

Page 1

LIPS-F & LIPS-T **Installation Guide**

Page 2

2.0 *LIPS-F* HARDWARE INSTALLATION

This section covers the installation of a Frame Grabber card in your personal computer (PC) and the interconnections between your PC and Land ***FTI 6*** Thermal Imagers.

A Frame Grabber card is required if you wish to work on live thermal images. If you intend to use a Frame Grabber card, this must be installed in your PC before installing the ***LIPS-F*** software.

This section also covers the installation of the following additional options:

- Digital Input Card
- Digital Output Card

Installation Guide *LIPS-F & LIPS-T*

2.0 *LIPS-F* HARDWARE INSTALLATION

This section covers the installation of a Frame Grabber card in your personal computer (PC) and the interconnections between your PC and Land ***FTI 6*** Thermal Imagers.

A Frame Grabber card is required if you wish to work on live thermal images. If you intend to use a Frame Grabber card, this must be installed in your PC before installing the ***LIPS-F*** software.

This section also covers the installation of the following additional options:

- Digital Input Card
- Digital Output Card

Page 3

LIPS-F & LIPS-T **Installation Guide**

Page 4

2.1 Installing the Frame Grabber card for use with *LIPS-F*

WARNING

Risk of electric shock. Before opening your PC, ensure that it is disconnected from the mains supply.

Observe precautions for handling static sensitive devices.

NOTE

Refer to the Operating Instructions supplied with your computer, as they contain relevant information regarding dismantling the PC and installing additional cards.

1) Ensure that the computer, and any attached peripheral devices, are switched off and disconnected from the mains supply.

2) Move any obstructions which prevent access to the computer i.e. monitor, keyboard etc.

3) Refer to the computer Operating Instructions. Remove the cover from the computer to reveal the motherboard and expansion slots.

4) Select an empty slot with a PCI connector.

5) Observe precautions for handling static sensitive devices. Slide the card into the slot.

6) To ensure that the air flow within the computer is sufficient to cool the system properly, make sure that any remaining expansion slot covers are in place.

7) Refer to the computer Operating Instructions. Replace the computer cover.

8) Reconnect the computer monitor, keyboard etc.

Installation Guide *LIPS-F & LIPS-T*

2.1 Installing the Frame Grabber card for use with *LIPS-F*

WARNING

Risk of electric shock. Before opening your PC, ensure that it is disconnected from the mains supply.

Observe precautions for handling static sensitive devices.

NOTE

Refer to the Operating Instructions supplied with your computer, as they contain relevant information regarding dismantling the PC and installing additional cards.

1) Ensure that the computer, and any attached peripheral devices, are switched off and disconnected from the mains supply.

2) Move any obstructions which prevent access to the computer i.e. monitor, keyboard etc.

3) Refer to the computer Operating Instructions. Remove the cover from the computer to reveal the motherboard and expansion slots.

4) Select an empty slot with a PCI connector.

5) Observe precautions for handling static sensitive devices. Slide the card into the slot.

6) To ensure that the air flow within the computer is sufficient to cool the system properly, make sure that any remaining expansion slot covers are in place.

7) Refer to the computer Operating Instructions. Replace the computer cover.

8) Reconnect the computer monitor, keyboard etc.

9) Reconnect the computer and any attached peripheral devices to the mains supply. Switch on the computer.

When your computer restarts, the Windows software will display the 'New Hardware Found' window stating that it has detected new hardware on your PC. The window contains a list of options relating to driver software.

10) Select the 'Use disk from manufacturer...' option.

11) Insert the Windows 95/98/NT disk supplied with the Frame Grabber card.

The operating system extracts the relevant driver information from the disk inserted into your computer.

Installation of the Frame Grabber card is now complete.

LIPS-F & LIPS-T **Installation Guide**

9) Reconnect the computer and any attached peripheral devices to the mains supply. Switch on the computer.

When your computer restarts, the Windows software will display the 'New Hardware Found' window stating that it has detected new hardware on your PC. The window contains a list of options relating to driver software.

10) Select the 'Use disk from manufacturer...' option.

11) Insert the Windows 95/98/NT disk supplied with the Frame Grabber card.

The operating system extracts the relevant driver information from the disk inserted into your computer.

Installation of the Frame Grabber card is now complete.

Page 6

2.2 System Interconnections using a Frame Grabber Card

In order to capture and display live thermal images, your PC must be connected to a Thermal Imager via the Frame Grabber card supplied with ***LIPS-F***. Ensure that the Frame Grabber card is installed correctly in your PC (refer to Section 2.1).

There are several options for system interconnections, depending on the number of ***FTI 6*** Thermal Imagers in your system and the method used to connect them to the Frame Grabber card. Each configuration is described below:

- A single ***FTI 6*** Thermal Imager connected to a PC, displaying a single live image. The interconnections for this system are illustrated in Fig.1.
- Up to four ***FTI 6*** Thermal Imagers, connected via an input multiplexer (i.e. parallel connection) to a PC, displaying a single live image. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 2.
- Up to sixteen ***FTI 6*** Thermal Imagers, in a 'daisy chained video' (i.e. serial) connection to the video input of the PC, displaying a single live image. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 3.
- Up to four ***FTI 6*** Thermal Imagers, connected via an input multiplexer (i.e. parallel connection) to a PC, displaying a live image from one ***FTI 6*** plus up to three frozen images from the other ***FTI 6*** units. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 4.
- Up to four ***FTI 6*** Thermal Imagers, in a 'daisy chained video' (i.e. serial) connection to the video input of the PC, displaying a live image from one ***FTI 6*** plus up to three frozen images from the other ***FTI 6*** units. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 5.

Installation Guide *LIPS-F & LIPS-T*

2.2 System Interconnections using a Frame Grabber Card

In order to capture and display live thermal images, your PC must be connected to a Thermal Imager via the Frame Grabber card supplied with ***LIPS-F***. Ensure that the Frame Grabber card is installed correctly in your PC (refer to Section 2.1).

There are several options for system interconnections, depending on the number of ***FTI 6*** Thermal Imagers in your system and the method used to connect them to the Frame Grabber card. Each configuration is described below:

- A single ***FTI 6*** Thermal Imager connected to a PC, displaying a single live image. The interconnections for this system are illustrated in Fig.1.
- Up to four ***FTI 6*** Thermal Imagers, connected via an input multiplexer (i.e. parallel connection) to a PC, displaying a single live image. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 2.
- Up to sixteen ***FTI 6*** Thermal Imagers, in a 'daisy chained video' (i.e. serial) connection to the video input of the PC, displaying a single live image. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 3.
- Up to four ***FTI 6*** Thermal Imagers, connected via an input multiplexer (i.e. parallel connection) to a PC, displaying a live image from one ***FTI 6*** plus up to three frozen images from the other ***FTI 6*** units. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 4.
- Up to four ***FTI 6*** Thermal Imagers, in a 'daisy chained video' (i.e. serial) connection to the video input of the PC, displaying a live image from one ***FTI 6*** plus up to three frozen images from the other ***FTI 6*** units. The live image 'auto cycles' (i.e. switches to next imager in sequence) after a user-defined period. The interconnections for this system are illustrated in Fig. 5.

