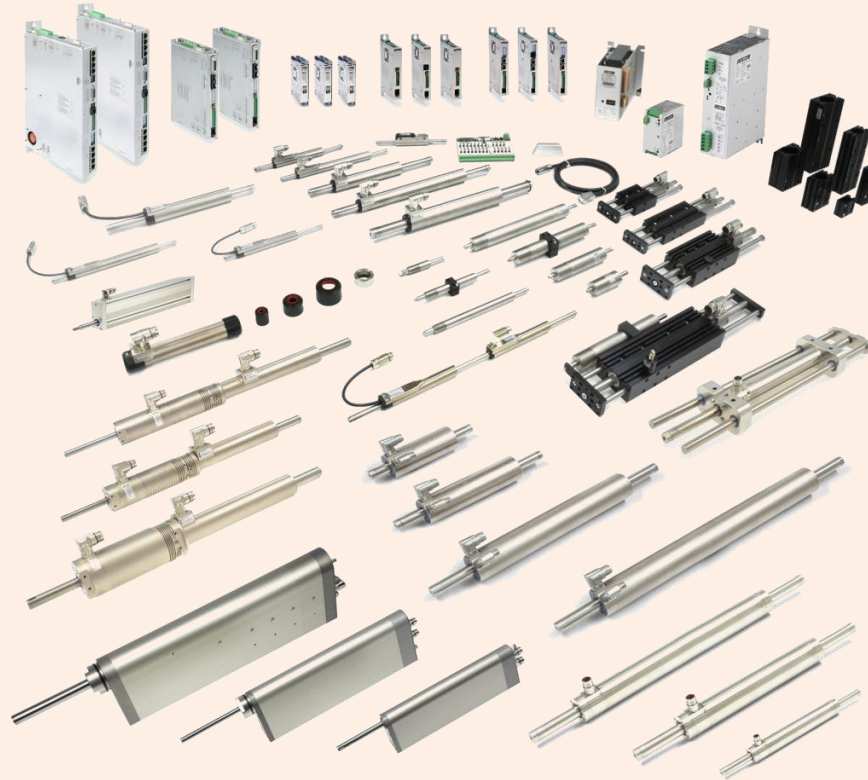


MONTROL

敏石系統有限公司



LinMot教育訓練

Overview

- 軟體下載
- 軟體通訊
- Motor Wizard-Setting (Step1~Step9)
- 軟體介面Control Panel
- 2點運動-VAI 2 Pos Continuous
- I/O控制設定(Control Panel)
- Easy Steps
- Command Table
- Oscilloscopes
- 備份資料
- 其他補充

軟體下載

LinMot Talk 軟體下載



LinMot Talk軟體下載:

<https://linmot.com/download/linmot-talk-drive-configuration/linmot-talk/>

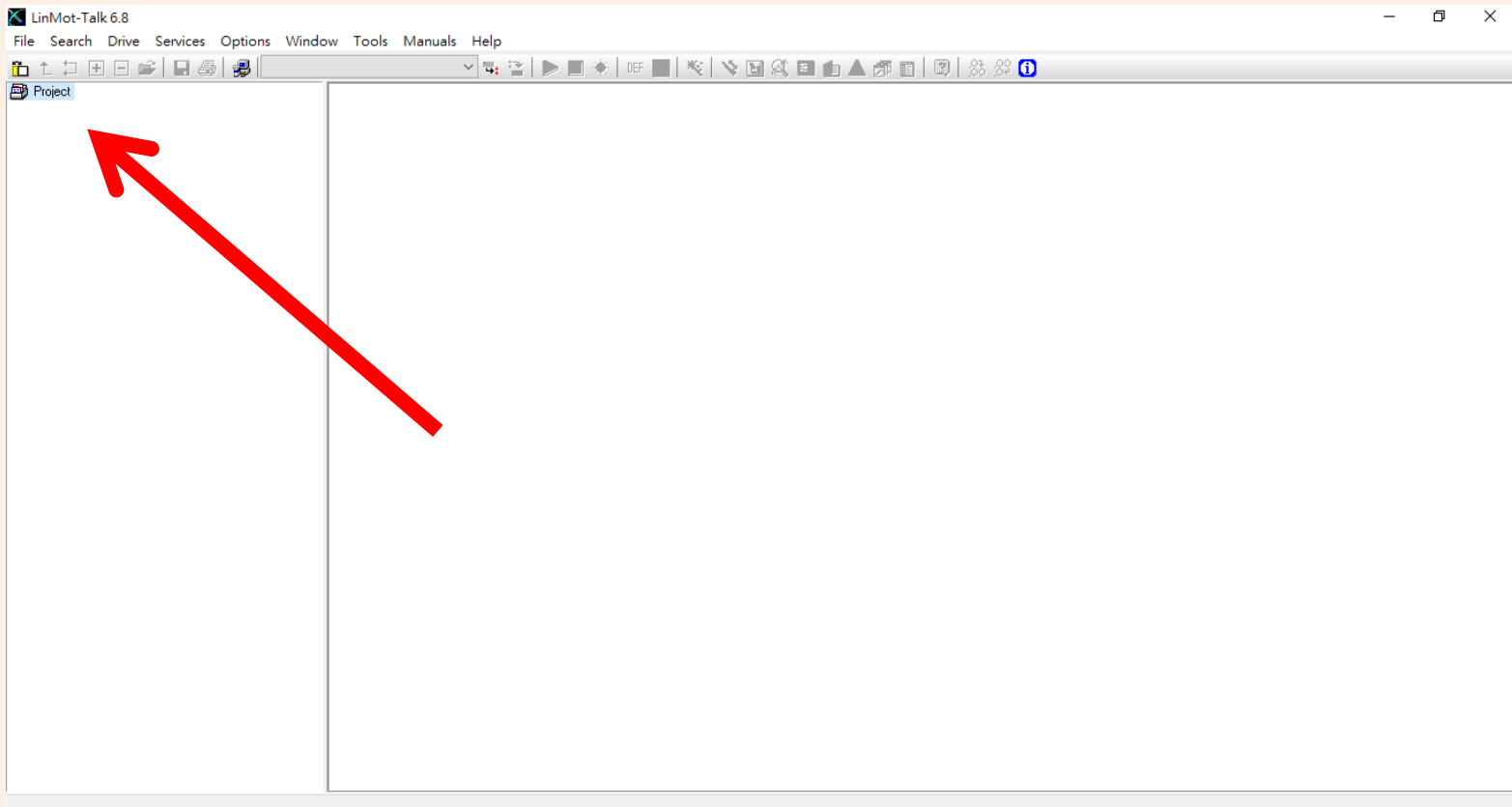


LinMot Talk原廠使用手冊下載:

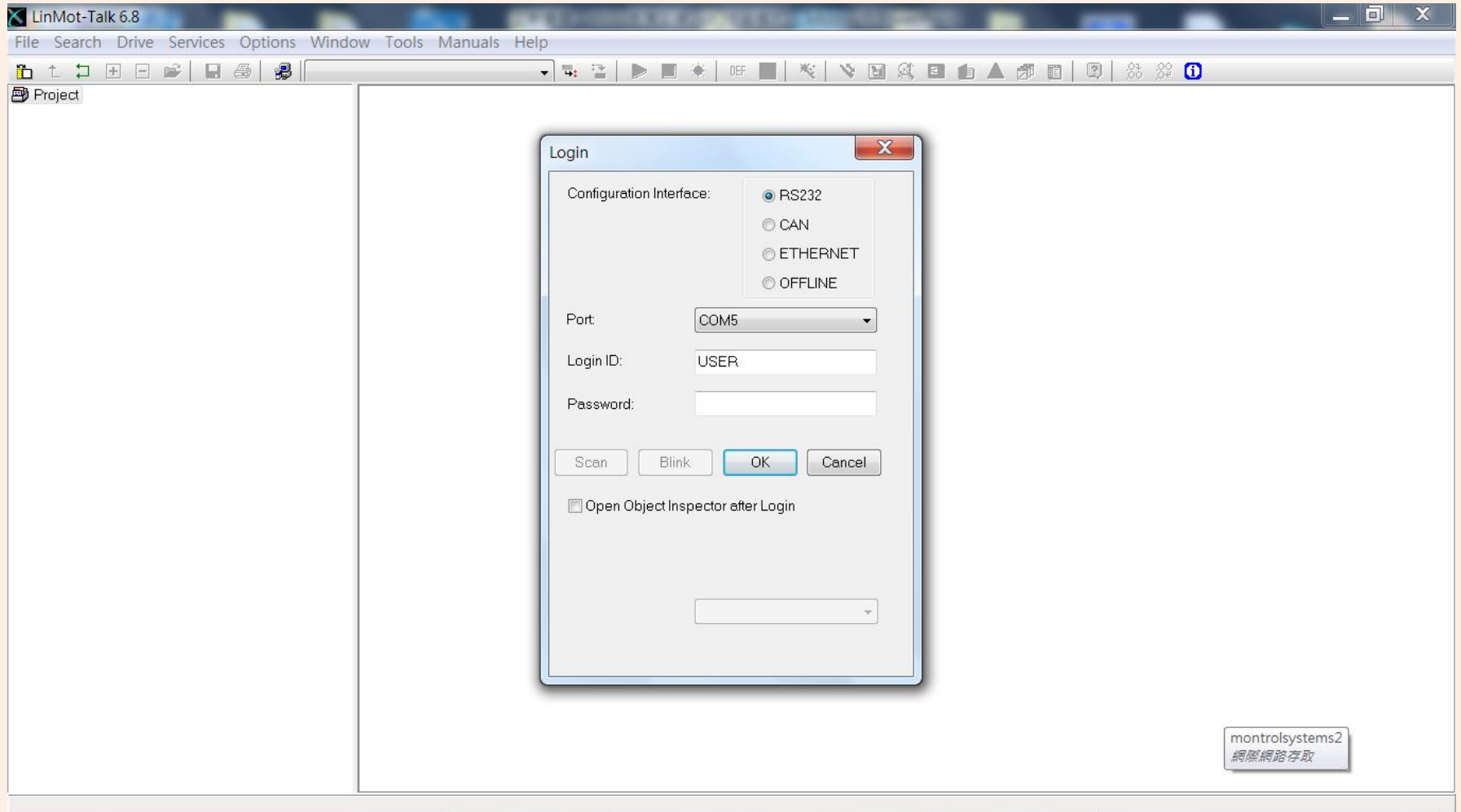
<https://linmot.com/download/linmot-talk-drive-configuration/linmot-talk/>

