PDT 1100 Terminal

DLL Guide

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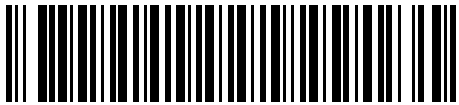

70-36556-01
Revision B — May 2001

Symbol Technologies, Inc. One Symbol Plaza, Holtsville N.Y. 11742

PDT 1100 Terminal
DLL Guide

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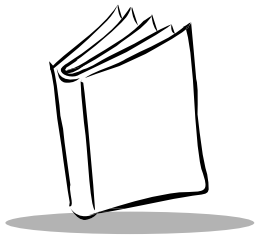

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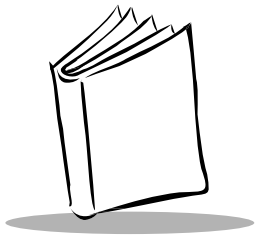


About This Guide

Introduction

This document describes the use of the Dynamic Link Library (DLL) of IR-Transfer Utilities. It is intended for programmers who already have some experience in programming.

Related Publications

- *PDT 1100 Terminal Product Reference Guide*, p/n 70-35864-XX
- *PDT 1100 Terminal Quick Reference Guide*, p/n 70-35861-XX
- *CRD 1100 Cradle Quick Reference Guide*, p/n 70-35862-XX
- *CRG 1100 4-Slot Battery Charger Quick Reference Guide*, p/n 70-35863-XX
- *PDT 1100 Terminal Transfer Utility Guide*, p/n 70-36368-XX
- *PDT 1100 Terminal Extension Library Programmer's Guide*, p/n 70-36100-XX
- *PDT 1100 Terminal Programmer's Guide*, p/n 70-36099-XX

Chapter Descriptions

- Chapter 1, *Introduction* describes the Ir-Transfer Utility C and E DLL.
- Chapter 2, *DLL File Formats* describes the file formats used in the Ir-Transfer Utility C and E DLL.
- Chapter 3, *Setting up the PDT 1100 in System Mode* describes how to set up the PDT 1100 to accept downloading and uploading from the host.

Notational Conventions

The following conventions are used in this document:

- *Italics* are used to highlight specific items in the general text, and to identify chapters and sections in this and related documents.
- Bullets (•) indicate:
  - action items
  - lists of alternatives
  - lists of required steps that are not necessarily sequential
- Sequential lists (e.g., those that describe step-by-step procedures) appear as numbered lists.
- `Courier` is used to indicate syntax.

Service Information

If you have a problem with your equipment, contact the nearest *Symbol Support Centers*. Before calling, have the model number, serial number, and several of your bar code symbols at hand.

Call the Support Center from a phone near the scanning equipment so that the service person can try to talk you through your problem. If the equipment is found to be working properly and the problem is symbol readability, the Support Center will request samples of your bar codes for analysis at our plant.

If your problem cannot be solved over the phone, you may need to return your equipment for servicing. If that is necessary, you will be given specific directions.

Note: *Symbol Technologies is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty. If the original shipping container was not kept, contact Symbol to have another sent to you.*

Symbol Support Centers

For service information, warranty information or technical assistance contact or call the Symbol Support Center in:

United States

Symbol Technologies, Inc.
One Symbol Plaza
Holtsville, New York 11742-1300
1-800-653-5350

Canada

Symbol Technologies Canada, Inc.
2540 Matheson Boulevard East
Mississauga, Ontario, Canada L4W 4Z2
(905) 629-7226

United Kingdom

Symbol Technologies
Symbol Place
Winnersh Triangle, Berkshire RG41 5TP
United Kingdom
0800 3282424(Inside UK)
+44 208 945 7529 (Outside UK)

Asia/Pacific

Symbol Technologies Asia, Inc.
230 Victoria Street #04-05
Bugis Junction Office Tower
Singapore 188024
337-6588 (Inside Singapore)
+65-337-6588 (Outside Singapore)

If you purchased your Symbol product from a Symbol Business Partner, contact that Business Partner for service.

Warranty

Symbol Technologies, Inc ("Symbol") manufactures its hardware products in accordance with industry-standard practices. Symbol warrants that for a period of twelve (12) months from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by Symbol, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Symbol, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or (iv) which has been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having s Symbol serial number, will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, Symbol will repair or replace defective products returned to Symbol's manufacturing plant in the US. For warranty service in North America, call the Symbol Support Center at 1-800-653-5350. International customers should contact the local Symbol office or support center. If warranty service is required, Symbol will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. Symbol will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. Symbol's manufacturing plant.

