



User Manual for RAA50.1C10 Series Encoder



Changchun Rongde Optics Co., Ltd.(ROUNDSS)



www.roundss.cc

Catalogue

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1. Security matters:

When using this product, please follow these important precautions to prevent malfunctions and unintended actions. Use this product only after fully understanding the following instructions.

1.1 Precautions during storage, transportation, and installation:

1.1.1 Do not store or configure in the following environments:

- Places with direct sunlight;
- Locations where ambient temperature exceeds storage and setting temperature conditions;
- Relative humidity exceeding the storage and humidity setting conditions;
- Areas with drastic temperature fluctuations prone to condensation;
- Areas with corrosive gases*1 (e.g., hydrogen sulfide, sulfurous acid, chlorine, ammonia, etc.) or flammable gases nearby; (If installed in environments with other special gases, customers must conduct their own testing before use. This product is not guaranteed for use in special gas environments.)
- Radiation environment or places exposed to radiation;
- Areas with high concentrations of dust, particulate matter, salt, and metal particles;
- Places prone to contamination by water, oil, pharmaceuticals, etc.;
- Excessive vibration and impact may be transmitted to the main structure;
- ※Please note that, in addition to the usual surrounding environment, corrosive gases may also be generated due to the volatilization of components such as grease around the encoder.

1.2 Installation Notes:

1.2.1. During installation, follow the assembly and adjustment instructions in the user manual

- Ensure proper environmental setup to prevent oil, foreign objects, or other contaminants from entering the encoder.
- When securing the screws and bolts for the fixed encoder, ensure they are loosened during installation.
- Implement electrostatic countermeasures in the setup environment to prevent electrical components from being subjected to overvoltage;
- If the encoder is subjected to vibration or impact, it may malfunction or operate incorrectly. Please be ever if the installation environment carefully.
- Avoid applying external forces such as hammering to the encoder;
- Ensure the encoder wires and their connections to the outer cover are securely fastened to avoid tension, bending, or other stresses during installation. Failure to do so may cause the wires to detach or become disconnected.

1.2.2 Interference with the encoder may cause malfunctions. Ensure proper installation of the encoder

Housing and motor wiring connections, and pay close attention to the installation environment.

- ※For the encoder housing, please use an electromagnetic shielding metal product and maintain a stable electrical potential. At the same time, ensure sufficient spatial separation from electrical components on the circuit board. If the encoder may be affected by magnetic fields generated by nearby motors or welding currents, use a soft magnetic material (such as soft iron) for the encoder housing.

- ※Do not place the motor power cord near the encoder;

- ※Ensure proper grounding of the motors FG line and the mechanical devices FG.

- After installing the encoder, users should conduct a thorough system evaluation beforehand.

Do not perform voltage withstand or insulation impedance tests on encoders.

1.3 Wiring Considerations:

1.3.1. Perform wiring correctly and properly:

- Always turn off the power before wiring.

Use the specified power supply voltage. Note that the power supply voltage may drop due to wiring length.

- Encoder wiring must not share conduits with other power lines or be bundled in parallel.

- Use twisted-pair cables for both signal and power lines in encoder wiring.

- For encoder wiring, use grouped shielded cables, and ensure both the encoder and the controller are properly grounded.

1.4 Operation Notes:

- Before use, thoroughly study and confirm the safety design of the device for encoder malfunctions and misoperations. When an alarm occurs, identify the cause and ensure safety before resetting the alarm and restarting operation. Do not overstrain the cable, as this may cause a break.

- Do not apply overvoltage or reverse voltage exceeding the absolute maximum rated value, as this may cause component damage or even fire.

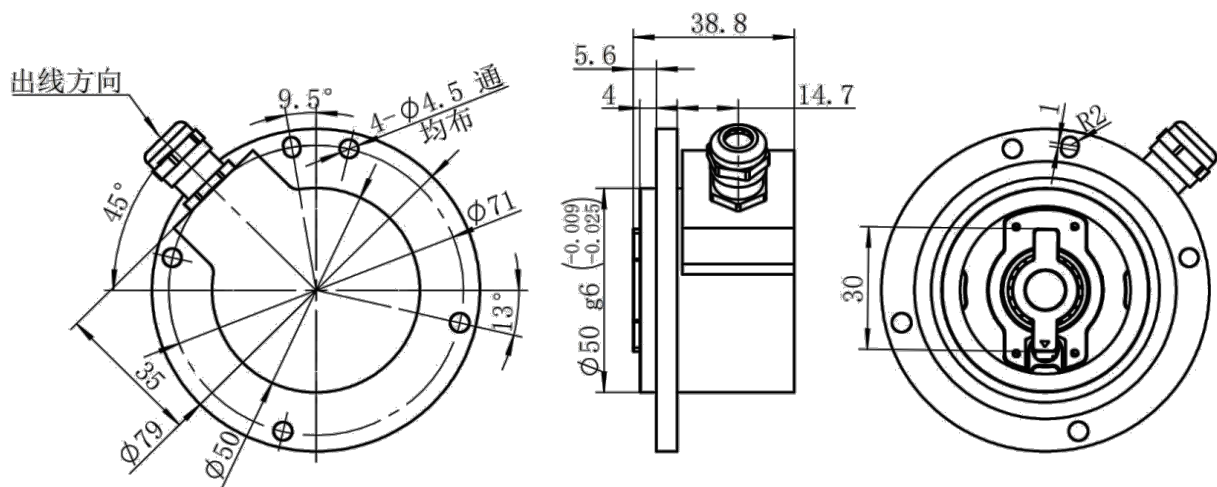
2. General Precautions:

- This specification may be modified without prior notice due to product improvements or technical upgrades. Please verify the latest specifications and confirm the intended use before actual application.
- Please note that this product is intended for integration into standard electronic components (e.g., office automation systems, communication devices, household appliances, entertainment systems, measurement instruments, and general industrial equipment). It is not designed for applications requiring extreme reliability and safety (such as transportation systems, aerospace equipment, nuclear power control systems, or medical devices for life support).
- While our company is committed to enhancing quality and reliability, the occurrence of malfunctions and failures in semiconductor products cannot be entirely avoided under normal circumstances. Therefore, when using this product, please consider potential impacts such as operational defects and take safety precautions to prevent accidents. The company shall not be held liable for any damage to life or property or adverse effects caused by malfunctions, failures, or product lifespan, nor for equipment, facilities, or machinery malfunctions resulting from installation or use of this product, regardless of severity. Users are solely responsible for ensuring proper system safety design.



3. Encoder classification:

3.1 Mechanical dimension diagram of the RAA50.1C10 line outlet:

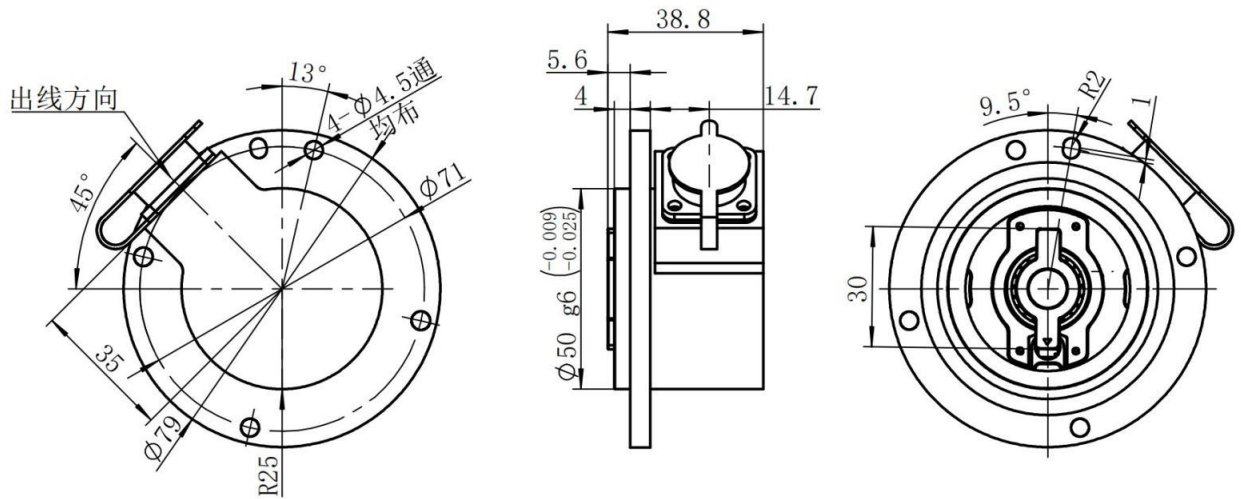


To prevent malfunctions caused by loose screws, it is recommended to use threaded screws.

Use screws (not included) to secure the encoder during installation.

