

Toho FP Series Reference Manual

Toho Technology Corporation.

1. Calibration:

💫 CALIB Windows Application	
<u>File</u> <u>H</u> elp	
Stylus Force Calibration	Video Calibration Factor
Video Calibration	Step Height Calibration Factor
Scan Position Offset Calibration	131um/0.357A 0.992447
Linearity Calibration	26um/0.015625A 1.00912
Step Height Calibration	De fine Constant Factor
Radius Curvature Calibration	
Center Position Offset Calibration	Scan Position Offset
Video Lamp Balance	X: 422 um Y: -150 um
Drop Timer	Center Position Offset

• Stylus Force Calibration	: Calibration and setting of stylus force
• Video Calibration	: Calibration and setting of screen and video image
\cdot Scan Position Offset Calibration	Calibration and setting of start position of measurement
\cdot Step Height Calibration	: Calibration of step height by range
• Video Lamp Balance	: Adjustment of video lamp
• Drop Timer	: Setting of stylus drop motor speed

1.1. Stylus Force Calibration:

Stylus force is the power that is given to stylus end when a stylus contacts a sample. Mechanical changes of a stylus arm affect each of the calibration. Note: In case the stylus force is below 10mg, make re-calibration every time styluses are changed.

Stylus Force Setup Check

1.1.1. Click "Stylus Force Calibration." If the stylus is close to the sample, choose "Move To Soft Home" from the "Elevator" menu.

🛲 stylus.cfg - STYCALIB Window	ws Application			
<u>File Stylus Elevator View Help</u>)			
↑ - H 📓				
		Coefficients: -		
			C0:	-195853
			C1:	-1076806
			C2:	33892
			C3:	127935
			C4:	221647
			C5:	-389085
			C6:	-814030
Stylus	-		C7:	693629
Stylus Force			C8:	1236595
Contact Speed (1 - 10)	3		C9:	-401541
Drop Timer (0 - 4800)	2629		C10:	-642456
Stylus Arm Length (um)	25908			
Spring Constant (um/mg)	5		Ref:	72235
Stylus Shank Length (um)	5321			
Min Contact Force (0.1 mg)	2			

1.1.2. Choose "Calibrate Force Coefficients" from "Stylus" in the menu.

1.1.3. Save the new value by choosing "Save" from the "File" menu.

1.2. Video Calibration:

Video calibration associates the video screen coordinate and the stage coordinate.

- 1.2.1. Place the sample on the stage to bring it just below the measurement head.
- 1.2.2. Click "Video Calibration" so that the "Video Calibration" window appears.

Video Calibration	×
<u>V</u> iew <u>M</u> ove <u>D</u> irection <u>A</u> ctions <u>S</u> ubstrate <u>V</u> acuum S <u>t</u> ylus <u>H</u> elp	
	ZOOM START C
	Mode: XY X: Ομm Y: Ομm Z: Ομm
Requested Stylus Force: 2.000 mg	Z: 0 pm Ø: 0.00 deg Zoom: 0 OK_Cancel
Keady	CAP NUM

- 1.2.3. Click so that the zero point is selected on the sample surface and then the image is focused.
- 1.2.4. Choose a pattern on the sample to make calibration. The upper-left angle of a rectangle is ideal. If there are exactly the same or similar patters on the screen, avoid choosing any one of these for calibration.

1.2.5. Move the cross-shaped cursor and click the angle of the pattern chosen in the section 1.2.4. Stage will slightly move in the XY direction and the following message will appear.

"Teach the same feature again."

1.2.6. Click the same pattern chosen in the section 1.2.5 so that the following message box will appear.

-	XY Video Display
	1 Pixel[X] = 2.174μm 1 Pixel[Y] = 2.326μm
	OK

Values in the message box shows one pixel on the screen in the horizontal and vertical direction is equivalent to how many μm in the X and Y direction on coordinates.

1.2.7. Click "OK."

1.3. Scan Position Offset Calibration:

By using the "Stylus Alignment" tool, calibrate the difference between the center of the cross hairs in the "XY View" window and the actual center of the stylus.

Note: In the following cases, calibration should be made.

- Styluses are changed.
- "Zoom-In" is used to measure a fine pattern.
- 1.3.1. Place the standard sample on the stage to bring it just below the measurement head.
- 1.3.2. Click the "Scan Position Offset Calibration" button so that the "Video Calibration" window appears.



1.3.3. Click the 150 μ m radio button to select the 300 μ m calibration option.

1.3.4. Click "Continue" so that the scan position offset calibration window appears.

🚾 Scan Offset Calibration		×
<u>V</u> iew <u>M</u> ove <u>D</u> irection <u>A</u> ctions <u>S</u> u	ibstrate <u>V</u> acuum S <u>t</u> ylus <u>H</u> elp	
SLOW MED FAST		DOM START
		Mode: XY
Requested Stylus Force: 2.	.000 mg	Υ: Ο μm Ζ: Ο μm Ø: 0.00 deg Ζοοm: 0
		OK Cancel
Align tool crosshairs with scre	een crosshairs	

- 1.3.5. Click so that the zero point is selected on the sample surface and then the image is focused.
- 1.3.6. Match the position to one of the "300µm Alignment Patterns."