Symbol will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to Symbol within 3 days of receipt of the replacement product. The process for return and customer's charges will be in accordance with Symbol's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

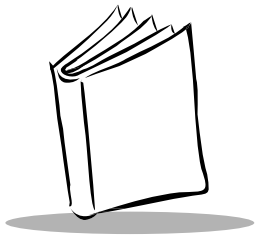
Symbol's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a substantial discount during warranty period.

General

Except for the warranties stated above, Symbol disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of Symbol for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller's liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the proceeding exclusion or limitation may not apply to you.



Chapter 1
Introduction

The Dynamic Link Library for IR-Transfer Utility C V1.04 and IR-Transfer Utility E V1.02 transmits program files and data files between the PDT 1100 Terminal and the host computer. The DLL runs on Microsoft® Windows 95® and Windows NT® 3.51/4.0.

DLL Disks

The DLL for IR-Transfer Utility C Disk Contains:

Under the Root Directory

- Readme.txt This document
- It3cw32d.dll DLL files

Under the VC40 directory

- It3cw32d.lib Import library name file for VC++4.0
- It3cApi.h Header name file for VC++4.0

Under the VB40 directory

- It3cw32.bas Module file for VB4.0
- Formmain.frm FRM file for VB4.0 demonstration program
- Formmain.frx FRX file for VB4.0 demonstration program
- It3cdemo.vbp Project file for VB4.0 demonstration program

The DLL for IR-Transfer Utility E Disk Contains:

Under the Root Directory

- Readme.txt This document
- It3ew32d.dll DLL files
- It3e*.dll DLL file for initializing IR devices

Under the VC40 directory

- It3ew32d.lib Import library name file for VC++4.0
- It3eApi.h Header name file for VC++4.0

Under the VB40 directory

- It3ew32.bas Module file for VB4.0
- Formmain.frm FRM file for VB4.0 demonstration program
- Formmain.frx FRX file for VB4.0 demonstration program
- It3edemo.vbp Project file for VB4.0 demonstration program

Note: *Always make and use copies of the master disk (IR-Transfer Utility C DLL floppy disk) and store the master copy from the package in a safe place, misoperation may damage the master disk.*

What is IR-Transfer Utility C DLL?

IR-Transfer Utility C DLL is a set of DLL programs which uploads and downloads program files, data files, or function files between the PDT 1100 and the host computer. This transfer is done according to the PDT 1100-IR protocol in the Windows 95 or Windows NT 3.51/4.0 environment.

Note: *Uploading refers to the host's receiving files from the PDT 1100; downloading refers to transferring files from the host computer to the PDT 1100.)*

The PDT 1100-IR protocol is a PDT 1100 terminal's format for transmitting data between the PDT 1100 and the host computer. For details, refer to the *PDT 1100 Product Reference Guide*.

Computers Available for IR-Transfer Utility C DLL

IR-Transfer Utility C DLL can run on personal computers equipped with the Intel 80386 CPU or higher capability that can operate Microsoft Windows 95 or Microsoft Windows NT3.51/ 4.0.

The DLL needs more memory than required by the OS and at least 200 kilobytes of unused disk space.

Note: *IR-Transfer Utility C DLL cannot run with Windows 3.1.*
When using PC's that use commands or menus to control the power source for the integrated RS-232C interface to save power, create a setting for applying power to that interface.

Installing IR-Transfer Utility C and E DLL

Preparations for Using IR-Transfer Utility C DLL

Copy the DLL file(s) to use into the folder where application program(s) are stored or into the folder with the path to the application folder.

IR Devices Available for IR-Transfer Utility E DLL

Listed below are IR devices (e.g., external IR transceivers and IR port-integrated computers) that IR-Transfer Utility E DLL supports.

External IR Transceivers

The table below lists supported external IR transceivers and their corresponding DLL files for initializing them. To use any of these external IR transceivers, specify the corresponding DLL file using the +I option (refer to *Options* on page 2-7).

Table 1-1. Available External IRTransceivers

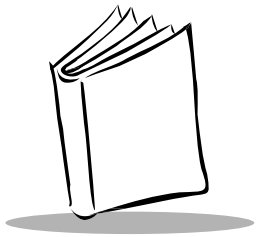
Manufacturers	Models	DLL filenames
ALPS ELECTRIC	IR MultiStation	IT3EAIRM.DLL
FUJITSU	FMIR-102	IT3EFMIR.DLL
KANSAI ELECTRIC	KC-IR1	IT3EKKCI.DLL
Extended Systems	ESI-9680A JetEye PC	IT3EEESI.DLL

IR Port-Integrated Computers

The table below lists IR port-integrated computers where IR-Transfer Utility E DLL is known to run normally. These computers require no DLL file for initialization.