軟體通訊

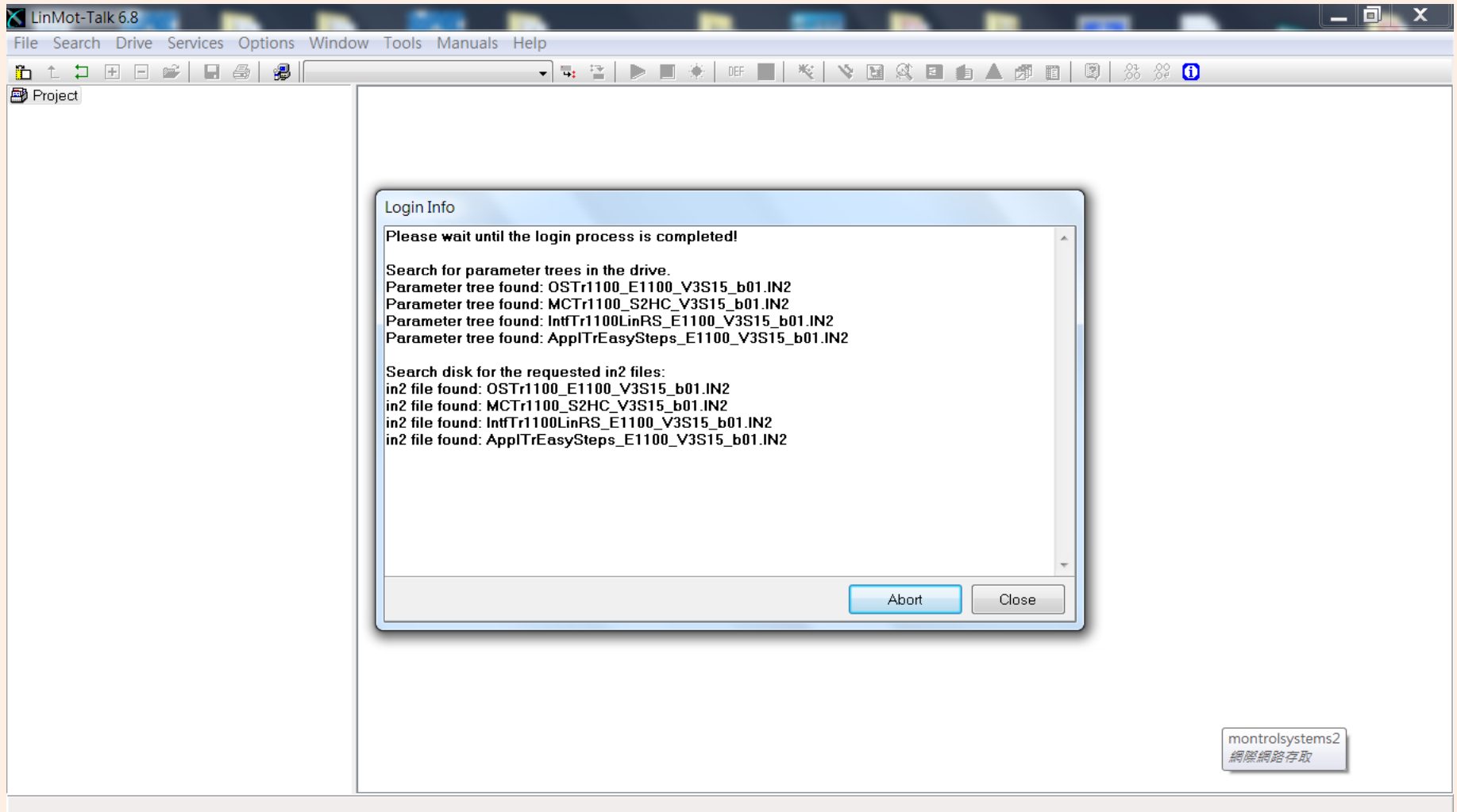
開啟LinMot Talk軟體 -> 雙擊Project



Login介面 -> 選RS232連線 -> 選擇port -> 點擊OK



正在執行通訊連線



完成通訊連線

LinMot-Talk 6.8

File Search Drive Services Options Window Tools Manuals Help

Unnamed on COM5 (USER)

Project: Unnamed on COM5 (USER)

- Control Panel
- Parameters
- Variables
- Oscilloscopes
- Messages
- Errors
- Curves
- Command Table

Control

0: Switch On	0	IO X4.3 Function
1: Voltage Enable	1	Forced by Parameter
2: /Quick Stop	1	Forced by Parameter
3: Enable Operation	1	Forced by Parameter
4: /Abort	1	Forced by Parameter
5: /Freeze	1	Forced by Parameter
6: Go To Position	0	Interface
7: Error Acknowledge	0	Interface
8: Jog Move +	0	IO X4.8 Function
9: Jog Move -	0	IO X4.7 Function
10: Reserved	0	No Source Specified
11: Home	0	IO X4.4 Function
12: Clearance Check	0	Interface
13: Go To Inital Positio	0	Interface
14: Linearizing	0	No Source Specified
15: Phase Search	0	No Source Specified

Control Word: **003Eh**

Override Value

Enable Manual Override

Status

0: Operation Enabled	0	0: Motor Hot Sensor	0
1: Switch On Active	0	1: Motor Short Time Overload	0
2: Enable Operation	1	2: Motor Supply Voltage Low	0
3: Error	0	3: Motor Supply Voltage High	0
4: Voltage Enable	1	4: Position Lag Always	0
5: /Quick Stop	1	5: Position Lag Standing	0
6: Switch On Locked	0	6: Controller Hot	0
7: Warning	1	7: Motor Not Homed	1
8: Event Handler Active	0	8: PTC Sensor 1 Hot	0
9: Special Motion Active	0	9: PTC Sensor 2 Hot	0
10: In Target Position	0	10: RR Hot Calculated	0
11: Homed	0	11: Reserved	0
12: Fatal Error	0	12: Reserved	0
13: Motion Active	0	13: Reserved	0
14: Range Indicator 1	1	14: Interface Warn Flag	0
15: Range Indicator 2	0	15: Application Warn Flag	0

Status Word: **40B4h** Warn Word: **0080h**

Op. Main State: **02h** Logged Error Code: **0000h**


Op. Sub State: 00h

Monitoring

Connection Status: Online

Firmware Status: Running (INTF st)

Motor Status: **Switched Off**



Op. State: **Ready to Switch O**

Motor Not Homed

Actual Position: **-0.04 mm**

Demand Position: **0.00 mm**

Force Factor: Motor not hom

Motor Current: **0.00 A**

Logic Supply Volt.: **24.06 V**

Motor Supply Volt.: **72.90 V**

IO Panel

Enable Manual Override

Override Value

Actual Value

X4.11 - Input	
X4.10 - Input	
X4.9 - Input	
X4.8 - Input	
X4.7 - Input	
X4.6 - Input	
X4.5 - Input	
X4.4 - Input	
X4.3 - Input	

Motion Command Interface

Enable Manual Override:

-10 mm -1 mm +1 mm +10 mm

Command Category: Most Commonly Used

Command Type: No Operation (000xh)

Count Nibble (Toggle Bits): 0h Auto Increment Count Nibble

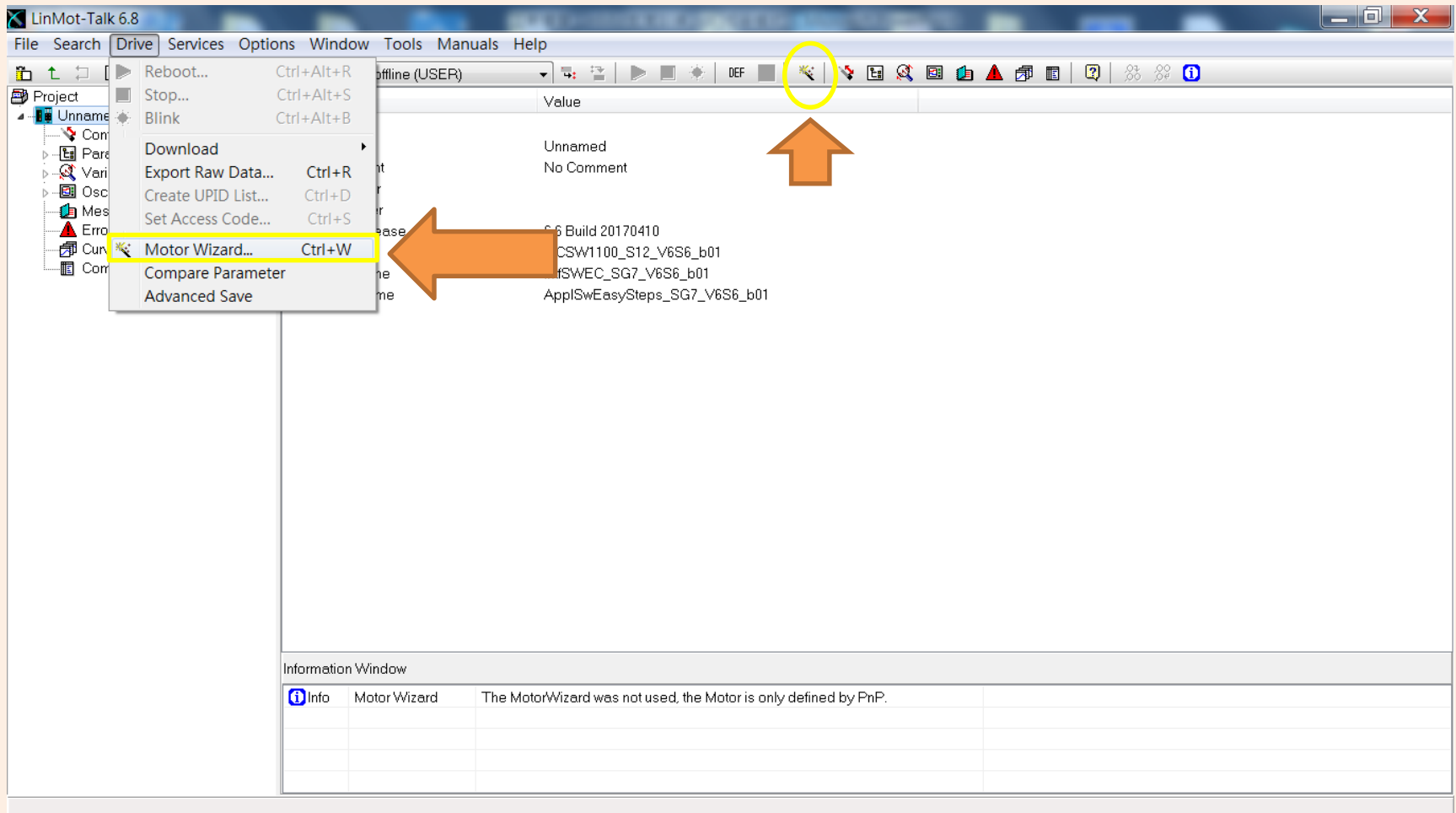
Name	Of...	Description	Scaled Val...	Int. Value (Int. Value (Hex)
Hea...	0	000xh: No Operation	0	0	

