SINCECAM

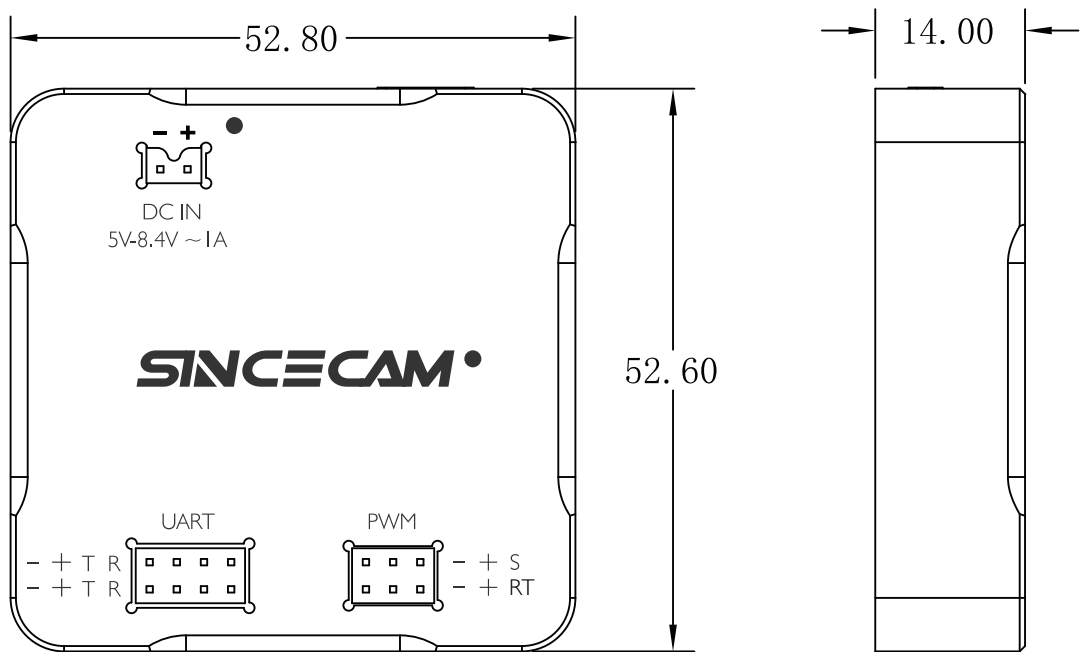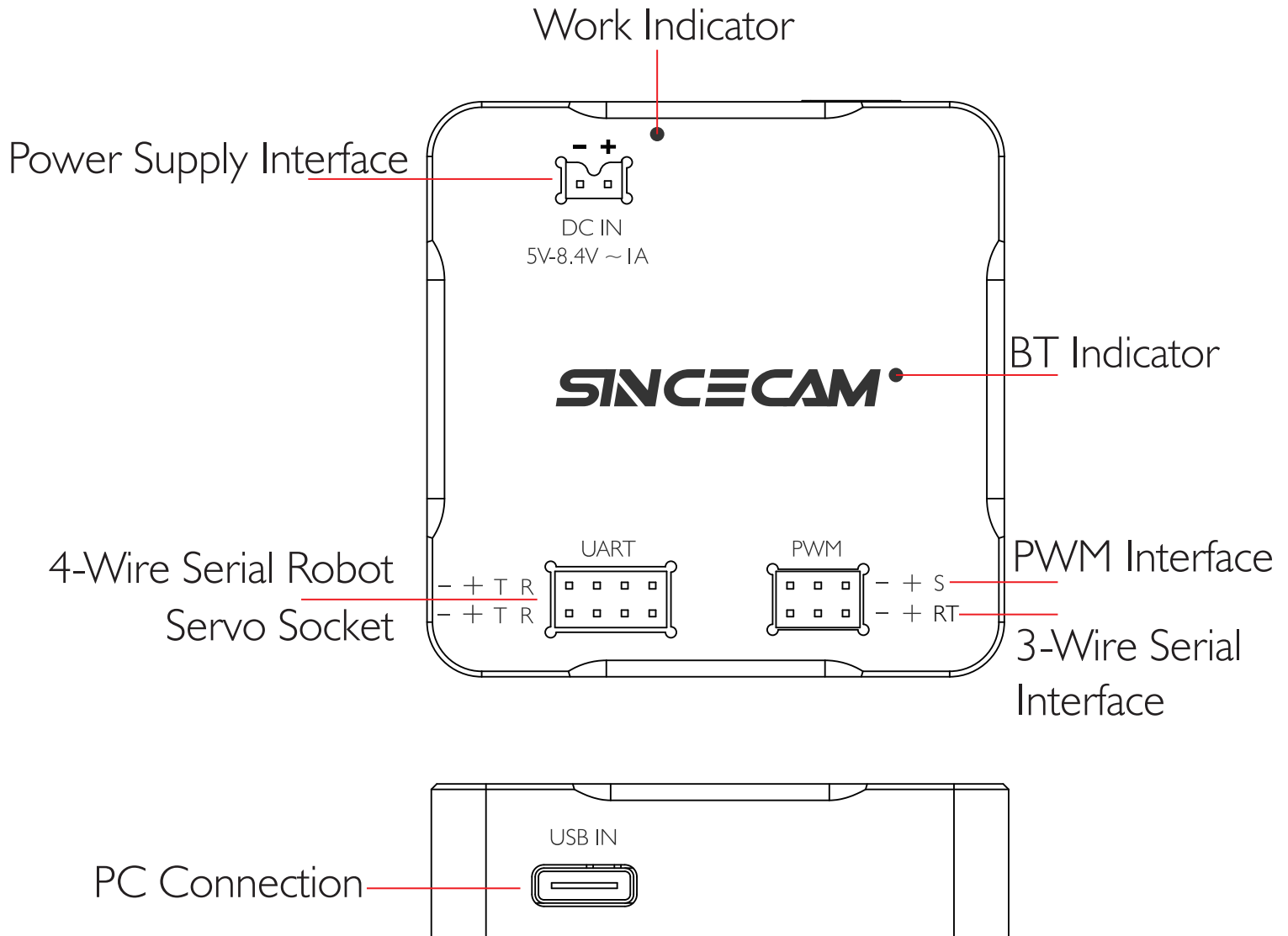## *Oblique Gears Servo*