Page 7

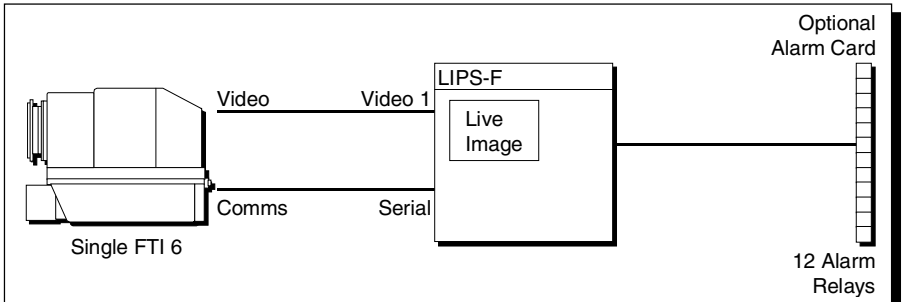

Fig. 1 Interconnection diagram for a single ***FTI 6*** to a single live image

TI990031

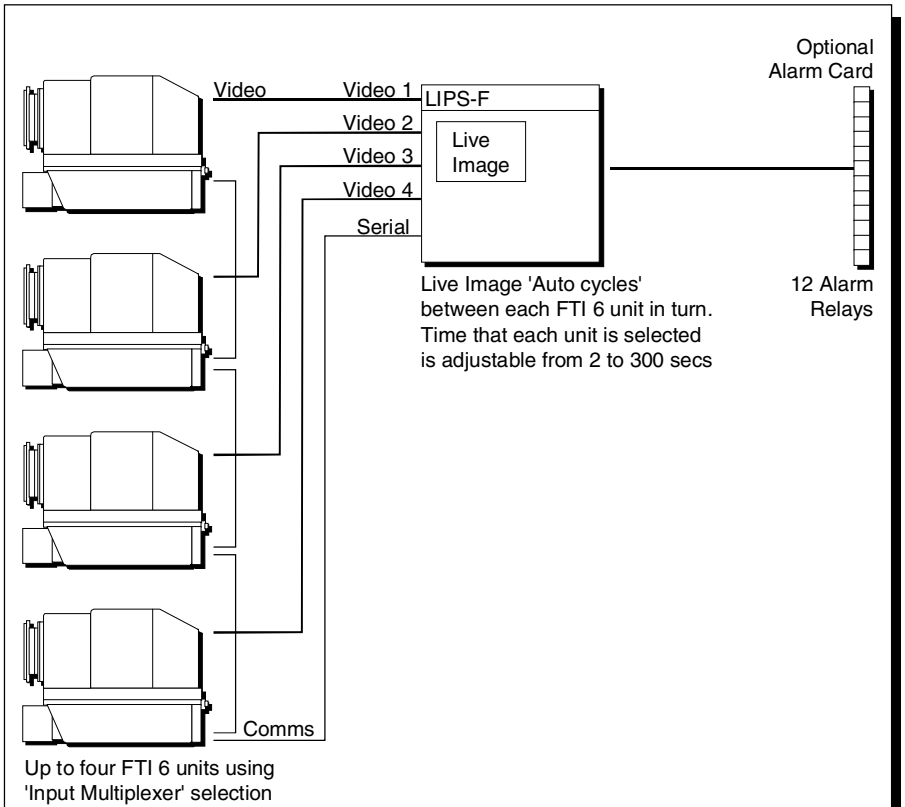

Fig. 2 Interconnection diagram for up to four multiplexed ***FTI 6*** units to a single live image

TI990032

LIPS-F & LIPS-T **Installation Guide**

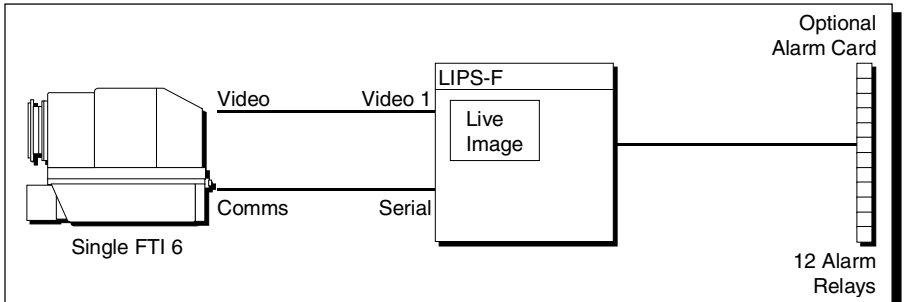

Fig. 1 Interconnection diagram for a single ***FTI 6*** to a single live image

TI990031

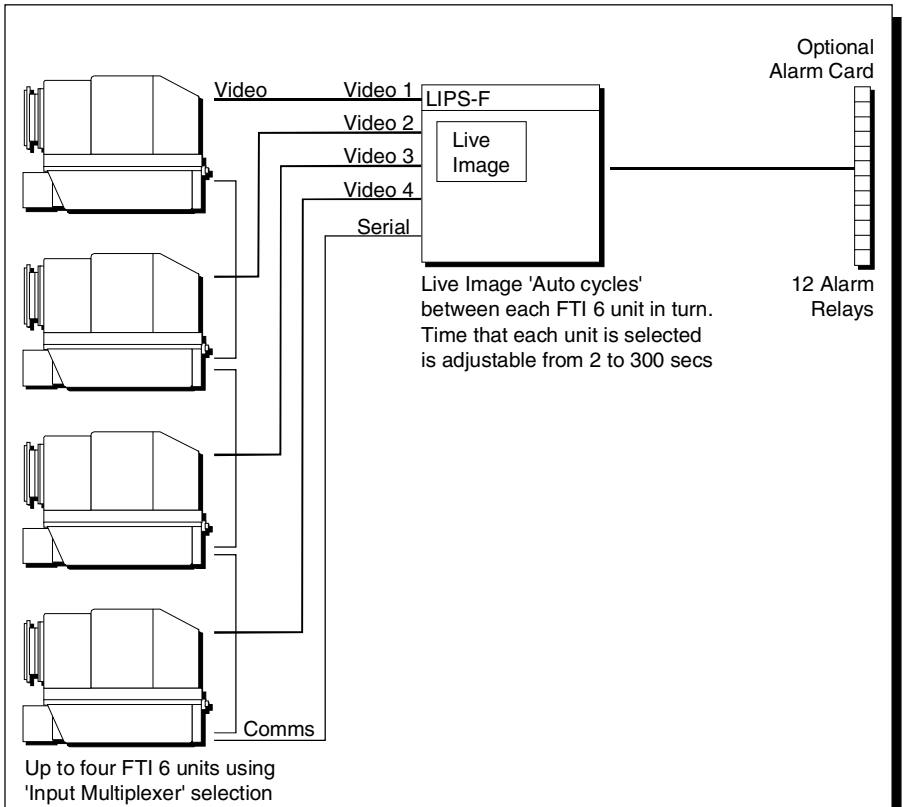

Fig. 2 Interconnection diagram for up to four multiplexed ***FTI 6*** units to a single live image

TI990032

Page 8

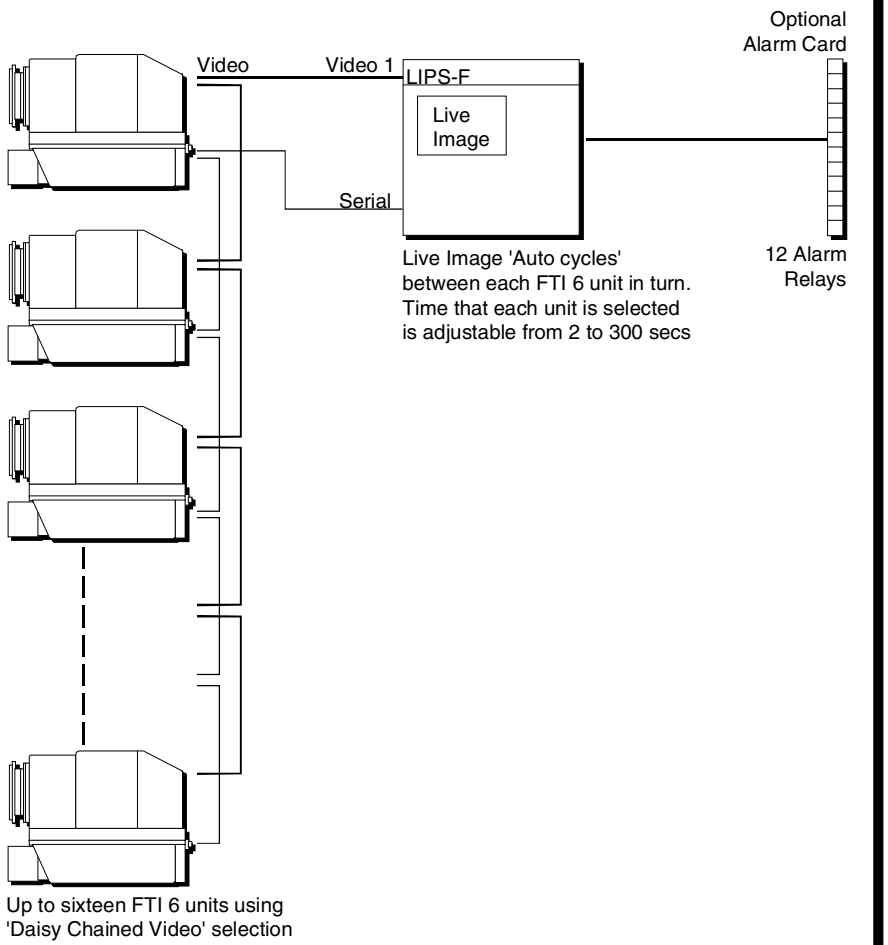

Fig. 3 Interconnection diagram for up to sixteen 'daisy chained' ***FTI 6*** units to a single live image TI990033