montrcontrols2
網際網路存取

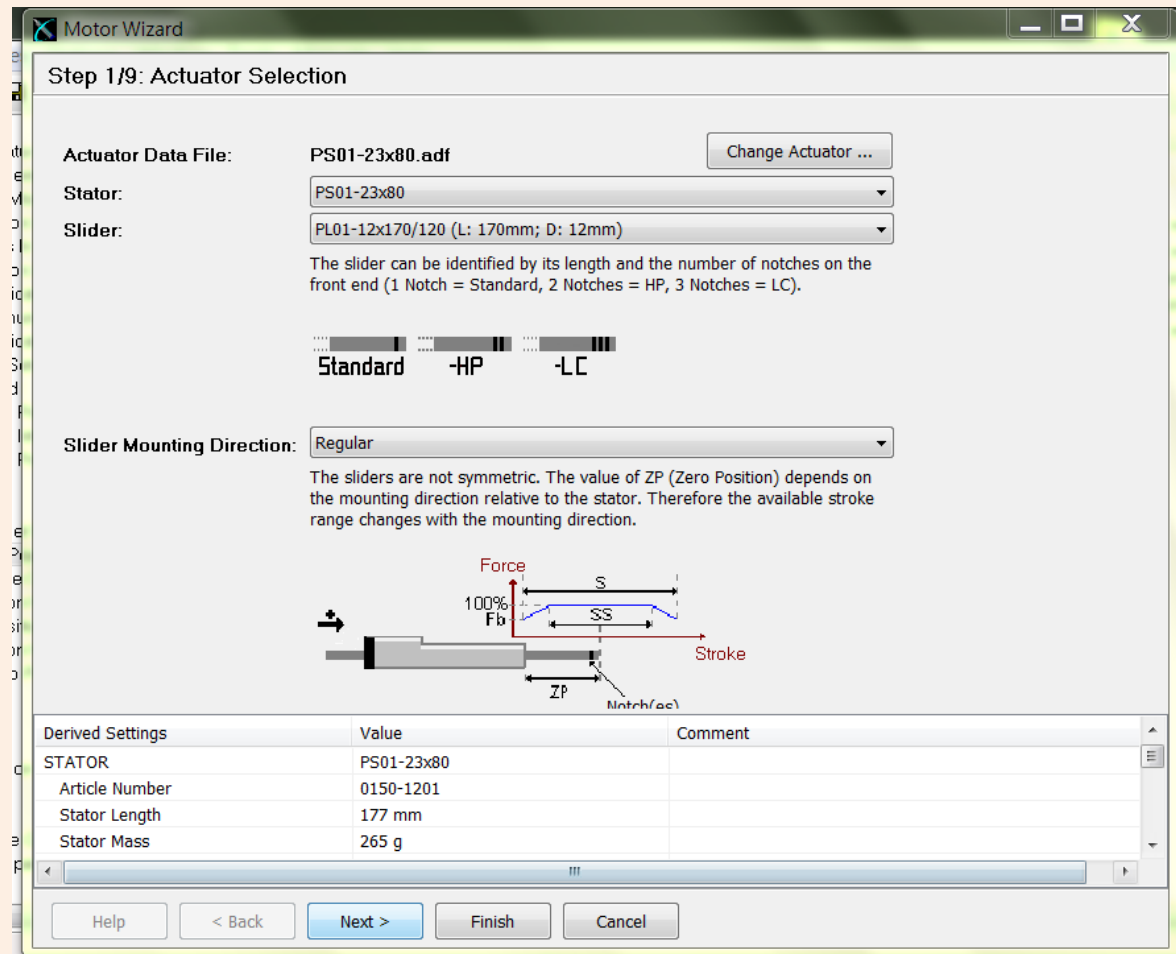
Control Panel

MOTOR WIZARD-SETTING

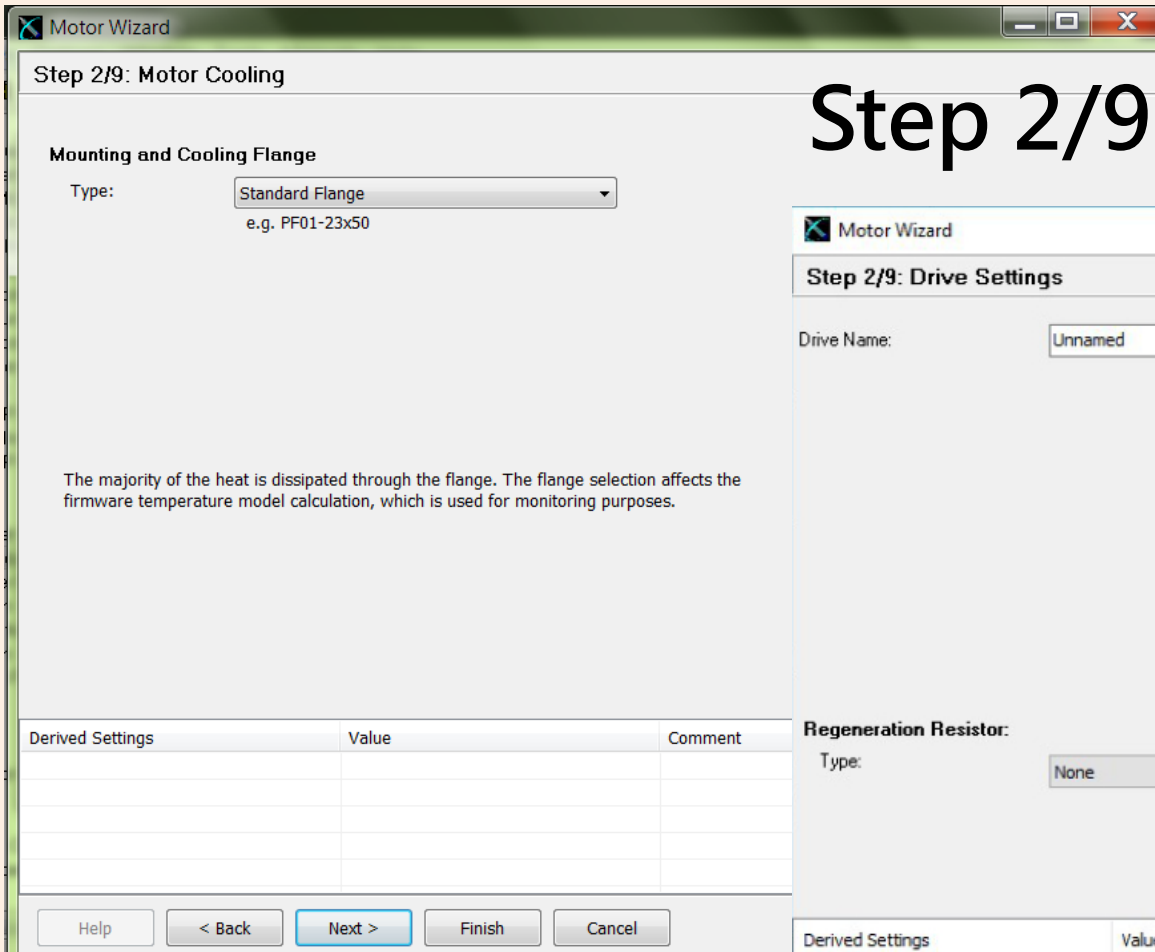
馬達安裝軟體設定Motor Wizard



Step 1/9: 選擇馬達型號與安裝方向



Step 2/9:是否加裝風扇(old)



Motor Wizard

Step 2/9: Motor Cooling

Mounting and Cooling Flange

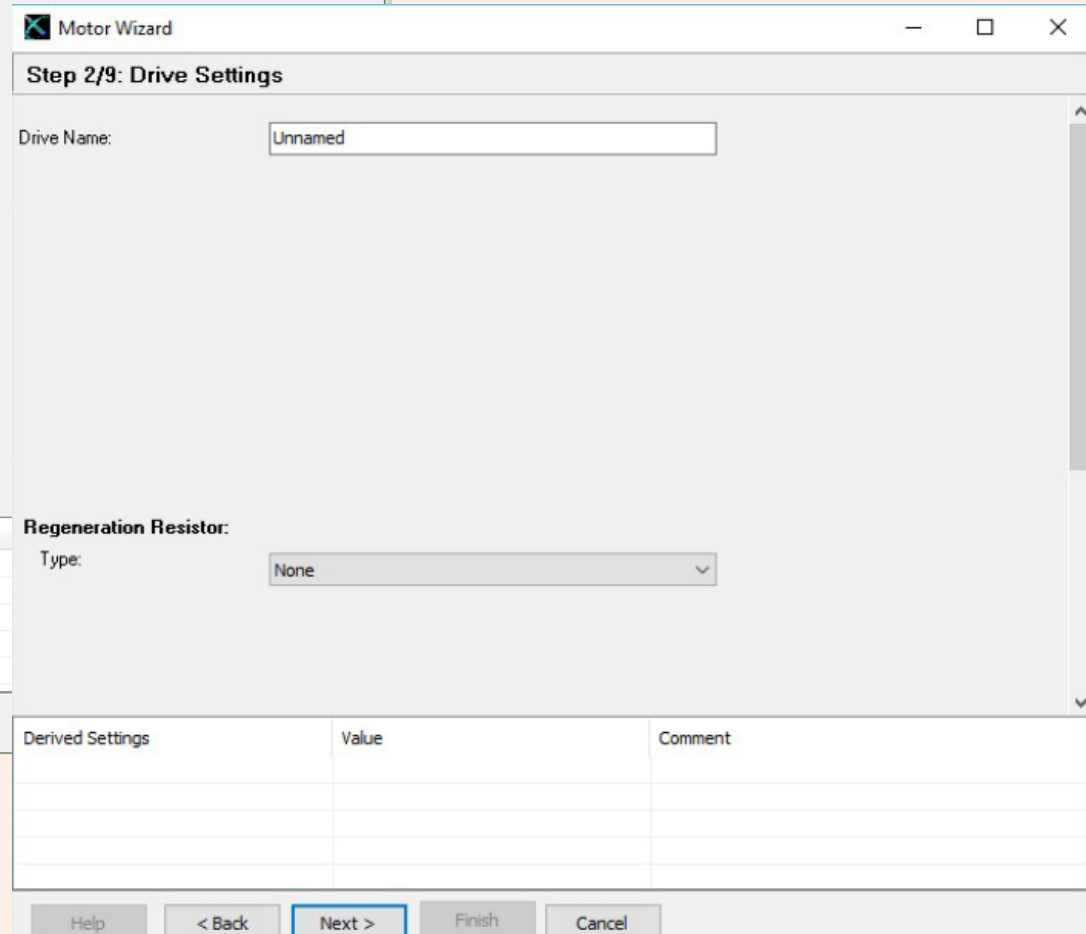
Type:
 e.g. PF01-23x50

The majority of the heat is dissipated through the flange. The flange selection affects the firmware temperature model calculation, which is used for monitoring purposes.

Derived Settings	Value	Comment

Help < Back Next > Finish Cancel

Step 2/9: 驅動器設定(new)



Motor Wizard

Step 2/9: Drive Settings

Drive Name:

Regeneration Resistor:

Type:

Derived Settings	Value	Comment

Help < Back Next > Finish Cancel

Step 3/9: 選擇馬達線之長度

Motor Wizard

Step 3/9: Extension Cable Setup

First Extension Cable Segment

Type:

Second Extension Cable Segment

Type:

The ohmic resistance of extension cables can be quite high in relation to the motor's phase resistance. If the firmware knows the total ohmic resistance it can optimize the current control loop to the load. If there are extension cables used in the application, then that/these segment(s) should be defined here. The cable piece that comes directly out of the motor is negligible.

Derived Settings	Value	Comment
Motor Phase Resistance	10.1 Ohm	
Cable Resistance	0 Ohm	
Total Resistance	10.1 Ohm	

Help < Back Next > Finish Cancel

Step 4/9: 是否加裝encoder

Motor Wizard

Step 4/9: External Position Sensor System

External Position Sensor

Type:

Resolution r (1/4 Period Length): um

Minimal Edge Separation: us

With an additional external position measuring system the positioning accuracy and the linearity can be improved. The optional position sensor has to be connected to Ext Pos Sens connector on the drive. In case of a absolute position sensor the position recovery mode will be set accordingly.

Mode:

Derived Settings	Value	Comment

Help < Back Next > Finish Cancel

Step 5/9:馬達運動方式與負載重設定

Motor Wizard

Step 5/9: Feed Forward Parameters

Mechanical Layout

Moving Part of Motor:

Orientation Angle (-90°..+90°): °

Moving Mass

Slider: g

Additional Load Mass: g

Friction Forces

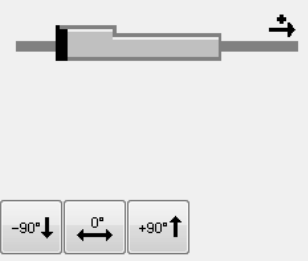
Dry Friction: N

Viscous Friction: N/(m/s)

MagSpring (or other constant force)

External Constant Force: N

Force Direction:



-90° ↓ 0° ↔ +90° ↑

Derived Settings	Value	Comment
Total Moving Mass	118 g	
Gravitation force in motor direction	0 N	
External Constant Force	0 N	
Sum of Constant Effective Forces	0 N	

Help < Back Next > Finish Cancel

Step 6/9: PID調整

PID Position Controller Setting

P Gain: A/mm (P=2, D=4, I=0)

D Gain: A/(m/s) (P=5, D=10, I=0)

I Gain: A/(mm*s)

D Filter Time: us

Noise Filter:

Dead Band mm Enable Noise Filter

Beside the feed forward parameters (see previous step), the PID controller setup influences the drive behavior. For the most applications it is possible to achieve good results with one of the given default settings (no additional loop tuning necessary).
The Noise Filter can be used to filter out any noise from the position feedback signal. A too wide filter dead band can have negative impact on the drive's performance.

Derived Settings	Value	Comment
P Gain	2 A/mm	
D Gain	4 A/(m/s)	
I Gain	30 A/(mm*s)	
Integrator Limit	4 A	

Help < Back **Next >** Finish Cancel

PID Position Controller Setting

P Gain: A/mm (P=2, D=4, I=0)

D Gain: A/(m/s) (P=5, D=10, I=0)

I Gain: A/(mm*s)

D Filter Time: us

Noise Filter:

Dead Band mm Enable Noise Filter

Beside the feed forward parameters (see previous step), the PID controller setup influences the drive behavior. For the most applications it is possible to achieve good results with one of the given default settings (no additional loop tuning necessary).
The Noise Filter can be used to filter out any noise from the position feedback signal. A too wide filter dead band can have negative impact on the drive's performance.

Derived Settings	Value	Comment
P Gain	3 A/mm	
D Gain	6 A/(m/s)	
I Gain	12 A/(mm*s)	
Integrator Limit	4 A	

Help < Back **Next >** Finish Cancel

Step 7/9: 馬達復歸設定I

(速度與復歸方式)

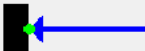
Motor Wizard

Step 7/9: Homing I

Home Position Search Move

Speed: 0.02 m/s

Mode: Mechanical Stop Negative Search



The motor moves in negative direction until a mechanical stop is reached. This position is assumed to be the Home Position.

Before motion commands can be executed, the motor must be homed. Depending on the selected mode, the motor searches a mechanical stop and/or an electrical switch.