Only Applicable to Sincecam Server for Upgrading the Server Program And the Server for Programming.

Programmer Card Body Instruction

Work Indicator

Power Supply Interface

DC IN
5V-8.4V ~ IA

SINCECAM

BT Indicator

UART

PWM

4-Wire Serial Robot
Servo Socket

− + T R
− + T R

− + S
− + RT

PWM Interface

3-Wire Serial
Interface

USB IN

PC Connection

52.80

14.00

DC IN
5V-8.4V ~ IA

SINCECAM

52.60

UART

PWM

− + T R
− + T R

− + S
− + RT

Setting Interface Introduction

PC Connection Port

Current Working Status

Data Progress Bar

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COM1 ⌄ Connection

Status : Connected   PWM: 1500

| 80 | 500 | 1000 | 1500 | 2000 | 2500 | 2900 |

PWM MIN	500
PWM MAX	2500
Control Angle	180
Sensor Angle	360
PWM Sensitivity	4
Direction	Positive
Signal Lost	Lock
STANDARD	SR	SSR
SFR	SXR	UR

LOW PWM	1000	SAVE
MDN PWM	1500	SAVE
HIGH PWM	2000	SAVE

3	Soft Startup
98	Output Power
-13	Brake
15	Back Center
2	Dead Zone
20	Response Speed
10	Sensity
50	Output Protection
5	Protection Time

Read Parameters Import Parameters Export Parameters Save Settings Write Device

Control Signal Input Function Setting

Servo Working Angle Position Offset Setting

Servo Working Performance Parameter

PWM Output Status Scale

Read Parameters:Read Existing Parameters Inside Servo

Import Parameters:Load Saved Parameters

Export Parameters:Export All Existing Parameters of the Servo and Save Them.

Save Settings:Save the Current Function Area and Performance Area Modified
Parameters for Users to Test on the Computer.
(Data is Not Saved When the Servo is Powered off)

Write Device:Write All Parameters of the Function and Performance
Zones to the Servo and Save Them.

The Following Sequence Must be Followed Before Programming Parameters

Step one: Check the Connection Port number of the Selected Computer Click CONNECTION to Connect the Programming Card.

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| COM1 ∨ | Connection | | 35% |

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Read Parameters   Import Parameters   Export Parameters   Save Settings   Write Device

Step two: Click the three buttons to see if the servo will rotate, If the servo will not rotatePlease check whether the PC programming Card or the servo are connected correctly.

Step Three: Click The Button to Read the Servo's Internal Raw Parameters, at this Time the Top Progress Bar Will be Raised to Show the Success of Reading Parameters 100%.

⚠ Every Time Before Programming Changes Must be This Step Must be Done + Before Every Programming Change.

Servo Angle Offset Settings for High, Medium and Low Positions.