Installation Guide *LIPS-F & LIPS-T*

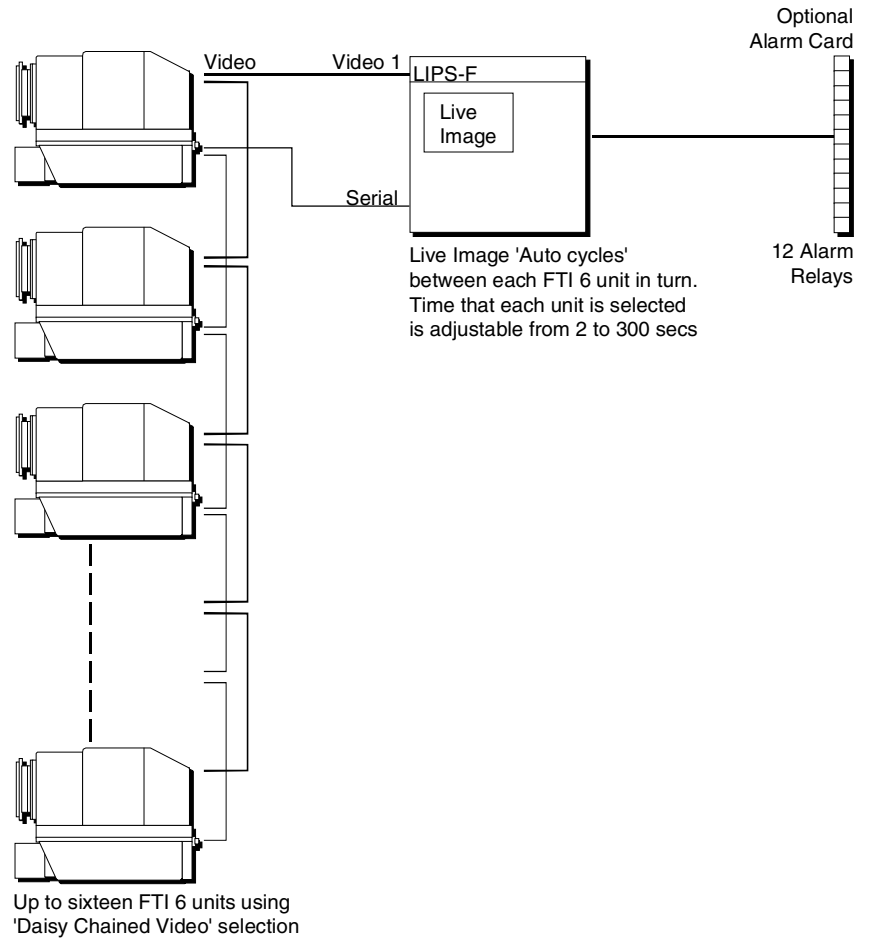

Fig. 3 Interconnection diagram for up to sixteen 'daisy chained' ***FTI 6*** units to a single live image TI990033

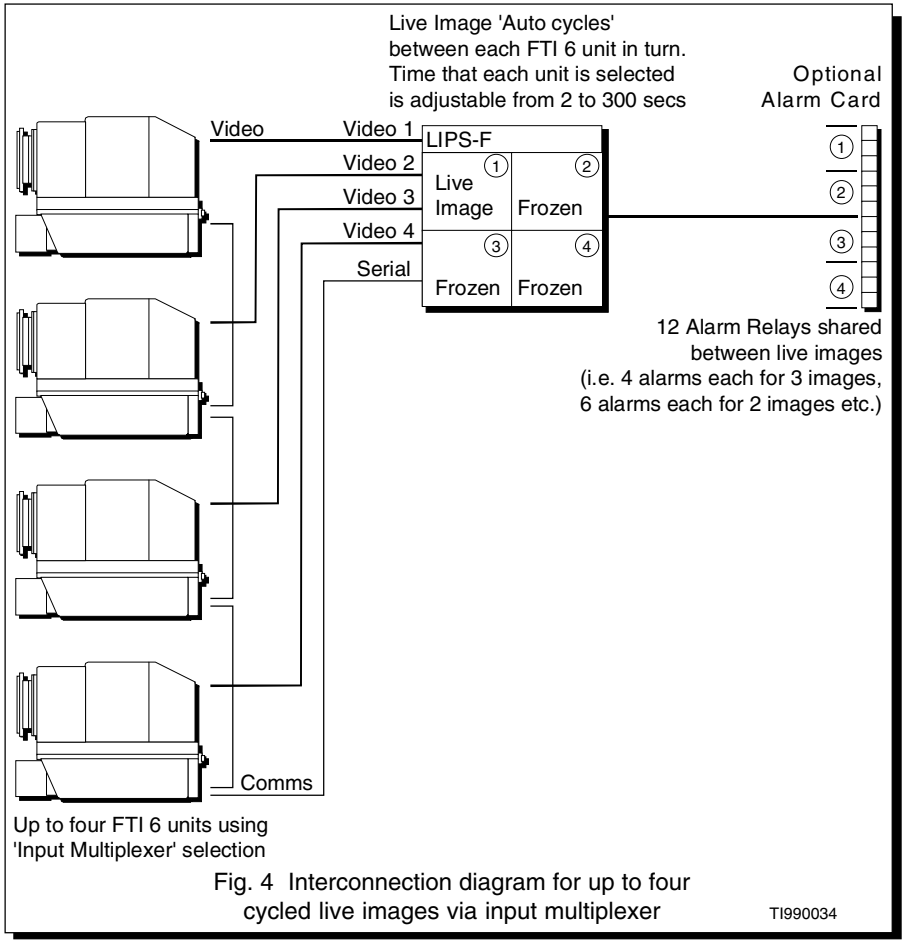

Fig. 4 Interconnection diagram for up to four cycled live images via input multiplexer

