Ú Ú Ú

Display and Print software for archive data



Help Manual

© 2008 Eurotherm Limited

All rights are strictly reserved. No part of this document may be reproduced, modified, or transmitted in any form by any means, nor may it be stored in a retrieval system other than for the purpose to act as an aid in operating the equipment to which the document relates, without the prior written permission of Eurotherm limited.

Eurotherm Limited pursues a policy of continuous development and product improvement. The specifications in this document may therefore be changed without notice. The information in this document is given in good faith, but is intended for guidance only. Eurotherm Limited will accept no responsibility for any losses arising from errors in this document.

Review QuickChart Help Manual Table of Contents

1		ODUCTION	
1.1	Qui	ickChart	1
1.2	Lite	e versus Full	1
2	File m	nenu	2
2.1	1.1	Menu items	2
2.2	Cha	art creation	3
2.2	2.1	From Files	3
2.2	2.2	From Folders	4
2.2	2.3	From removable media	5
2.3	Exp	port	6
2.3	3.1 ·	Export Range	6
2.3	3.2	Export What?	8
2.3	3.3	Layout	
	3.4	Copy to clipboard	
	3.5	Copy to file	
2.4		nt	
2.4		Print setup	
		Y mit setup	
		menu	
4.1		olbar	
4.1		Toolbar Icons	
4.2		atus Bar	
	2.1	Status bar window contents	
		t menu	
5.1		e Chart	
5.′	1.1	Standard charts	
5.′	1.2	Chart + Replay	
5.′	1.3	Point Properties	
5.2		e Spreadsheet	
5.3	Cha	art Setup	26
5.3	3.1	Points included	27
5.3	3.2	Current Mode	27
5.3	3.3	Chart Setup	28
5.3	3.4	Show Timezone on Chart	28
5.3	3.5	Spreadsheet Setup	28
5.3	3.6	Add Point	29
5.3	3.7	Edit Point	29
5.3	3.8	Delete Point	29
5.3	3.9	Point Properties	29
5.3	3.10	Auto Zone	30
5.4	Go	То	31
5.4	4.1	Relative Date and Time	32
5.4	4.2	Specific Date and Time	33
5.4	4.3	Batch	34
5.5		notate	
5.6		e Cursor	
5.7		ace Mode	
5.8		plight Trace	
5.9	•	ck	
5.9 5.10		Fimezone indication	
	י 10.1	Timezone data location	
ວ.	10.1	ו ווופבטוופ עמומ וטטמווטוו	

6	Sec	urity Menu42
6.1	Lo	ogin
6.2	S	etup
6.3	E	nable Security effects
7	Opti	ions Menu46
7.1	Fo	onts
7.2	S	ettings
7	.2.1	Default trace mode47
7	.2.2	Default Chart mode47
7	.2.3	Default Chart setup47
7	.2.4	Default Auto Zone settings47
7	.2.5	Sample interval
7	.2.6	Default Spreadsheet and Export Setup48
7	.2.7	Default CSV format48
8	Help	o Menu49
9	Win	dow Menu49
10	Othe	er items
10.	1	InSQL format
10.2 Batch phases		Batch phases
10.3 Recorder point types		Recorder point types
11	Inde	ex

1 INTRODUCTION

1.1 QuickChart

QuickChart provides the user with a simplified way of viewing data from a set of .uhh or .pkd files. The chart created can subsequently be saved as a QuickChart (.urq) file. URQ files can be opened on pcs which do not have access to the original files.

Note: There is no facility for direct connection with instruments

These help pages refer to QuickChart Version 3.10. The version number of QuickChart software can be determined by clicking on 'About QuickChart...' in the 'Help ' menu.

1.2 Lite versus Full

QuickChart software is available in two versions called 'Lite' and 'Full'. The 'Lite' version is supplied free-of-charge; the full version is a chargeable item.

These help pages reflect the Full version. The 'Lite' version is identical with the Full version except for the followings:

- 1. With QuickChart lite, chart data can be loaded into the chart only from floppy disk or PC card. It is not possible to load data from files or folders.
- 2. The security menu is not operative in QuickChart 'Lite'. In other words, QuickChart 'Lite' offers no support for Security Manager software.
- 3. Chart annotation is not possible in QuickChart 'Lite'.
- 4. Chart + Replay is not available in QuickChart 'Lite'.

2 File menu

2.1 Menu items

😭 Review	
<u>File</u> ⊻iew <u>S</u> ecurity <u>O</u> β	ptions <u>H</u> elp
New QuickChart 🕨	From Files
Open QuickChart	From Folders
<u>1</u> QuickChart4.urg	From Removable Media
E <u>x</u> it	

The initial file menu (above) allows a new QuickChart (.urq) file to be created, or an existing QuickChart file to be opened. A list of the most recent charts also appears, allowing quick access to existing .urq files.

Existing charts can also be opened using the 'Open Chart' tool bar key.

Once a QuickChart is open, the File menu contains further items:

<u>File</u> <u>E</u> dit <u>V</u> iew <u>C</u> hart <u>S</u> ec	urity <u>O</u> ptions <u>W</u> indow <u>H</u> elp
Close QuickChart Save QuickChart	🕚 🎒 🤋 🚮 🛛 1 Second
Save As	
Read 🕨	From Files
<u>E</u> xport	From Folders From Removable Media
Print Ctrl+P	
1 QuickChart4.urg	
E <u>x</u> it	

Close QuickChart Closes the chart. If previously unsaved, the user is given the opportunity to define a name and destination folder for the file.

- Save QuickChart Saves the current QuickChart. If previously unsaved, the user is given the opportunity to define a name and destination folder for the file.
- Save As... Allows the user to define a name and destination folder for the file.
- Read Allows further data to be added to the current chart. This data does not replace existing data it can only add to it. The three data sources (From files, From Folders and From Removable Media) are as described below for 'Chart Creation'
- Export Allows a comma-separated values (CSV) data file to be saved, either to the clip board, or to a specified destination. The extension suffix added by the user, when saving, determines which program will normally attempt to open the exported file.
- Print Allows the user to setup the print parameters of the file, to select a printer, to initiate printing etc.

2.2 Chart creation

2.2.1 From Files

The 'From Files' menu item is not available to users of the 'Lite ' version of QuickChart. Files may be read only 'From Removable Media'

Select archive data file to transfer to	database 🔋 🗙
Look in: 🔄 Group1	
B-Group-1~801C582600000312.uhh	🖻 e-group-1~8000DF26000000BD.uhh
B-Group-1~801C582600000313.uhh	🖻 e-group-1~8000DF26000000BE.uhh
e-group-1~8000DF26000000B9.uhh	🖻 Group-1~801C582600000310.uhh
e-group-1~8000DF26000000BA.uhh	🖻 Group-2~801C582601000187.uhh
e-group-1~8000DF26000000BB.uhh	🖻 Group-2~801C582601000188.uhh
e-group-1~8000DF26000000BC.uhh	🖻 Tank-temps~8026C02600000208.uh
•	Þ
File <u>n</u> ame:	<u>O</u> pen
Files of type: Packed Archive Files	▼ Cancel

In file menu, Clicking on 'New QuickChart', then 'From Files...' calls a browser type page, allowing the user to select a file to be transferred to the chart.

Clicking on 'Open', initiates the loading and interpretation of the data so that it can be displayed on the chart. The status bar at the bottom of the QuickChart window shows progress.

Processing records	2500	

Once the transfer process is complete, the chart is displayed. See 'Chart Menu' for details

Redundant Instrument files

This topic apples to the situation where two processors (primary and secondary) are running in parallel such that one can take over from the other in case of failure.

Data Transfer

Review holds a single set of data for a redundant instrument. Where samples are imported from a primary and a secondary for any period, only the primary data is retained.

Some messages are unique to the secondary processor, and such messages are preceded by a superscript 2 to identify them. An example of such a chart message is shown below, rotated by 90 degrees for convenience.

207/01/00 04:54:03 Database Stop

Sample data is identical for primary and secondary processors except in the following cases, both of which can arise only if adaptive recording is enabled.

(Continued...)

2.2.1 FROM FILES (Cont.)

- 1. The first sample after synchronization
- 2. If either processor loses a sample and therefore records a different time period (and therefore a different value). Such data loss is usually caused because an attempt has been made to record more data than can be accommodated by the instrument in the available time. This gives rise to a Lost Data alarm in the RGROUP block.

See the 'Recorder' section of the LIN blocks reference manual (HA082375U003), for more details of the RGROUP block.

2.2.2 From Folders

The 'From Files' menu item is not available to users of the 'Lite ' version of QuickChart. Files may be read only 'From Removable Media'

Read Files From Folders	×
Source Archive Folder C:\InetPub\ftproot\recorder\Group1	Browse
© All	
C Batch Batch Name Find Batches	
• From 25/02/04 • 08:39:01 •	
Duration: 1 TOTOTOT Days Hours Mins Secs	
	<u>C</u> ancel

In file menu, Clicking on 'New QuickChart', then 'From Folders...' allows the user to select a folder, the contents of which are to be transferred to the chart.

All	Transfers all files within the folder (and any sub-folders).
Batch	If files have been saved with 'Name Files by Batch' selected in the instrument's Batch Configuration, this allows the user either to enter a Batch name by typing it in, or to select a batch name from a picklist. The picklist is generated when 'Find Batches' is clicked on. Only data associated with the selected batch will be transferred.
From	Allows a start time and date, and a duration to be selected. All data that lies within the specified time period is transferred.