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Read Parameters   Import Parameters   Export Parameters   Save Settings   Write Device

Servo Low Side Position Offset Setting:
Click the LOW PWM Button to Let the Servo Return to the Original Low Side Position,Move the Scroll Bar Below,Then the Servo Will be Shifted to the Left or Right According to the Position of the Slider Moving, When Moving to the Desired Position Stop Click the Right Side of the SAVE to Save it.

⚠ There is no Need to Click Writing Device,After Moving the Position, Please Click Read Parameter to Read the Changed Parameters.

Servo Angle Offset Settings for High, Medium and Low Positions.

SINCECAM — ✕

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80   500   1000   1500   2000   2500   2900

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PWM Sensitivity	4
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Signal Lost	Lock

STANDARD   SR   SSR
SFR | SXR   UR

LOW PWM   1000   SAVE

MDN PWM   1500   SAVE

HIGH PWM   2000   SAVE

3	Soft Startup
98	Output Power
-13	Brake
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2	Dead Zone
20	Response Speed
10	Sensitity
50	Output Protection
5	Protection Time

Read Parameters   Import Parameters   Export Parameters   Save Settings   Write Device

Servo Back Center Point Offset Setting:
Click on the MDN PWM Button to Return the Servo to the Original Center Point,Move the Scroll Bar Below the Servo Will Move According to the Position of the Slider Left or Right Offset,When Moving to The Desired Position to Stop Clicking on the Right Side of the SAVE to Save.

⚠

No Need to Click Writing Device

Servo Angle Offset Settings for High, Medium and Low Positions.

SINCECAM

| COM1 ∨ | Connection | | 35% |

Status : Connected   PWM: 1500

80   500   1000   1500   2000   2500   2900

PWM MIN	500
PWM MAX	2500
Control Angle	180
Sensor Angle	360
PWM Sensitivity	4
Direction	Positive
Signal Lost	Lock
STANDARD	SR	SSR
SFR	SXR	UR

LOW PWM	1000	SAVE
MDN PWM	1500	SAVE
HIGH PWM	2000	SAVE

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98	Output Power
-13	Brake
15	Back Center
2	Dead Zone
20	Response Speed
10	Sensity
50	Output Protection
5	Protection Time

Read Parameters   Import Parameters   Export Parameters   Save Settings   Write Device

Servo High Side Position Offset Setting:
Click the HIGH PWM Button to Let the Servo Return to the Original High Side Position,Move the Scroll Bar Below,Then the Servo will be Shifted to the Left or Right According to the Position of the Slider Moving, When Moving to the Desired Position Stop Click the Right SAVE to Save.

⚠ There is no Need to Click Writing Device,After Moving the Pposition, Please Click Read Parameter Again to Read the Changed Parameter.

Description of Control Signal Input and Operating Performance Parameters.

PWM MIN：PWM Control Signal Input Min.

PWM MAX：PWM Control Signal Input Max.