- 1.3.7. Move the cross hairs to the position where they are co-incident with the cross hairs on the video screen.
- 1.3.8. Click **START**, so that the stylus drops to start measuring. The width of the triangle-shaped area to be scanned will be the half of one side.
 e.g. 75µm for a 150µm pattern. 150µm for a 300µm pattern.
- 1.3.9. When scanning is completed, the scan data will be shown.
- 1.3.10. If the values of "Distance to Edge" and "Step Width" are within 2µm of the each "Actual" value, click "Cancel" to keep a present value. If over 2µm, click "Set" to calculate a new offset value.
- 1.3.11. Continue repeating this process until the values of "Distance to Edge" and "Step Width" are within 2µm of the each "Actual" value.

1.4. Step Height Calibration:

A capacitance-type sensor of the Profiler is not a device to measure absolute values. Calibration should be made.

Note: Each vertical range should be calibrated separately.

Step height is calibrated.

1.4.1. Click the "Step Height Calibration Control" button in the "Scan Calibration" window. The "Step Height Calibration Options" dialogue box will be shown in the center of the window.

Step Height Calibration Options	•	×
Range:	Recipe:	Continue
© 130um/10A	Custom	Cancel
C 26um/2A	Custom	
		Default
		Custom
Multi-Scan Average:	3 💌	
Standard Step Height Value:	23.217	µm 💌

- *Range:* Choose a range suitable for the step height standard to use. Click its radio button.
- *Multi Scan Average:* Sets how many scans to take to determine a calibration factor. The result will be the average value of all scans.
- *Standard Step Height Value:* Enter a step height standard value to use. Select an adequate unit from the drop-down list in the right.
- *Recipe:* The profiler can select a default and custom calibration value for each range. Click Custom... to open the recipe editor. By using the custom recipe setting, set a condition appropriate for the measurement. Once the recipe is set, click Continue to begin calibration. The step height calibration window will appear.

🛲 Step Height Calibra	ation							×
\underline{V} iew \underline{M} ove \underline{D} irection	<u>A</u> ctions <u>S</u> ubstrate	⊻acuum S <u>t</u> ylus	<u>H</u> elp					
SLOW MED FAST	↑ ↓ +	- →		FOCUS	ZOOM ZOOM IN OUT	START	÷ []	N AD
		-			Ma	ode: XY	0	
Requested Stylu	s Force: 2.00	00 mg			Z : Ø: Zc	0.0	υ μm Ο μm Ο μm Ο deg 4	OK Cancel
Align step height 20	0μm to the right of	screen crosshair	ſS					Empty

1.4.2. Bring the measurement position to a step height of the step height standard.



1.4.3. Place the cross hairs approximately 100µm from the left side of the step height. Click either "OK, " or **START**. Measurement will be made for the times specified in the previous stage. Once the measurement is completed, a calibration factor will be calculated.

1.4.4. Click "SET" to save the new value, or click "Cancel" to go back to the "Scan Calibration" window keeping the original value.



1.5. Video Lamp Balance:

📩 CALIB Windows Application	
<u>File</u> Help	
	Lamp Balance: 0.539 Auto-Adjust
	Lamp Brightness: 127 Cancel Focus

Lamp is automatically adjusted. Place the standard below the stylus.

Click "Auto-Adjust" of	Lamp Balance:	0.539	Auto-Adjust	to start an	automated
adjustment. Select "Sav	ve" from the	• "File M	enu" to fini	sh.	

"Lamp Brightness" adjusts brightness of the Lamp.

1.6. Drop Timer:

ACALIB Windows Application		
<u>File</u> <u>H</u> elp		
	Drop Timer: 2629 Auto-A	\djust Focus

Drop Motor speed is automatically adjusted. Place the standard below the stylus.

Click "Auto-Adjust" of	Drop Timer:	2629	Au	to-Adjust	so	that	the	stylus
automatically drops to st	art adjus	stment.	Select	"Save"	from	the '	"File	Menu"

to finish.

2. Configuration:

The "Configuration File" inside the machine should be appropriately set to operate the machine correctly.

Double-click the "Configuration" icon in the top menu. In the window, there are a series of control buttons in the left, and the present settings are shown in the right.