Name	Abbreviation	Standard	Grade	Quantity
internal hexagonal head screw	M4x10	GB/T818-2016	A2-70	4

3.2 Mechanical dimension diagram of the RAA50.1C10 plug lead-out:



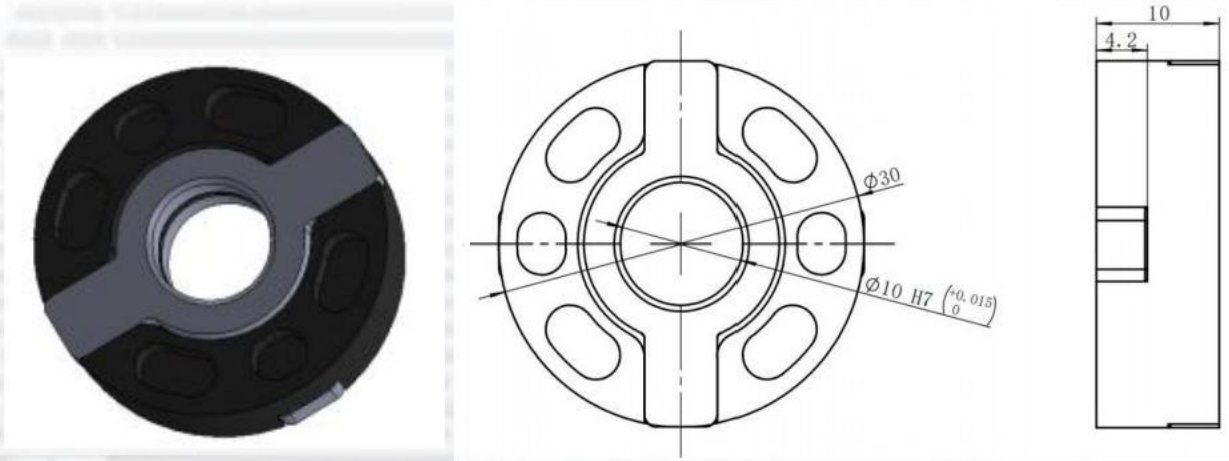
To prevent failures caused by loose screws, it is recommended to use threaded screws.

Use screws (not included) to secure the encoder during installation.

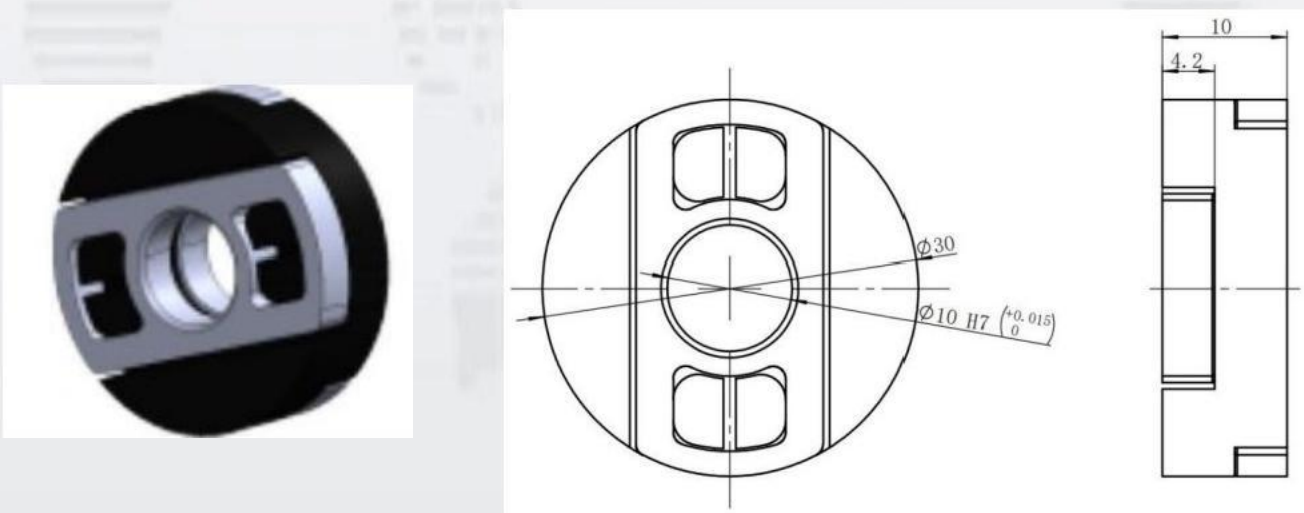
Name	Abbreviation	Standard	Grade	Quantity
Internal hexagonal head screw	M4x10	GB/T818-2016	A2-70	4