Table 1-2. Available IR Port-Integrated Computers

Manufacturers	Models
TOSHIBA	DynaBook TECRA 510CT/2.1
FUJITSU	FMV-5150 NA5/W
EPSON	VN513ET
IBM	ThinkPad 560
SHARP	MN-6350D



Chapter 2
DLL File Formats

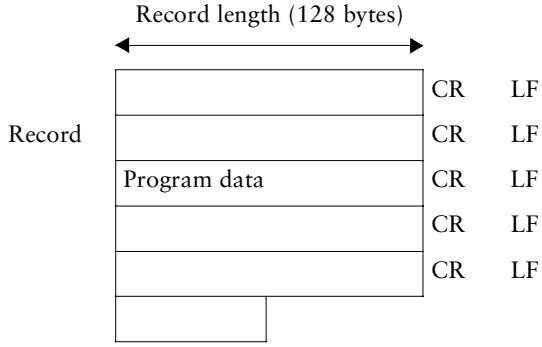
File Formats Supported by DLL

The DLL supports user program files, function files, and date files.

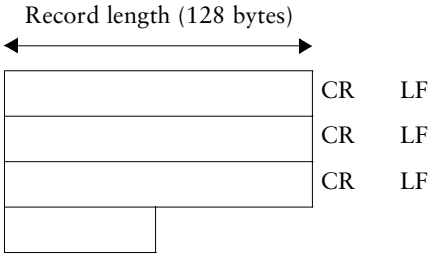
User Program Files

Ir-Transfer Utility C DLL regards MS-DOS files with the extension .PD3 as user program files (object program files). Files are developed using the PDT 1100-BASIC 3.0 Compiler.

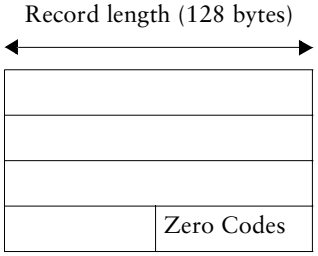
As shown, each record in a user program file is fixed to 128 bytes in length (except the last record) and suffixed by a set of CR and LF codes (CR-LF codes), 0Dh and 0Ah.



When downloading a program file, if the length of the last record is less than 128 bytes, the blank bytes (128 bytes minus last record length) are zero-filled so that every record is 128 bytes long.



When downloading:

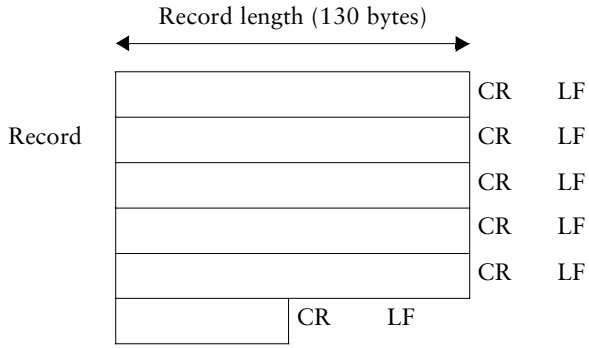


Note: *In the PDT 1100-Ir protocol, CR-LF codes that are used as record separators in data are removed before file transmission. When receiving downloaded user programs, the PDT 1100 packs two-byte ASCII characters into two 4-bit hexadecimal codes in a single byte, to improve the PDT 1100's performance and memory availability.*

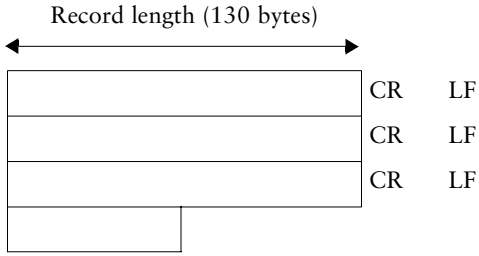
Function Files

Ir-Transfer Utility C DLL regards files with the extension .FN3 or .EX3 as function files. These function files are contained in the PDT 1100-BASIC 3.0 Extension Library.

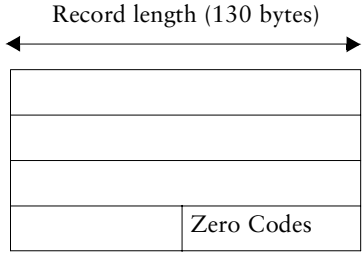
Each record in a function file is fixed to 130 bytes in length (except the last record) and suffixed by a set of CR-LF codes, as follows.



When downloading a function file, if the length of the last record is less than 130 bytes, the blank bytes (130 bytes minus last record length) are zero-filled, so that every record is 130 bytes long.