LIPS-F & LIPS-T **Installation Guide**

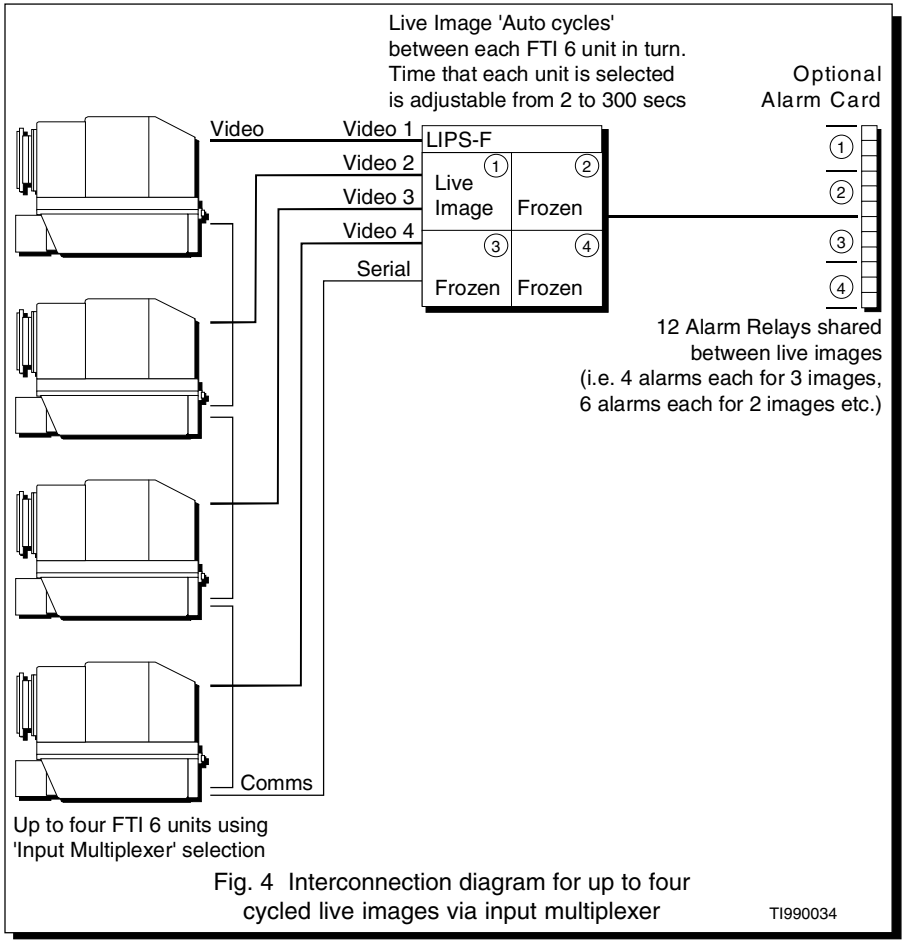

Fig. 4 Interconnection diagram for up to four cycled live images via input multiplexer

Page 10

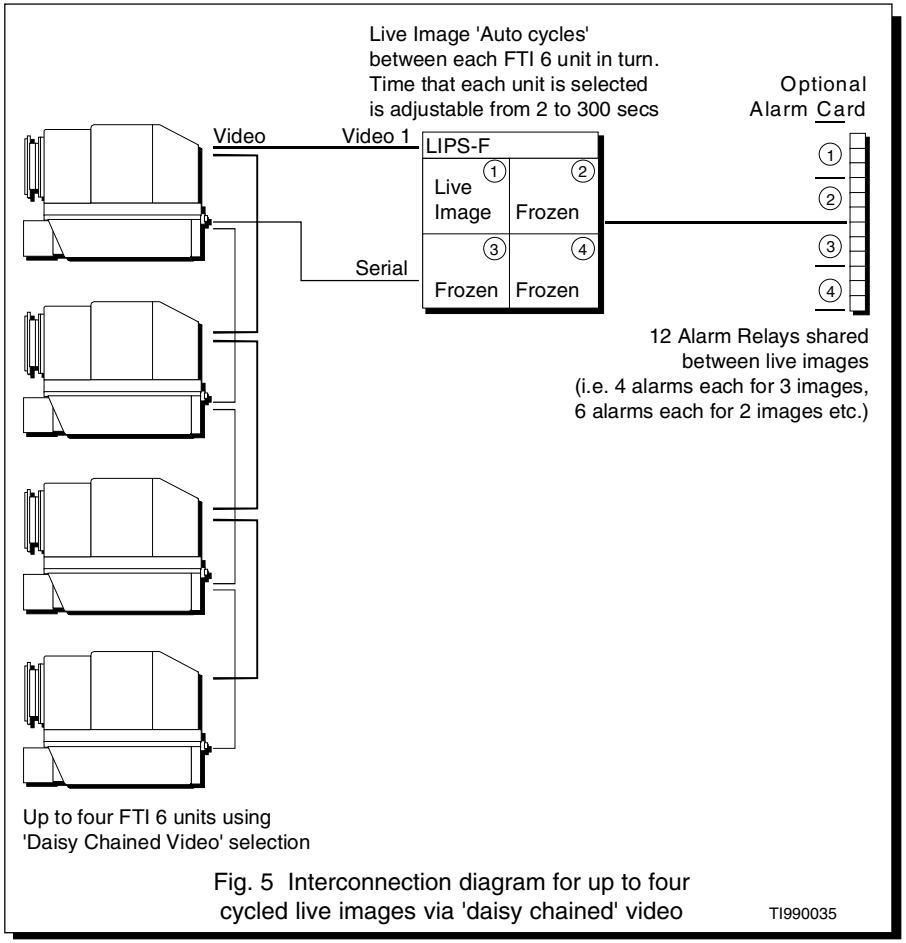

Fig. 5 Interconnection diagram for up to four cycled live images via 'daisy chained' video TI990035

Installation Guide ***LIPS-F & LIPS-T***

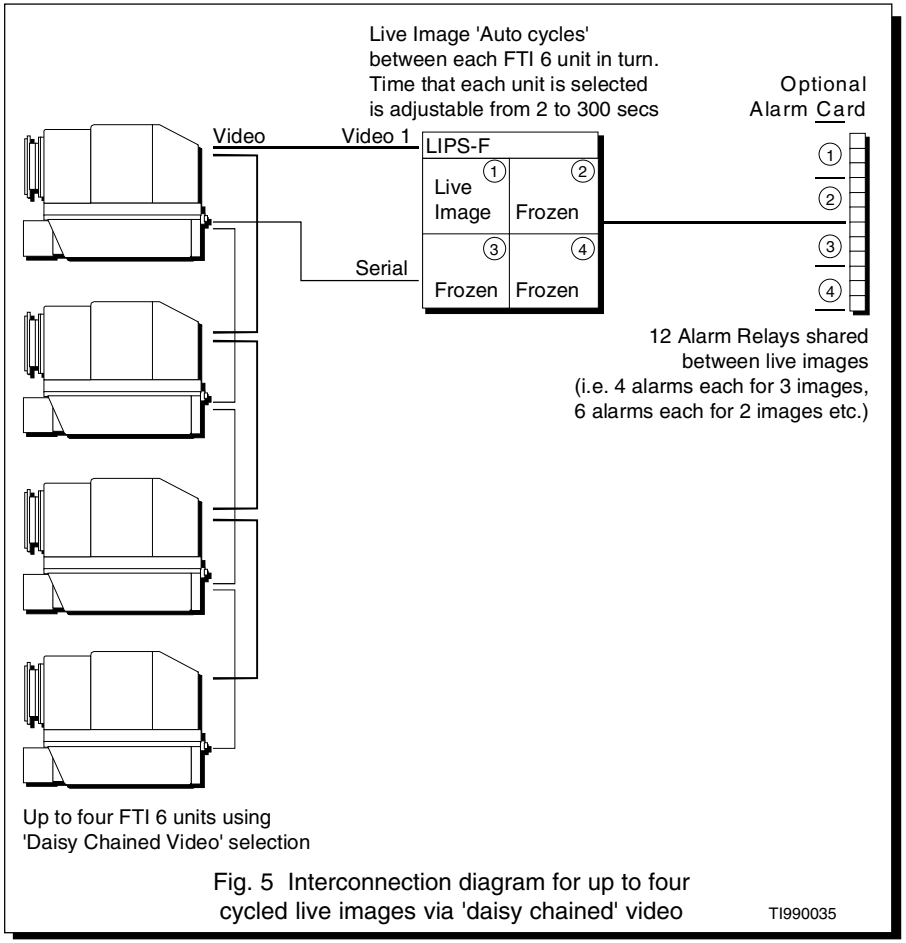

Fig. 5 Interconnection diagram for up to four cycled live images via 'daisy chained' video TI990035