Derived Settings	Value	Comment

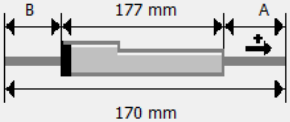
Help < Back Next > Finish Cancel

Step 8/9:馬達復歸設定II (位置)

Motor Wizard

Step 8/9: Homing II

Distance from Stator End to Slider End at the Home Position



Distance A mm

Distance B mm

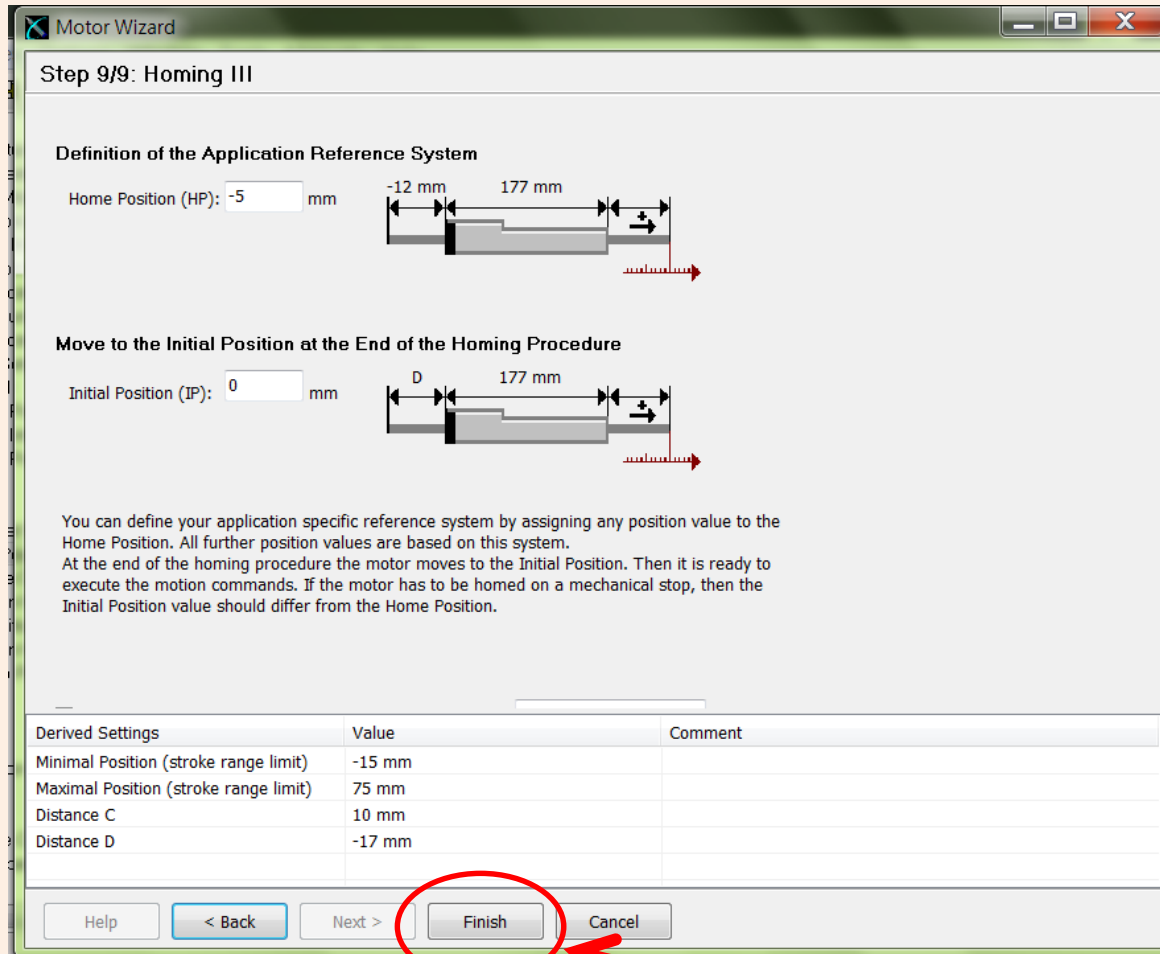
The drive needs to know the physical position of the slider relative to the stator. Please determine either distance A or distance B when the motor stands at the Home Position (mechanical stop or switch). Then enter the corresponding value. The other value is calculated by the software. If the slider end is inside the stator tube, then you have to give your entry a negative sign.

Derived Settings	Value	Comment
Slider Home Position	5 mm	Corresponds to distance A

Help < Back Next > Finish Cancel

Step 9/9:馬達復歸設定III

(設定座標點)



設定完成後點擊

重新啟動Firmware完成設定

點擊綠色三角形

Control Panel

Control

Reboot... (Ctrl+Alt+R)

Status

Monitoring

Connection Status: Online
Firmware Status: Not Running
Motor Status: Switched Off

Op. State: xxx

Firmware Stopped!

Actual Position: xxx
Demand Position: xxx
Force Factor: xxx
Motor Current: xxx
Logic Supply Volt: xxx
Motor Supply Volt: xxx

IO Panel

Enable Manual Override

Override Value

X14.14 - Input
X14.2 - Input
X14.15 - Input
X14.3 - Input
X14.16 - Input
X14.4 - Input

X14.17 - Output
X14.5 - Output
X14.18 - Output
X14.6 - Output
X14.19 - Output

Motion Command Interface

Command Category: Most Commonly Used

Command Type: No Operation (000h)

Count Nibble (Toggle Bits): 0h

Name	Of...	Description	Scaled Val...	Int. Value (...)	Int. Value (Hex)
Hea...	0	000h: No Operation	0	0	0000h

軟體介面CONTROL PANEL

控制介面Control Panel

The screenshot shows the LinMot-Talk 6.8 software interface. The interface is divided into several sections:

- Control Panel:** Located on the left, it contains a tree view with 'Control Panel' highlighted. An orange arrow points to it.
- Control Area:** The top-left pane, labeled '控制區', lists various control functions such as 'Switch On', 'Voltage Enable', 'Quick Stop', etc., with their current status (e.g., 'x' for active).
- Status Area:** The top-middle pane, labeled '狀態區', displays system status words like 'Operation Enabled', 'Switch On Active', 'Error', etc., along with their values.
- Monitoring Area:** The top-right pane, labeled '監控區', shows connection status, firmware status, motor status, and various sensor readings like 'Actual Position' and 'Demand Position'.
- IO Panel:** The bottom-left pane, labeled 'IO區', shows a list of digital inputs/outputs (X14.14 to X14.17) with their 'Override Value' and 'Actual Value'.
- Command Interface:** The bottom-right pane, labeled '指令區', features motion command buttons (-10 mm, -1 mm, +1 mm, +10 mm), a command category dropdown, and a table of command types.

Name	Offs.	Description	Scaled Value	Int. Value (Dec)
Header	0	000xh: No Operation	0	0

馬達尚未開啟電源 Switch On = 0

The screenshot displays the LinMot-Talk 6.8 software interface. The 'Monitoring' panel, highlighted with a red box, shows the following status:

- Connection Status: Online
- Firmware Status: Running (INTF stopped)
- Motor Status: **Switched Off**
- Op. State: **Ready to Switch On**
- Warning: **Motor Not Homed**
- Actual Position: -0.05 mm
- Demand Position: 0.00 mm
- Force Factor: Motor not homed!
- Motor Current: 0.00 A
- Logic Supply Volt.: 24.06 V
- Motor Supply Volt.: 72.90 V

The 'Control' panel shows the 'Switch On' status as 0, indicating the motor is not powered on. An orange arrow points to the 'Control' panel in the project tree.

The 'IO Panel' shows the 'Enable Manual Override' checkbox is checked, and the 'Actual Value' is 0. The 'Motion Command Interface' shows the 'Enable Manual Override' checkbox is unchecked, and the 'Command Type' is 'No Operation (000xh)'.

馬達開啟電源Switch On = 1 尚未復歸Motor Not Homed

The screenshot displays the LinMot-Talk 6.7 software interface. The 'Monitoring' tab is highlighted with a red box. It shows the following status:

- Connection Status: Online
- Firmware Status: Running
- Motor Status: Switched On
- Op. State: Operation Enabled
- Motor Not Homed: **Warning** (indicated by a yellow warning icon)
- Actual Position: 0.06 mm
- Demand Position: 0.06 mm
- Force Factor: Motor not homed!
- Motor Current: 0.00 A
- Logic Supply Volt: 23.69 V
- Motor Supply Volt: 72.70 V

The 'Control' tab shows the following status:

- Switch On: 1
- Voltage Enable: 1
- /Quick Stop: 1
- Enable Operation: 1
- /Abort: 1
- /Freeze: 1
- Go To Position: 0
- Error Acknowledge: 0
- Jog Move +: 0
- Jog Move -: 0
- Special Mode: 0
- Home: 0
- Clearance Check: 0
- Go To Initial Position: 0
- Linearizing: 0
- Phase Search: 0

The 'Status' tab shows the following status:

- Operation Enabled: 1
- Switch On Active: 1
- Enable Operation: 1
- Error: 0
- Voltage Enable: 1
- /Quick Stop: 1
- Switch On Locked: 0
- Warning: 1
- Event Handler Active: 0
- Special Motion Active: 0
- In Target Position: 0
- Homed: 0
- Fatal Error: 0
- Motion Active: 0
- Range Indicator 1: 1
- Range Indicator 2: 0

The 'IO Panel' shows the following status:

- Enable Manual Override:
- Override Value:
- XI4.14 - Input:
- XI4.2 - Input:
- XI4.15 - Input:
- XI4.3 - Input:
- XI4.16 - Input:
- XI4.4 - Input:
- XI4.17 - Output:
- XI4.5 - Output:
- XI4.18 - Output:
- XI4.6 - Output:
- XI4.19 - Output:

The 'Motion Command Interface' shows the following status:

- Enable Manual Override:
- Command Category: Most Commonly Used
- Command Type: No Operation (000h)
- Count Nibble (Toggle Bits): 0h
- Auto Increment Count Nibble:

The 'Control Word' is 003Fh and the 'Status Word' is 40B7h. The 'Warn Word' is 0080h and the 'Logged Error Code' is 0000h.

馬達正在復歸Homing

The screenshot displays the LinMot-Talk 6.7 software interface. The 'Monitoring' panel on the right is highlighted with a red circle and shows the motor's status as 'Switched On' and 'Op. State: Homing'. A schematic diagram of a motor is also visible. The 'Control' panel on the left shows the 'Home' command (11) selected, indicated by an orange arrow. The 'Status' panel shows the 'Homed' status (11) as active (1). The 'IO Panel' and 'Motion Command Interface' are also visible at the bottom.

Monitoring Panel Data:

- Connection Status: Online
- Firmware Status: Running
- Motor Status: **Switched On**
- Op. State: **Homing**
- Actual Position: **-0.07 mm**
- Demand Position: **0.00 mm**
- Force Factor: 100.00 %
- Motor Current: **0.13 A**
- Logic Supply Volt: **23.69 V**
- Motor Supply Volt: **72.50 V**

Control Panel Data:

- Control Word: **083Fh**
- Override Value: []
- Enable Manual Override: []

Status Panel Data:

- Status Word: **4C37h**
- Op. Main State: **09h**
- Op. Sub State: **0Fh**
- Warn Word: **0000h**
- Logged Error Code: **0000h**

IO Panel Data:

- X14.14 - Input: []
- X14.2 - Input: []
- X14.15 - Input: []
- X14.3 - Input: []
- X14.16 - Input: []
- X14.4 - Input: []
- X14.17 - Output: []
- X14.5 - Output: []
- X14.18 - Output: []
- X14.6 - Output: []
- X14.19 - Output: []

Motion Command Interface Data:

- Enable Manual Override: []
- Command Category: Most Commonly Used
- Command Type: No Operation (000xh)
- Count Nibble (Toggle Bits): 0h
- Auto Increment Count Nibble: []

Name	Of...	Description	Scaled Val...	Int. Value (...)	Int. Value (Hex)
Hea...	0	000xh: No Operation	0	0	0000h

馬達復歸完成 Operation Enabled 可以開始正常運動

The screenshot displays the LinMot-Talk 6.7 software interface. The main window is titled 'Unnamed on COM5 (USER)'. The interface is divided into several sections:

- Control Panel:** A tree view on the left shows the project structure, including 'Control Panel', 'Parameters', 'Variables', 'Oscilloscopes', 'Errors', 'Curves', and 'Command Table'.
- Control:** A list of control commands with checkboxes and status indicators. The '0: Switch On' command is checked and active.
- Status:** A list of status indicators. '0: Operation Enabled' is highlighted, indicating the motor is ready for operation.
- Monitoring:** A red-bordered box highlights this section, which shows the motor's connection status as 'Online', firmware status as 'Running', and motor status as 'Switched On'. It also displays a motor icon and the text 'Op. State: Operation Enabled'. Below this, various motor parameters are listed: Actual Position: -0.07 mm, Demand Position: 0.00 mm, Force Factor: 100.00 %, Motor Current: 0.13 A, Logic Supply Volt: 23.69 V, and Motor Supply Volt: 72.50 V.
- IO Panel:** A section for manual override, showing a list of inputs (X1414 to X1419) and outputs (X1417 to X1419) with checkboxes.
- Motion Command Interface:** A section for sending motion commands, including buttons for '-10 mm', '-1 mm', '+1 mm', and '+10 mm', a 'Command Category' dropdown set to 'Most Commonly Used', a 'Command Type' dropdown set to 'No Operation (0000h)', and a 'Count Nibble (Toggle Bits)' dropdown set to '0h'. Below this is a table of command data.