When downloading:

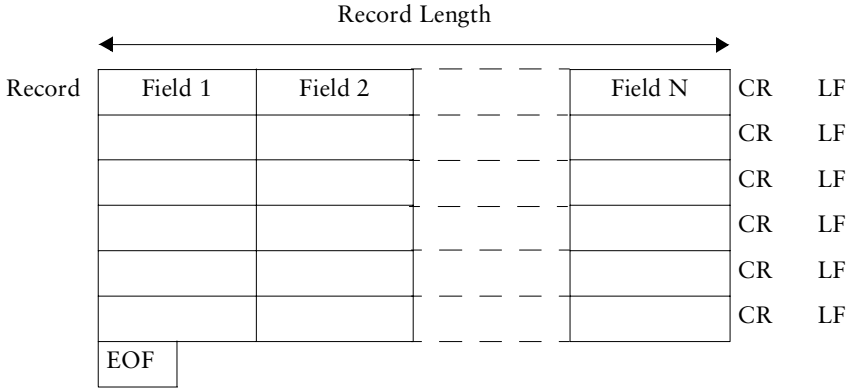


Note: *In the PDT 1100-Ir protocol, CR-LF codes that are used as record separators in data are removed before file transmission. When receiving downloaded function files, the PDT 1100 packs two-byte ASCII characters into two 4-bit hexadecimal codes in a single byte, to improve the PDT 1100's performance and memory availability.*

Data Files

Ir-Transfer Utility C DLL regards MS-DOS files with an extension other than .PD3, .FN3, and .EX3 as data files. Each record in a data file consists of one or more fields and suffixed by a set of CR and LF codes (CR-LF codes), 0Dh and 0Ah. An EOF (1Ah) code can be omitted.

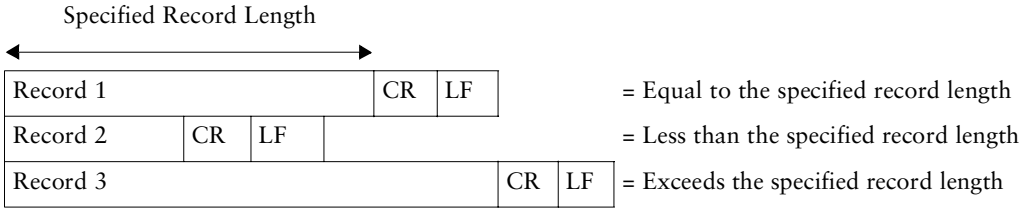
Data files can consist of ASCII text characters as well as arbitrary characters (00h to FFh).



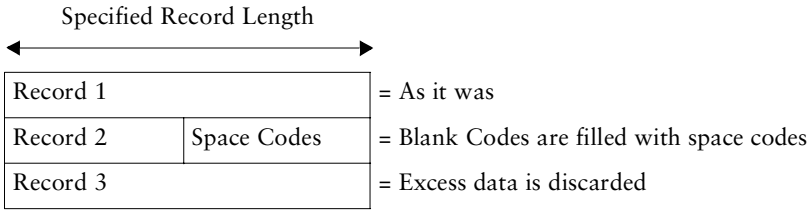
To download data files, type the folder, file names, and the field lengths. Each field should be 1 to 254 digits in length and the number of fields should be 1 to 16. The total field length (record length) plus the number of fields should be 255 or less.

Designate field lengths in a file with the same file name but an .FLD extension as the file to download, in the directory where that file resides. When the data file is uploaded, Ir-Transfer Utility C DLL automatically creates the field definition file in the folder where the uploaded file is stored. For the .FLD file format, refer to *Start of File Transmission* on page 2-11.

In downloading a data file, if the actual record length is less than the specified record length, the blank bytes are filled with space codes (20h); if it exceeds the specified record length, the excess is discarded.

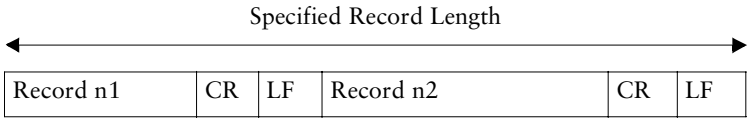


When downloaded:

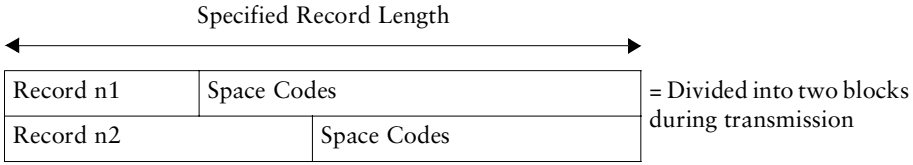


Interpreting CR-LF Codes in records

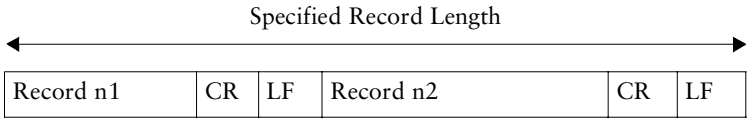
Ir-Transfer Utility C DLL interprets all characters 00h to FFh as data, but it usually interprets CR-LF codes in records as a record separator. If a record in a data file to be transmitted contains CR-LF codes, the Ir-Transfer Utility C DLL divides the record according to the record separator as follows.



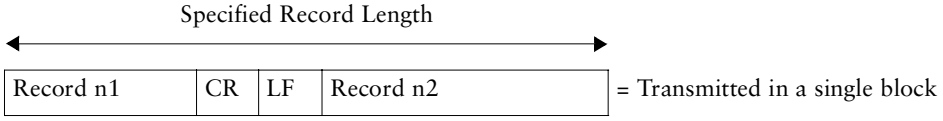
When downloaded:



To handle CR-LF codes as data, specify the +C option. CR-LF codes in records are transmitted as data:



When downloaded:



Even if you specify the +C option, use CR-LF codes as a record separator. If a record's length is more or less than the specified record length in a file, an error (error code 76) occurs and the transmission is aborted. For the +C option, refer to*Options* on page 2-7.

To download data files containing CR-LF codes in records to the PDT 1100:

1. At the host computer, specify the +C option in Ir-Transfer Utility C DLL
2. At the PDT 1100, set the [Data] on the space code handling screen in System Mode (or in PDT 1100-BASIC 3.0, specify the T option to "protocolspec" in the `XFILE` statement) to regard space codes in the tail of a data field as data.

If [Ignore] is selected (or no T option is specified), the PDT 1100 ignores space codes in the tail of a data field and data is not transferred correctly.

For [Data] setting, refer to the *PDT 1100 Product Reference Guide*. For T option setting in the `XFILE` statement, refer to the *PDT 1100 Programmer's Guide*.

Directory Path Names and File Names

Directory Path Names

Specify the directory path of a file to be sent or received. You may specify either an absolute or relative path. If no path name is specified, the current working directory becomes active by default. Specification of a path name only is not allowed.

Generally, no space code is allowed to be used in path names or file names; however, you can use space codes in path names by enclosing path names with double quotes as follows:

```
"c:\Program filesest.pd3"
```

File Names

Specify the name of a file to be sent or received. If you set the +R option for file reception and specified "(file)" as a file name, the host computer creates a receive file with the original file name used in the PDT 1100.

Note: *You cannot specify more than one file name in one function. To send or receive more than one file, add more than one line of the file transfer functions.*

Table 2-1. Options

Options	Functions		Defaults
+B transmissionspeed	Sets the transmission speed.		+B9600
	+Bn	n = 9600,19200,38400,57600, or 115200	
+P portnumber	Sets the communications port.		+P1
	+P1	COM1	
	+P2	COM2	
	+P3	COM3	
	+P4	COM4	

Table 2-1. Options (Continued)

Options	Functions		Defaults
+Fn	Sets the number of digits for fields for a data file to be sent.		----
		+F<Item1.fieldlength>[,<Item2.fieldlength>,	
		.....<Itemn,fieldlength>]	
		(n=1 to 16<Cfieldlength=1 to 254>	
	<Example>	If a file consists of three fields whose lengths are as follows:	
		`<Item1.field>=13,<Item2.field>=20,<Item3.field>=6` `+F13,20,6`	
+I,-I	Determines whether to initialize the IR device.		-I
	+I"<DLLfilename>"	Initializes the IR device specified by <DLLfilename> at the start of file transmission. The <DLLfilename> should be It3exxxx.dll (except It3ew32d.dll) enclosed by double quotes. Specify the DLL file name of the IR device to be used following the +I.	
	-I	Does not initialize the IR device.	
+R, -R	Sets the transmission direction.		-R
	+R	Creates a receive file with the specified file name in the specified directory, and receives a file. If you specify more than one file, an error occurs.	
	-R	Transmits the specified file. If you specify more than one file, an error occurs.	
+N, -N	Determines whether to check the name of a received file. When the +R is specified, the DLL compares the file name used in the PDT 1100 with the received file name. If any discrepancy is found, an error occurs. This command switch is ignored when the -R is specified.		-N
	+N	Checks the file name.	
	-N	Does not check the file name.	
+A, -A	Determines whether to add a received file data to the existing data file.		-A
	+A	Adds a received file data to the tail of the existing data file.	
	-A	Overwrites the existing data file with a received data file.	