A Configuration		
1 File 2 Help		
I He 2 Hep System Configuration Substrate Configuration Change Password Enable New Options Data Export Paths Deskew Options Sequence Execution Option Signal Tower Teach Soft Home Position Teach Lowest Elevator Position Teach Handler Load Position Teach Manual Load Position	Handler Load Pos. Manual Load Pos. X: 840000 um Y: 100000 um Theta: 0 deg Elevator: 0 um Stage Configuration Elevator: 0 Soft Home Theta: 0 deg Leveling Offset: 1897 arc sec Lowest Elevator Position: 20000 um Elevator Focus Speed: 10 um Before Moving Stage Enable Safety Interlock Save Changes	,

2.1. System Configuration:

This contains hardware settings of the machine. The setting of the handler and stage limit can be made here. Normally, these settings need not to be changed.

Click the "System Configuration" button.

Machine Configur	ation	
Serial Number:	6040707	ОК
Customer:	3356	Cancel
Model:	Step Height	
Machine Type:	Instrument-Sodick	
Handler Type:	Handler TypeA	
Instrument	<u>H</u> andler <u>S</u> tage	<u>Printer</u>

- 2.1.1. Serial Number: Serial number of the machine.
- 2.1.2. Customer Number: Customer number of the machine
- 2.1.3. Model: Model of the machine

2.1.4. Machine Type: Type of the machine (Unchangeable)

Instrument-Sodick 💌
Desktop
Instrument
Instrument-Sodick

2.1.5. Handler Type: Type of the handler being used (Unchangeable)

None
None
Handler TypeA
Handler TypeB
Handler TypeC
Handler TypeD
Handler TypeL

2.1.6. Instrument: Display of options, etc

Instrument Setup	×
Software Options: X GEM/SECS X Pattern Recognition X Sequence	Hardware Options Video Hardware: TELEFORCE CX-5252 Head Type: MicroHead II
Glass Coordinates	Vacuum Options Vacuum Control: Automatic Delay Between 2nd Deskew and 1st Measurement in Seq (in sec): Vacuum Feedback Vacuum Feedback Sequence Data Option Data Storage period: 1 Days 0 Hours 0 Minutes 0 Seconds
Use Glass Coordinates	Delete Sequence Data
ОК	Cancel

• Software Option:

Click each option to change "enable" or "unable" of the option.

- Glass Coordinates:
- Set this to send measurement position data to the host with the XY coordinates converted.
- Hardware Option:

A video board type and micro head type are shown here.

• Vacuum Option.

Vacuum options are set here.

• Sequence Data Option:

Set this to delete sequence data automatically. Also, a data storage period is set her.

2.1.7. Handler:

The "Handler Setup" window, number of slots, number of cassettes (up to four), cassette name, and timeout of the handler can be set. These settings are available only if there are handler options.

Handler Setup				
General Information		Cassette Inform	ation	
Handler Type: Handler	ТуреА	Place	Cassette Na	ame
Wafer ID Type: None	•	🔽 Cassette #1	Cassette #	1
Number of Slots: 80		🔽 Cassette #2	Cassette #	2
Slot No.1 from the Top.		🗖 Cassette #3	3	
Glass Information		🔲 Cassette #4	Cassette #	4
Glass Name	e			
Glass #1 Glass Nan	ne #1			<u>T</u> imeout
Glass #2 Glass Nan	ne #2			
Glass #3 0.0 mm				
0.0 mm				
0.0 mm				
Glass #5			ок	Cancel
Handler Timeout Setup				
nandier fillleout Setup				
Operations	Timeout (Seconds	:)		
Handler Initialization:				
			_	
Cassette Start:	20	_ Cance		
Pick Glass from Slot:	45			
Put Glass to Slot:	45			
Pick Glass from Stage:	45			
Put Glass on Stage:	45			

2.1.8. Stage: Factors of the stage limit and motor axes are set.

Stage Config Stage Stage Stage Limit Conversion Factors Ca Stage Mapping	OK Cancel	
FPD Stage		×
Travel Area	Stage Limit	7
X: 3332000 um	X: 1690000 um	
Y: 2222000 um	Y: 1110000 um	
Table Top Size	Substrate Size	
X: 1710000 um	X: 1310000 um	
Y: 1110000 um	Y: 1110000 um	
ОК	Reset	

Conversion Factors	×
BIGX	
BIGA	
BIGY	-20
Z	2
XSLOW	472.8944022
THETA	27.7777778
LEVEL	0.802568218
XFAST	2.519685039
Y	1
OK Ca	ncel Default

2.2. Substrate Configuration:

The size of the sample to measure is set. By setting it, the moving ranges of the X-axis and Y-axis will be automatically set and the information in the scan window and data analysis window will be modified.

Click the "Substrate Configuration" button and enter glass substrate size. Click "OK" to save or "Cancel."

Substrate Configuration	X
Wafer Size:	
Glass Substrate	
X: 1310 mm	
Y: 1110 mm	
OK Cancel	

2.3. Change Password:

Setting of a user password limits access to data files and the setting screen. If the password is activated, access to database, change of default configuration, change of calibrated values, and change of zoom factor ask to enter the password.

Click "Change Password."