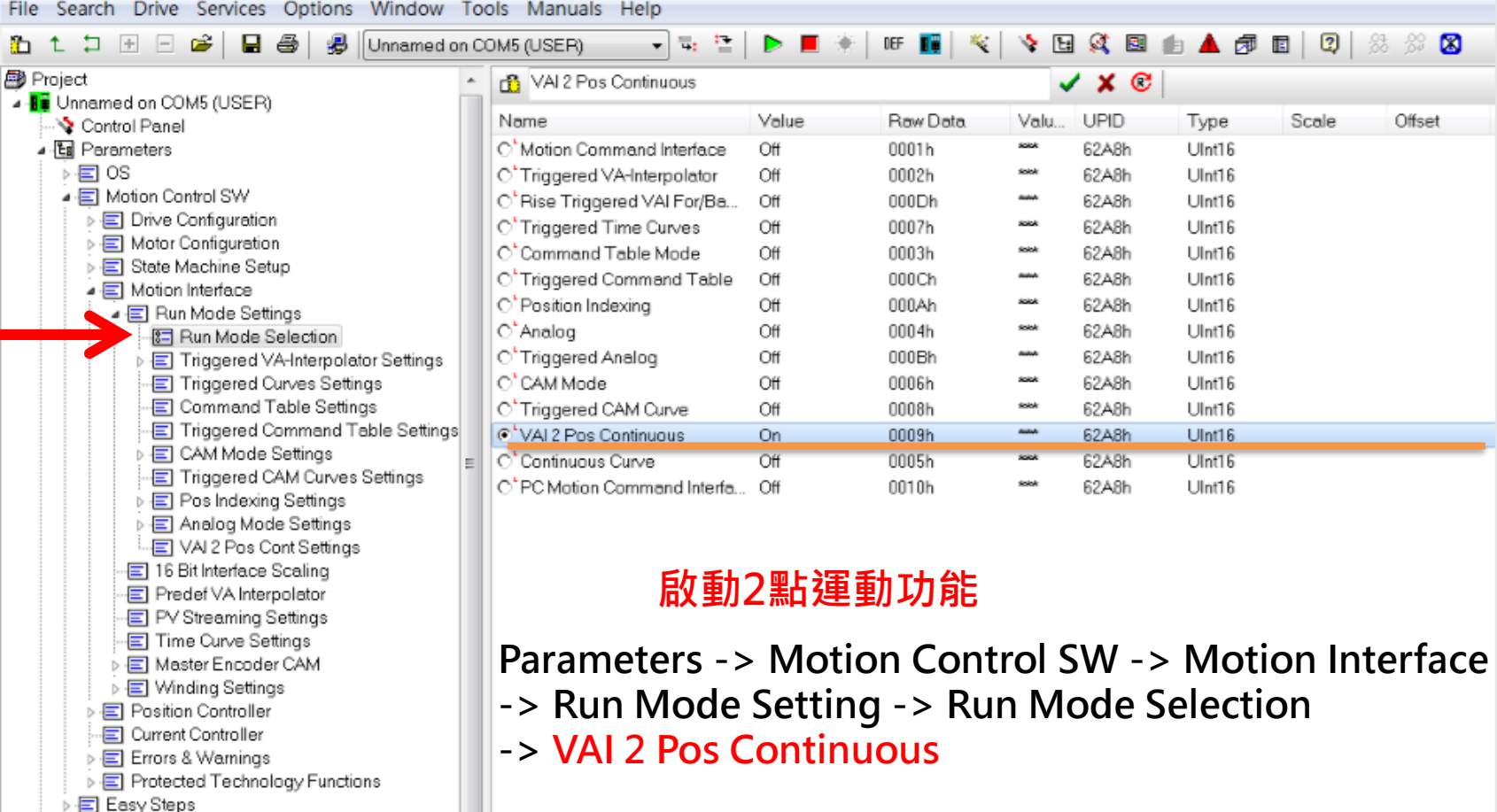
Name	Of...	Description	Scaled Val...	Int. Value (...)	Int. Value (Hex)
Hex...	0	0000h: No Operation	0	0	0000h

2點運動

VAI 2 POS CONTINUOUS

兩點來回運動

VAI 2 Pos Continuous



Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offset
<input type="radio"/> Motion Command Interface	Off	0001h	---	62A8h	UInt16		
<input type="radio"/> Triggered VA-Interpolator	Off	0002h	---	62A8h	UInt16		
<input type="radio"/> Rise Triggered VAI For/Ba...	Off	000Dh	---	62A8h	UInt16		
<input type="radio"/> Triggered Time Curves	Off	0007h	---	62A8h	UInt16		
<input type="radio"/> Command Table Mode	Off	0003h	---	62A8h	UInt16		
<input type="radio"/> Triggered Command Table	Off	000Ch	---	62A8h	UInt16		
<input type="radio"/> Position Indexing	Off	000Ah	---	62A8h	UInt16		
<input type="radio"/> Analog	Off	0004h	---	62A8h	UInt16		
<input type="radio"/> Triggered Analog	Off	000Bh	---	62A8h	UInt16		
<input type="radio"/> CAM Mode	Off	0006h	---	62A8h	UInt16		
<input type="radio"/> Triggered CAM Curve	Off	0008h	---	62A8h	UInt16		
<input checked="" type="radio"/> VAI 2 Pos Continuous	On	0009h	---	62A8h	UInt16		
<input type="radio"/> Continuous Curve	Off	0005h	---	62A8h	UInt16		
<input type="radio"/> PC Motion Command Interfa...	Off	0010h	---	62A8h	UInt16		

啟動2點運動功能

Parameters -> Motion Control SW -> Motion Interface
-> Run Mode Setting -> Run Mode Selection
-> **VAI 2 Pos Continuous**

設定2點座標位置及運動參數 (加速度、減速度、速度值)

位置1

位置2

位置

速度

加速度

減速度

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offset
Position	0 mm	00000000h	...	F14Dh	SInt32	0.0001 mm	0 mm
Max. Speed	0.1 m/s	000186A0h	...	F14Ch	SInt32	1E-6 m/s	0 m/s
Acceleration	1 m/s ²	000186A0h	...	F14Ah	SInt32	1E-5 m/s ²	0 m/s ²
Deceleration	1 m/s ²	000186A0h	...	F14Bh	SInt32	1E-5 m/s ²	0 m/s ²

設定2點運動之間隔時間

位置1等待時間

位置2等待時間

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offset	Min
Rise Pos Wait Time	10 ms	0064h	*** ms	147Dh	UInt16	0.1 ms	0 ms	0 ms
Fall Pos Wait Time	10 ms	0064h	*** ms	147Eh	UInt16	0.1 ms	0 ms	0 ms

montrolsystems2
網際網路存取

I/O控制設定(CONTROL PANEL)

定義I/O控制連結Control Panel 動作

輸入

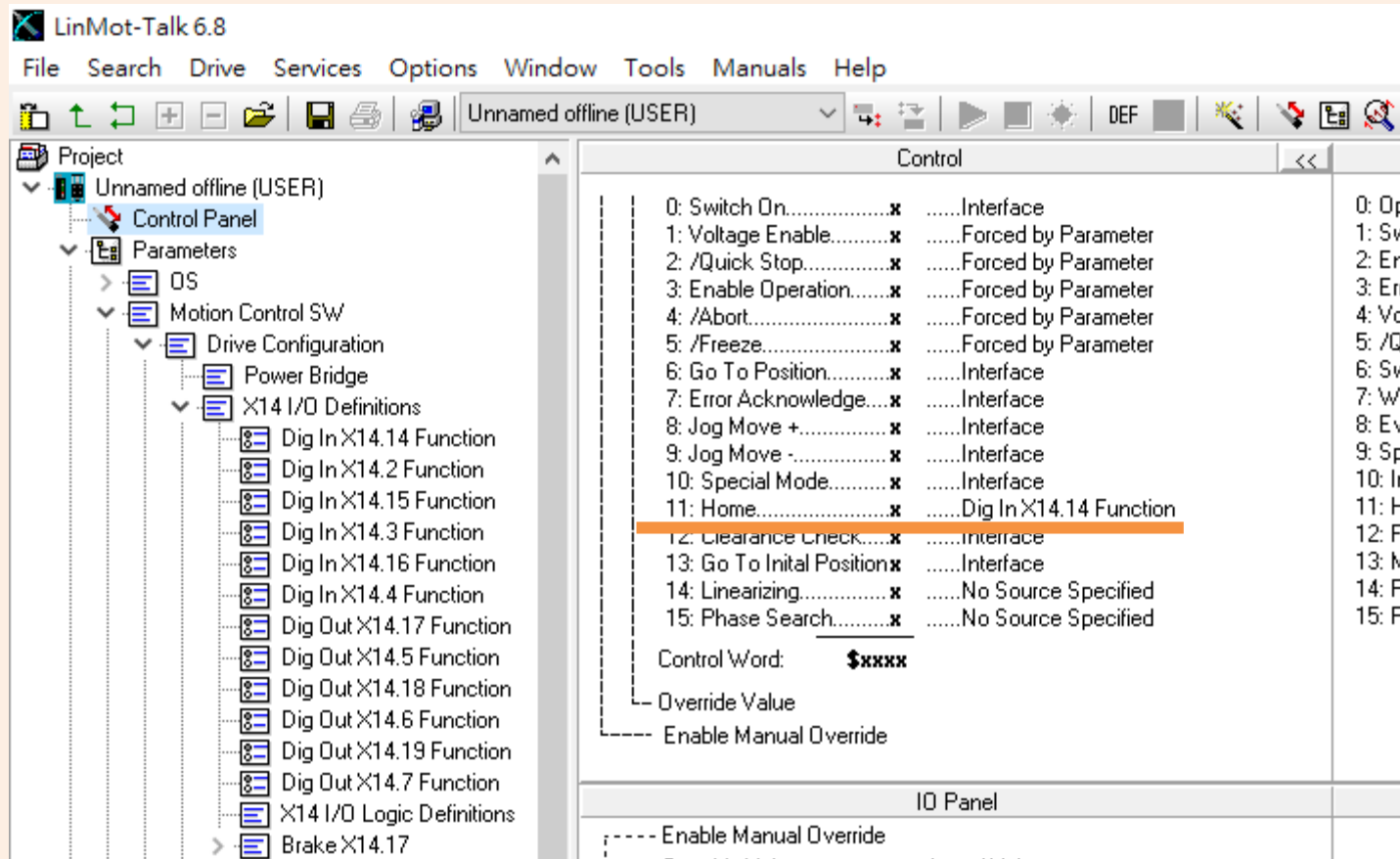
輸出

Name	Value	Raw Data	Value...	UPID	Type	Scale	Offset	Min	Max	Def...	Attr.
<input type="radio"/> None	Off	0000h	****	62E8h	UInt16					X	RW
<input type="radio"/> PTC 1	Off	0005h	****	62E8h	UInt16						RW
<input type="radio"/> PTC 2	Off	0006h	****	62E8h	UInt16						RW
<input type="radio"/> CAM Start Enable (Input)	Off	000Ah	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Switch On	Off	0010h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Voltage Enable	Off	0011h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: /Quick Stop	Off	0012h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Enable Operation	Off	0013h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: /Abort	Off	0014h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: /Freeze	Off	0015h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Go To Position	Off	0016h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Error Acknowledge	Off	0017h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Jog Move +	Off	0018h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Jog Move -	Off	0019h	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Special Mode	Off	001Ah	****	62E8h	UInt16						RW
<input checked="" type="radio"/> Ctrl Word: Home	On	001Bh	****	62E8h	UInt16						RW
<input type="radio"/> Ctrl Word: Go To Initial Position	Off	001Dh	****	62E8h	UInt16						RW