Table 2-1. Options (Continued)

Options	Functions		Defaults
+T, -T	Determines whether to insert field separators. Inserts field separators (specified by <DelimiterChar> or <HexCode>) between fields when writing a received data file. This option should be specified in either of the following two formats. For characters (see Note 2) which cannot be specified in Format 1, use Format 2. If this option is specified in other incorrect formats, no operation is assured.		-T
	Format 1 `+T'<DelimiterChar>'`	The <DelimiterChar> should be in a single byte and enclosed by single quotes.	
		(Example) To insert a comma as a field separator `+T','`	
		(Note 1) Data written outside a pair of single quotes is ignored.	
		(Note 2) Listed below are characters which cannot be specified by <DelimiterChar> in Format 1. To write any of them, use Format 2.	
	Format 2 `+T\x<HexCode>`	The <HexCode> should be a two-byte hexadecimal character string.	
		(Example) To insert a space code as a field separator `+T\x20`	
	-T	Does not insert field separators.	
+V, -V	Determines whether to display the communications status dialog box.		+V
	+V	Displays the status dialog box.	
	-V	Does not display the status dialog box.	
+C,-C	Specifies how to handle CR-LF codes in records in file transmission.		-C
	+C	Interprets CR-LF codes as data.	
	-C	Interprets CR-LF code as a record separator.	

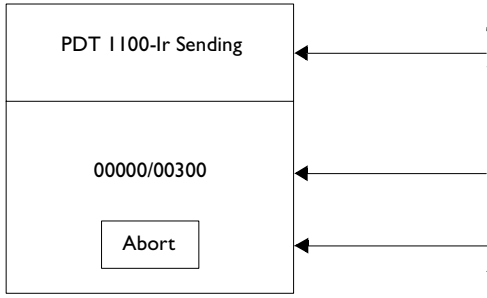
Table 2-1. Options (Continued)

Options	Functions		Defaults
+L timeoutlength	Sets the timeout length in seconds.		+L30
	+Ln	n=0 to 65535	
		Specification of +L0 produces no timeouts.	
		Specification of only +L makes the default (30 seconds) active.	
+X x-coordinate	Specifies the x-coordinate of the *PDT 1100 Sending* or *PDT 1100 Receiving* dialog box.		
	+Xn	n=-65535 to 65535	
		This specifies the location of the left side of the dialog box. The display position is a relative value from the upper left corner of the screen.	
+Y y-coordinate	Specifies the y-coordinate of the *PDT 1100 Sending* or *PDT 1100 Receiving* dialog box.		
	+Yn	n=-65535 to 65535	
		This specifies the location of the upper side of the dialog box. The display position is a relative value from the upper left corner of the screen.	
		<Example> `+X100 +Y400`	
		The dialog box appears with its upper left corner located at (100, 400).	

Note: *If the same option is set more than once with different specifications, the most recent one has the highest priority.*

Start of File Transmission

If `It3cw32d` is initiated, the Ir Sending dialog box (when downloading) or PDT 1100-Ir Receiving dialog box (when uploading) is displayed, and file transmission starts.



The *PDT 1100-Ir Receiving* appears in uploading.

Number of transmitted records (serial number)/Total number of records to be transmitted.

Click this Abort button to abort the transmission.

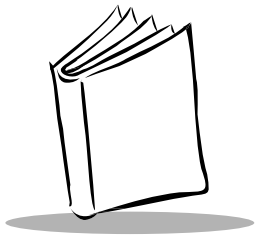
When uploading a data file, Ir-Transfer Utility C DLL automatically creates a field definition file with the extension .FLD using the same file name as the data file, as follows. If this file is already present, Ir-Transfer Utility C DLL updates its contents.

The following dialog box does not appear if the -V option is set:

```
* created by Ir-Transfer Utility 3C for Windows95/NT DLL Version X.XX
* Copyright (C) DENSO CORPORATION 1997 all rights reserved

file    PACK1.DAT
date    1997-09-25 18:56:30
size    570
records 10
fields 40 5 10
```

file	: Parent file name
date	: Date and time when the file is uploaded
size	: File size
records	: Number of records
fields	: Field length

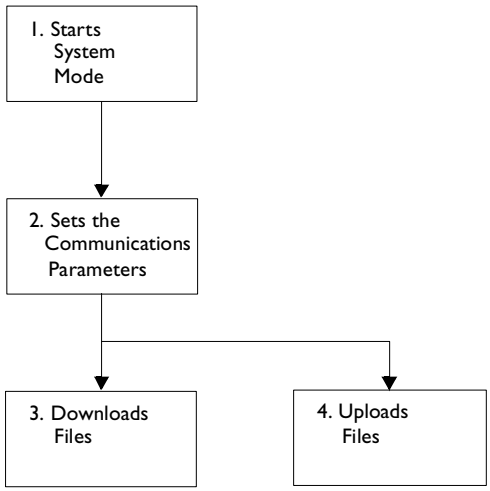


Chapter 3
Setting up the PDT 1100 in System Mode

This chapter describes the PDT 1100 preparation required for using Ir-Transfer Utility C and E DLL.