Once the transfer process is complete, the chart is displayed. See 'Chart Menu' for details

2.2.3 From removable media

Read Files From	n Removable Media	×
Source Archive [Drive	
• All		
◯ <u>B</u> atch	Batch Name Find Batches	
	,	
C From	25/02/04 💌 08:39:01 💌	
Duration:		
	<u>D</u> ays <u>H</u> ours <u>M</u> ins <u>S</u> ecs	
	<u> </u>	

In file menu, Clicking on 'New QuickChart', then 'From Removable Media...' allows the user to transfer files from a floppy disk, PC Card etc.

All Transfers all files within the folders (and any sub-folders) on the disk.

- Batch If files have been saved with 'Name Files by Batch' selected in the instrument's Batch Configuration, this allows the user either to enter a Batch name by typing it in, or to select a batch name from a picklist. The picklist is generated when 'Find Batches' is clicked on. Only data associated with the selected batch will be transferred.
- From Allows a start time and date, and a duration to be selected. All data that lies within the specified time period is transferred.

Once the transfer process is complete, the chart is displayed. See 'Chart Menu' for details

2.3 Export

Clicking on 'Export' in the File menu, calls the Export Dialogue box:

Export	×	
Export Range O Current ⊻iew	Export What?	
Batch Only batches active after start of 21/11/07 Only batches active before end of 22/11/07	☑ Values ☑ Messages □ Raw Data	
Coniy batches active before end of 22/11/07 Eind Batch Batch Name: O00000112 Phase:	Sample Interval 6 Seconds	
All Image batches with matching descriptors Image batch/phase Image batch of the batch/phases		
○ From 20/11/07 ▼ 18:00:49 ₹ Duration: 0 14 57 55 0 ₹ 0 ₹ 0		
Layout Copy To Clipbo	ard Copy To File <u>C</u> lose	

This allows the export of a CSV formatted table of data, and / or messages to a file or to the clipboard for use in documents or spreadsheets. The suffix appended by the user, to the file, indicates the programme which is to be used to open it. For example, a file saved as 'Chart 1.xls', would be opened by 'Excel', (if fitted).

2.3.1 Export Range

Current View	Exports what is currently on view at the chart window. For charts, the time range of the exported data is defined by the difference between the right-hand and left-hand date/time indicators below the chart. For spreadsheets the exported data is the range that appears on the display page.
Selected Range	For spreadsheets only, this allows the export of the items highlighted in the display page.
Batch	Only batches active after start of
	This applies a filter to the search range so that only those batches with a start time after that specified are included. Applies to 'Find Batch' and 'Batch Name'.
	Only batches active before end of
	This applies a filter to the search range so that only those batches with a finish time before that specified are included. Applies to 'Find Batch…' and 'Batch Name'.

2.3.1 EXPORT RANGE (Cont.)

- Find Batch...Opens a browser facility to allow the user to select a batch file. if the 'active after' or 'active
before' filters have been selected, only those files within the selected range appear.
- Batch Name: Enter the batch name, or use the 'Find Batch' browse facility to locate it. if the 'active after' or 'active before' filters have been selected, only those files within the selected range appear. Show entire batch/phase

Check this box if the whole batch or phase is to be exported (including any messages at the ends of the batch).

Hide Data from other batches/phases

A chart can contain traces and messages from more than one batch or phase, and can even contain traces that are not associated with any batch at all. In such cases, it is often clearer if only the traces associated with the required batch or batch phase are exported. This is achieved by selecting 'Hide data from other batches'. This selection also removes any pre-batch and post-batch data.

Phase:

For those instruments which support batch phase, this allows a particular phase to be selected for export. For other instruments, this window is disabled ('greyed').



From Select 'From' if the exported data is to start at a particular date and time. The start date/time is entered by the user. The total amount of data exported, is determined by the duration setting.

<u>Duration:</u> If 'From' is selected, this allows a duration period to be entered. This entry, in conjunction with the 'From' time and date, allows the exact data range to be defined.

2.3.2 Export What?

Values	Selecting 'Values' exports process values over the time range defined in 'Export Range'
	(above). Provided that 'Raw data' is not selected, a sample interval can be selected.
Messages	Selecting 'Messages' causes messages from within the appropriate time range to be includ

Messages Selecting 'Messages' causes messages from within the appropriate time range to be included in the exported data.

Raw Data This is the data as recorded at the sample interval defined at the relevant instrument. 'If Raw Data' is selected, the sample interval field on this display no longer applies and is 'greyed'.

Sample interval If 'Raw Data' has not been selected, this allows the user to choose the time period between exported data samples, and thus the number of samples in the defined data range.

2.3.3 Layout

E	xport Table	×
	Date/Time format	
	Text <u>String</u>	
	O Spreadsheet <u>N</u> umeric Format	
	Separator	
	⊙ <u>I</u> ab	
	O <u>D</u> efault Separator	
	Include Column <u>H</u> eaders	
	InSQL Format	
	OK Cancel	

This key allows some aspects of the export data format to be defined.

DATE/TIME FORMAT

Text String Date and time are exported as a text string. Mutually exclusive with 'Spreadsheet Numeric Format' described below.

Spreadsheet Numeric Format

Date and time are exported in the numeric format recommended if exporting to a spreadsheet. Mutually exclusive with 'Text String', described above.

SEPARATOR

- TabExported values are exported with 'tab' separators instead of commas. Mutually exclusive
with 'Default Separator' described below.
- Default Separator Exported values are separated by 'the system default separator', which varies from pc to pc, and country to country. Mutually exclusive with 'Tab' above.

INCLUDE COLUMN HEADERS

If this checkbox is enabled, the first line of the table consists of headers for the table columns.

2.3.3 LAYOUT (Cont.)

InSQL FORMAT

If this checkbox is enabled, csv files are exported in InSQL format. See 'Settings' in the Option Menu topic for a description of file naming conventions. When enabled, all other selections in Export Table are greyed out.

2.3.4 Copy to clipboard

This key initiates the copying of the selected data to the clipboard, ready to be pasted into another application. Copying is complete when the dialogue box disappears.

2.3.5 Copy to file

This calls a dialogue box allowing a destination folder and filename to be entered. Clicking 'Save' initiates the export process. The chart is re-drawn when the export process is complete.

2.4 Print

This File menu command is used to print a chart, message table or a spreadsheet. When called from the File Menu, or by one of the shortcuts listed below, the Print Setup Dialogue box (below) appears.

Shortcuts:

- 1 Print icon in the tool bar
- 2. Ctrl + P

2.4.1 Print setup

Print Setup	×
Print Range	Print What?
C Current <u>V</u> iew C Selected Range	C Chart
 Batch 	C Portrait
Only batches active after start of 20/11/07	
Only batches active before end of 21/11/07	© Message <u>T</u> able Orientation © <u>S</u> preadsheet © Portrajt
Eind Batch	Sample Interval C Landscape
00000112	
Phase:	Page <u>S</u> etup
Merge batches with matching descriptors	
 Print entire batch/phase Hide data from other batches/phases 	
C From 20/11/07 ▼ 18:00:49 ₽	
Duration: 0 14 57 55	
Layout Preview	Print

Print Range

Current View For charts, prints what is on display in the chart window, using the time span defined by the left and right-hand date/time windows.

Selected Range For spreadsheets only, this allows the printing of the items highlighted by the user, in the display page.

PRINT RANGE (cont.)

Batch

Only batches active after start of. This applies a filter to the search range so that only those batches with a start time after that specified are included. Applies to 'Find Batch...' and 'Batch name:'.

<u>Only batches active before end of</u>. This applies a filter to the search range so that only those batches with a finish time before that specified are included. Applies to 'Find Batch...' and 'Batch name:'.

<u>Batch Name</u>: Enter the batch name, select a batch name from the drop-down list or use the 'Find Batch' browse facility (described below) to locate it.

<u>Phase:</u> For those instruments that support batch phase, this allows a particular phase of the batch to be selected for printing. For instruments which do not support batch phase, this window is disabled.

Batch Name:	<u>F</u> ind Ba	tch	
00000112			•
Phase:			
All			<u>1</u>
All			
pre-run			
heat1			
heat2			
soak			
quench			
cooldown			
safety			
SEG8			
U	Ξ ' '		

<u>Merge batches with matching descriptors.</u> If this tickbox is enabled, all batches with the same name are merged, and the start and end times are determined from the earliest batch records in the database. If not enabled, the start date is appended to each batch name in the list.

<u>Print entire batch/phase:</u> Check this box if the whole batch or phase is to be printed (including any messages at the ends of the batch).

<u>Hide Data from other batches/phases:</u> A chart can contain traces and messages from more than one batch or phase, and can even contain traces that are not associated with any batch at all. In such cases, it is often clearer if only the traces associated with the required batch or phase are printed. This is achieved by selecting 'Hide data from other batches/phases'. This selection also removes any pre-batch and post-batch data.

From Select 'From' if the print data is to start at a particular date and time. The start date/time is entered here by the user. The total amount of data printed is determined by the duration setting.

<u>Duration</u>: This allows a duration period to be entered if 'From' has been selected. This entry, in conjunction with the 'From' time and date, allows the exact data range to be defined.

Print What?

Print What?	
C Chart	Orientation
	C Portrait
	C Landscape
-	
O Message <u>T</u> able	- Orientation
Spreadsheet	Portrajt
Sample Interval	O Landscap <u>e</u>
7	
Page <u>S</u> etup	

This allows Chart, Message Table or Spreadsheet to be selected for printing, in either portrait (tall) or landscape (wide) format.

