Model 370092
Data Conversion Software
for Windows 3.1

IM 370092-61E

IM 370092-61E
1st Edition

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INTRODUCTION

Thank you for purchasing the Data Conversion Software for the LR with /FDD option. This User's Manual describes the functions, operating procedures, and notes for operation of the data conversion software. Read this manual thoroughly before using the software. In addition, read the User's Manual for the LR recorder and for the associated personal computers.

Notes

- The contents of the manual are subject to change without prior notice.
- Every effort has been made to ensure the accuracy of this manual. However, if any errors are found, please inform your nearest representative. Addresses may be found on the back cover of this manual.
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- IBM is a registered trademark of IBM Corporation.
- PC/AT is a registered trademark of IBM Corporation.
- Lotus 1-2-3 is a registered trademark of Lotus Development Corporation.

Revisions

First edition: December 1996

Disk No. RE03
1st Edition : December 1996 (YG)

CONTENTS

1. OVERVIEW

This software provides a utility exclusively for the LR recorder series with /FDD option to convert their measured data, namely, this software allows the user to convert a data file in LR into various format files.

Data Conversion Software for Windows 3.1

Runs under Windows 3.1 and displays file information, for conversion of a file into a desired file format.

1.1 Hardware Requirements

This software requires the following specifications for your PC, to run.

Data Conversion Software for Windows 3.1

PC model: IBM-PC/AT
Memory: at least 8 MB
Floppy disk drive: capable of accessing a 3.5", 1.44 MB-formatted floppy disk

1.2 Operating System

Data Conversion Software for Windows 3.1

English version of Windows 3.1

1.3 Installation

Data Conversion Software for Windows 3.1

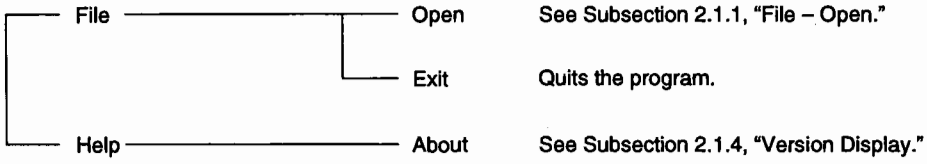
Use the Program Manager to run the SETUP.EXE in the product floppy disk, and then follow the instructions displayed. The group and icon are then created.

2. PROGRAM

2.1 Running Under Windows 3.1

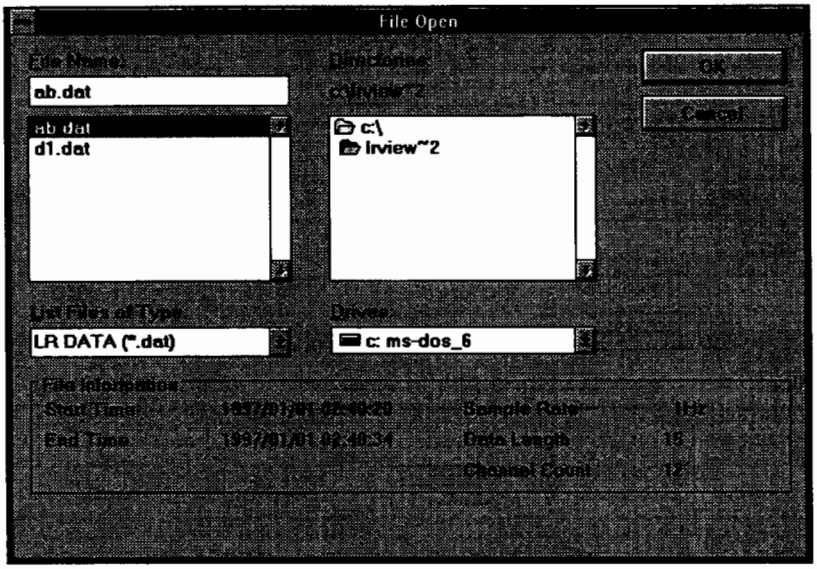
Icon title: WLRCVTE
Function: Converts the format of a data file under the English version of Windows 3.1.
Operation: Click on the WDRCVTE icon from the Program Manager to run the program. There is no help file.