3.3 Types of Attachments:

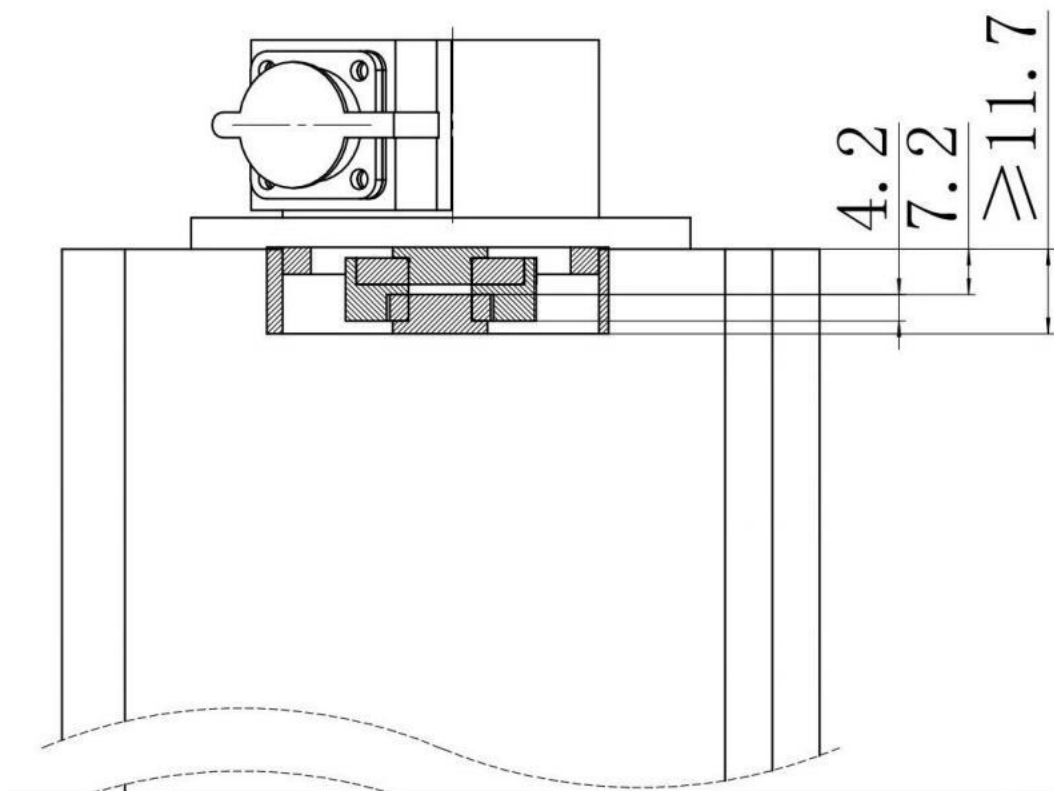
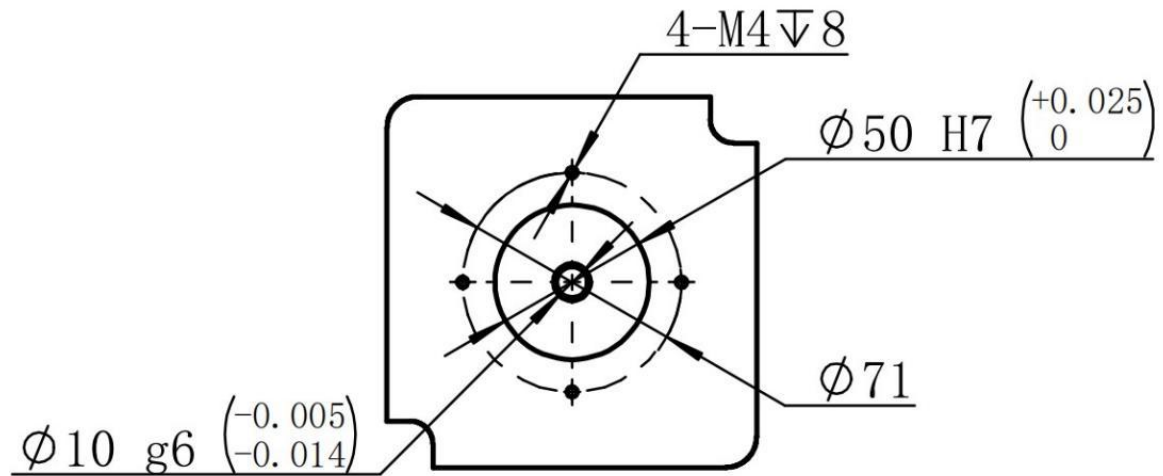
3.3.1 Default attachments:



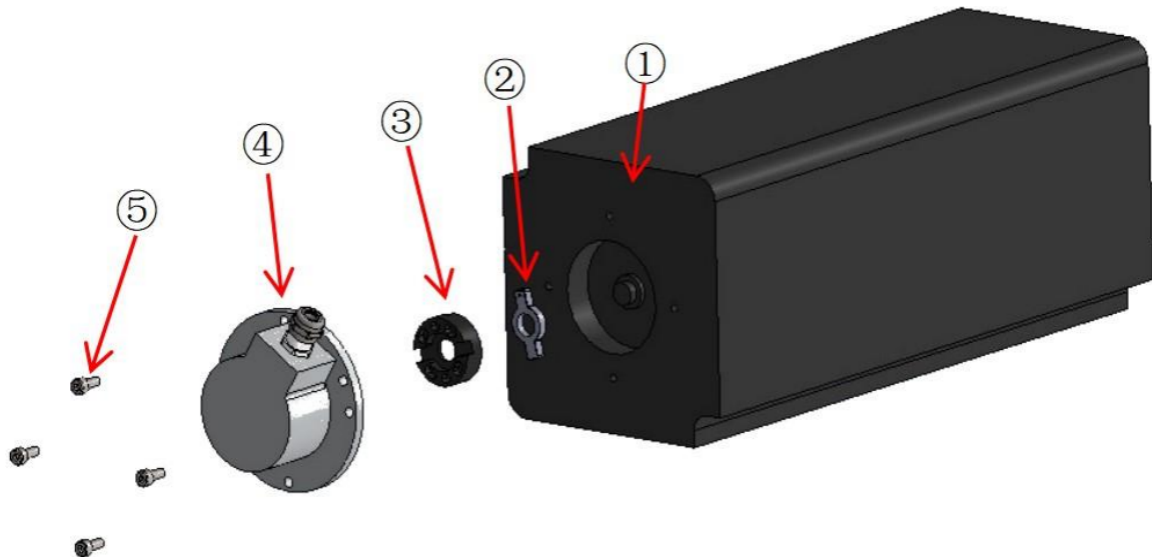
3.3.2 Appendix A:



4 Recommended motor design configurations:



4.1 Recommended installation method:



1. Clean the motor shaft and cross coupling assembly (②) of dust, dirt, and rust;
2. Apply adhesive evenly on both the motor shaft and the inner wall of the ten-piece coupling assembly (an anaerobic adhesive (648) is recommended).
3. Then install the cross coupling assembly (②) onto the motor shaft, ensuring that the lower end face of the assembly (②) and the upper end face of the motor shaft are aligned in the same plane during installation.
4. Wait for 30 minutes until the glue is fully cured before proceeding to the next step.
5. Gently insert the cross-coupling motor end assembly (③) into assembly (②) to prevent damage to the motor and encoder assembly.
6. Gently insert the cross-coupling encoder (④) until its stop face is fully flush with the motors stop face, while ensuring the encoders lower end aligns perfectly with the motors upper end (never use striking or similar methods during this process).
7. The 4-M4 (⑤) screws are tightened in a crosswise sequence along the mounting hole.

5. Connection definition:

5.1 Wiring Definition:

5.1.1 RS485 and RS232 protocols:



1	2	3	4	5	6	7	8
5V	0V	D+	D-	3.6V battery	0V cell	empty	shield
red	black	blue	yellow	brown	white	empty	shield

5.1.2 BISS and SSI protocols:



1	2	3	4	5	6
Data-	Data+	Clock-	Clock+	GND	VCC
red	black	blue	yellow	brown	white

5.2 Socket Definition:

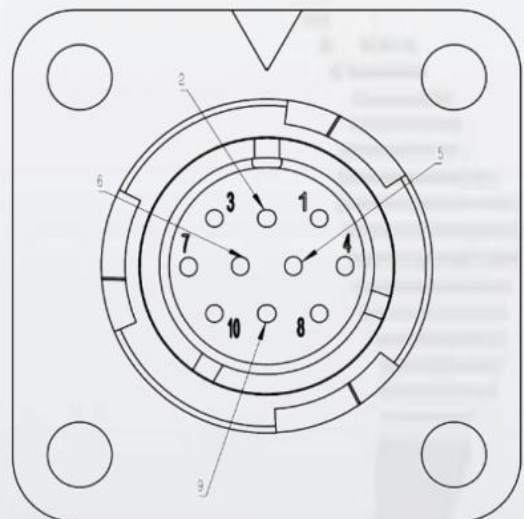
5.2.1 RS485 and RS232 protocols:

Rear socket pin sequence	definition
4	5V
9	GND
1	D+
2	D-
6	Battery+
5	Battery GND
10	PE