Define Password		×
🔽 Enable Password	d Protection	
Password:	×]
Retype Password:	×]
ОК	Cancel	

Click "Enable Password Protection" to set a password.

A password is selected within 12 letters. Click "OK" to enable the password protection.

2.4. Enable New Option:

New options are added to an existing machine.

2.5. Data Export Paths:

Export paths for scan data and sequent data are set.

Click "Data Export Paths."

Dal	ta Export Paths		×
	Scan Data	C:	
	Export Path:	VRECIPE	
	- Sequence Data-		
	Export Drive: Export Path:	VRECIPE	
	OK]	Cancel Defa	ault

Enter an appropriate drive into the "Export Drive" box, and directory path in the "Export Path" box. Click "OK" to save a new value or "Cancel" to go back without change. Click "Default" to set the default value.

2.6. Deskew Options:

Deskew options are configured.

Click "Deskew Options."

Deskew Options	×
Perform Deskew Twice to Align Theta?	
Pattern Rec. Options	OK
No. of Groping Retry Layers: 1 (8 Sites) 💌	Cancel
Lowest Match Score (20100%):	
Max. Score to Stop Groping (20100%): 65 %	
Re Pattern Rec. Count:	

2.6.1. Perform Deskew Twice to Align Theta:

If this is checked, Theta is aligned. If this is not checked, only the X-axis and Y-axis are aligned.

2.6.2. No. of Groping Retry Layers:

This parameter specifies the search area around the deskew position. The more "Sights" are, the larger the area is.

2.6.3. Lowest Match Score:

This parameter sets a threshold whether the pattern recognition system detects a deskew pattern. If the scores are higher than the "Lowest Match Score", the pattern recognition system judges the point with the highest score to be the correct deskew point. Its tolerance is between 20-100%.

2.6.4. Max. Score to Stop Groping:

If the scores become equal to, or lower than the "Max. Score to Stop Groping," the search stops so that position matching of the deskew point begins. Its tolerance is between 20-100%.

2.6.5. Re Pattern Rec. Count:

The number of position matching of the deskew point is set. Normally it is

one time.

2.7. Sequence Execution Option:

In order to save automatically sequence data with Lot ID or Operator ID entered, open the entry screen from the machine side before sequence execution.

Click "Sequence Execution Option."

Check the check buttons shown. Click "OK" to save new setting or "Cancel" to keep old setting.

Sequence Execution Option								
Prompt for Lot ID, before sequence execution?								
Prompt for Operator ID before sequence execution?								
Cancel								

2.8. Signal Tower: Not available.

2.9. Teach Soft Home Position:

This sets the position of the θ -axis in case of return to the home position.

2.10. Teach Lowest Elevator Position:

Setting of this parameter limits the vertical moving range of the measurement head.

2.11. Teach Handler Load Position:

The load position of the handler is configured by teaching its position. Once the setting is configured, do not change the value.

2.12. Teach Manual Load Position:

The load position of the manual is configured by teaching its position.

3. Database File Manager

In the "Database File Manager," the following functions are available.

- Call a catalog
- Delete a file
- Print a file
- Export a file (Backup)
- Import a file (Retrieve)

Click "Database File Manager" to execute commands from the database window menu so that various functions become accessible via the four sub-windows.

Catalog - [SCAN RECI	PE]					
Edit Priransfer W	rinaow Help					
	X _ ∰ ⊖→ ⊖←	2D	3D			
Scan Recipe	Scan Recipe Nam	e: LO	FF300			
	Recipe Name	Type	Length(um)	Speed(um/s)	Force(mg)	Creation Date
1	OFF300	2D	1000	50	10	04/06/07 - 11:53:20
Scan Data	STEPHTH	2D	300	50	5	04/06/07 - 16:44:51
	STEPHTM	2D	300	50	5	04/05/28 - 19:01:23
	1000UM	2D	1000	50	5	04/05/29 - 15:42:51
	5000UM	2D	5000	100	S	04/05/31 - 17:08:10
	D1103	2D	2000	100	4	04/05/31 - 15:21:32
1	D1104	2D	500	50	2	04/06/05 - 13:54:56
Sequence Recipe	D1105	2D	500	5	2	04/06/01 - 09:02:23
Sequence Recipe Sequence Data	D1106	2D	100	10	0.5	04/06/01 - 09:03:00
	D1107	2D	50	2	1	04/06/01 - 09:03:19
	D1108	2D	25	1	2	04/06/01 - 09:03:43
	D1109	2D	1000	100	1	04/06/01 - 09:04:03
Sequence Data	D1110	2D	200	20	1	04/06/01 - 09:04:33
	D1111	2D	100	5	0.5	04/06/01 - 09:05:06
	D1112	2D	500	50	2	04/05/31 - 09:31:59
	D1113	2D	500	5	2	04/05/29 - 15:22:29
	R130	2D	300	50	5	04/06/07 - 16:50:48
	R26	2D	300	50	5	04/06/14 - 11:10:13
	R26M	2D	300	50	5	04/06/14 - 12:57:48
	TEST	2D	300	50	5	04/06/05 - 14:03:40
	XY1	2D	200	50	5	04/05/29 - 11:31:49
	XY2	2D	200	50	5	04/05/29 - 11:39:13
	XY3	2D	200	50	5	04/05/29 - 11:39:15
	Delete P	rint	View/Modifiz	Fv	oort	Import

3.1. Menu Bar, Tool Bar





Store selected scan recipe, scan data, sequence recipe or sequence data in the outside.