Page 11

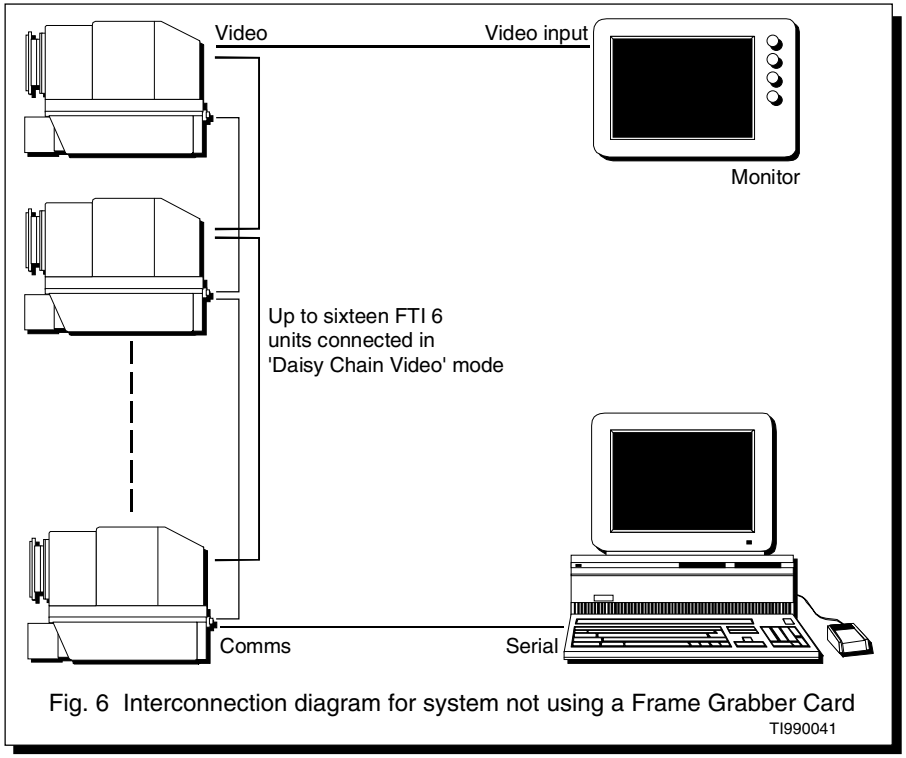

Fig. 6 Interconnection diagram for system not using a Frame Grabber Card

TI990041

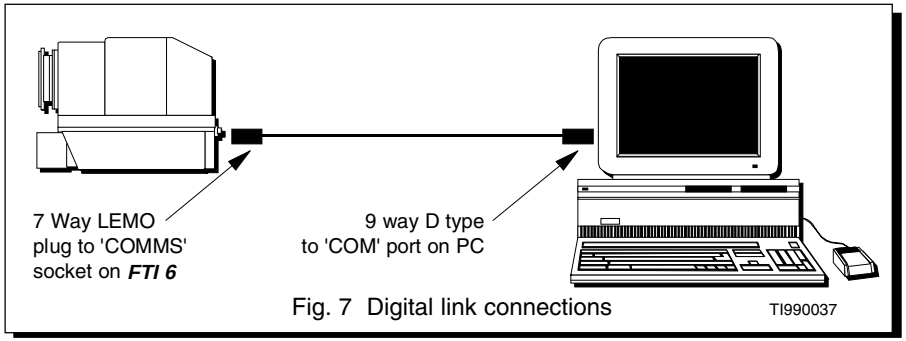

Fig. 7 Digital link connections

TI990037

LIPS-F & LIPS-T **Installation Guide**

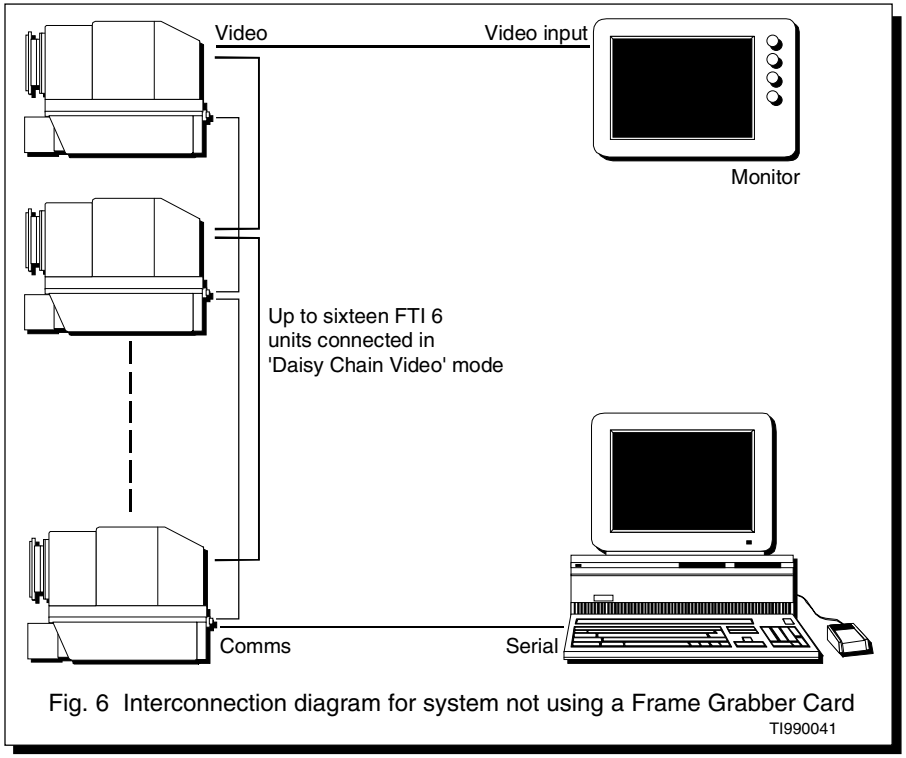

Fig. 6 Interconnection diagram for system not using a Frame Grabber Card

TI990041

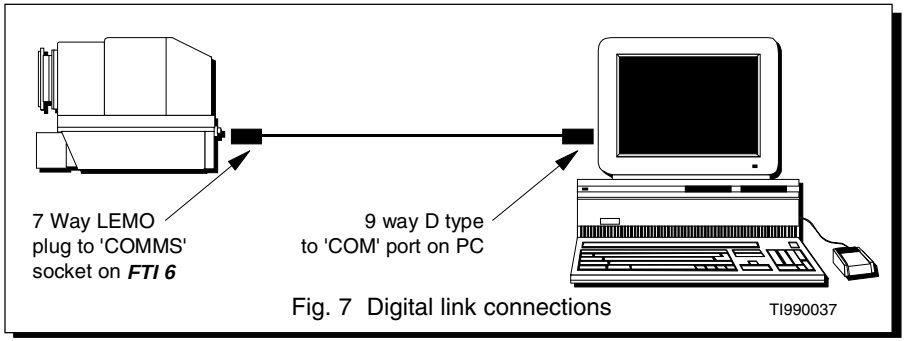

Fig. 7 Digital link connections

TI990037

2.3 Viewing live images when no Frame Grabber Card is fitted

You can control up to sixteen ***FTI 6*** units from a PC **not** fitted with a Frame Grabber Card. This configuration is possible in both ***LIPS-F*** and ***LIPS-T***, but is most likely to be used with the ***LIPS-T*** software.

To view live images, a TV monitor must be connected to the 'VIDEO' output of the thermal imager. In multiple imager applications, the video outputs of up to sixteen ***FTI 6*** units must be connected in 'daisy chain' mode. Each ***FTI 6*** is controlled from the PC running the ***LIPS*** software. Refer to Fig. 6 for system interconnection details.

2.4 Digital link connections

When your computer is connected to an ***FTI 6*** Thermal Imager via its digital link, it is possible to transfer information and thermal images between the ***LIPS-F*** software and the Thermal Imager without the need for a Frame Grabber Card.

The digital link enables the following facilities:

- Full remote control of the Thermal Imager functions.
- Transfer of images stored on optional memory cards fitted in the ***FTI 6*** Thermal Imager to the ***LIPS-F*** software for post-processing and analysis.

Refer to Fig. 7 for details of the digital link connections.

Installation Guide *LIPS-F & LIPS-T*

2.3 Viewing live images when no Frame Grabber Card is fitted

You can control up to sixteen ***FTI 6*** units from a PC **not** fitted with a Frame Grabber Card. This configuration is possible in both ***LIPS-F*** and ***LIPS-T***, but is most likely to be used with the ***LIPS-T*** software.

To view live images, a TV monitor must be connected to the 'VIDEO' output of the thermal imager. In multiple imager applications, the video outputs of up to sixteen ***FTI 6*** units must be connected in 'daisy chain' mode. Each ***FTI 6*** is controlled from the PC running the ***LIPS*** software. Refer to Fig. 6 for system interconnection details.