(1) Menu Items



2.1.1 File – Open

Window Format



Operations

Selects the data file.
The File Information box shows the following five data concerning the file that is highlighted (selected) in the file list box:

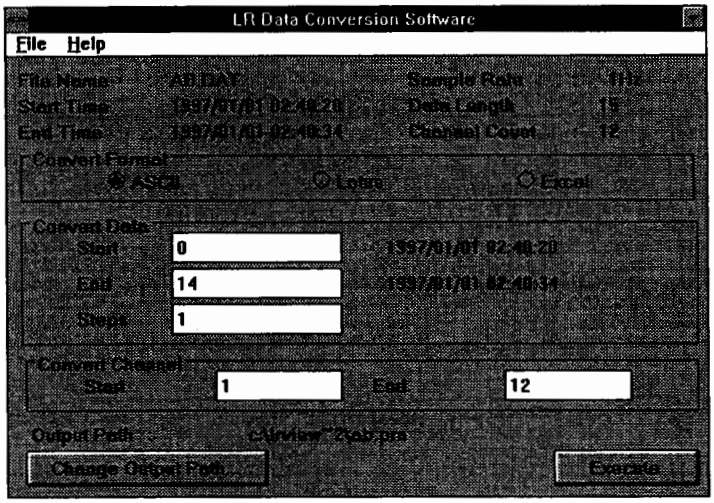
- Start time (starting time of data sampling)
- End time (ending time of data sampling)
- Sample rate
- Data length (number of data items values)
- Channel count (number of channels in file)

Buttons

OK	Opens the selected file and opens up the File Conversion window as shown in the next subsection 2.1.2.
Cancel	Cancels opening of a file.

2.1.2 File Conversion

Window Format



Operations

Specify the range of data numbers to be converted (Start and End entry boxes in the Convert Data box), the skipping interval of data values (Steps entry box in Convert Data box), and the range of channels (Start and End entry boxes in Convert Channel box); and then start conversion. Entering the Start or End data number and moving to another entry box displays the date and time of the specified data number on the immediate right of that entry box.

Buttons

Opens up the dialog box as shown in subsection 2.1.3, for changing the output file name.

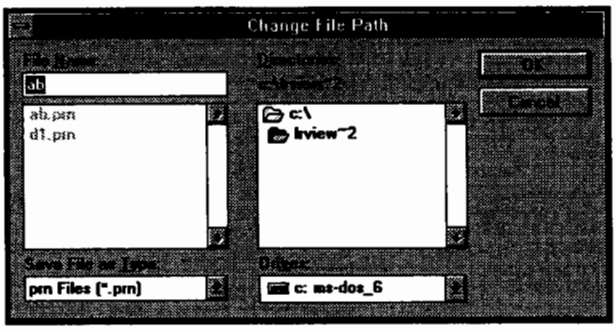
Starts the file conversion.

Note

The "channel numbers" referred to in this software simply follow the order of the channels stored in the data file and, therefore, they differ from the channel numbers identified at measurement.

2.1.3 Change of Output File Name

Dialog Box Format



Operations

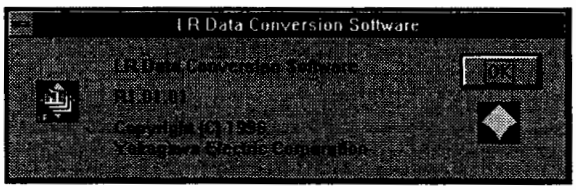
Specify the name of the output file.

Buttons

OK	Changes the output file name as specified and brings back the File Conversion window (Subsection 2.1.2).
Cancel	Cancels the change of the output file name and brings back the File Conversion window (Subsection 2.1.2).

2.1.4 Version Display

Dialog Box Format



Operationsp

This dialog box displays the release number and copyright.

Buttons

OK	Closes the dialog box.

3. FILE FORMATS

The file format to be converted to can be selected from three types.

(1) ASCII File

A specific ASCII format file
The file format is disclosed, so the user can develop the desired program to import it.
(For the format details, see the following pages.)

(2) Lotus File

A Lotus 1-2-3 file
This program saves a file in the format of Lotus 1-2-3 release 1A. Specify "WRK" as the suffix code.

	A	B	C	D	E	F
1	LR Series					
2	Start Time		1996/01/09		11:30:20	
3	End Time		1996/01/09		12:01:20	
4	Sample rate		135	Hz		
5	Data Count		1000			
6			Ch.	1	2	
7				TAG1	TAG2	
8				V	V	
9	01/09	11:30:20	(1)	-1. 273	1. 272	
10	01/09	11:30:20	(2)	-1. 273	1. 272	
11	01/09	11:30:21	(3)	-1. 273	1. 272	
12	01/09	11:30:21	(4)	-1. 273	1. 272	

Date Time Data Number Measured data

(3) Excel File

A Microsoft Excel file
This program saves a file in the format of Excel version 4. Specify "XLS" as the suffix code.