Retrieve stored scan recipe, scan data, sequence recipe or sequence data.

• Print: 🞒

Print selected scan recipe, scan data, sequence recipe or sequence data.

• Delete:

Delete selected scan recipe, scan data, sequence recipe or sequence data. Once-deleted recipe or data will not be restored.

Select recipe or data to delete.

Delete Files	×
Delete: R26C R26C1788 R26LB R26LB1788 R26LT R26LT1788 R2	OK Cancel

Click "OK" to delete.

3.2. Command Buttons

From the four command buttons in the left of the window, select a database catalog.



3.3. Database Entry Delete

Select an appropriate catalog to delete scan recipe or sequence recipe.

Delete of a file.

3.3.1. Click an appropriate command button in the left of the window to display a catalog to call.

		⁰ ← 2D	3D			
Scan Recipe	Scan Recip	e Name:)FF300			
	Recipe Name	Туре	Length(um)	Speed(um/s)	Force(mg)	Creation Date
1	OFF300	2D	1000	50	10	04/06/07 - 11:53:2
Scan Data	STEPHTH	2D	300	50	5	04/06/07 - 16:44:5
	STEPHTM	2D	300	50	5	04/05/28 - 19:01:2
	1000UM	2D	1000	50	5	04/05/29 - 15:42:5
	5000UM	2D	5000	100	5	04/05/31 - 17:08:1
	D1103	2D	2000	100	4	04/05/31 - 15:21:3
1	D1104	2D	500	50	2	04/06/05 - 13:54:5
equence Recipe	D1105	2D	500	5	2	04/06/01 - 09:02:2
	D1106	2D	100	10	0.5	04/06/01 - 09:03:0
	D1107	2D	50	2	1	04/06/01 - 09:03:1
	D1108	2D	25	1	2	04/06/01 - 09:03:4
	D1109	2D	1000	100	1	04/06/01 - 09:04:0
Sequence Data	D1110	2D	200	20	1	04/06/01 - 09:04:3
	D1111	2D	100	5	0.5	04/06/01 - 09:05:0
	D1112	2D	500	50	2	04/05/31 - 09:31:5
	D1113	2D	500	5	2	04/05/29 - 15:22:2
	R130	2D	300	50	5	04/06/07 - 16:50:4
	R26	2D	300	50	5	04/06/14 - 11:10:1
	R26M	2D	300	50	5	04/06/14 - 12:57:4
	TEST	2D	300	50	5	04/06/05 - 14:03:4
	XY1	2D	200	50	5	04/05/29 - 11:31:4
	XY2	2D	200	50	5	04/05/29 - 11:39:1
	XY3	2D	200	50	5	04/05/29 - 11:39:1

👼 Catalog - [SCAN REC]	IPE]						
<u>F</u> ile <u>E</u> dit <u>P</u> PTransfer	<u>W</u> indow Help						
	X / ⊒∌ n→ n←	20	30				
			30				
Scan Recipe	Scan Recipe Nar	me: K	AWA1				
	Recipe Name	Туре	Length(um)	Speed(um/s)	Force(mg)	Creation Date	
	STEPHTM	2D	300	50	5	04/01/15 - 14:27:35	
Scan Data	STEPHTL	2D	500	50	5	04/01/15 - 14:32:38	
	STEPHTH	2D	300	50	5	04/03/13 - 15:48:51	
	RADIUS	2D	500	100	1	04/03/04 - 03:05:44	
	OFF300	2D	1000	50	10	04/03/10 - 11:47:24	
	 OFF150	2D	500	50	10	04/03/13 - 16:27:02	
	LINEAR	2D	50000	1000	5	04/01/15 - 14:36:19	
Sequence Recipe	XY3	2D	400	50	5	04/03/13 - 16:26:01	
	XY2	2D	400	50	5	04/03/13 - 16:25:57	
	XY1	2D	400	50	5	04/03/13 - 16:24:59	
	TEST342	2D	500	50	5	04/02/09 - 13:42:41	
Sequence Data	TEST1	2D	300	50	5	04/01/20 - 09:01:34	
	SODICK_R	2D	350	50	5	04/03/06 - 11:31:52	
	RCP1	2D	100	50	5	03/12/19 - 16:32:35	
	R27	2D	500	100	5	03/06/09 - 14:36:06	
	R26	2D	316	50	5	04/03/16 - 18:52:58	
	R130	2D	300	50	5	04/03/13 - 14:37:54	
	MIN	2D	20	20	5	03/12/22 - 16:46:36	
	KAWA3	2D	357	50	5	04/03/16 - 14:51:55	
	KAWA2	2D	357	50	5	04/03/16 - 14:51:07	
	KAWA1	2D	357	50	5	04/03/16 - 14:49:03	
	D1113	2D	500	5	2	04/03/13 - 10:57:51	
	D1112	2D	500	50	2	04/03/12 - 11:03:28	
	D1111	2D	100	5	0.5	04/03/13 - 10:58:34	
	D1110	2D	200	20	1	04/03/13 - 10:58:30	
	D1109	2D	1000	100	1	04/03/13 - 10:58:27	
	D1108	2D	25	1	2	04/03/13 - 10:58:24	
	D1107	2D	50	2	1	04/03/13 - 10:58:18	
	D1106	2D	100	10	0.5	04/03/13 - 10:58:15	
	D1105	2D	500	5	2	04/03/13 - 10:58:11	_
		1			1		
	Delete	<u>P</u> rint	<u>V</u> iew/Modify	y <u>I</u>	Export	Import	