Chart	Click on 'Chart' if the print output is to be in the form of a chart.
-------	---

- Message Table Click on Message Table if the output is to be in tabular form. The output is a list in two columns of some or all of the messages associated with the current chart. The table includes timestamps as well as the message text.
- Spreadsheet Selecting 'Spreadsheet' causes the printout to be in the form of a spreadsheet table. The table contains columns with timestamps, messages and process values for all points in the chart.

Note: This chart/spreadsheet setting is independent of the chart/spreadsheet setting of the displayed chart.

PAGE SETUP

Click on this button to call the Page Setup dialogue box.

This box allows:

- 1. Paper size to be selected
- 2. Paper tray to be selected
- 3. Margins to be set up

The page also confirms the landscape/portrait selection made in the Print setup page.

Operating the Print... button calls the Printer selector page.

Layout

Clicking on this button calls the layout dialogue box:

Layout	×
Header/Footer Time-Axis	
k	
Header <u>C</u> aption	
Caption <u>T</u> ext: QuickChart 2	
Batch Name:	
Footer Date/Time of Print: ☑	
Page x of y:	
Chart <u>N</u> ame:	
OK Cancel Apply	

HEADER/FOOTER TAB

Note: Header and footer fonts are selected in 'Options'.

- Caption Click on this to enable caption printing. If enabled, the caption text (entered in the text entry box below) is printed near the top left-hand corner of each page.
- Caption Text This box is used to enter the text to be used as a caption. The box is 'greyed' unless 'Caption' is enabled.
- Batch Name If enabled, the batch name is printed at the top right-hand corner of each page. If a batch phase has been selected, the header contains the batch name followed by the phase name,separated by a colon. For example '0000112:heat1', where '00000112' is the batch name and 'heat1' is the Phase name.
- Date/Time of print Checking this box causes the date and time of printing to be printed near the bottom lefthand corner of each page.
- Page x of y If selected, this causes the page number to be printed near the bottom right-hand corner of each page. It appears in the 'Page x of y' format where 'x' is the current page number, and 'y' is the total number of pages.
- Chart Name If selected, this causes the chart name to be printed near the bottom centre of each page.

LAYOUT (Cont.)

TIME AXIS TAB

Layout 🗙
Header/Footer Time Axis
● Fit to: 1 📮 Page(s) wide
C. Has final assling
O Use fixed scaling
25 📻 mm/hour 💌
Print Scales
OK Cancel Apply

Fit to If 'Fit to' is enabled, the printout adjusts its time axis scale such that it exactly fills the specified number of pages. Mutually exclusive with 'Use Fixed Scaling', below.

Use Fixed scaling Checking this box means that the time axis of the printout is set to a constant value, and occupies as many pages as is necessary. The user selects the units from picklists.

1	• Use fixed <u>s</u> caling	
	25	mm/hour
	☑ Print Scales	inches/hour minutes/page hours/page days/page

Preview

Print preview gives a view of the page showing the layout specifications, header footer information etc. entered in the print setup, Page setup and Layout dialogue boxes. The tool bar at the top of the page has the following buttons:

🞇 Review - QuickChart2					
<u>Print</u> <u>N</u> ext	Print Next Page Prey Page Iwo Page Zoom In Zoom Out Close				
Print	Print Pops up the Print dialogue box to allow the print to be initiated				
Next Page	Calls the next page for preview. The button is 'greyed' if there are no further pages.				
Prev Page	Calls the previous page for preview. The button is 'greyed' if there are no previous pages.				
Two (One) page	Two (One) page Toggles between displaying one page at a time and displaying two pages at a time, for preview.				
Zoom in Increases the magnification of the preview, but shows less of the page.					
Zoom out Decreases the magnification of the preview, but shows more of the page.					
Close	Returns to the Print setup page				

PRINT DIALOGUE BOX

This dialogue box allows the user to select the required printer.

Pa	age Setup				? ×
	Printer				
	<u>N</u> ame:	HP LaserJet 8000 Series PS		<u>P</u> roperties	
	Status:	Ready			
	Туре:	HP LaserJet 8000 Series PS			
	Where:	TOPPER			
	Comment:				
	Net <u>w</u> ork		OK	Canc	el

- Name Displays the name of the currently selected printer. Allows an alternative (if available) to be selected if required.
- Properties Displays the usual printer properties page, allowing paper size, orientation, binding edge (if any) to be entered.

Note: The paper size and orientation selected here, must match the selections in the 'Print Setup ' page.

Printer properties page

This page allows paper size, orientation, binding edge (if any) to be entered for the selected printer. Note: The paper size and orientation selected here, must match the selections in the 'Print Setup ' page.

🖬 HP LaserJet 8000 Series PS Document Properties 🛛 🛛 😤 🗙
Page Setup Advanced
Paper Size: A4
Paper Source: Automatically Select
<u>C</u> opy Count: 1 😴 Copy (1 - 999)
Crientation
A C Portrait A O Landscape V C Rotated
□ Print on <u>B</u> oth Sides (Duplex Printing)
▲ ● None ▲ C Short Side ▲ C Long Side
Color Appearance
Color
OK Cancel

3 Edit Menu

<u>E</u> dit	$\underline{V} iew$	<u>C</u> hart	<u>S</u> e
<u> </u>	ру	Ctrl+C	
Select <u>A</u> ll		Ctrl+A	

The edit menu is used to copy items to the clipboard.

- Copy In Chart mode, the current chart is copied. In spreadsheet mode only currently selected (highlighted) items are copied.
- Select All Active only in spreadsheet mode, this allows the user to select all the items in the spreadsheet.

4 View menu

⊻iew	<u>C</u> hart	<u></u> . <u>S</u> ε
✓ <u>T</u> oolbar		
✓ <u>S</u> tatus Bar		

4.1 Toolbar

Allows the user to 'show' the toolbar (near the top of the page) or to 'hide' it.

□ 🖆 🔛 🕺 😂 💡 🛣 🕺 Second 💽			
4.1.1	Toolbar Icons		
	New Chart. Not applicable to QuickChart		
	Open existing chart. Allows the user to open an existing chart (urq file), as described in File 'Open'.		
	Save. Allows the user to Save a chart		
do V	Cut. Not applicable to QuickChart		
Ē	Paste. Not applicable to QuickChart		
	Copy. Not applicable to QuickChart		
۲	Goto. Allows the user to cause the display to jump to a specified area of the chart or spreadsheet. Copies 'Go To… ' function in the Chart menu.		
9	Calls the print setup page, allowing the user to configure the printout as required. Copies the 'Print ' File menu item.		
8	Enters the Help page system for QuickChart. Copies the Help Topics item in the Help menu.		
M	Toggles between chart view and spreadsheet view for the display. Chart or Spreadsheet selection for printing is made in the Print Setup page.		
1 Seco	nd 🔽		
	Displays the current time scale of the chart. Can be edited by selecting another value from		

Displays the current time scale of the chart. Can be edited by selecting another value from the drop-down picklist, or by using the left side vertical scroll bar. See 'The Chart' for more details.

4.2 Status Bar

Allows the user to 'show' the status bar (at the bottom of the page) or to 'hide' it.

Processing records	2500 ADMIN is logged in	CAP NUM SCRL
-	, ,	

The right-hand side of the status bar (above) contains a number of 'windows', described below. The left end of the bar contains brief information relating to the current operation. The example below shows the text which appears when the cursor hovers over the Save Chart tool bar item.

Save the active chart

4.2.1 Status bar window contents

'Processing Records'

This window shows the progress of the transfer operation when files are being loaded into a chart.

2500 Shows the number of the item being processed.

'ADMIN is logged in'

Shows the Login status, if 'Security' is enabled.

- CAP Appears if 'Caps Lock' is active at the PC
- NUM Appears if 'Num Lock' is active at the computer
- SCRL Tab appears if 'Scroll Lock' is active at the computer.

5 Chart menu

<u>C</u> hart	<u>S</u> ecurity	<u>0</u> pl
<u>S</u> etu	ю	
<u> <u> </u></u>	Го	
<u>A</u> nn	otate	
Loci	k	
<u> </u>	esh F	5

Setup	This gives a list of the points included in the current chart, and allows the user to edit this list. The user may also select 'chart' or 'spreadsheet' mode, whether messages are to be included, trace zoning etc. This menu item is disabled if 'Allow Chart Setup' has been disabled in Chart Lock.
Goto	Allows the user to jump to a specified time and date in a chart or spreadsheet. Shortcut = 🕥 key on the toolbar.
Annotate	Allows the user to enter a message to appear on the chart at a specified date and time. If Security is enabled, the user must enter a user name and associated password before the annotation is accepted.
Lock	If 'Lock' is selected, the user will be unable to scroll or zoom the chart, or to switch chart/spreadsheet mode. In spreadsheet mode the user is able to scroll within the range of the current chart but nothing else.
Refresh	Causes the chart to be redrawn. Shortcut = F5 key.

5.1 The Chart

For QuickChart 'Full ' users, two chart display modes (called 'Chart' and 'Chart + Replay' are selectable from the chart setup dialogue box. The first part of this topic deals with standard charts: Chart + Replay is described in the second part. Chart + Replay is not available to QuickChart 'Lite' users.

When 'Hide data from other batches/phases' is enabled, the batch name appears in the title bar. If a specific phase has been selected, this also appears in the title bar, separated from the batch name by a colon (i.e. BatchName:PhaseName)

5.1.1 Standard charts



The figure above shows the top part of a chart, where there are more faceplates than can be displayed within the height of the screen. The right-hand scroll bar is used to scroll through the height of the chart. The figure below shows the lower half of this chart.