選擇搭配功能
EX: Ctrl Word: Home 啟動復歸動作

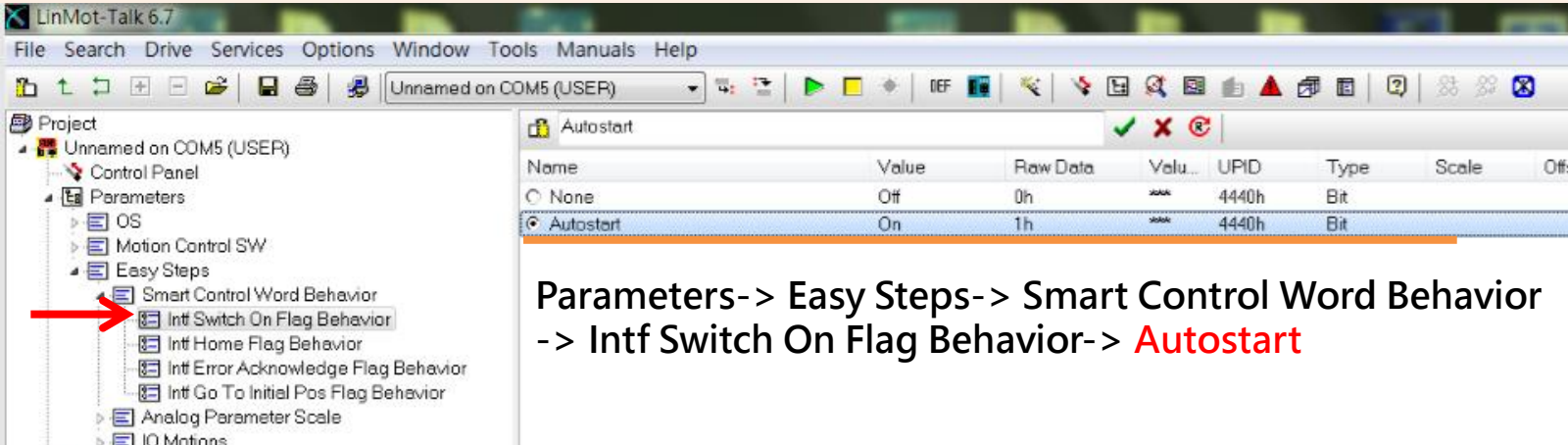
Parameters -> Motion Control SW -> Drive Configuration -> X14 I/O Definitions

Control Panel 介面變化



EASY STEPS

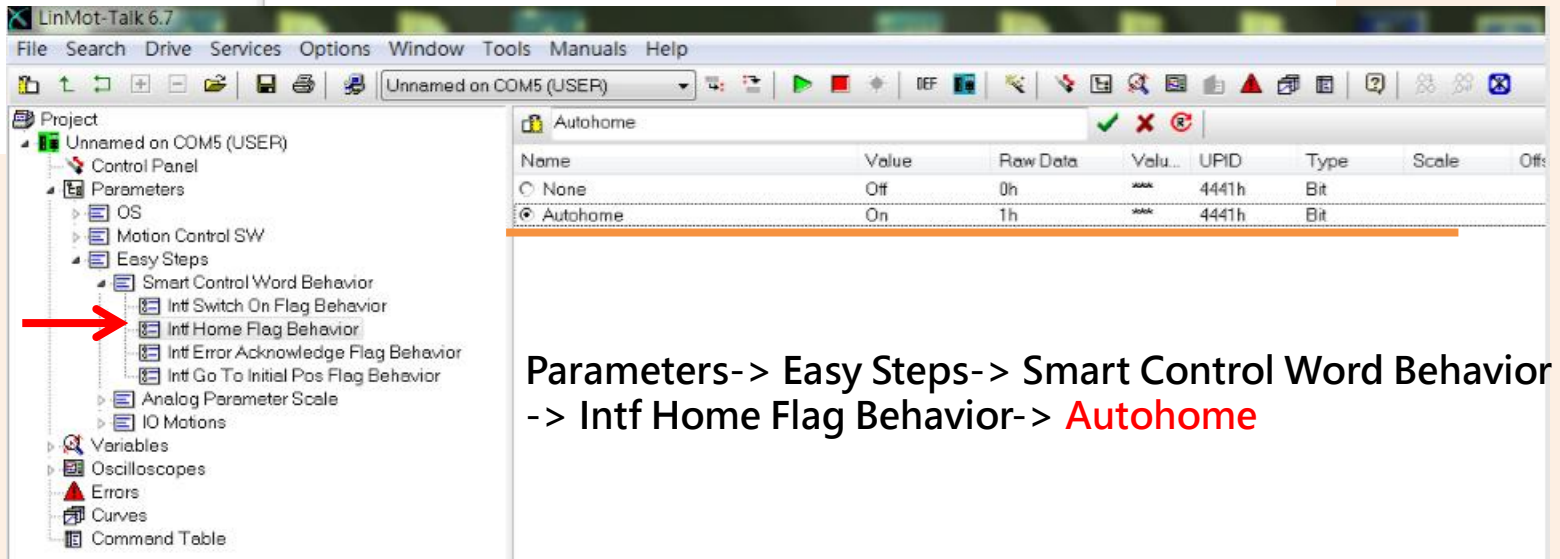
啟用開機自動復歸 (Auto Switch On & Auto Homing)



The screenshot shows the 'Autostart' configuration window in LinMot-Talk 6.7. The 'Autostart' parameter is selected, with a value of 'On', a raw data value of '1h', and a UPID of '4440h'. The parameter type is 'Bit'.

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offs
None	Off	0h	***	4440h	Bit		
Autostart	On	1h	***	4440h	Bit		

Parameters-> Easy Steps-> Smart Control Word Behavior
-> Intf Switch On Flag Behavior-> **Autostart**



The screenshot shows the 'Autohome' configuration window in LinMot-Talk 6.7. The 'Autohome' parameter is selected, with a value of 'On', a raw data value of '1h', and a UPID of '4441h'. The parameter type is 'Bit'.

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offs
None	Off	0h	***	4441h	Bit		
Autohome	On	1h	***	4441h	Bit		

Parameters-> Easy Steps-> Smart Control Word Behavior
-> Intf Home Flag Behavior-> **Autohome**

I/O控制位置 I

The screenshot shows the LinMot-Talk 6.8 software interface. On the left, a tree view shows the project structure: Unnamed offline (USER) > Control Panel > Parameters > Easy Steps > IO Motions > Input X14.2 Config > X14.2 Rising Edge Function. An orange arrow points from this path to the main table. The table lists various parameters with columns: Name, Value, Raw Data, Value..., UPID, Type, Scale, Offset, Min, Max, Def..., and Attr. The 'Goto Abs Position' parameter is highlighted in orange, with its value set to 'On' and Raw Data to '0001h'. The 'X14.2 Rising Edge Function' parameter is also highlighted in blue.

Name	Value	Raw Data	Value...	UPID	Type	Scale	Offset	Min	Max	Def...	Attr.
<input type="radio"/> none	Off	0000h	xxx	6418h	UInt16					X	RW
<input checked="" type="radio"/> Goto Abs Position	On	0001h	xxx	6418h	UInt16						RW
<input type="radio"/> Increment Target Position	Off	0002h	xxx	6418h	UInt16						RW
<input type="radio"/> Increment Demand Position	Off	0003h	xxx	6418h	UInt16						RW
<input type="radio"/> Goto Abs Position From Actual Position	Off	0004h	xxx	6418h	UInt16						RW
<input type="radio"/> Increment Actual Position	Off	0005h	xxx	6418h	UInt16						RW
<input type="radio"/> Go To Analog Position	Off	0006h	xxx	6418h	UInt16						RW
<input type="radio"/> Start Curve From Actual Position	Off	0008h	xxx	6418h	UInt16						RW
<input type="radio"/> Goto Abs Position With Max Current	Off	0009h	xxx	6418h	UInt16						RW
<input type="radio"/> Eval Command Table Command	Off	000Ch	xxx	6418h	UInt16						RW
<input type="radio"/> VAI Stop	Off	000Dh	xxx	6418h	UInt16						RW
<input type="radio"/> VAI Infinite Motion Positive Direction	Off	000Eh	xxx	6418h	UInt16						RW
<input type="radio"/> VAI Infinite Motion Negative Direction	Off	000Fh	xxx	6418h	UInt16						RW
<input type="radio"/> CAM Go To Synch Pos	Off	0010h	xxx	6418h	UInt16						RW
<input type="radio"/> CAM Enable	Off	0011h	xxx	6418h	UInt16						RW
<input type="radio"/> Encoder Winding Start With Def Par	Off	0018h	xxx	6418h	UInt16						RW
<input type="radio"/> Encoder Curve Winding Start With Def Par	Off	0019h	xxx	6418h	UInt16						RW
<input type="radio"/> Master Homing	Off	001Ah	xxx	6418h	UInt16						RW

Parameters -> Easy Steps -> IO Motions -> Input X14.2 Config
-> X14.2 Rising Edge Function -> **Goto Abs Position**



注意!!!!!! 此 I/O 設定若與P.31 之 I/O 控制設定(Control Panel)互相衝突，會以P.31 之 I/O 控制設定(Control Panel)之設定功能為主。

I/O控制位置 II

The screenshot shows the LinMot-Talk 6.8 software interface. The left sidebar contains a tree view with the following structure:

- Project
 - Unnamed offline (USER)
 - Control Panel
 - Parameters
 - OS
 - Motion Control
 - Easy Steps
 - Smart Control Word Behavior
 - Analysis Parameters
 - IO Motions
 - X14 I/O Logic Definitions
 - Input X14.14 Config
 - Input X14.2 Config
 - X14.2 Rising Edge Function
 - X14.2 IO Motion Config
 - X14.5 Linked Output Mode
 - Input X14.15 Config
 - Input X14.3 Config
 - Input X14.16 Config
 - Input X14.4 Config
- Variables
- Oscilloscopes
- Errors
- Curves
- Command Table

The main window displays a table of parameters for the selected '5 mm' motion. The table has the following columns: Name, Value, Raw Data, Value..., UPID, Type, Scale, Offset, Min, Max, Def..., and Attr. The parameters listed are:

Name	Value	Raw Data	Value...	UPID	Type	Scale	Offset	Min	Max	Def...	Attr.
Position	5 mm	0000C350h	*** mm	F208h	SInt32	0.0001 mm	0 mm	-214748.36...	214748.364...	5 mm	RW
Max. Speed	0.4 m/s	00061A80h	*** m/s	F209h	SInt32	1E-6 m/s	0 m/s	0 m/s	2147.48364...	0.4...	RW
Acceleration	1 m/s ²	000186A0h	*** m...	F20Ah	SInt32	1E-5 m/s ²	0 m/s ²	0 m/s ²	21474.8364...	1 m...	RW
Deceleration	1 m/s ²	000186A0h	*** m...	F20Bh	SInt32	1E-5 m/s ²	0 m/s ²	0 m/s ²	21474.8364...	1 m...	RW
Curve/Cmd ID	1	0001h	***	6419h	UInt16	1	0	0	255	0	RW
Maximal Current	2 A	07D0h	*** A	641Ah	UInt16	0.001 A	0 A	0 A	25 A	0 A	RW

Red Chinese text annotations with arrows point to the following elements:

- 位置 (Position) - points to the 'Position' parameter in the table.
- 速度 (Speed) - points to the 'Max. Speed' parameter in the table.
- 加速度 (Acceleration) - points to the 'Acceleration' parameter in the table.
- 減速度 (Deceleration) - points to the 'Deceleration' parameter in the table.

A large orange arrow points from the 'IO Motions' folder in the sidebar to the 'X14.2 IO Motion Config' entry.