Control Angle：Control Signal Minimum and Maximum Values Maximum
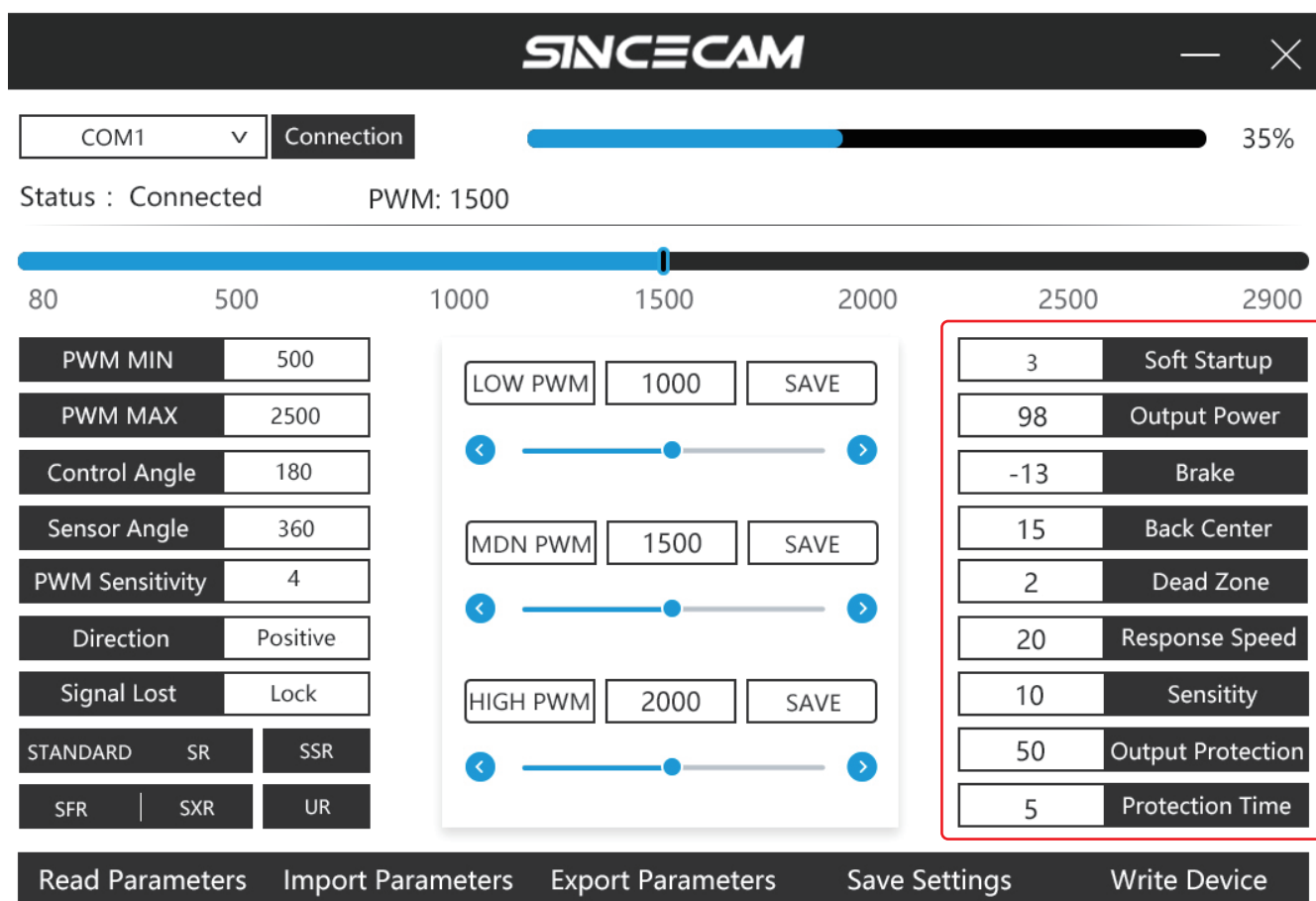　　　　　　　Angle of Servo Rotation

Sensor Angle：Maximum Angle of Angle Sensor
　　　　　　　(Cannot be changed without special requirements)

PWM Sensitivity：Input Signal Sensitivity.(The larger the value, the lower the
　　　　　　　　Resolution, the smaller the value, the higher the resolution)

Direction：Control Servo Forward or Reverse Rotation Settings.

Signal Lost：When the Control Signal is Lost the Servo Locks the Current
　　　　　　　Position or Releases the Rudder Locking Force.

Description of Control Signal Input and Operating Performance Parameters.

| SINCECAM | — ✕ |

| COM1 ∨ | Connection | ▬▬▬▬▬▬▬▬▬▬ | 35% |

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| Read Parameters | Import Parameters | Export Parameters | Save Settings | Write Device |

Soft Startup: Slow Start Function, The Higher the Value the Faster the Speed.

Output Power: Percentage of Maximum Motor Output Power Maximum100 Minimum 0.

Brake: Brake and Overshoot Settings, Values Must not Exceed -16 to +16.

Back Center: Center Return Stiffness, The Larger the Value the Greater the Stiffness And Easy to Shake the Rudder Value Minimum 0 Maximum 63.

Dead Zone: Deadband at Center Point, The Smaller the Value the More Accurate The Center Return Under Load and Prone to Rudder Jitter.

Response Speed: The Reaction Speed of the Servo, The Larger the Value, The Faster the Speed and Easy to Shake the Rudder.

Sensity: Servo Operating Response Sensitivity, The Lower the Value the Higher The Sensitivity.

Output Protection: Percentage of Blocking Power Output, The Larger the Value, The More Likely to Damage the Motor.

Protection Time: Blocking Protection Time, The Smaller the Value, The Faster it Enters the Protection, The Larger the Value, The Easier it is to Damage the Motor.

Description of Control Signal Input and Operating Performance Parameters.

Fast Mode Switching Between Normal Digital Control Signals and Mainstream Remotes, Click on the Corresponding Remote Control Mode Name and Then Click on Writing device to Write to the Servo.

⚠️

If You can't Read the COM Port of the Servo or the Connection is not Successful, it is Possible that the Power Supply Current of the USB of the Computer is not Enough. If not, Please Download the Driver File of the Programming Card and Install it on Your Computer.