5.2.2 BISS and SSI protocols:

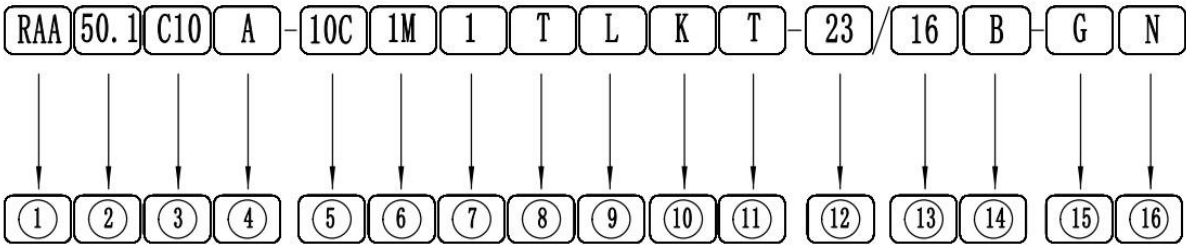
Rear socket pin sequence	definition
4	5V
9	GND
1	Data+
2	Data-
6	Clock+
5	Clock-
10	PE



6. technical parameter :

Product model	Example: RAA50.1C10A-10C1MTLKT-23/16B-GN
Single loop resolution	23-bit (17-bit, 25-bit, or 26-bit optional)
Multi-turn resolution	16bit
CI	RS485 (RS232 , BISS、 SSI)
Service voltage	5V±0.25
Cell voltage	2.5MHz (5MHz is also available in large quantities)
Battery supply voltage	Supports up to 16K
Battery warning voltage	binary system
Baudrate	2.5 MHz (available in large quantities)
Refreshrate	Supports up to 16K
Communication code	binary system
Along the time of change	100ms
Working temperature	-10° c~90° C
Working humidity	Below 90% (no condensation)
Storage temperature	-20°C~100°C
Storage humidity	Below 95% R H (no condensation)
Iash	Shock acceleration: 980 m/s ² , 11 ms; 3 shocks applied per direction, 18 shocks in total.
Vibrate	10 – 55 Hz: 1.5 mm amplitude; 55 – 2000 Hz: 98 m/s ² acceleration; 2 h/test per X/Y/ Z axis, total 6 h.
Maximum permissible speed	N: Default Rotational Speed (6000 rpm) G: High Rotational Speed (6000 rpm < Speed < 12000 rpm)
levelsofprotection	IP65
Accuracy	D: 40 ± 10 (Default Accuracy) N: 20 (High-Accuracy Custom)

7. Model definition:



Number	Definition description
①	Basic model: RAA50.1C10; Temperature-sensing model: RTA50.1C10
②	External dimensions: $\Phi 50\text{mm}$
③	$\Phi 10$ cross coupling
④	appendix A
⑤	10C: $\Phi 10$ radial aviation plug output G: radial cable outlet
⑥	1M line
⑦	5V
⑧	RS 485 (RS232, BISS, SSI) communication interface
⑨	2.5 MHz baud rate (5 MHz\other large batch options available)
⑩	16K update rate
⑪	synchronous communication protocol
⑫	23-bit single-cycle resolution (17-bit, 25-bit, or 26-bit single-cycle resolution available)
⑬	16-bit multi-turn resolution
⑭	positive logic binary code
⑮	None: Default speed (≤ 6000 rpm) G: High speed 6000 rpm ($\text{speed} \leq 12000$ rpm)
⑯	None: Default precision ($40'' \pm 10$) N: High-precision custom model ($\leq 20''$)

The specifications shown in the figure are: 50 mm outer diameter, with Attachment A (cross coupling), 1-meter-long aviation plug output, 5V operating voltage, RS485 interface (2.5 MHz baud rate, 16 K update rate), timed communication protocol transmission, 23-bit for single revolution and 16-bit for multiple revolutions, positive logic binary code output, high-speed operation, and high-precision custom design.



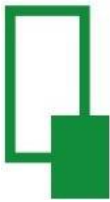
8. Communication protocol (17 bit-23 bit):

8.1 Overview (17 bit-23 bit)		
unit	description	remarks
communication code	binary system	
communication circuit	differential drive	RS485
Data transfer content	Single-loop position information	17 bits (maximum 23 bits)
	multi-loop position information	16bit
	status flag	(1)Over Speed (2)Full absolute status (3)Counting Error (4)Counter overflow (5)Over-heat (6)Multi-turn error (7)Battery alarm (8)Battery error
traffic rate	2.5Mbps	--

*All protocol specifications in this encoder are client-customized. Some clients may not achieve perfect alignment, which is normal. For any protocol customization or alignment requirements, we can collaborate on development.