Navigation path: Parameters -> Easy Steps -> IO Motions -> Input X14.2 Config -> X14.2 IO Motion Config

I/O控制位置 III

The screenshot shows the LinMot-Talk 6.8 software interface. The left sidebar displays a project tree with the following structure:

- Unnamed offline (USER)
 - Control Panel
 - Parameters
 - DS
 - Motion Control SW
 - Easy Steps
 - Smart Control Word Behavior
 - Analog Parameter Scale
 - IO Motions
 - X14 I/O Logic Definitions
 - Input X14.14 Config
 - Input X14.2 Config
 - X14.2 Rising Edge Function
 - X14.2 IO Motion Config
 - X14.5 Linked Output Mode
 - Input X14.15 Config
 - Input X14.3 Config
 - Input X14.16 Config
 - Input X14.4 Config
 - Variables
 - Oscilloscopes
 - Errors
 - Curves
 - Command Table

The main window displays a table of parameters:

Name	Value	Raw Data	Value...	UPID	Type	Scale	Offset	Min	Max	Def...	Attr.
<input type="radio"/> none	Off	0000h	xxx	6471h	UInt16					X	RW
<input checked="" type="radio"/> In Position	On	0001h	xxx	6471h	UInt16						RW
<input type="radio"/> Motion Active	Off	0002h	xxx	6471h	UInt16						RW

An orange arrow points from the 'Parameters' folder in the sidebar to the 'In Position' parameter in the table.

Parameters -> Easy Steps -> IO Motions -> Input X14.2 Config
-> X14.5 Linked Output Mode -> **In Position** 到位輸出訊號

COMMAND TABLE

Command Table 指令控制運動之介面

目前第幾行
註解
指令類別
指令型式

自動執行下一指定行
欲跳往之下一指定行

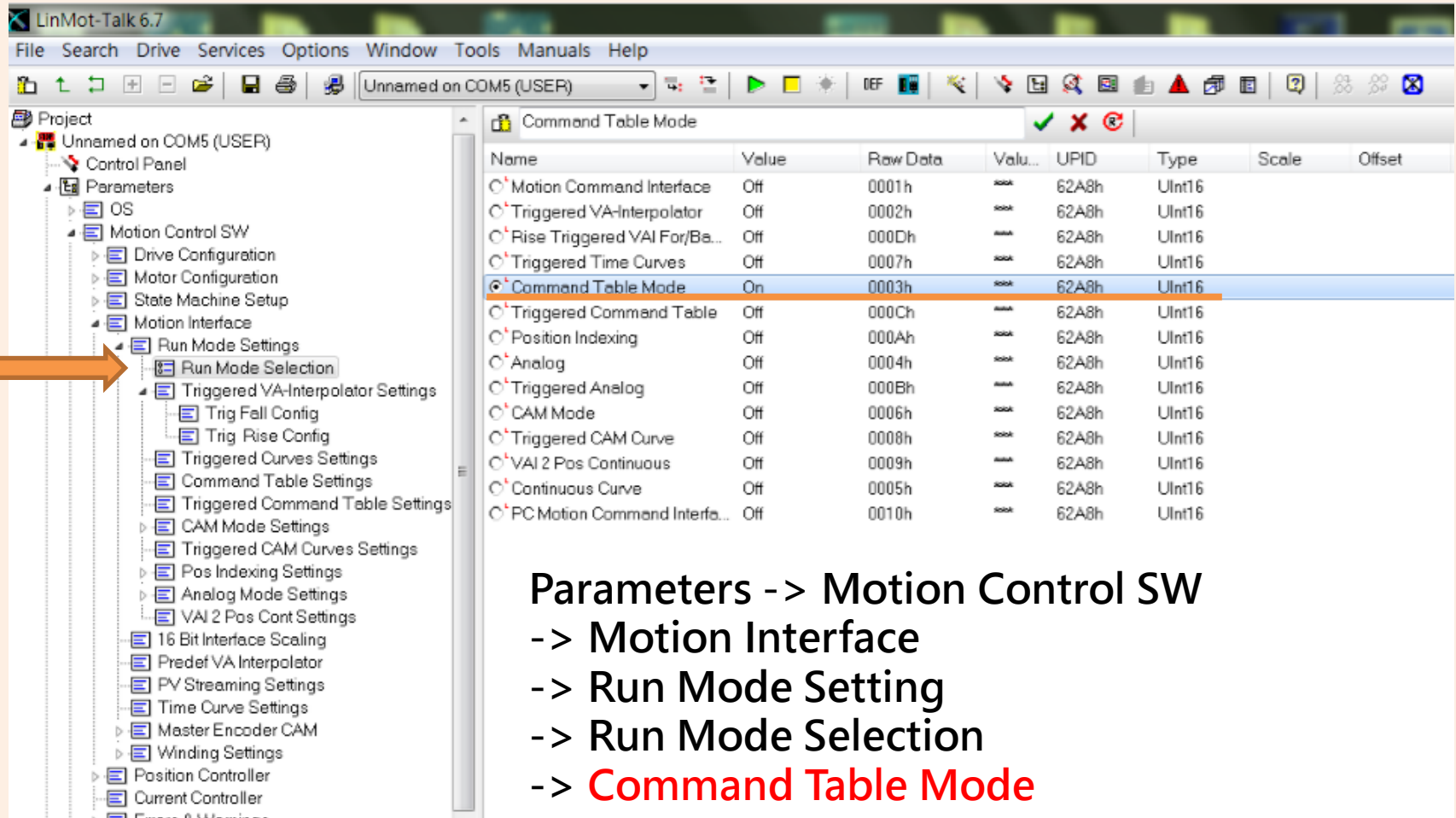
ID	Name	Type	Par 2	Par 3
1	Unnamed	VAI Go To Pos (010xh)	Pos: 0 mm	Vel: 0.1 m/s Acc: 1 m/s ²
2	Unnamed	Wait until In Target Position (212xh)		
3	Unnamed	VAI Go To Pos (010xh)	Pos: 40 mm	Vel: 0.1 m/s Acc: 1 m/s ²
4	Unnamed	Wait until In Target Position (212xh)		
5				

EX:

VAI Go To Pos (010xh) 前進到座標位置

Wait until in Target Position (212xh) 等待直到抵達定位

啟動指令控制之設定 I Command Table Mode



The screenshot shows the LinMot-Talk 6.7 software interface. On the left, a tree view shows the project structure under 'Parameters' > 'Motion Control SW' > 'Motion Interface' > 'Run Mode Settings' > 'Run Mode Selection'. An orange arrow points to the 'Run Mode Selection' folder. On the right, the 'Command Table Mode' table is displayed, with the 'Command Table Mode' row highlighted in blue. The table columns are Name, Value, Row Data, Valu..., UPID, Type, Scale, and Offset.

Name	Value	Row Data	Valu...	UPID	Type	Scale	Offset
<input type="radio"/> Motion Command Interface	Off	0001h	...	62A8h	UInt16		
<input type="radio"/> Triggered VA-Interpolator	Off	0002h	...	62A8h	UInt16		
<input type="radio"/> Rise Triggered VAI For/Ba...	Off	000Dh	...	62A8h	UInt16		
<input type="radio"/> Triggered Time Curves	Off	0007h	...	62A8h	UInt16		
<input checked="" type="radio"/> Command Table Mode	On	0003h	...	62A8h	UInt16		
<input type="radio"/> Triggered Command Table	Off	000Ch	...	62A8h	UInt16		
<input type="radio"/> Position Indexing	Off	000Ah	...	62A8h	UInt16		
<input type="radio"/> Analog	Off	0004h	...	62A8h	UInt16		
<input type="radio"/> Triggered Analog	Off	000Bh	...	62A8h	UInt16		
<input type="radio"/> CAM Mode	Off	0006h	...	62A8h	UInt16		
<input type="radio"/> Triggered CAM Curve	Off	0008h	...	62A8h	UInt16		
<input type="radio"/> VAI 2 Pos Continuous	Off	0009h	...	62A8h	UInt16		
<input type="radio"/> Continuous Curve	Off	0005h	...	62A8h	UInt16		
<input type="radio"/> PC Motion Command Interfa...	Off	0010h	...	62A8h	UInt16		

Parameters -> Motion Control SW
-> Motion Interface
-> Run Mode Setting
-> Run Mode Selection
-> **Command Table Mode**

啟動指令控制之設定 II

Command Table Settings

The screenshot shows the LinMot-Task 6.7 software interface. The left sidebar displays a tree view of settings, with 'Command Table Settings' highlighted by an orange arrow. The main window shows a table with the following data:

Name	Value	Row Data	Valu...	UPID	Type	Scale	Offset
Command Table Entry ID	1	0001h	***	6301h	UInt16	1	0

A red box highlights the 'Value' column, and a red arrow points to the value '1'. Below the table, red text reads: '欲開始執行程式"行"位置 EX: Entry ID = 1'.

使用輸入訊號執行 Command Table I

The screenshot shows the LinMot-Talk 6.8 software interface. The left sidebar displays a project tree with the following structure:

- Unnamed on COM5 (USER)
 - Control Panel
 - Parameters
 - OS
 - Motion Control SW
 - LinRS
 - Easy Steps
 - Smart Control Word Behavior
 - Analog Parameter Scale
 - IO Motions
 - X4 I/O Logic Definitions
 - Input X4.4 Config
 - Input X4.5 Config
 - Input X4.6 Config
 - Input X4.7 Config
 - Input X4.8 Config
 - Input X4.9 Config
 - Input X4.10 Config
 - Input X4.11 Config
 - X4.11 Rising Edge Function
 - X4.11 IO Motion Config
- Variables
- Oscilloscopes
- Messages
- Errors
- Curves
- Command Table

An orange arrow points to the 'X4.11 Rising Edge Function' item in the tree. The main window displays a table of parameters:

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offset	Min	Max	De...	Attr.
<input type="radio"/> none	Off	0000h	████	3400h	UInt16						X RW
<input type="radio"/> Goto Abs Position On Risin...	Off	0001h	████	3400h	UInt16						RW
<input type="radio"/> Increment Target Position	Off	0002h	████	3400h	UInt16						RW
<input type="radio"/> Increment Demand Position	Off	0003h	████	3400h	UInt16						RW
<input type="radio"/> Goto Abs Position From Act...	Off	0004h	████	3400h	UInt16						RW
<input type="radio"/> Increment Actual Position	Off	0005h	████	3400h	UInt16						RW
<input type="radio"/> Go To Analog Position	Off	0006h	████	3400h	UInt16						RW
<input type="radio"/> Start Curve From Actual Po...	Off	0008h	████	3400h	UInt16						RW
<input type="radio"/> Goto Abs Position With Max...	Off	0009h	████	3400h	UInt16						RW
<input checked="" type="radio"/> Eval Command Table Com...	On	000Ch	████	3400h	UInt16						RW
<input type="radio"/> VAI Stop	Off	000Dh	████	3400h	UInt16						RW
<input type="radio"/> VAI Infinite Motion Positive ...	Off	000Eh	████	3400h	UInt16						RW
<input type="radio"/> VAI Infinite Motion Negative ...	Off	000Fh	████	3400h	UInt16						RW
<input type="radio"/> CAM Go To Synch Pos	Off	0010h	████	3400h	UInt16						RW
<input type="radio"/> CAM Enable	Off	0011h	████	3400h	UInt16						RW
<input type="radio"/> Encoder Winding Start With ...	Off	0018h	████	3400h	UInt16						RW
<input type="radio"/> Encoder Curve Winding Sta...	Off	0019h	████	3400h	UInt16						RW
<input type="radio"/> Master Homing	Off	001Ah	████	3400h	UInt16						RW

Parameters -> Easy Steps -> IO Motions
-> Input X14.11 Config
-> X14.11 Rising Edge Function
-> **Eval Command Table Command**