3.3.2. Click entry(s) or scroll the array key to select entry(s) to delete.

3.3.3. Click the "Delete" button in the bottom of the catalog or delete icon in the tool bar.

Delete 🐰

3.3.4. Click "OK" to delete or "Cancel" to quit.



3.4. Recipe or Data Backup

Selected scan recipe, scan data, sequence recipe or sequence data is stored in the outside.

Data export is available by either form in the below.

- ASCII: Text file
- Binary: Backup file

Export of database.

3.4.1. Click an appropriate command button in the left of the window to display a catalog to export.

🐻 Catalog - [SCAN RECIPE]							
<u>File E</u> dit <u>P</u> PTransfer <u>W</u> i	ndow Help						
	¥ /= a a		20.1				
		2D	30				
Saux Basing							
Scan Recipe	Scan Recipe Nat	me: 8	46A3				
	Recipe Name	Type	Length(um)	Speed(um/s)	Force(mg)	Creation Date	
	STEPHTM	2D	300	50	5	04/01/15 - 14:27:35	
Scan Data	STEPHTL	2D	500	50	5	04/01/15 - 14:32:38	
	STEPHTH	2D	300	50	5	04/03/13 - 15:48:51	
	RADIUS	2D	500	100	1	04/03/04 - 03:05:44	
	OFF300	2D	1000	50	10	04/03/10 - 11:47:24	
1	_OFF150	2D	500	50	10	04/03/13 - 16:27:02	
Sequence Recipe	LINEAR	2D	50000	1000	5	04/01/15 - 14:36:19	
	XY3	2D	400	50	5	04/03/13 - 16:26:01	
	XY2	2D	400	50	5	04/03/13 - 16:25:57	
,	XY1	2D	400	50	5	04/03/13 - 16:24:59	
	TEST342	2D	500	50	5	04/02/09 - 13:42:41	
Sequence Data	TEST1	2D	300	50	5	04/01/20 - 09:01:34	
	SODICK_R	2D	350	50	5	04/03/06 - 11:31:52	
	RCP1	2D	100	50	5	03/12/19 - 16:32:35	
	R27	2D	500	100	5	03/06/09 - 14:36:06	
	R26	2D	316	50	5	04/03/16 - 18:52:58	
	R130	2D	300	50	5	04/03/13 - 14:37:54	
	MIN	2D	20	20	5	03/12/22 - 16:46:36	
	KAWA3	2D	357	50	5	04/03/16 - 14:51:55	
	KAWA2	2D	357	50	5	04/03/16 - 14:51:07	
	KAWA1	2D	357	50	S	04/03/16 - 14:49:03	
	D1113	2D	500	S	2	04/03/13 - 10:57:51	
	D1112	2D	500	50	2	04/03/12 - 11:03:28	
	D1111	2D	100	5	0.5	04/03/13 - 10:58:34	
	D1110	2D	200	20	1	04/03/13 - 10:58:30	
	D1109	2D	1000	100	1	04/03/13 - 10:58:27	
	D1108	2D	25	1	2	04/03/13 - 10:58:24	
	D1107	2D	50	2	1	04/03/13 - 10:58:18	
	D1106	2D	100	10	0.5	04/03/13 - 10:58:15	
	D1105	2D	500	5	2	04/03/13 - 10:58:11	-
	Delete	Print	View/Modify	7 E	xport	Import	
					-		