2.4 Digital link connections

When your computer is connected to an ***FTI 6*** Thermal Imager via its digital link, it is possible to transfer information and thermal images between the ***LIPS-F*** software and the Thermal Imager without the need for a Frame Grabber Card.

The digital link enables the following facilities:

- Full remote control of the Thermal Imager functions.
- Transfer of images stored on optional memory cards fitted in the ***FTI 6*** Thermal Imager to the ***LIPS-F*** software for post-processing and analysis.

Refer to Fig. 7 for details of the digital link connections.

Page 13

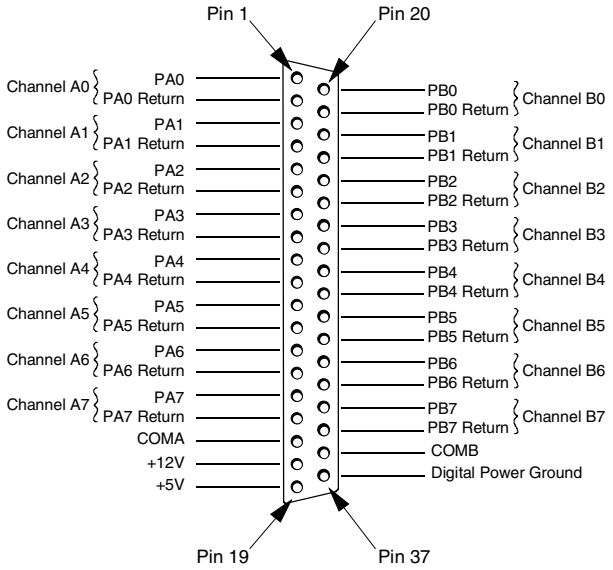

Fig. 8 Digital Input Card (PC 62C) connection schedule TI990120

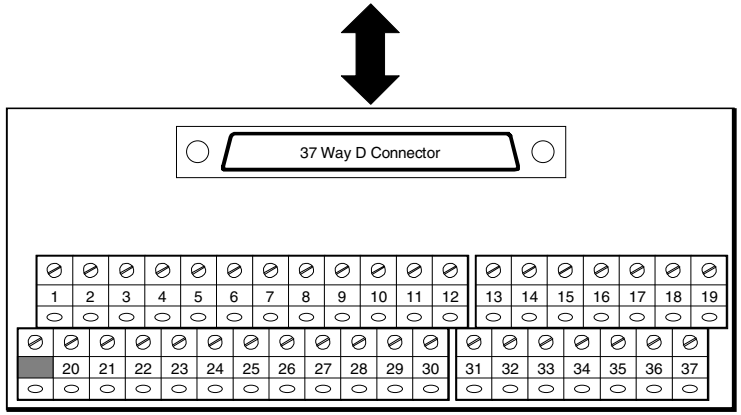

Fig. 9 Layout of Screw Termination Assembly TI990051

LIPS-F & LIPS-T **Installation Guide**

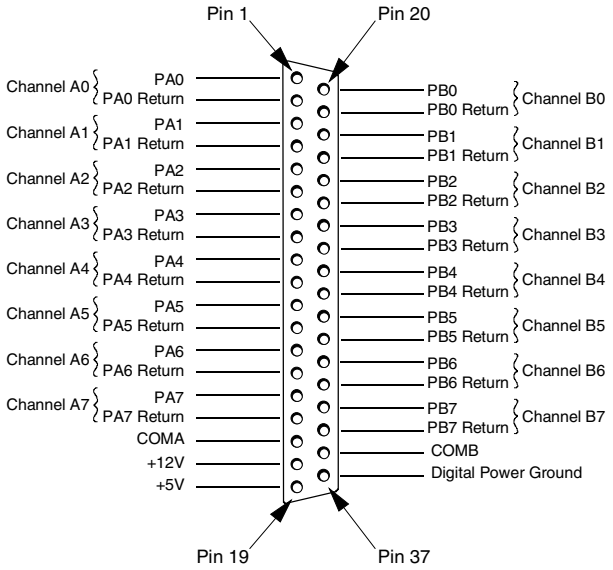

Fig. 8 Digital Input Card (PC 62C) connection schedule TI990120

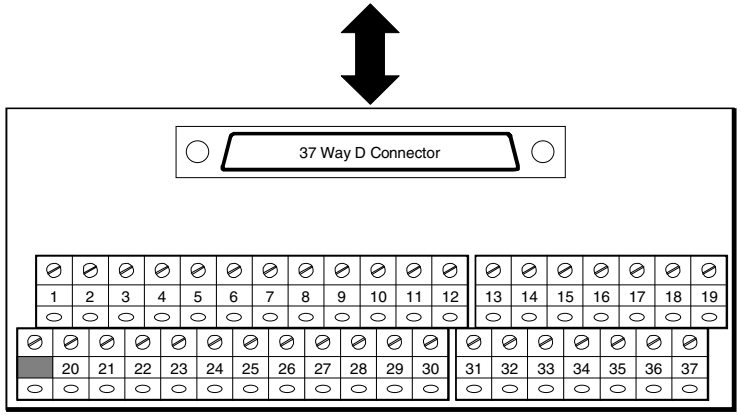

Fig. 9 Layout of Screw Termination Assembly TI990051

2.5 Installing the Digital Input Card

The Digital Input Card supplied (as an option) with ***LIPS-F*** is the **Amplicon Liveline PC 62C**.

For full installation details for the Digital Input Card, refer to Chapters 1 and 2 of the 'User's Manual' supplied with the card.

NOTE

The default base address of the card is factory-set to 280h. If you wish to select another address, refer to the 'User's Manual' supplied with the PC 62C.

If you change the base address, the new base address must be entered during the software installation.

2.5.1 Digital Input connections

The connections to the Digital Input Card (PC 62C) are made via the 37 way D type connector. The connection schedule is given in Fig. 8.

A Screw Termination Assembly (Amplicon Part Nº 908 919 50) is supplied with the Digital Input Card. The Screw Termination Assembly enables easier connection to the Digital Input Card. The Terminal Block is DIN rail mountable and connects to the Input Card via a 37 Way Ribbon Cable (Amplicon Part Nº 908 919 51).

The layout of the Screw Termination Assembly is given in Fig. 9.

Installation Guide *LIPS-F & LIPS-T*

2.5 Installing the Digital Input Card

The Digital Input Card supplied (as an option) with ***LIPS-F*** is the **Amplicon Liveline PC 62C**.

For full installation details for the Digital Input Card, refer to Chapters 1 and 2 of the 'User's Manual' supplied with the card.

NOTE

The default base address of the card is factory-set to 280h. If you wish to select another address, refer to the 'User's Manual' supplied with the PC 62C.

If you change the base address, the new base address must be entered during the software installation.

2.5.1 Digital Input connections

The connections to the Digital Input Card (PC 62C) are made via the 37 way D type connector. The connection schedule is given in Fig. 8.

A Screw Termination Assembly (Amplicon Part Nº 908 919 50) is supplied with the Digital Input Card. The Screw Termination Assembly enables easier connection to the Digital Input Card. The Terminal Block is DIN rail mountable and connects to the Input Card via a 37 Way Ribbon Cable (Amplicon Part Nº 908 919 51).

The layout of the Screw Termination Assembly is given in Fig. 9.