5.1.1 STANDARD CHARTS (Cont.)

Display items

- Chart The chart appears as shown above, and contains all the points in the transferred file(s) (see Chart creation). If the total number of points is such that their faceplates can be shown within the height of the window, then the right hand scroll bar does not appear.
- Left scroll bar This 'sample interval' scroll bar appears at the left edge of the chart, and is used to expand or contract the amount of 'history' displayed across the width of the chart. Moving the slider upwards reduces the amount of history displayed; moving it downwards increases the amount of history displayed.
 - The equivalent 'time per pixel' is displayed in a window in the tool bar. The sample interval pull down menu associated with this display can be used to select a particular time per pixel, as an alternative to using the scroll bar.
- Bottom scroll bar This 'period select' scroll bar is used to select which part of the history is to appear at the chart, at the magnification set using the Left scroll bar,or time-per-pixel selection. See also `Go to...'

Date/Time windows

Three date /time windows appear below the bottom scroll bar. The left hand window displays the date and time at the left edge of the displayed area of the chart. The right hand window contains similar data for the right hand edge. The central window displays 'Cursor time '.

- Timezone Displays the time zone within which the data was generated. See 'Timezone indication' for more details.
- Right Scroll Bar This appears when there are more faceplates than can fit in the height of the chart. (This obviously depends on how high the chart has been made, by click/dragging its bottom right hand corner. The examples above show the default chart height.) Scrolling down reveals further faceplates, and eventually, the bottom scroll bar and date/time windows.
- Faceplates For every point in the chart, what is known as a 'faceplate' appears to the right of the chart. As shown below, this contains the channel descriptor, its scale end points and a process value. This value is at Cursor time.

Clicking on a faceplate, 'dims' all traces except that associated with the clicked faceplate. This makes the selected trace easier to pick out.

Double clicking on the faceplate calls the Point Properties page. This allows a new scale and chart zone to be entered, and also allows a number of trace enhancements to be applied to the trace. See Point Properties for more details. For details of how to change the various faceplate fonts, see the Options menu.

5.1.2 Chart + Replay

For QuickChart 'Full' users only, when 'Chart + Replay' is selected in the Chart setup page, the standard chart appears with a replay control panel beneath. Chart + Replay is not available to QuickChart 'Lite' users.



The dynamic replay feature allows the user to review the entire history in the database, or to start running from a specific point. The replay speed, and therefore the amount of history across the page can be set using the left hand scroll bar, or by using the 'Sample interval' edit box. The replay starting time and date is set using the horizontal scroll bar beneath the chart. (This scroll bar is accessible only when replay is stopped (not paused) or complete.)

Replay panel

The Replay panel provides controls for starting, stopping, pausing and resetting (i.e. going back to the beginning of) the playback.

Repl	ay _			Stopped		
	Start Replay	. The chart starts	replaying. T	he lower scroll ba	r disappears. Sta	tus: running
	Stop Replay	. The chart stops				ng a different time/date to be
	ed. Status:					
	Pause Repla	y. The chart stop	s replaying, I	but lower scroll b	ar remains hidder	n. Status: Paused.
I	Reset Repla	y. The chart stops	s replaying.	The lower scroll b	ar appears. Time	and date reset to the history
start p	oint.					
		Progress bar. G	ives an indic	ation of where th	e current time ar	nd date lie within the stored
history	. The bar i	s 'empty' (i.e. com	pletely grey) when the select	ed time and date	lie at the oldest point of

history. The bar is 'empty' (i.e. completely grey) when the selected time and date lie at the oldest point of history. The bar is 'full' (i.e. completely blue) when the time and date are at the most recent point of stored history. The example at the beginning of this paragraph shows that the current position is about half-way through the history.

5.1.3 Point Properties

This page is entered by double clicking on a faceplate, or by clicking on 'Point Properties' in the Chart setup page.

Point Properties	×
	Descriptor: Channel 1
Span Low: 🚺 🗸 V	Trace Mode
Span High: 1 V	Normal Interpolation C On
spannign. [C Average Off
¬ , 0 ×	O Minimum
Zone Low: 0 %	
Zone High: 100 %	
Scale Type	Colour:
• Linear	
C Logarithmic	🔽 Show Scale on Print
🔿 Logarithmic / Linear	
<u>D</u> K Cancel	<u>A</u> dvanced

As can be seen from the figure above, this allows:

New values for Span low/high and Zone low/high to be entered

Scale type to be selected for the selected point.

- Linear: Values are displayed without conversion. The y-axis scale is linear from Scale Low to Scale High.
- Logarithmic: Review takes the log of the input values. The y-axis scale is log₁₀(Scale Low) to Log₁₀(Scale High)
- Logarithmic/Linear: Review assumes that the inputs are already logarithmic (as with some transducer types). The y-axis scale is log10(Scale Low) to Log10(Scale High)

Trace mode to be selected.

Trace colour to be changed.

The Advanced button allows Span, Zone, Colour and logarithmic scales to be edited / enabled for Trace B (if A/B switching is supported by the instrument).

5.2 The Spreadsheet

Date/Time GMT DST	Messages	Silo 1 Temp 1	Silo 1 Temp 2	Silo 1 Temp 3	Sib 🔺
01/03/04 10:58:15		6.4667	87.8750	42.5512	26
01/03/04 10:58:20		6.4389	82.8750	42.5476	28
01/03/04 10:58:25		6.4111	77.8750	42.5466	31
01/03/04 10:58:30		6.3833	72.8750	42.5404	33
01/03/04 10:58:35		6.3556	67.8750	42.5332	35
01/03/04 10:58:40		6.3278	62.8750	42.5294	37
01/03/04 10:58:45		6.3000	57.8750	42.5328	39
01/03/04 10:58:50		6.2722	52.8750	42.5362	41
01/03/04 10:58:55		6.2444	47.8750	42.5342	43
01/03/04 10:59:00		6.2167	42.8750	42.5287	45
01/03/04 10:59:05		6.1889	37.8750	42.5321	47
01/03/04 10:59:10		6.1611	32.8750	42.5309	49
01/03/04 10:59:15		6.1333	27.8750	42.5290	48
01/03/04 10:59:20		6.1056	22.8750	42.5286	46
01/03/04 10:59:25		6.0778	17.8750	42.5296	43
01/03/04 10:59:30		6.0500	12.8750	42.5255	41
01/03/04 10:59:35		6.0222	7.8750	42.5195	39
01/03/04 10:59:40		5.9944	2.8750	42.5227	37
01/03/04 10:59:45		5.9667	2.1250	42.5220	35
01/03/04 10:59:50		5.9389	7.1250	42.5194	33
01/03/04 10:59:55		5.9111	12.1250	42.5220	31 🔹

Data can be displayed as if on a chart, as described in 'The Chart ', above, or as a spreadsheet, as described here. Viewing mode (chart or spreadsheet) can be selected from 'Current Mode' in the 'Chart setup ' dialogue box, or

by using the 'Toggle View Mode' toolbar button (

When 'Hide data from other batches/phases' is enabled, the batch name appears in the title bar. If a specific phase has been selected, this also appears in the title bar, separated from the batch name by a colon (i.e. BatchName:PhaseName)

The spreadsheet view allows process data to be viewed and printed as a spreadsheet-like table of data. The first column shows the timestamp, the second column shows messages (if enabled in 'Chart Setup '), and subsequent columns show the process values of the points in the chart.

If 'Raw Data' is enabled (in Chart setup) the data appears at the recorder intervals. If not, a fixed time interval for the data samples can be selected from a pull down Sample Period menu.

Notes:

- 1. The content of the spreadsheet is defined in 'Chart Setup '.
- 2. The 'Go To ' facility available from the chart menu (or by using the Go To... toolbar key () allows a specific start time to be selected.
- 3. When a chart is printed in spreadsheet mode, the time range of spreadsheet data will not always be the same as the time range of the equivalent chart.
- 4. When view mode is switched from Chart to spreadsheet, or *vice versa*, the chart pixels-per-second and the spreadsheet sample interval are made, as nearly as is possible, the same.
- 5. When switching from chart to spreadsheet, the sample nearest in time to the cursor position is highlighted, and, if possible, placed at the top of the list. When switching from spreadsheet to chart mode, if a spreadsheet row has been highlighted, then the chart will appear with the cursor at the date and time of that highlighted row.

5.2 THE SPREADSHEET (Cont.)

- 6. If, when switching from chart to spreadsheet, there is more data than can be displayed within the time span covered by the scroll bar, then 'Earlier data' and 'Later data' buttons appear at the top and bottom of the screen respectively. These buttons become active when the scroll bar is at the top or bottom of the page respectively.
- 7. The font used in the spreadsheet is the Windows system default unless 'Use Report Font in Spreadsheet View' is ticked in the Spreadsheet Setup area of the Chart Setup dialogue box, in which case the font used is that selected as 'Report Font...' in the Options/Fonts menu. The default status of this tick box can be selected in the Options/Settings menu.