File Transfer in System Mode

For file transfer in System Mode, use the following procedure:



Setting up the PDT 1100 in System Mode

Hold down the SF and 1 keys to power on the PDT 1100.

Setting Communications Parameters

The table below lists the default communications parameter values:

Table 3-1. Communications Parameter s

Communications parameters	Defaults
Transmission speed	9600 bps
Output pulse width of IR beam	1.63 us
Serial number	ON
Horizontal parity	ON
Timeout for link establishment	30 seconds
Space codes in the tail of a data field	Ignore
Communications protocol	PDT 1100-protocol
Interface	Optical

To modify the above settings, set the desired values on the System Environment Setting screen in System Mode. For details, refer to the *PDT 1100 Product Reference Guide*.

Select the PDT 1100-Ir protocol in the PDT 1100 when using Ir-Transfer Utility C and E DLL. The PDT 1100-Ir protocol automatically adds the serial number and horizontal parity, so other settings made in the PDT 1100 are ignored.

To download data files to the PDT 1100 using +C option specified in the DLL, select [Data] on the Communications Protocol Option screen in System Mode to treat space codes in the tail of a data field as data. If you have selected the +C option, every record in a data file should be fixed in length (refer to *Data Files* on page 2-4) so that space codes used to fill blanks in the tail of a data field are data, not characters.

Downloading

Use the download menu in System Mode to download files. For details, refer to the *PDT 1100 Product Reference Guide*.

Uploading

Use the upload menu in System Mode to upload files. For details, refer to the *PDT 1100 Product Reference Guide*.

Programming in PDT 1100-BASIC 3.0

Setting Communications Parameters using the OUT Statement

You may set the communications protocol type using the `OUT` statement. The following sample sets the PDT 1100-Ir protocol.

```
OUT &h6060,2
```

The PDT 1100 System version 1.01 or earlier does not support setting the communications protocol type with the `OUT` statement. Select the PDT 1100-Ir protocol in System Mode.

Setting Communications Parameters using the OPEN "COM:" Statement

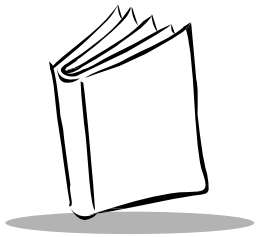
You may set the communications parameters using the `OPEN "COM:"` statement. The following sample sets the optical interface and 115200 bps.

```
OPEN "COM1:115200" AS #1
```

Creating a Source Program Using the XFILE Statement

You may develop a downloading or uploading source program that handles files according to the PDT 1100-Ir protocol using the `XFILE` statement. Compile the source program into the user program and download it to the PDT 1100. For details, refer to the `XFILE` statement in the *PDT 1100 Programmer's Guide*.

To download data files to the PDT 1100 using +C option specified in the DLL, specify the T option to the "protocolspec" of the `XFILE` statement to treat space codes in the tail of a data field as data. If you have selected the +C option, every record in a data file must be fixed in length (refer to *Data Files* on page 2-4) so that space codes in the tail of a data field are data, not fill characters used to fill blanks in record when its actual length is shorter than the specified length.



Chapter 4
DLL Functions

Ir-Transfer Utility C DLL supports the following three functions:

- `GetIt3cDllVersion()` Gets the version of the current DLL.
- `ExecIt3c()` Transfers files.
- `AbortIt3c()` Aborts the current file transfer.

You can call these functions from VC++4.0 or VB4.0. For VC++4.0, include "`It3capi.h`." For VB4.0, use the function "`It3cw32d.dll`" by writing the declare statement into "(General) (Declarations)" of the module file. For the instructions on how to use them, refer to the "`It3cw32.bas`" and sample programs.

GetIt3cDllVersion()

Description

Gets the version of the current DLL.