🐻 C	atalog – [SCAN	RECIPE]							
Eile	<u>E</u> dit <u>P</u> PTran	nsfer <u>W</u>	<u>/</u> indow Help							
			u /=1.	a) [a/		an [
				<u> 0</u> →	2D	3D				
	Scan Regine									
	ocari Necipe		Sc	an Recipe Nar	ne: K	AWA2				
_										
			Recipe Name		Type	Length(um)	Speed(um/s)	Force(mg)	Creation Date	
	Com Data		_STEPHTM		2D	300	50	5	04/01/15 - 14:27:35	
	ocan Data		_STEPHTL		2D	500	50	5	04/01/15 - 14:32:38	
_			_STEPHTH		2D	300	50	5	04/03/13 - 15:48:51	
			_RADIUS		2D	500	100	1	04/03/04 - 03:05:44	
			_OFF300		2D	1000	50	10	04/03/10 - 11:47:24	
		1	_OFF150		2D	500	50	10	04/03/13 - 16:27:02	
	Sequence Recij	ipe 📗	_LINEAR		2D	50000	1000	5	04/01/15 - 14:36:19	
			XY3		2D	400	50	5	04/03/13 - 16:26:01	
			XY2		2D	400	50	5	04/03/13 - 16:25:57	
			XY1		2D	400	50	5	04/03/13 - 16:24:59	
	Sequence Dat	ta	TEST342		2D	500	50	5	04/02/09 - 13:42:41	
	00440/100 041	~	TEST1		2D	300	50	5	04/01/20 - 09:01:34	
_			SODICK_R		2D	350	50	5	04/03/06 - 11:31:52	
			RCP1		2D	100	50	5	03/12/19 - 16:32:35	
			R27		2D	500	100	5	03/06/09 - 14:36:06	
			R26		2D	316	50	5	04/03/16 - 18:52:58	
			R130		2D	300	50	5	04/03/13 - 14:37:54	
			MIN		2D	20	20	5	03/12/22 - 16:46:36	
			KAWA3		2D	357	50	5	04/03/16 - 14:51:55	
			KAWA2		2D	357	50	<u> </u>	04/03/16 - 14:51:07	
			KAWAI		2D	357	50	2	04/03/16 - 14:49:03	
			D1113		2D	500	2	2	04/03/13 - 10:57:51	_
			D1112		2D	200	50	2	04/03/12 - 11:03:28	
			DIIII		2D	100		0.5	04/03/13 - 10:58:34	
			D1110		20	200	20	1	04/03/13 - 10:58:30	
			D1109		20	1000	100	1	04/03/13 - 10:38:27	
			D1108		20	23	1	4	04/03/13 - 10:38:24	
			D1107		20	100	10	1	04/03/13 - 10:38:18	
			D1105		20	500	10	0.0	04/03/13 - 10:58:13	Ţ
			101105		20	500	د	4	04/03/15 - 10:38:11	
										—
			Dubt	1	During	Vi			Turn and	
			Delete		<u>r</u> nu		y	spon	Import	

3.4.2. Click entry(s) or scroll the array key to select entry(s) to export.

3.4.3. Click the "Export" button in the bottom of the catalog or export icon in the tool bar.

<u>E</u>xport 0→

3.4.4. Enter into the "Drive" field "A" for floppy disk or "C" for hard disk. Enter a directory path into the "Path" field. Enter a new file name into the "Filename" field to change file names. Select "ASCII" or "Binary." Click "OK" to export or "Cancel" to quit.

E	xport Data			×
	Export File			
	Drive:	0		_
	Path:	¥		
	Export Ty	ре 601	Binary	
		ок	Cancel]

3.5. Recipe or Data Import

Scan recipe, sequence recipe or sequence data saved as Binary is imported.

Import of database.