5.3 Chart Setup

The chart setup window, accessed from the Chart menu, displays information about the chart or spreadsheet display. See Options/Settings for default editing.

art Setup	
Point ID Channel 1 (ANIN1) Channel 2 (ANIN2) Channel 3 (ANIN3) Channel 4 (ANIN4) Channel 5 (ANIN5) Channel 6 (ANIN6) Boiler OP (TRC0101:OP) Boiler Setpoint (TRC0101:SP) Boiler Temp (TRC0101:PV) IO Test Mode (T2550_C6:I0_mode:EnaTest)	GroupInstrumentGroup 1Boiler 1 ProductionGroup 1Boiler 1 ProductionBoilerNET:C6:T2550BoilerNET:C6:T2550BoilerNET:C6:T2550BoilerNET:C6:T2550
Current Mode Chart C Chart + Replay C Spreadsheet	Show Timezone on Chart
Chart Setup Show Messages Keep traces clear of timestamps Grid Major divisions: 10 Grid Minor divisions (total): 1	Spreadsheet Setup Values Messages Raw Data Use Report Font in Spreadsheet View
Add Point Edit Point Delete Point DK Cancel Point Properties	Auto Zone

5.3.1 Points included

Point ID This is a unique identifier consisting of a tag and / or descriptor (as set up in the instrument) along with a point type and number. For some LIN instruments, data points are identified by descriptor, block, field and subfield names rather than descriptor and point number. The default identifier for such blocks is of the form Descriptor (Block:Field) or Descriptor (Block:Field:Subfield) as appropriate. Examples are 'Boiler temp (TRC0101:PV)' and 'IO Test Mode (T2550_C6:IO_mode:EnaTest') respectively.

Group The name of the group from the original archive file.

Instrument The instrument name.

5.3.2 Current Mode



Allows the user to select Chart, Spreadsheet or (for 'Full ' users only), Chart + Replay for display. The print mode is independent of this setting, and is setup in the Print Setup page. The default for new charts can be set as 'Chart' or 'Spreadsheet' in the Options menu 'Settings' item.

Current view mode can also be toggled between chart and spreadsheet using the 'Toggle View Mode' toolbar

button If Chart + Replay is the current mode, and this button is used to switch to spreadsheet and then back again, then standard chart mode will be returned to (i.e. not replay mode).

Chart view provides a chart display, as described in 'The Chart '.

Chart + Replay also provides a chart display but with controls to start, stop, pause and reset the replay facility. Initially, the replay start position is at the oldest point in the stored history, but the replay start position can be adjusted as required, using the horizontal scroll bar located below the chart. Chart + Replay is not available to QuickChart 'Lite' users.

Spreadsheet view allows process data to be viewed (and printed if required) as a spreadsheet-like table of data, with columns for Timestamp, Messages (if enabled – see 'Spreadsheet setup', below) and process values for each point in the chart.

5.3.3 Chart Setup

1	Chart Setup	μ.
	☑ Show Messages	
	Keep traces clear of timestamps	
١	Grid Major divisions: 10	
1	Grid Minor divisions (total): 1	

Show Messages Allows the user to switch chart messages on and off.

Keep traces clear of timestamps

Timestamps are moved to a position immediately above the chart, so they do not obscure traces.

Grid Major divisions

The total number of 'heavy' major chart divisions in the vertical (point value) axis.

Grid Minor divisions (total)

The total number of 'light' minor divisions in the vertical (point value) axis. Example: to have 10 major divisions each subdivided into five minor divisions, set Major divisions = 10; Minor divisions = 50.

5.3.4 Show Timezone on Chart

```
✓ Show Timezone on Chart
```

If enabled, this causes timezone information to appear in charts, spreadsheets and printouts. For more details, see Timezone Indication.

5.3.5 Spreadsheet Setup

```
- Spreadsheet Setup

Values Versages

Raw Data

Use Report Font in Spreadsheet View
```

Values	Includes point values in the spreadsheet			
Messages	Includes messages in the spreadsheet			
Raw Data	Enabled = Include every measurement made by the instrument. Disabled = Include readings only at user-defined sample interval. Sample interval is de using the Sample interval pull-down menu, located in the Toolbar. 1 Second			
Use Report Font in Spreadsheet View				
	When ticked, the font selected as 'Report Font' in the Options/Fonts menu is used for this spreadsheet. The normal default state of this box is 'unticked'. This default status can be changed to			

The normal default state of this box is 'unticked'. This default status can be changed to 'ticked' in the Options/Settings menu. In this case all new charts automatically use the Report Font, unless the selection box for this particular chart is 'unticked' here in Spreadsheet Setup.

If 'unticked', the system default font (as determined by Windows) is used.

Select Point		×	1
Instrument:	Refinery Unit 1	<u>D</u> K Cancel	
Log Group:	Refine Temps 1		
		<u>A</u> dd All	
Point ID(s):	B Config version (DV2) Karl:s Comms (ANIN12) Math 1 (DV1) Silo 1 Temp 1 (ANIN1) Silo 1 Temp 2 (ANIN2) Silo 1 Temp 3 (ANIN3) Silo 2 Temp 5 (ANIN9) Silo 3 Temp 5 (ANIN4)		

5.3.6 Add Point

This allows the user to select points to be added to the chart or spreadsheet. Once the instrument and Group have been selected from pull-down pick lists, a list of all the points in the group appears, allowing the user to highlight specific points for inclusion. Clicking the 'Add All' key causes all the points in the selected group to be included.

Note: the maximum number of points in any one chart is 60.

5.3.7 Edit Point

This allows a point to be replaced. This means the existing point is removed from the chart and the new one added. The procedure is as follows:

Click on the point to be changed, to highlight it.

Click on 'Edit Point'

Select the new instrument, group and point

Press OK

5.3.8 Delete Point

This allows a point to be removed from the chart or spreadsheet by clicking on it to highlight it, then clicking the 'Delete' key.

5.3.9 Point Properties

Clicking on this key calls the point properties display, as described in 'The Chart'.

5.3.10 Auto Zone



Selecting 'Zones Adjacent' causes the chart traces to be separated from one another. Scales are adjusted to fit. Traces appear approximately adjacent to their faceplates.



'Zones Adjacent' example



'Zones Overlaid' example

5.4 Go To

GoTo X
GoTo
 <u>Relative date and time</u> <u>Des</u> <u>Days</u> <u>Hours</u> <u>Mins</u> <u>Move</u> <u>17/10/06</u> <u>00:06:30</u>
© <u>B</u> atch
☑ Only batches active after start of: 15/12/07 ▼
Only batches active before end of: 17/12/07
Eind Batch Batch name:
Furnace2temps
Phase:
✓ Merge batches with matching descriptors
Show entire batch/phase
Hide data from other batches/phases
Save Batch Name with Chart
Duration: 29 - 12 - 33 - 30 -
<u>D</u> ays <u>H</u> ours <u>M</u> ins <u>S</u> ecs
<u>O</u> K <u>C</u> ancel

This command, accessed from the chart menu, or via the Go To toolbar button () is used to jump to a specific area of the chart or spreadsheet.

Relative Date and Time

This allows the user to jump backwards or forwards a specified amount of time relative to the current position.

Specific Date and Time

This allows the user to move to a specified Time and Date.

Batch Allows the user to move to the start of a specified batch. For those instruments which support batch phases, this allows the user to navigate to the start of a specific phase of the batch.

5.4.1 Relative Date and Time



This Go To... button is clicked to move the start of the chart or spreadsheet forwards or backwards by a specified period of time.

If the selected time is outside the available range of data, the chart is redrawn, but is blank, with all faceplates reading 'No Data'. For spreadsheets, the date/time jumps to the date/time nearest to that requested.

Duration Boxes

If a specific time span is required, then the 'Duration boxes' can be edited to override the current 'sample rate' setting (if any).
5.4.2 Specific Date and Time



This Go To... button is clicked to select a Specific Date and Time for the start of the chart or spreadsheet.

If the selected time is outside the available range of data, the chart is redrawn, but is blank, with all faceplates reading 'No Data'. For spreadsheets, the date/time jumps to the date/time nearest to that requested.

The required time is entered by clicking on the required hours, minutes or seconds, then either entering a value from the keyboard, or editing the values using the arrow buttons.

The required date is entered either:

- 1. By clicking on the individual data figures, then editing them from the keyboard, or
- 2. By clicking on the down arrow symbol to the right of the date. This presents a calendar page. The month is selected using the right/left arrows at the top, and the day by clicking on the required day number.

Subsequent clicking on the OK key causes the chart or spreadsheet to jump to the selected location.

Duration Boxes

If a specific time span is required, then the 'Duration boxes' can be edited to override the current 'sample rate' setting (if any).

5.4.3 Batch

 	 ● Batch ✓ Only batches active after start of: 15/12/07
Only batches active before end of: 17/12/07	Only batches active before end of:
Eind Batch	Eind Batch
Furnace2temps	00000112
Phase:	Phase:
Merge batches with matching descriptors	
Show entire batch/phase	pre-run heat1
Hide data from other batches/phases	heat2
Save Batch Name with Chart	soak quench

This Go To... button function is used to move the chart or spreadsheet to the start of a batch.

Only batches active after/before...

These two fields allow the user to limit the time range to batches which were started after a specified time and/or ended before another specified time. These settings define the time range of files which appear in the 'Batch name' drop-down list, and in the 'Find Batch' browser.

- Batch Name The required batch name can be typed-in, selected from the pull-down batch list or the batch name can be searched for using the batch selector dialogue. The batch names which appear may be filtered using the 'Only batches active...' fields above.
- Phase This selection window is disabled ('greyed out') for instruments that do not support batch phase. Foe instruments that do support batch phase, the pull down menu gives a list of phases associated with the batch. Clicking on a specific phase, then on 'OK', causes the chart to jump to the start of the selected phase.