使用輸入訊號執行 Command Table II

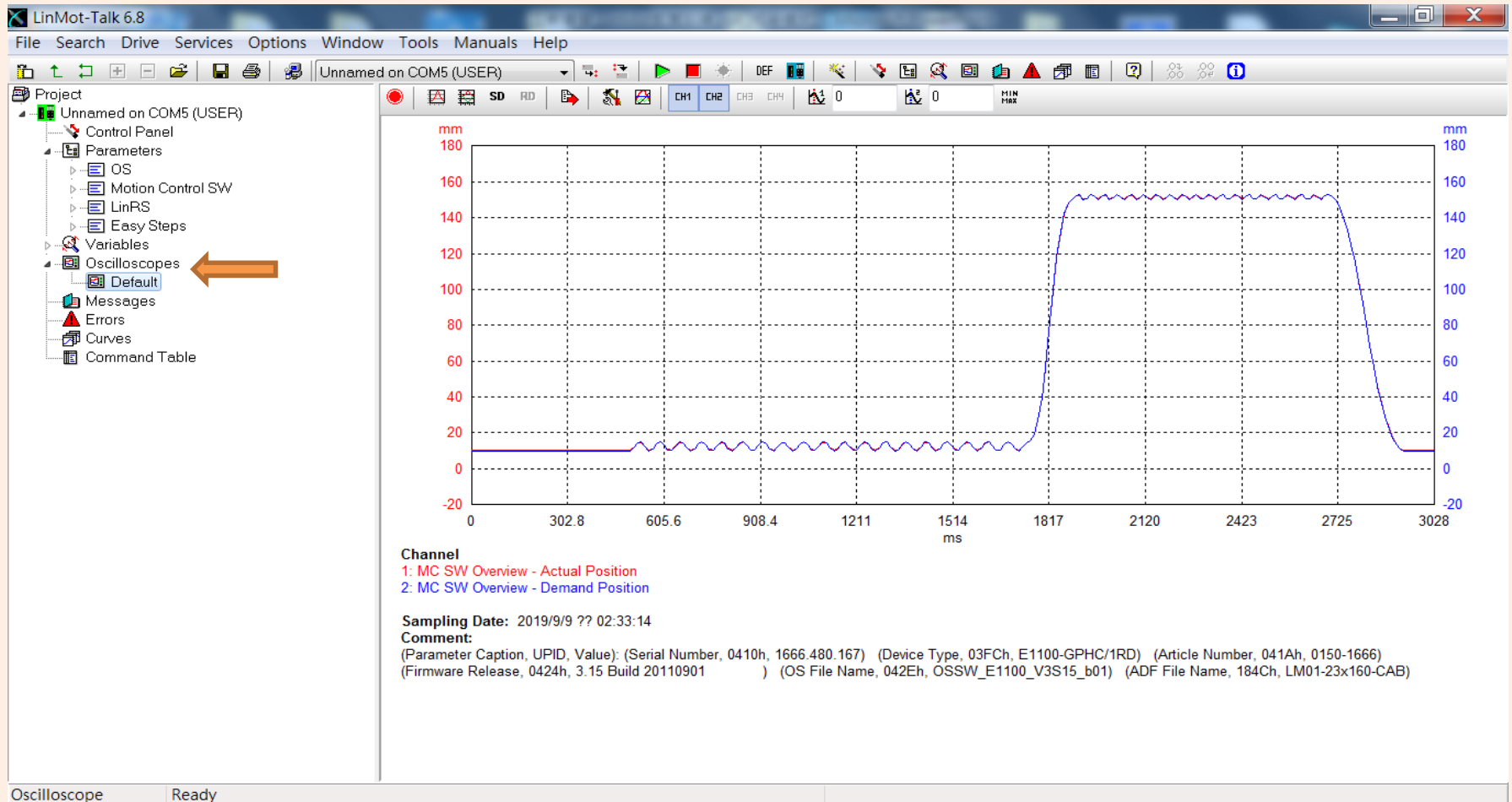
欲開始執行程式“行”位置
EX: Entry ID = 19

Parameters -> Easy Steps -> IO Motions -> Input X14.11 Config
-> X14.11 IO Motion Config

Name	Value	Raw Data	Valu...	UPID	Type	Scale	Offset
Position	0.276 mm	00000AC8h	**** ...	3410h	SInt32	0.0001 mm	0 mm
Max. Speed	0.4 m/s	00061A80h	**** ...	3411h	SInt32	1E-6 m/s	0 m/s
Acceleration	1 m/s ²	000186A0h	**** ...	3412h	SInt32	1E-5 m/s ²	0 m/s ²
Deceleration	1 m/s ²	000186A0h	**** ...	3413h	SInt32	1E-5 m/s ²	0 m/s ²
Curve/Cmd ID	19	0013h	****	3420h	UInt16	1	0
Maximal Current	0 A	0000h	**** A	3421h	UInt16	0.001 A	0 A

OSCILLOSCOPES

可產生運動波形圖 如:位置、速度、電流...等



備份資料

點擊File -> Export

The screenshot shows the LinMot-Talk 6.8 software interface. The 'File' menu is open, and the 'Export...' option is highlighted with a red rectangle. The interface displays various control and status parameters, including a list of control words and their values, and a table of status words and their values.

Control Panel

Control Word	Value
0: Switch On	xxxx
1: Voltage Enable	xxxx
2: /Quick Stop	xxxx
3: Enable Operation	xxxx
4: /Abort	xxxx
5: /Freeze	xxxx
6: Go To Position	xxxx
7: Error Acknowledge	xxxx
8: Jog Move +	xxxx
9: Jog Move -	xxxx
10: Special Mode	xxxx
11: Home	xxxx
12: Clearance Check	xxxx
13: Go To Initial Position	xxxx
14: Linearizing	xxxx
15: Phase Search	xxxx

Status Panel

Status Word	Value
0: Operation Enabled	xxxx
1: Switch On Active	xxxx
2: Enable Operation	xxxx
3: Error	xxxx
4: Voltage Enable	xxxx
5: /Quick Stop	xxxx
6: Switch On Locked	xxxx
7: Warning	xxxx
8: Event Handler Active	xxxx
9: Special Motion Active	xxxx
10: In Target Position	xxxx
11: Homed	xxxx
12: Fatal Error	xxxx
13: Motion Active	xxxx
14: Range Indicator 1	xxxx
15: Range Indicator 2	xxxx

IO Panel

IO Address	Value
X14.14	xxxx
X14.2	xxxx
X14.15	xxxx
X14.3	xxxx
X14.16	xxxx
X14.4	xxxx
X14.17	xxxx
X14.5	xxxx
X14.18	xxxx
X14.6	xxxx
X14.19	xxxx
X14.7	xxxx

Motion Command Int

Name	Offs.	Description	Scaled Value	Int. Value (Dec)
Header	0	000xh: No Operation	0	0

選擇欲備份之項目

LinMot-Talk 6.8

File Search Drive Services Options Window Tools Manuals Help

Unnamed offline (USER)

Project

Unname

Choose one or more drives to save their configuration.

Select All	Name	Port
<input checked="" type="checkbox"/>	Unnamed	offline

- Export All
 - Parameters
 - OS
 - Motion Control SW
 - Easy Steps
 - Variables
 - OS SW Message/Error
 - OS SW CAN Monitoring
 - OS SW Status
 - OS SW Keys
 - MC SW Overview
 - MC SW Motor
 - MC SW X13 Ext Sensor
 - MC SW Current Controller
 - MC SW Control Word
 - MC SW Status Word
 - MC SW Warnings
 - MC SW Phase Search
 - MC SW Motion Interface
 - MC SW Winding
 - MC SW Capture, Trigger & Mapped Input
 - MC SW VA interpolator
 - MC SW Curve
 - MC SW PVT Stream
 - MC SW Monitoring
 - MC SW Errors

Advanced Options

勾選進階選項

讀取變數

下一步

檔案名稱及路徑位置



切記只能用英文或數字

存取檔案路徑

存取檔案名稱

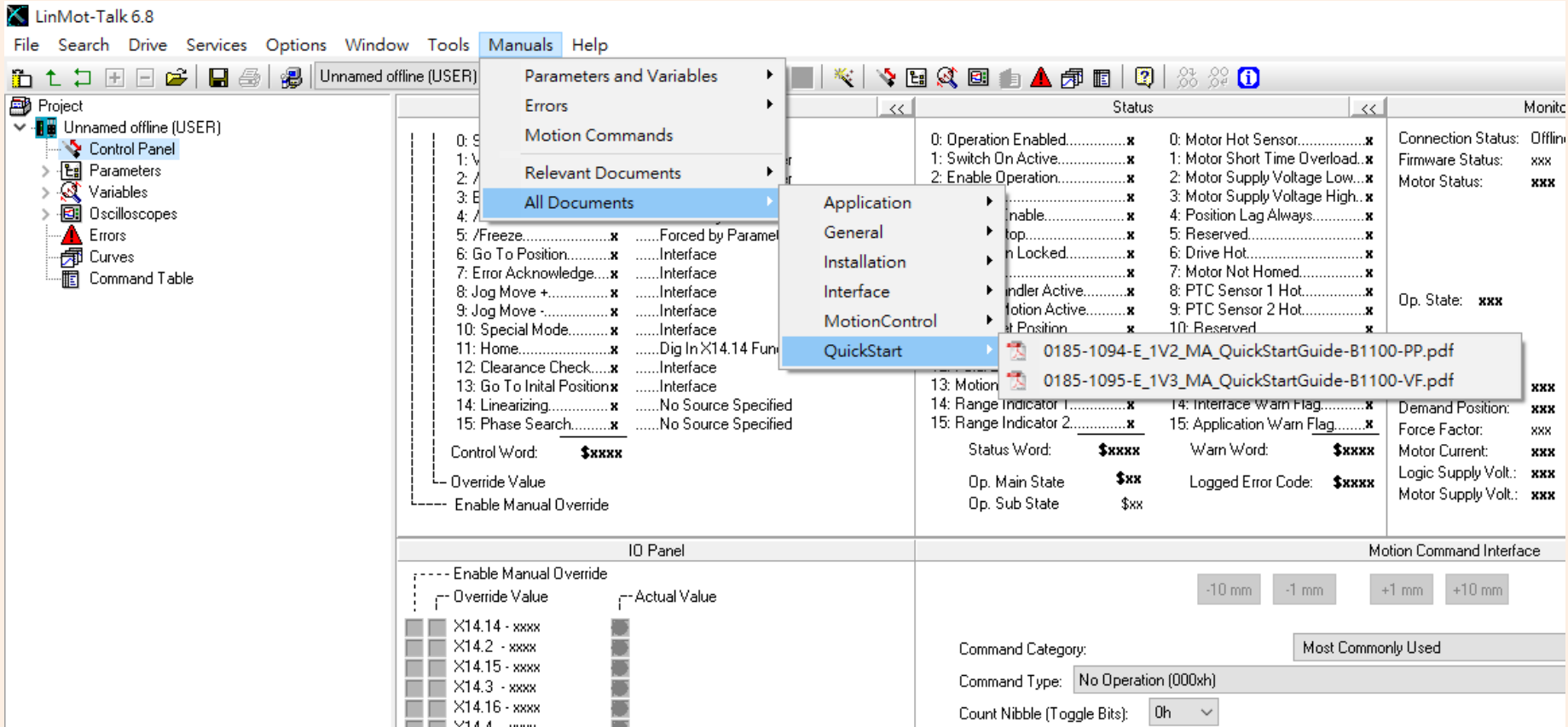
檔案格式 .lmc

名稱	修改日期	類型
TAICHANG C1100 ORIGINAL.lmc	2019/6/25 上午 1...	LinMot-Talk6 Co...
xy demo c1100 gp.lmc	2019/6/17 下午 0...	LinMot-Talk6 Co...

其他補充

使用手冊連結位置

點擊上方欄 -> Manuals



人機通訊(RS485/ LinRS Test Tool)

The screenshot displays the LinMot-Talk 6.8 software interface. The 'Tools' menu is open, highlighting 'LinRS Test Tool'. A red box with the text 'LinRS Test Tool 工具開啟位置' (LinRS Test Tool tool opening position) points to this menu item. Below the menu, the 'Port Settings' dialog is visible, showing 'Port Name', 'Baud Rate: 57600', 'Data Bits: 8', 'Stop Bits: 1', and 'Parity: None'. A red box with the text '通訊界面' (Communication interface) is positioned over this dialog. On the right side, a 'Status' window shows a list of monitoring items, including '0: Operation Enabled', '1: Switch On Active', '2: Enable Operation', etc. A red box with the text '參考手冊' (Reference manual) points to a PDF file '0185-1082-E_3V24_MA_LinRS.pdf' in the file list. The bottom of the interface shows an 'IO Panel' with various digital inputs and outputs.

敏石官網 技術支援 VB範例

https://montrol.com.tw/linmot_rs485_%e5%96%ae%e8%bb%b8-%e4%bb%8b%e9%9d%a2%e7%af%84%e4%be%8b/

更多應用請查閱敏石官網 技術支援文章



<https://montrol.com.tw/category/linmot%e7%b7%9a%e6%80%a7%e9%a6%ac%e9%81%94/>



~ Thank you for listening ~