3.5.1. Click an appropriate command button in the left of the window to display a catalog to import.

Scan Recipe	Com Proinc	N	4640				
	Scan Recipe	Name: 8	40A3				
,	Recipe Name	Type	Length(um)	Speed(um/s)	Force(mg)	Creation Date	
Sec. Data	_STEPHTM	2D	300	50	5	04/01/15 - 14:27:35	
ocan Data	_STEPHTL	2D	500	50	5	04/01/15 - 14:32:38	
	_STEPHTH	2D	300	50	5	04/03/13 - 15:48:51	
	_RADIUS	2D	500	100	1	04/03/04 - 03:05:44	
	_OFF300	2D	1000	50	10	04/03/10 - 11:47:24	
1	_OFF150	2D	500	50	10	04/03/13 - 16:27:02	
Sequence Recipe	_LINEAR	2D	50000	1000	5	04/01/15 - 14:36:19	
· · ·	XY3	2D	400	50	5	04/03/13 - 16:26:01	
	XY2	2D	400	50	5	04/03/13 - 16:25:57	
	XY1	2D	400	50	5	04/03/13 - 16:24:59	
Service Data	TEST342	2D	500	50	5	04/02/09 - 13:42:41	
Sequence Data	TEST1	2D	300	50	5	04/01/20 - 09:01:34	
	SODICK_R	2D	350	50	5	04/03/06 - 11:31:52	
	RCP1	2D	100	50	5	03/12/19 - 16:32:35	
	R27	2D	500	100	5	03/06/09 - 14:36:06	
	R26	2D	316	50	S	04/03/16 - 18:52:58	
	R130	2D	300	50	5	04/03/13 - 14:37:54	
	MIN	2D	20	20	5	03/12/22 - 16:46:36	
	KAWA3	2D	357	50	5	04/03/16 - 14:51:55	
	KAWA2	2D	357	50	5	04/03/16 - 14:51:07	
	KAWA1	2D	357	50	S	04/03/16 - 14:49:03	
	D1113	2D	500	S	2	04/03/13 - 10:57:51	
	D1112	2D	500	50	2	04/03/12 - 11:03:28	
	D1111	2D	100	5	0.5	04/03/13 - 10:58:34	
	D1110	2D	200	20	1	04/03/13 - 10:58:30	
	D1109	2D	1000	100	1	04/03/13 - 10:58:27	
	D1108	2D	25	1	2	04/03/13 - 10:58:24	
	D1107	2D	50	2	1	04/03/13 - 10:58:18	
	D1106	2D	100	10	0.5	04/03/13 - 10:58:15	
	D1105	2D	500	S	2	04/03/13 - 10:58:11	

3.5.2. Click the "Import" button in the bottom of the catalog or import icon in the tool bar.

Import 0 C

3.5.3. Select a drive from the "Drive" list in the right of the window and choose a file to import. Click "OK" to import a file.

Import Sequence Data			×
Select Sequence <u>N</u> ames: R65C_BE	<u>D</u> ata Path: c:¥		OK Cancel
R65C BE	CD CD CD_021209 CD_021209 Documents and Settings JUST Drive:	• •	

3.6. Print of Database Entry

Scan recipe, sequence recipe, scan data or sequence data is printed.

Print of database.

3.6.1. Click an appropriate command button in the left of the window to display a catalog to print.

e <u>E</u> dit <u>P</u> PTransfer <u>W</u> in	dow Help 	2D	3D				
Scan Recipe	Scan Recipe Nar	ne: 84	I6A3				
	Recipe Name	Type	Length(um)	Speed(um/s)	Force(mg)	Creation Date	
Soon Data	_STEPHTM	2D	300	50	5	04/01/15 - 14:27:35	
Scan Data	_STEPHTL	2D	500	50	5	04/01/15 - 14:32:38	
	_STEPHTH	2D	300	50	5	04/03/13 - 15:48:51	
	_RADIUS	2D	500	100	1	04/03/04 - 03:05:44	
	_OFF300	2D	1000	50	10	04/03/10 - 11:47:24	
1	_OFF150	2D	500	50	10	04/03/13 - 16:27:02	
Sequence Recipe	_LINEAR	2D	50000	1000	5	04/01/15 - 14:36:19	
	ХҮЗ	2D	400	50	5	04/03/13 - 16:26:01	
	XY2	2D	400	50	5	04/03/13 - 16:25:57	
	XY1	2D	400	50	5	04/03/13 - 16:24:59	
	TEST342	2D	500	50	5	04/02/09 - 13:42:41	
Sequence Data	TEST1	2D	300	50	5	04/01/20 - 09:01:34	
	SODICK R	2D	350	50	5	04/03/06 - 11:31:52	
	RCP1	2D	100	50	5	03/12/19 - 16:32:35	
	R27	2D	500	100	5	03/06/09 - 14:36:06	
	R26	2D	316	50	5	04/03/16 - 18:52:58	
	R130	2D	300	50		04/03/13 - 14:37:54	
	MIN	2D	20	20		03/12/22 - 16:46:36	
	KAWAS	2D	357	50	5	04/03/16 - 14:51:55	-1
	KAWA2	2D	357	50	5	04/03/16 - 14:51:07	
	KAWAI	2D	357	50	5	04/03/16 - 14:49:03	
	D1113	2D 2D	500	5	2	04/03/13 - 10:57:51	
	D1113	20	500	50	2	04/03/12 - 11:03:28	-
	DIII2	20	100	50	0.5	04/03/12 - 11:05:20	
	DIIIO	20	200	20	0.5	04/03/13 10:58:30	
	D1109	20	1000	100	1	04/03/13 10:58:30	
	D1109	20	25	100	2	04/03/13 10:58:27	
	D1108	20	50	2	1	04/03/13 - 10.58.24	
	D1107	20	100	10	0.5	04/03/13 - 10.58.18	
	D1105	20	500	10	0.0	04/03/13 - 10.58.13	-18
	Delete	Print	View/Modify	z E	.xport	Import	

- 3.6.2. Select entry(s) to print and click "View/Modify." Open the data to print scan data, etc.
- 3.6.3. Click the "Print" button in the bottom of the catalog or print icon in the tool bar.