Merge batches with matching descriptors

If this item is enabled, then all batches with the same name are merged and the start and end times are determined from the earliest and latest batch records in the database. If not enabled, then the batch start dates are appended to the batch names.

Show entire batch/phase

This box is checked only if the chart or spreadsheet window is to show the entire batch, or batch phase from start to finish, including any text messages at the end of the batch. If the entire batch or phase is not required, the duration buttons can be used to set a specific time period. In such a case, the chart/spreadsheet starts at the beginning of the batch or phase, and spans the specified duration.

Hide data from other batches/phases

A chart or spreadsheet can contain data from more than one batch or phase, and may even contain traces that are not associated with a batch at all. In such cases, it is sometimes clearer if only those traces associated with the required batch or phase are displayed. To achieve this, 'Hide data from other batches/phases' should be selected. This selection also removes any pre-batch and post-batch data.

Save Batch Name with chart

If this item is selected, Batch settings are saved with the chart. This means that when the chart is re-opened, the batch settings continue to apply.

5.4.3 BATCH (Cont.)

Find Batch

Clicking this button calls the Batch selector page.

	End Time	Group		
12/11/06 11:46:10	13/11/06 11:05:40	Furnace2temps		
12/11/06 10:47:50	13/11/06 10:24:50	Furnace1Temps		
11/11/06 12:26:40	12/11/06 11:46:00	Furnace2temps		
11/11/06 11:10:50	12/11/06 10:47:40	Furnace1Temps		
10/11/06 13:07:10	11/11/06 12:26:30	Furnace2temps		
10/11/06 11:33:40	11/11/06 11:10:40	Furnace1Temps		
Search Find First [furnace1				
	12/11/06 10:47:50 11/11/06 12:26:40 11/11/06 11:10:50 10/11/06 13:07:10 10/11/06 11:33:40	12/11/06 10:47:50 13/11/06 10:24:50 11/11/06 12:26:40 12/11/06 11:46:00 11/11/06 11:10:50 12/11/06 10:47:40 10/11/06 13:07:10 11/11/06 12:26:30 10/11/06 11:33:40 11/11/06 11:10:40	12/11/06 10:47:50 13/11/06 10:24:50 Furnace1Temps 11/11/06 12:26:40 12/11/06 11:46:00 Furnace2temps 11/11/06 11:10:50 12/11/06 10:47:40 Furnace1Temps 10/11/06 13:07:10 11/11/06 12:26:30 Furnace2temps 10/11/06 11:33:40 11/11/06 11:10:40 Furnace1Temps	12/11/06 10:47:50 13/11/06 10:24:50 Furnace1Temps 11/11/06 12:26:40 12/11/06 11:46:00 Furnace2temps 11/11/06 11:10:50 12/11/06 10:47:40 Furnace1Temps 10/11/06 13:07:10 11/11/06 12:26:30 Furnace2temps 10/11/06 11:33:40 11/11/06 11:10:40 Furnace1Temps

A batch is selected for the Go To function either by clicking it once, to highlight it, then clicking OK or by double-clicking anywhere in the relevant row.

Search

In order to locate a batch in a long list, and one or more characters (not case sensitive) of the batch name may be typed in to the Search box. 'Find First' finds and highlights the first batch name in the list to contain these characters. 'Find Next' finds and highlights the next such batch name, and so on.

5.5 Annotate

Annotate X Sign Instrument: Refinery Unit 1 • Admin User name: Log Group: Group 3 Ŧ Password: . 03/03/04 15:18:28 Annotation Timestamp: User: Reason Reviewed O Note C Released C Approved. Annotation: OK for this batch Cancel ď

Annotation is not available to users of the 'Lite' version of QuickChart.

This chart menu item allows the user to enter a message for 'printing' on the chart at a specified date and time. This message is saved as a part of the chart, and cannot be amended or deleted.

The default time and date are those of the cursor position, but can be edited in the 'Annotation Timestamp' fields in the normal way. The date and time at which the annotation is created is also included in the message.

In the example:

03/03/04 15:18:28 Reviewed, Signed: Fred 16/03/04 14:58:15 OK this batch.

The first timestamp (03/03/04 15:18:28) is the date and time at which the message is located on the chart. The second timestamp (16/03/04 14:58:15) defines when the annotation was added to the chart.

If Security is enabled, then annotation may have to be signed for (User name and password), according to the setup in Security Manager for the logged-in user.

The message text is prefaced by the user's pc login name (if any) or by the user's Security management user name (Fred in the above example) if Security is enabled.

'Notes' must have a text string typed-in. 'Reviewed', 'Approved' and 'Released' can have text ('OK this batch' in the above example) added, or not, as required.

A confirmation of the message is requested, before the message is added to the chart.







The cursor is displayed as a vertical dashed, black line, which is initially located at the right hand (most recent) edge of the chart. The cursor can be moved to the desired position by clicking anywhere in the chart window, then dragging to the position indicated by the central date/time window.

The values in the point faceplates are those at the cursor position.

When using the time scale (left edge) scroll bar, the resulting expansion/contraction of data is centered about the cursor position.

5.7 Trace Mode

Normal The trace is shown as a set of values (horizontal levels) joined by vertical line sections. Each step represents the instantaneous value of the point at sample time. If Interpolation is enabled, this causes intermediate values to be calculated and inserted, resulting in a smoother (but no more accurate) trace.



Interpolation off

Interpolation on.

Average As for normal, above, except that the values are produced by averaging all the measurements taken between consecutive samples. The point value is read at an iteration rate depending on the instrument, but the sample rate is selected by the user as described in 'The Chart'.

MinimumAs for Average, except that the trace steps represent the minimum value reached by the
point between consecutive samples. Ensures that negative going 'spikes' are captured.

Maximum As for minimum, except that the trace steps represent the maximum value reached by the point between consecutive samples. Ensures that positive going 'spikes' are captured.

5.8 Highlight Trace



Clicking on the faceplate highlights the associated trace, by 'dimming' all the others. Click again to return to normal working.

Note: the faceplate background goes white when in 'Highlight' mode.

5.9 Lock

Chart Lock 🛛 🗙		
C <u>U</u> nlocked		
C Lock Chart (cannot be zoomed, scrolled or resized)		
C Limit Timerange: 03/03/04 ▼ 15:14:33 ▼		
Duration: 0 = 0 = 10 = 58 =		
<u>D</u> ays <u>H</u> ours <u>M</u> ins <u>S</u> ecs		
Allow Chart Setup		
Allow Further Data to be added		
OK Cancel		

As shown in the figure, this Chart menu item allows the user to control access to various chart functions.

Unlocked This default selection allows the user full access to chart functions.

Lock Chart 'Locks' the chart so that it cannot be zoomed, scrolled or re-sized. For 'Full' users, it is not possible to switch between Chart and Spreadsheet modes. If already in Spreadsheet mode, then the user may scroll through the current range of values, but nothing else. Chart setup and File Read functions are disabled.

Limit Timerange Allows a start time and duration to be entered. Chart and spreadsheet functions are available within the specified time period.

Allow Chart Setup When enabled (default), this allows chart set up to be performed on a re-opened chart. The selection box is disabled if 'Lock Chart' is selected.

Allow Further Data to be added.

When enabled (default), the user may add further files to the chart (File menu). Otherwise no access is allowed to further files. The selection box is disabled if 'Lock Chart' is selected.

5.10 Timezone indication

This optional display indicates the timezone in which timestamps on charts, spreadsheet views and printouts are shown.

Timezone indication can be configured on/off in the Options/Settings dialogue box (for new charts) and in the Chart set-up dialogue box(for existing charts).

Note: PKD format files contain no timezone information, so if this feature is enabled for pkd format files, the timezone is shown as GMT.

Examples

GMT + 2

This indicates that the local time is two hours ahead of GMT.

GMT – 5 DST

This indicates that local time is five hours behind GMT and that Daylight Saving Time will be applied, if appropriate.

Note: The appearance of 'DST' does means only that Daylight Saving Time is applied at the appropriate time of year – it does not (necessarily) mean that DST is active for the current chart time.

5.10.1 Timezone data location

Charts (on screen)

The timezone information is located to the right of the Date/time windows.



Charts (printout)

For chart printouts Timezone data appears adjacent to the left-hand timestamp.



Spreadsheets

Timezone data is included as a part of the column 1 header, both on the screen and on the printout.



6 Security Menu

Security menu items are not available to users of the 'Lite' version of QuickChart.

Security	
Login	
Lo <u>go</u> ut	
<u>S</u> etup	

Note: Before enabling security in QuickChart, a 'Security item' of type QuickChart S/W must be added as described in the Security manager help pages. Otherwise the 'Enable Security' request will fail with an error message.

Review	×
	Unable to intialise security system A security item matching this computer name was not found in the security database Matching security item not found, QuickChart S7W : Computer name : EPID384

This menu item's functions are available only if Security Manager software is installed at the pc running QuickChart. Otherwise, the menu functions are 'greyed'.

Once 'set up', the current login status is displayed in the status bar at the bottom of the screen.

- Login Once 'Set up', this allows a user with the correct user name / password combination to login.
- Logout Allows a user to log out. Selection is greyed if there is no logged-in user. See the note below.
- Setup Allows Security to be enabled. A part of this process is the logging-in of a user with Administration level permissions.
- Note: When a user logs out, the 'Full User Name' window in the status bar at the bottom of the display window becomes blank (if 'Enable Security' is disabled), or contains the text "No user is logged in" if security is enabled.