8.2 EEPROM Communication Specifications		
unit	description	remarks
Read and write user parameter address range	0~0x7E	This address field can be used to store user parameters

Address	0x7F	0-5
maximum number of write cycles	100,000 times	The number of times the user can save and write parameters



8.3 Frame Format

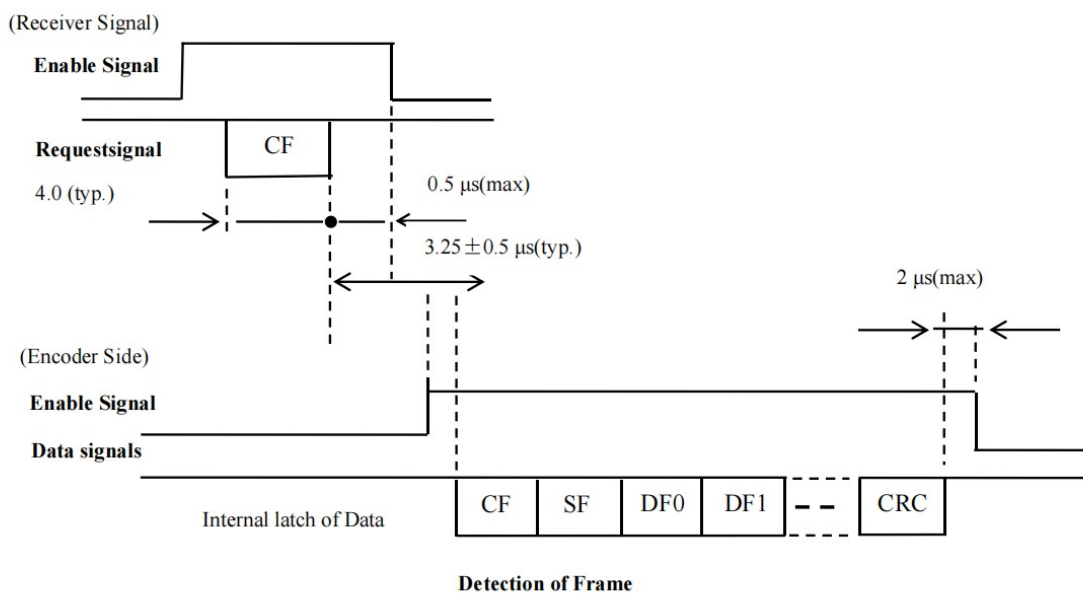
Each data frame is divided into several bytes, and the sending and receiving of each byte is realized by 1 start bit, 8 data bits and 1 stop bit, the low bit is in front and the high bit is behind.

Terms used in data frame transmission:

unit	description	remarks
CF	Control Field	Use this to identify different command types
SF	Status Field	The encoder state is obtained through this section
DF	Data Field	encoder position data
ADF	Address Field	Accessible encoder address
EDF	E2PRM Field	Address content
CRC	CRC verification	Polynomial: $x + 1$ (XOR operation applied to all data except CRC)

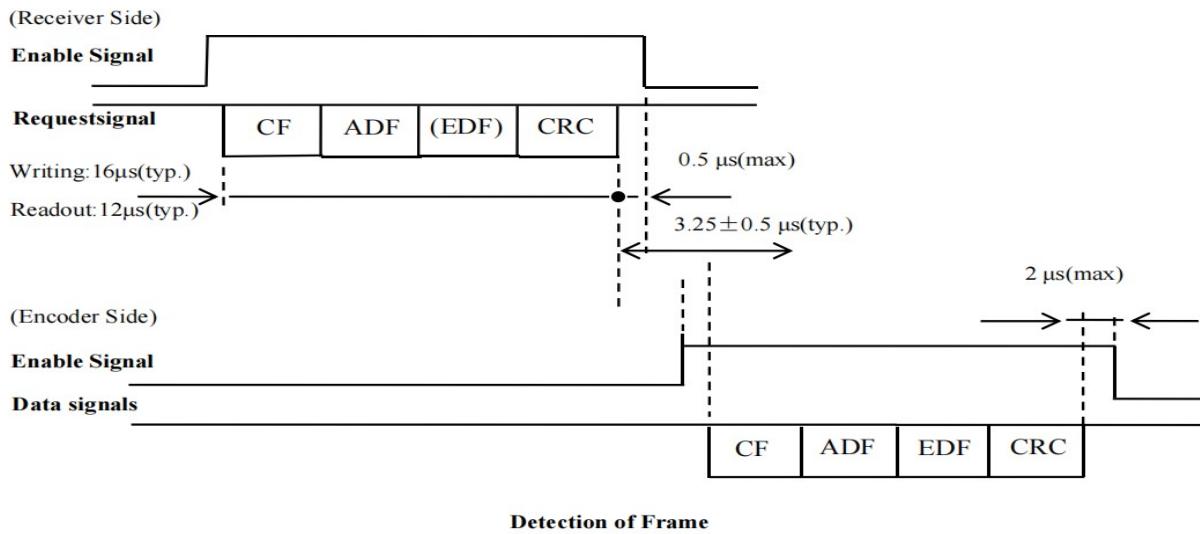
8.3.1 Location data reading

(Receiver Signal)