Syntax

For VC++4.0

```
char    *GetIt3cDllVersion(char *Param);
```

For VB4.0

```
Declare Function GetIt3eDclVersion Lib "It3cw32c.dll"
                                  (ByVal Param As String) As String
```

where:

Param = Character string where the version character string of the DLL is to be stored. Sufficient length is required.
If you are using VB4.0, use the String variable such as String(100.“ ”) to reserve the memory area.

Returned value

Parameter itself.

ExecIt3c()

Description

Uploads (receives) or downloads (sends) the designated file.

Syntax

For VC++4.0

```
typedef enum errorcode {
Er_NOERROR         = 0, /* Communication ended normally.       */
Er_NOFILE          = 1, /* Designated file not found.          */
:
:
} Er;
Er ExecIt3c(HWND hWnd, char *Param, char *TransferFileName);
```

For VB4.0

```
Declare Function ExecIt3c Lib "It3cw32d.dll" (ByVal hWnd As Long,
ByVal Param As String, ByVal TransferFileName As String) As Long
```

where:

hWnd = Sets the window handle that calls the DLL. If you are using VB4.0, to call "ExecIt3c()" from the form, write "Me.hWnd" to display the dialogs and get the timer value.

Param = Sets the character string of the command switch for customizing the file transfer. This character string contains one file name and command switches separated by space codes.
(Example) `c:\tmp\check.pd3 +P1 +B19200`
For details about file names, refer to *Directory Path Names and File Names* on page 2-7. For command switches, refer to *Options* on page 2-7.

TransferFileName = Character string specifying the directory path name and file name of the transferred file in sending or receiving. Sufficient length is required.
If you are using VB4.0, use the String variable such as String(255." ") to reserve the memory area.

Returned value

For VC++4.0: Use "`It3capi.h.`" for the Macro code (enum type) for the returned codes.

For VB++4.0: Refer to "`It3cw32.bas.`" for the returned code.

AbortIt3c()

Description

Aborts the current file transmission.

Syntax

For VC++4.0

```
int AbortIt3c(void);
```

For VB4.0

```
Declare Function AbortIt3c Lib “It3cw32d.dll” () As Long
```

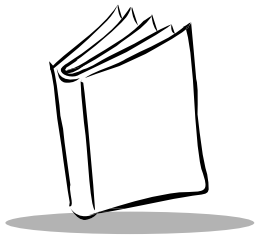
Returned value

This function returns the same value as an error code, showing the current file transfer status when it is called.

0 Was not transferring.

60 Was sending.

61 Was receiving.



Appendix A
Error Codes

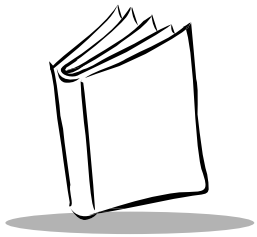
If an error occurs during execution of Ir-Transfer Utility C or E DLL, one of the error codes from Table 1-1 is returned.

Table 1-1. Error Codes

Code	Description
0	Normal end.
1	Ir-Transfer Utility C DLL could not find the designated file.
2	Filename entered in the wrong format.
3	The total number of the records specified in a file exceeds 32767.
4	The data field is out of range from 1 to 254 digits in length.
5	The number of fields is out of the range from 1 to 16.
6	The total number of designated fields and length of all data fields exceeds 255 bytes.
7	You entered no field option (undefined option) which is not to be specified for downloading a program file.
8	No field option was entered when downloading a data file.
9	An undefined option was entered.
51	Communications error. The sending timer has timed out.
52	Communications error. The receiving timer has timed out.

Table 1-1. Error Codes (Continued)

Code	Description
53	Communications error. The NAK sending counter has counted up to 10.
54	Communications error. The NAK receiving counter has counted up to 10.
55	Communications error. The sending station receives as EOT in response to the sent text.
60	The DLL has been running in sending operation.
61	The DLL has been running in receiving operation.
70	The receiving heading text contains any of the following: (1) File name in wrong format (2) More than 32767 records (3) Number of fields out of range from 1 to 16 in the data file (4) Data field length out of range from 1 to 254 digits in the data file (5) Total length of all data fields plus the number of the fields exceeding 255 bytes
71	The designated directory path has not been found.
72	The disk memory is full.
74	The designated timers have been occupied by other applications.
75	The designated RS-232C communications port (COMx:) has been occupied by other applications.
76	In a file there is a record whose length is less than or more than the specified record length.
77	The Utility has received a file not designated, instead of the designated file.
80	Ir-Transfer Utility C DLL has failed to initialize the IR device.
81	The correct DLL is not found.
82	The IR device does not support the designated transmission speed.
90	Ir-Transfer Utility C DLL was aborted by clicking the Abort button in the PDT 1100-Ir Sending (or Receiving) dialog box.
99	Any other error has occurred.



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