	A	B	C	D	E	F
1	LR Series					
2	Start Time		1996/01/09		11:30:20	
3	End Time		1996/01/09		12:01:20	
4	Sample rate		135	Hz		
5	Data Count		1000			
6			Ch.	1	2	
7				TAG1	TAG2	
8				V	V	
9	01/09	11:30:20	(1)	-1. 273	1. 272	
10	01/09	11:30:20	(2)	-1. 273	1. 272	
11	01/09	11:30:21	(3)	-1. 273	1. 272	
12	01/09	11:30:21	(4)	-1. 273	1. 272	

Date Time Data Number Measured data

3.1 ASCII File

1	Model	CR	LF
2	Starting date and time	CR	LF
3	Ending date and time	CR	LF
4	Sample rate	CR	LF
5	Number of data items	CR	LF
6	Channel numbers	CR	LF
7	Channel names	CR	LF
8	Engineering units corresponding to channels	CR	LF
9	Data sample times, channel names and data values (repeated for the number of data values)	CR	LF

1 Model

1	2	3	4	5	6	7	8	9	10	11	12	13
"	L	R		S	e	r	i	e	s	"	CR	LF

2 Starting date and time

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	S	t	a	r	t		T	i	m	e	"	,	"	1	9	9	6	-	0

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
1	-	0	9		1	0	:	2	0	:	3	4	"	CR	LF

3 Ending date and time

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	E	n	d				T	i	m	e	"	,	"	1	9	9	6	-	0

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
1	-	0	9		1	1	:	2	0	:	3	0	"	CR	LF

4 Sample rate

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	S	a	m	p	l	e		R	a	t	e	"	Data sampling rate						

21	22	23	24	25	26	27	28	29	30	31
				,	"	H	z	"	CR	LF

Example

15	16	17	18	19	20	21	22	23	24	
							1 0	3. ..	5 1	135 Hz 0.1 Hz

5 Number of data items

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	D	a	t	a		C	o	u	n	t	"	,	Number of data items						

21	22	23	24	25
			CR	LF

Example

14	15	16	17	18	19	20	21	22	23	
					2	4	1 0	0 0	0 0	100 data items 24000 data items

6 Channel numbers

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	C	h	.	"	,	Channel number				,	Channel number				,	Channel number			

21																	?	?
,	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	CR	LF

Example

+0	+1	+2	+3	
"		4	"	Channel number 4

Note

The "channel numbers" referred to in this software simply follow the order of the channels stored in the data file and, therefore, they differ from the channel numbers identified at measurement.

7 Channel names

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	N	a	m	e	"	,	Channel name										,		

21	22	23	24	25	26	27	28	29
Channel name							.	,

?	?
CR	LF

Example

+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
"	T	A	G	0	1				"

8 Engineering units corresponding to channels

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	U	n	i	t	"	,	Unit for data (10 characters)										,		

21	22	23	24	25	26	27	28	29
Unit for data							.	,

?	?
CR	LF

Example

+0	+1	+2	+3	+4	+5	+6	+7	+8	+9
"	V								"

9 Data sample times, channel names and data value

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
"	Y	Y	Y	Y	-	M	M	-	D	D		H	H	:	M	M	:	S	S

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
"	,	"										(	N	)	"	,			

41	42	43	44	45	46	47
.	Measured value					,

. . . . . .

?	?
CR	LF

If the time is 10:03:21.5 on January 9, 1996, the saved format is "1996-01-09 10:03:21.5."
N : Data number

4. MESSAGES

Message	Description
This file is not LR Data file	The selected data file is not a Yokogawa LR format file.
This program failed file conversion.	The file cannot be written. Possible causes are: (1) There is no floppy disk inserted. (2) The floppy disk is write-protected. (3) There is not enough space on the floppy disk. (4) The floppy disk has not yet been formatted.

5. RESTRICTIONS

(1) No files other than Yokogawa LR format files can be read.
(2) Lotus 1-2-3 itself has a limitation on the number of records that can be handled (e.g., up to 2000 or 8000 data values). This conversion program does not set a limitation on the number of data items. When setting the specifications for conversion to a Lotus 1-2-3 file, be careful not to exceed the limit for Lotus 1-2-3.
(3) Special characters (characters other than alphanumeric characters, e.g., ° and Ω) are not supported.
(4) If the sample rate is less than one second, multiple data have the same date and time.