6.1 Login

This Security Menu item is selectable only if Setup... has already been carried out. Clicking on 'Login...' causes the Login Dialogue box to appear:

Login	×
Enter user name: ADMIN Enter password: *****	
OK Cancel	

The default user name is ADMIN; the default password (case sensitive) is also ADMIN, but either or both of these may have been changed in Security Manager.

Notes:

- 1. This login box also appears whilst enabling security
- 2. The user's 'Full User Name' is displayed in the status bar at the bottom of the display window for as long as the user is logged in.

6.2 Setup

The Security Menu Setup... item is available only if 'Enable security' has not yet been enabled, or if a user is logged in who has 'Administration permission' to the Quickchart software instance configured in Security Manager.

Note: The security database path must be the same as that entered for this instance of QuickChart in Security Manager.

Security Setup		×
Enable Security		
Centralised Security Control (requires Security Manager)		
Security Database Path: D:\Security Manager		Browse
R	Default	
	OK]	Cancel

After 'Enable Security' has been enabled and the OK key clicked, the user is asked to log in.

Review	×
⚠	A user with Administration permission to Review must login to complete this action
	Cancel

OK calls the login box. If the login is incorrect, an error message is displayed and the request to enable Security is ignored.

6.3 Enable Security effects

With Security enabled, the Security Manager software can allow/deny the QuickChart user access to most QuickChart functions. The items which can be enabled/disabled by the Security Manager software are arranged as a number of checkboxes, as follows:

Create QuickChart	Allows the user to create a chart from file, folder or 'media'.
Open QuickChart	Allows the user to open previously created QuickCharts.
Modify chart view:	Includes Chart Go To and scroll; chart/spreadsheet toggle; View settings in Print setup. Does not include settings in Page setup or Layout.
Save QuickChart	Always enabled if 'Chart setup' enabled. Save a new view of a file modified by one of the actions permitted under 'Modify chart view'.
	If 'Save Chart' is disabled, but the user has changed the chart view, the new view cannot be saved before closing.
Chart setup	Allows the user to add/delete/edit the point list, to zone traces, select/deselect 'Raw' data, include/exclude messages, include/exclude spreadsheet values, set chart gridlines and / or separate timestamps from chart traces.
Administration	Includes Security* setup and all Options menu items.
Chart Annotate	Allows the user to add notes to the chart*.
Chart Review	Allows 'Chart Reviewed' annotation messages* to be sent to the chart (if Chart Annotate is enabled)
Chart Approve	Allows 'Chart Approved' annotation messages* to be sent to the chart (if Chart Annotate is enabled)
Chart Release	Allows 'Chart Released' annotation messages* to be sent to the chart (if Chart Annotate is enabled)
Print:	The printing of charts and spreadsheets. To modify other setup data, Print Setup (below) must be enabled.
Print Setup	Full access to Print setup.
Export data:	The Exporting of data. To modify setup data, Export Setup (below) must be enabled.
Export setup:	Full access to Export functions.

* Not applicable to users of the 'Lite' version of QuickChart

7 Options Menu

<u>Options</u> <u>W</u> indow	<u>H</u> elp	
Eonts	×.	Chart Font
<u>S</u> ettings		Large Font
		<u>S</u> mall Font
		Header/Footer Font
		<u>R</u> eport Font

This menu allows fonts to be chosen for various software features, and also allows the default chart and spreadsheet settings to be set up.

7.1 Fonts

- Chart FontThis is the font used for text written on the chart, and for scales drawn along the side of the
chart. The text is drawn vertically. Most 'True Type' (TT) fonts work correctly when printed
vertically; other fonts should be selected on a trial-and-error basis.Large FontThis is the font used for the process value display within point faceplates.
- Small Font Used for title and range information within point faceplates.

Header/Footer font

Used for the printed headers and footers on printed charts and spreadsheets.

Report Font This is the font used for spreadsheet content.

Clicking on any of these menu items calls the Font Definition page:

Font			? ×
Eont: Century Gothic 약 Arial 약 Arial Black 약 Arial Narrow 약 Book Antiqua 약 Book Antiqua 약 Bookman Old Style 약 Century Gothic 약 Century Schoolbook 도	Font style: Regular Italic Bold Bold Italic	Size: 11 11 12 14 16 18 20 22 V	OK Cancel
Sample AaBbYyZz			
	So <u>r</u> ipt:	V	

7.2 Settings

Clicking on this Options Menu item calls the Settings page, which allows defaults to be set up for chart and spreadsheet settings.

Settings	×	
This dialog sets default values to be used when a ne	ew chart is created	
Default Trace Mode	Default Auto Zone Settings	
Normal Interpolation C On	Zones Overlaid	
C Average © Off	C Zones Adjacent	
C Minimum	Keep traces clear of timestamps	
O Maximum		
Default Chart Mode	Sample Interval	
Chart	1 Second 💌	
O Spreadsheet	Show Timezone on Chart	
Default Chart Setup	Default Spreadsheet and Export Setup	
Show Messages	🔽 Values 🔽 Messages	
Show Scale on Print	🔽 Raw Data	
Grid Major divisions: 10	Use Report Font in Spreadsheet View	
Grid Minor divisions (total):		
Default CSV format		
Date/Time format Separator		
○ Spreadsheet <u>N</u> umeric Format ● <u>D</u> ef	ault Separator	
	OK Cancel	

7.2.1 Default trace mode

See 'Point Properties ' (Chart menu)

7.2.2 Default Chart mode

Allows Chart or spreadsheet to be selected as default. See 'Chart Setup ' (Chart menu)

7.2.3 Default Chart setup

Allow defaults to be set up for messages and grid divisions.

7.2.4 Default Auto Zone settings

Allows defaults to be set for the zoning of traces, and the positioning of timestamps. See 'Chart setup' (Chart menu)

7.2.5 Sample interval

Allows a default sample interval to be selected. See 'Chart setup ' (Chart menu)

Show Timezone on Chart

Checking this box causes timezone information to be included, by default, on any new chart or spreadsheet. Timezone information can be added to existing charts/datasheets using the chart setup dialogue box. See 'Timezone indication ' for further details.

7.2.6 Default Spreadsheet and Export Setup

Allows default settings for the inclusion/exclusion of values and messages and for the use of Raw data or sampled data to be entered. See 'Chart setup ' (Chart menu) for Spreadsheet details and 'Export ' (File menu) for details of exporting data.

'Use Report Font in Spreadsheet View' allows the user to change the default status of the tick box 'Use Report Font in Spreadsheet View' which appears in the Spreadsheet setup area of the Chart Setup dialogue box. Normally the default setting is 'unticked' which means that the spreadsheet font is the system default. If this box is ticked, the font used is that selected in 'Report Font...' in the Options/Fonts menu.

7.2.7 Default CSV format

For some versions of software, only the file extension is editable.

This are allows the default time/date format, the separator and the file extension to be defined for use when exporting files. The user can also choose whether or not to include column headers.

Date/Time format

Text String

Causes a time/date to appear in the spreadsheet. Most spreadsheets allow the time/date format to be selected according to locale.

Spreadsheet numeric format

This displays the number of days since December 30th 1899. The decimal part of the value represents the latest six hours. for example, DDD---DDD.25 represents 0600 hrs; DDD---DDD.50 represents noon and so on. This format is more easily interpreted than text string by some spreadsheets.

Separator

Selecting 'Default Separator' causes commas to be used to separate the variables. For locales which traditionally use the comma as a decimal point, 'Tab' should be used to avoid confusion.

File extension

The three characters added as a suffix to file names. For CSV files, the normal extension is '.csv'.

Include Column Headers

If enabled, column headers are included in the CSV files by default.

InSQL format

If enabled, files generated using automatic csv generation are in InSQL format. All other options in the Default CSV section are 'greyed out', except for 'File Extension'.

FILE NAMING

InSQL files have the same name as the source uhh file but with the extension (eg .csv) as specified in the Default CSV Format section of the Options Settings dialogue. For example, assuming the extension is configured as csv, the uhh file Group-1~20061107_8038D22600000C4.uhh would be exported as Group-1~20061107_8038D22600000C4.csv.

The above strategy guarantees that file names are unique (as uhh file names are unique) so there is no danger of csv files being overwritten before they have been actioned by other software.

Note: If uhh files are being collected on a scheduled basis then uhh files of the same name may be picked up at successive scheduled times, each version being an extended version of the previous file. this results in the csv file being generated a number of times with an increasing amount of data each time.

8 Help Menu

<u>H</u> elp	
<u>H</u> elp Topics	
About QuickChart	

Help Topics Allows entry to these QuickChart help pages.

About QuickChart...

Clicking on this item calls the About display, giving details of QuickChart revision.

9 Window Menu

$\underline{W}\text{indow}$	<u>H</u> elp
<u>C</u> ascad	le
<u>T</u> ile	
<u>A</u> rrange	elcons
✓ <u>1</u> Quick	Chart1

Cascade	Causes windows to be arranged so that they overlap
Tile	Windows are arranged in non-overlapping tiles.
Arrange icons	Causes minimized windows to be ranged along the bottom of the Quickchart screen
Chart list	Shows the name of the currently open chart.

10 Other items

10.1 InSQL format

This format contains three header lines followed by all process variable (PV) values from the relevant uhh file. Fields in lines are separated by commas.