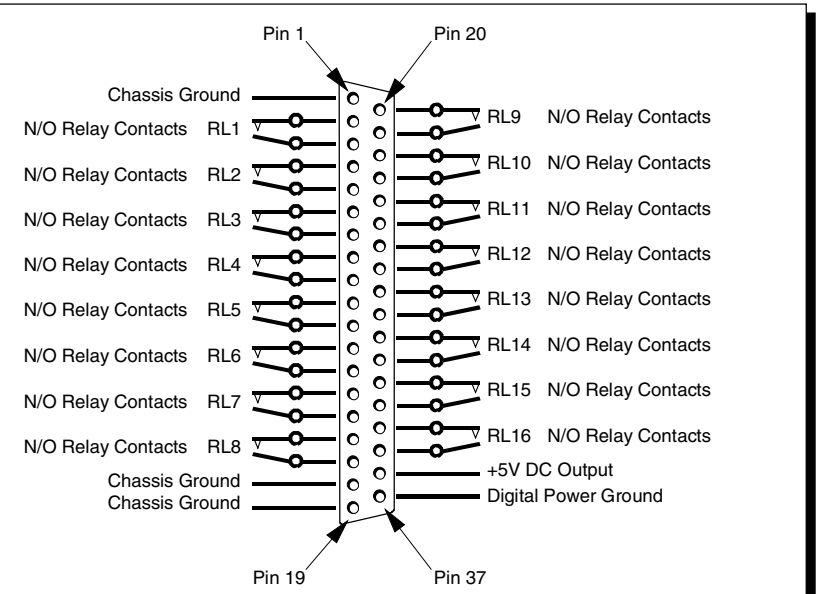

Fig. 10 Digital Output Card (PC263) connection schedule TI990052

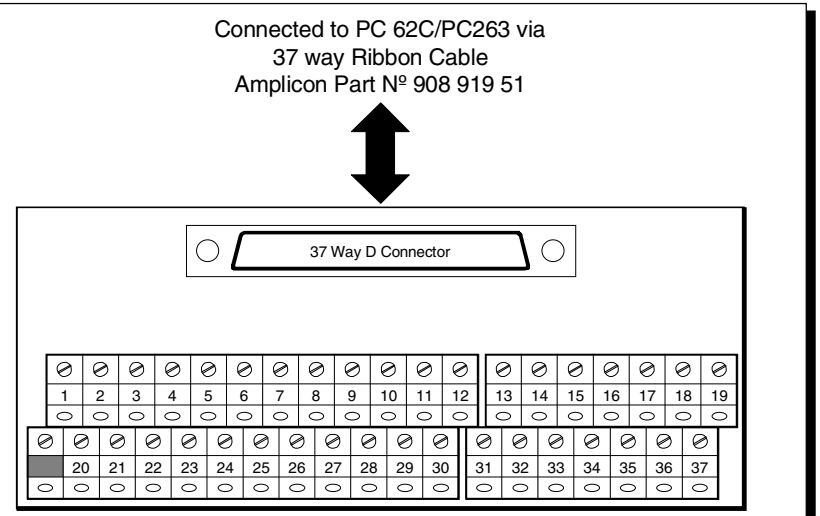

Fig. 11 Layout of Screw Termination Assembly TI990051

LIPS-F & LIPS-T **Installation Guide**

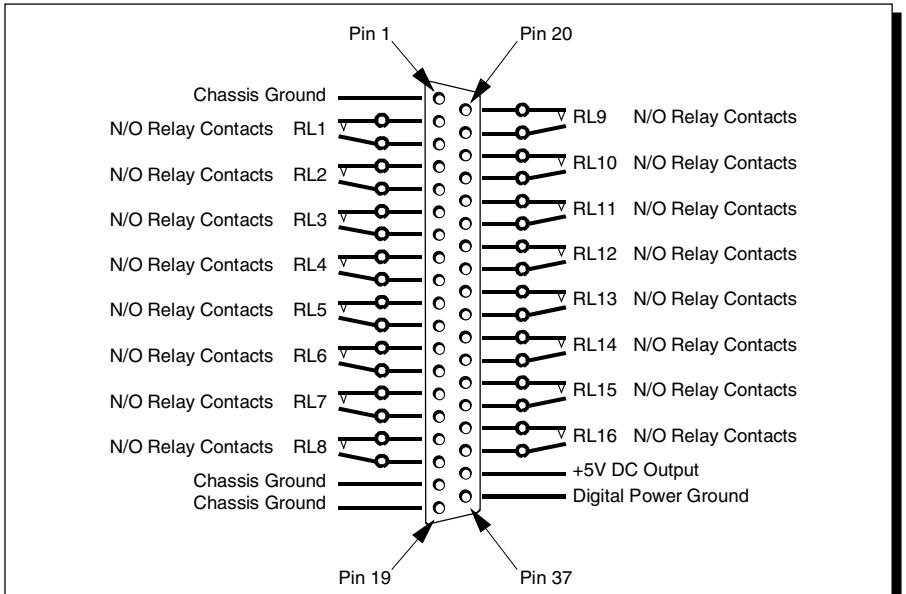

Fig. 10 Digital Output Card (PC263) connection schedule TI990052

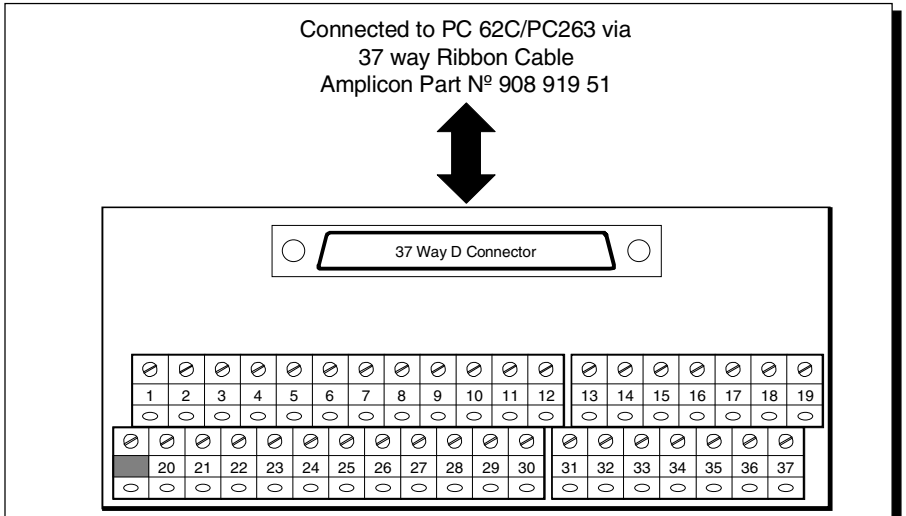

Fig. 11 Layout of Screw Termination Assembly TI990051

2.6 Installing the Digital Output Card

The Digital Output Card supplied (as an option) with ***LIPS-F*** is the **Amplicon Liveline PC263**.

For full installation details for the Digital Output Card, refer to Chapters 1, 2 and 3 of the 'Instruction Manual' supplied with the card.

NOTE

The default base address of the card is factory-set to 300h. If you wish to select another address, refer to the 'Instruction Manual' supplied with the PC263.

If you change the base address, the new base address must be entered during the software installation.

2.6.1 Digital Output connections

The relay output connections from the Digital Output Card (PC 263) are made via the 37 way D type connector (SK1). The connection schedule is given in Fig. 10.

A Screw Termination Assembly (Amplicon Part Nº 908 919 50) is supplied with the Digital Output Card. The Screw Termination Assembly enables easier connection to the Digital Output Card. The Terminal Block is DIN rail mountable and connects to SK1 on the Output Card via a 37 Way Ribbon Cable (Amplicon Part Nº 908 919 51).

The layout of the Screw Termination Assembly is given in Fig. 11.

Installation Guide *LIPS-F & LIPS-T*

2.6 Installing the Digital Output Card

The Digital Output Card supplied (as an option) with ***LIPS-F*** is the **Amplicon Liveline PC263**.

For full installation details for the Digital Output Card, refer to Chapters 1, 2 and 3 of the 'Instruction Manual' supplied with the card.

NOTE

The default base address of the card is factory-set to 300h. If you wish to select another address, refer to the 'Instruction Manual' supplied with the PC263.

If you change the base address, the new base address must be entered during the software installation.

2.6.1 Digital Output connections

The relay output connections from the Digital Output Card (PC 263) are made via the 37 way D type connector (SK1). The connection schedule is given in Fig. 10.

A Screw Termination Assembly (Amplicon Part Nº 908 919 50) is supplied with the Digital Output Card. The Screw Termination Assembly enables easier connection to the Digital Output Card. The Terminal Block is DIN rail mountable and connects to SK1 on the Output Card via a 37 Way Ribbon Cable (Amplicon Part Nº 908 919 51).

The layout of the Screw Termination Assembly is given in Fig. 11.

3.0 SOFTWARE INSTALLATION

This section covers the installation of the ***LIPS*** software on your PC.

NOTE

Before installing the ***LIPS*** software, ensure that your computer system meets the requirements listed in Section 3.1.

3.1 Minimum System Requirements

LIPS-F can operate on live thermal images and/or 'post process' images stored on disk.

LIPS-T operates in 'post processing' mode only, working with stored or digitally transferred images.

3.1.1 Live Image Processing mode (*LIPS-F* only)

- 300MHz Pentium PC (or greater) with PCI bus
- Windows 95/98 or Windows NT (V4.0 or greater) operating system
- 16MB RAM for Windows 95/98, 32MB RAM for Windows NT
- High speed PCI bus SVGA card capable of 1024 x 768 pixels desktop area at 65536 colours
- CD ROM drive
- SVGA monitor

3.1.2 Post Processing mode

- 166MHz Pentium PC
- Windows 95/98 or Windows NT (V4.0 or greater) operating system
- 16MB RAM for Windows 95/98, 32MB RAM for Windows NT
- SVGA card capable of 800 x 600 pixels desktop area at 65536 colours
- CD ROM drive
- SVGA monitor

LIPS-F & LIPS-T **Installation Guide**

3.0 SOFTWARE INSTALLATION

This section covers the installation of the ***LIPS*** software on your PC.

NOTE

Before installing the ***LIPS*** software, ensure that your computer system meets the requirements listed in Section 3.1.

3.1 Minimum System Requirements

LIPS-F can operate on live thermal images and/or 'post process' images stored on disk.

LIPS-T operates in 'post processing' mode only, working with stored or digitally transferred images.

3.1.1 Live Image Processing mode (*LIPS-F* only)

- 300MHz Pentium PC (or greater) with PCI bus
- Windows 95/98 or Windows NT (V4.0 or greater) operating system
- 16MB RAM for Windows 95/98, 32MB RAM for Windows NT
- High speed PCI bus SVGA card capable of 1024 x 768 pixels desktop area at 65536 colours
- CD ROM drive
- SVGA monitor

3.1.2 Post Processing mode

- 166MHz Pentium PC
- Windows 95/98 or Windows NT (V4.0 or greater) operating system
- 16MB RAM for Windows 95/98, 32MB RAM for Windows NT
- SVGA card capable of 800 x 600 pixels desktop area at 65536 colours
- CD ROM drive
- SVGA monitor

Page 18

3.2 Installing the software

The ***LIPS*** software is supplied on one CD ROM.

1) Switch on your computer.

2) Start a Windows 95/98 or Windows NT session.

3) Insert the CD ROM disk into the CD drive on your PC. If your PC has 'Autostart' enabled, the setup program will begin automatically, otherwise go to step 4.

4) In Windows, select 'Start' > 'Run'.

5) Type **d:\setup.exe** (where **d:** is the CD drive from which you are installing the program).

6) Follow the instructions on screen to install the software.

3.2.1 *LIPS-F* Frame Grabber card software installation

If you wish to use a Frame Grabber card, the 'Select Video Standard' window appears. The video standard of your Frame Grabber card must be set to match that of the country in which the software is operating.

The countries in the following list use the 525 line NTSC system. All other countries use the 625 line PAL/SECAM standard.

- **Bahamas**
- **Barbados**
- **Bermuda**
- **Brazil**
- **Canada**
- **Chile**
- **Japan**
- **Korea**
- **Mexico**
- **Peru**
- **Philippines**
- **Taiwan**
- **Trinidad**
- **USA**
- **Venezuela**

Installation Guide *LIPS-F & LIPS-T*

3.2 Installing the software

The ***LIPS*** software is supplied on one CD ROM.

1) Switch on your computer.

2) Start a Windows 95/98 or Windows NT session.

3) Insert the CD ROM disk into the CD drive on your PC. If your PC has 'Autostart' enabled, the setup program will begin automatically, otherwise go to step 4.

4) In Windows, select 'Start' > 'Run'.

5) Type **d:\setup.exe** (where **d:** is the CD drive from which you are installing the program).

6) Follow the instructions on screen to install the software.

3.2.1 *LIPS-F* Frame Grabber card software installation

If you wish to use a Frame Grabber card, the 'Select Video Standard' window appears. The video standard of your Frame Grabber card must be set to match that of the country in which the software is operating.

The countries in the following list use the 525 line NTSC system. All other countries use the 625 line PAL/SECAM standard.

- **Bahamas**
- **Barbados**
- **Bermuda**
- **Brazil**
- **Canada**
- **Chile**
- **Japan**
- **Korea**
- **Mexico**
- **Peru**
- **Philippines**
- **Taiwan**
- **Trinidad**
- **USA**
- **Venezuela**

Page 19

NOTE - FRAME GRABBER USERS ONLY

LIPS-F requires the program Microsoft Direct X to be installed on your PC. If your PC does not already have this program, the ***LIPS-F*** setup program can install it for you.

Click on 'Yes' in the 'Install Query' dialog box to install this program.

3.3 Completing the Setup (Restarting your PC)

When set up is complete, your computer needs to be restarted in order for the ***LIPS*** program to run correctly.

The 'Setup Complete' window appears, giving you the option of restarting your computer either immediately or later.

(i) Select a restart option, remove any disks from their drives and click on 'Finish'.

The message 'Click Finish to complete Setup' now appears in the 'Setup Complete' window.

(ii) Click on 'Finish' to exit the setup program.

Installation of ***LIPS*** is now complete.

Depending on the restart option chosen, your computer will either restart or the current Windows session will continue.

LIPS-F & LIPS-T **Installation Guide**

NOTE - FRAME GRABBER USERS ONLY

LIPS-F requires the program Microsoft Direct X to be installed on your PC. If your PC does not already have this program, the ***LIPS-F*** setup program can install it for you.

Click on 'Yes' in the 'Install Query' dialog box to install this program.

3.3 Completing the Setup (Restarting your PC)

When set up is complete, your computer needs to be restarted in order for the ***LIPS*** program to run correctly.

The 'Setup Complete' window appears, giving you the option of restarting your computer either immediately or later.

(i) Select a restart option, remove any disks from their drives and click on 'Finish'.

The message 'Click Finish to complete Setup' now appears in the 'Setup Complete' window.

(ii) Click on 'Finish' to exit the setup program.

Installation of ***LIPS*** is now complete.

Depending on the restart option chosen, your computer will either restart or the current Windows session will continue.

Page 20

3.4 Removing ('Uninstalling') the software

Occasionally, you may wish to remove the ***LIPS*** software from your PC (to install it on another computer, for example). The ***LIPS*** software is supplied with a simple 'Uninstall' utility, which removes all files related solely to ***LIPS*** from your computer.

To remove the ***LIPS*** software;

1) Switch on your computer.

2) Start a Windows 95/98 or Windows NT session.

3) From the Control Panel window, select 'Add/Remove Programs'

4) From the list of programs presented, select either ***LIPS-F*** or ***LIPS-T*** accordingly.

5) Click the 'Add/Remove...' button.

6) When prompted, confirm that you wish to remove the software.

   The ***LIPS*** software will now be removed from your computer.

Installation Guide *LIPS-F & LIPS-T*

3.4 Removing ('Uninstalling') the software

Occasionally, you may wish to remove the ***LIPS*** software from your PC (to install it on another computer, for example). The ***LIPS*** software is supplied with a simple 'Uninstall' utility, which removes all files related solely to ***LIPS*** from your computer.

To remove the ***LIPS*** software;

1) Switch on your computer.

2) Start a Windows 95/98 or Windows NT session.

3) From the Control Panel window, select 'Add/Remove Programs'

4) From the list of programs presented, select either ***LIPS-F*** or ***LIPS-T*** accordingly.

5) Click the 'Add/Remove...' button.

6) When prompted, confirm that you wish to remove the software.

   The ***LIPS*** software will now be removed from your computer.

Page 21

LIPS-F & LIPS-T **Installation Guide**

Page 22