	I		····	1				
	Line	Field	Contents	Description	1			
Header	1	0	ASCII	File format				
	2	0	1	Field delim	iter			
	3	0	Review	User name (fixed string)				
		1	1	Time forma	at (=1 = local time)			
		2	Server local			he local timezone of the one as the instrument).		
		3	1		naviour if a missing bloo acement blocks	ck is encountered. 1 =		
		4	1	Create history blocks necessary to import data				
Values	4n	0	instrumentname.Tagna me or Tagname	Either: Instrument name and channel descriptor from the uhh file, converted to ASCII strings and separated by a dot, or				
				Tagname only, depending on options fitted.				
		1	1	Type of operation (insert)				
		2	YYYY/MM/DD	Date of the sample				
		3	HH:MM:SS.MSEC	Local instrument time of sample				
		4		Empty				
		5		Empty				
		6	0	Indicates th	nat the value is in engin	eering units		
		7	nn.nn	Sample value in the format as displ The decimal separator is that confi 'OPC Quality' (below) is not 'Good'		gured in the PC. If the		
		8	192 or other value	OPC Quality	Uhh status	Quality name		
				192	Good	Good		
				28	PV OFF	Out of service		
				32	Ranging or No Data	Waiting for initial data		
				16	Over Range or Under Range	Sensor failure		
				12	Hardware error	Device failure		
				4	Hardware exceeded or	Config error		
					Too many lin. tables			
				0	PV Overflow or	Bad		
					Bad PV			

10.2 Batch phases

For those instruments which support the feature, a phase represents a specific part of a batch, such as Heat, Cool, Rinse etc. entered as part of the batch configuration.

10.3 Recorder point types

This shows details of recorder point types.

ANINX = analogue input, where X is the point number in the instrument (e.g. ANIN7 is input channel 7).

DVN is the Nth derived variable in the instrument.

TOTN is the Nth Totaliser and

COUNTN is the Nth counter.

If adaptive recording is enabled at the instrument, two entries appear e.g. (ANIN1)Mx and (ANIN1)Mn

This page is deliberately left blank

11 Index

About QuickChart	49
Adjacent	26
All	3
ANIN7	26
Annotate	36
Auto Zone	26
Batch	3, 6, 10, 34
Batch Name	10, 34
Bottom scroll bar	21
Caption	10
Chart	10
Chart + Replay	21
Chart creation	3
Chart Font	46
Chart menu	20
Chart Name	10
Chart Setup	
Close	
Сору	
Copy to clipboard	
Copy to file	
CSV format	
Current Mode	
Current View	
Data Transfer	
Data Transier	
Date/Time of print	
Date/Time windows Default Auto Zone settings	
_	
Default Chart mode	
Default Chart setup	
Default CSV format	
Default Separator	
Default Spreadsheet and Export Setup	
Default trace mode	
Delete Point	
Duration	
Duration Boxes	
Edit Menu	
Edit Point	
Enable Security effects	
Export	6
Export Range	6
Export What?	6
Faceplates	21
File extension	47
Find Batch	6, 34
Find First	34
Find Next	34
Fit to	10
Fonts	46
From	3, 6, 10
From Files	3

From Folders	3
From removable media	3
Go To	31
Header/footer	10
Header/Footer font	46
Help Menu	49
Help Topics	49
Hide data from other batches/phases	5, 34
Highlight Trace	
Include Column Headers	
InSQL format	
Introduction	
Large Font	
Layout	
Left scroll bar	
Lite versus Full	
Lock	
Login	
Merge batches	
Merge batches with matching descriptors	
Message Table	
Messages	
-	
Name	
Next Page	
One page	
Only batches active	
Only batches active after start of	
Only batches active before end of Options menu	
Page setup	
Page x of y	
Period select scroll bar	
Phase	
Point ID	
Point Properties	
Points included	
Prev Page	
Preview	
Print	
Print Range	10
Print setup	
Print	
Properties	
Raw Data	
Redundant Instrument files	3
Relative Date and Time	
Replay panel	21
Penert Font	
Report Font	46
Right Scroll Bar	
	21
Right Scroll Bar	21 6, 47
Right Scroll Bar Sample interval	21 6, 47 21
Right Scroll Bar Sample interval Sample interval scroll bar	21 6, 47 21 34

REVIEW QUICKCHART HELP MANUAL (VERSION 3.10)

Select All	17
Selected Range	6, 10
Separator	6, 47
Settings	47
Setup	
Show entire batch/phase	6, 34
Small Font	
Specific Date and Time	
Spreadsheet	10
Spreadsheet Setup	
Start Transfer	3
Status bar window contents	
Tab	6
Text String	6
The Chart	21

The Spreadsheet	25
Time Axis	10
Timezone data location	40
Timezone indication	40
Toolbar Icons	18
True Type	46
Two page	10
Use Fixed scaling	10
Use Report Font in Spreadsheet View	. 25, 26, 47
Values	6
View menu	18
Window Menu	49
Zones Adjacent	26
Zoom in	10
Zoom out	10

Inter-Company sales and service locations

AUSTRALIA Sydney

Eurotherm Pty. Ltd. Telephone (+61 2) 9838 0099 Fax (+61 2) 9838 9288 E-mail info.au@eurotherm.com

AUSTRIA Vienna

Eurotherm GmbH Telephone (+43 1) 7987601 Fax (+43 1) 7987605 E-mail info.at@eurotherm.com

BELGIUM & LUXEMBOURG Moha

Eurotherm S.A/N.V. Telephone (+32) 85 274080 Fax (+32) 85 274081 E-mail info.be@eurotherm.com

BRAZIL Campinas-SP

Eurotherm Ltda. Telephone (+5519) 3707 5333 Fax (+5519) 3707 5345 E-mail info.br@eurotherm.com

DENMARK Copenhagen Eurotherm Danmark AS Telephone (+45 70) 234670 Fax (+45 70) 234660 E-mail info.dk@eurotherm.com

FINLAND Abo

Eurotherm Finland Telephone (+358) 22506030 Fax (+358) 22503201 E-mail info.fi@eurotherm.com

FRANCE Lyon Eurotherm Automation SA Telephone (+33 478) 6645

Telephone (+33 478) 664500 Fax (+33 478) 352490 E-mail info.fr@eurotherm.com

GERMANY Limburg

Eurotherm Deutschland GmbH Telephone (+49 6431) 2980 Fax (+49 6431) 298119 E-mail info.de@eurotherm.com

HONG KONG & CHINA

Eurotherm Limited North Point Telephone (+85 2) 28733826 Fax (+85 2) 28700148 E-mail info.hk@eurotherm.com

Guangzhou Office

Telephone (+86 20) 8755 5099 Fax (+86 20) 8755 5831 E-mail info.cn@eurotherm.com

Beijing Office Telephone (+86 10) 6567 8506 Fax (+86 10) 6567 8509 E-mail info.cn@eurotherm.com

Shanghai Office Telephone (+86 21) 6145 1188 Fax (+86 21) 6145 1187 E-mail info.cn@eurotherm.com

INDIA Chennai Eurotherm India Limited Telephone (+9144) 2496 1129 Fax (+9144) 2496 1831 E-mail info.in@eurotherm.com

IRELAND Dublin Eurotherm Ireland Limited Telephone (+353 1) 4691800 Fax (+353 1) 4691300 E-mail info.ie@eurotherm.com

ITALY Como

Eurotherm S.r.I Telephone (+39 031) 975111 Fax (+39 031) 977512 E-mail info.it@eurotherm.com

KOREA Seoul

Eurotherm Korea Limited Telephone (+82 31) 2738507 Fax (+82 31) 2738508 E-mail info.kr@eurotherm.com

Fax (+31 172) 417260

E-mail info.nl@eurotherm.com

NETHERLANDS Alphen a/d Rijn Eurotherm B.V. Telephone (+31 172) 411752

NORWAY Oslo

Eurotherm A/S Telephone (+47 67) 592170 Fax (+47 67) 118301 E-mail info.no@eurotherm.com

POLAND Katowice

Invensys Eurotherm Sp z o.o Telephone (+48 32) 218 5100 Fax (+48 32) 217 7171 E-mail info.pl@eurotherm.com

SPAIN Madrid

Eurotherm España SA Telephone (+34 91) 661 6001 Fax (+34 91) 661 9093 E-mail info.es@eurotherm.com

SWEDEN Malmo

Eurotherm AB Telephone (+46 40) 384500 Fax (+46 40) 384545 E-mail info.se@eurotherm.com

SWITZERLAND Wollerau

Eurotherm Produkte (Schweiz) AG Telephone (+41 44) 787 1040 Fax (+41 44) 787 1044 E-mail info.ch@eurotherm.com

UNITED KINGDOM Worthing

Eurotherm Limited Telephone (+44 1903) 268500 Fax (+44 1903) 265982 E-mail info.uk@eurotherm.com Web www.eurotherm.co.uk

U.S.A Leesburg VA

Eurotherm Inc. Telephone (+1 703) 443 0000 Fax (+1 703) 669 1300 E-mail info.us@eurotherm.com Web www.eurotherm.com

ED54



EUROTHERM LIMITED Faraday Close, Durrington, Worthing, West Sussex, BN13 3PL Telephone: +44 (0)1903 268500 Facsimile: +44 (0)1903 265982 e-mail: info.uk@eurotherm.com Website: http://www.eurotherm.co.uk

Specification subject to change without notice. ©Eurotherm Limited.

Invensys, Eurotherm, the Eurotherm logo, Chessell, EurothermSuite, Mini8, EPower, Eycon, Eyris and Wonderware are trademarks of Invensys plc, its subsidiaries and affiliates. All other brands may be trademarks of their respective owners.

HA028508/8 (CN24050)