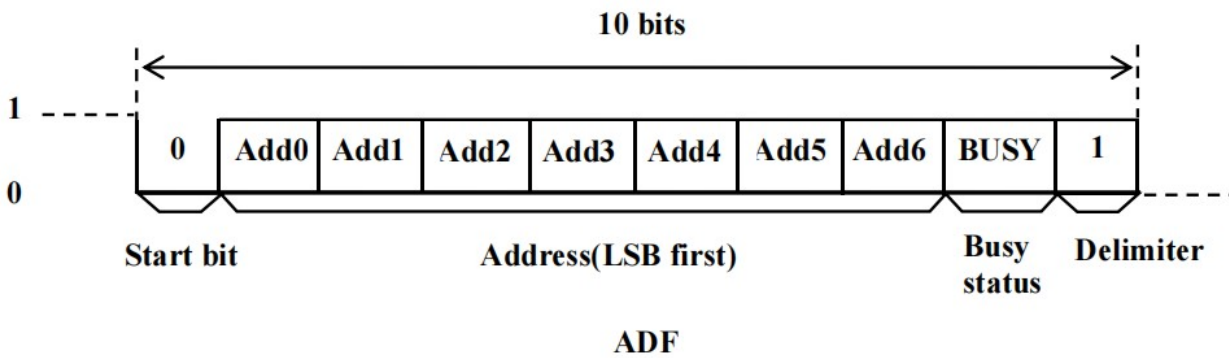


※ The number of DF data points varies depending on the CF.

8.3.2 EEPROM Read and Write



8.3.3 ADF and EDF during EEPROM operation



- (1) Startbit: Fixed
- (2) Address: EEPROM address range 0~127
- (3) Busy status: The access status of EEPROM can be checked through the busy status bit.

8.4 Detailed Description

8.4.1 Control Field(CF)		
CF class	CF content	remarks
read data	ID0 (0x02)	Absolute position information reading (CF+SF+ABS+CRC)
	ID1 (0x8A)	Multi-loop data information reading (CF+ABM+CRC)
	ID2 (0x92)	Encoder ID information reading (CF+ID+CRC)
	ID3 (0x1A)	Read all data (CF+SF+ABS+ID+ABM+ALMC+CRC)
	ID4 (0x2B)	Read the required data (SF+ABS+ABMO+ABM1+ALMO+CRC)
Write E 2 P R O M	ID6 (0x32)	The 8-bit "user data" can be written to the specified address. Within 20µs after the instruction format is sent, the encoder will respond with data. Do not communicate with the encoder during this process.
Read E 2 P R O M	IDD (0xEA)	The 8-bit "user data" can be read from the specified address. Within 20µs after the instruction format is sent, the encoder will respond with data. Do not communicate with the encoder during this process.
reset	ID7 (0xBA)	The reset instruction requires that the instruction be sent continuously 10 times with a time interval of not less than 62.5µs, and all fault flag bits are reset.
	ID8 (0xC2)	The reset command requires 10 consecutive transmissions at intervals of no less than 62.5 microseconds to reset any single cycle position to zero. Even after a power cycle, the position data remains unchanged from the reset state.
	IDC (0x62)	The reset command requires sending 10 consecutive commands at intervals of no less than 62.5 microseconds to reset all multi-turn data (without affecting single-turn data). Reset all fault flags.

Note: CF consists of one byte, with categories and content as shown in the table above.

8.4.3 DataField(DF0~DF7)								
CF type	DF0	DF1	DF2	DF3	DF4	DF5	DF6	DF7
ID0 (0x02)	ABS0	ABS1	ABS2					
ID1 (0x8A)	ABMO	ABM1	ABM2					
ID2 (0x92)	ENID							
ID3 (0x1A)	ABS0	ABS1	ABS2	ENID	ABMO	ABM1	ABM2	ALMC
ID4 (0x2B)	ABS0	ABS1	ABS2	ABMO	ABM1	ALMC		
ID7 (0xBA)	ABS0	ABS1	ABS2					
ID8 (0xC2)	ABS0	ABS1	ABS2					
IDC (0x62)	ABS0	ABS1	ABS2					

※The number of bytes in DF varies depending on the CF type, as shown in the table above

pour :

1. In the ABS0~ABS encoding scheme, the lower, middle, and upper bits of the encoders absolute position are designated as ABS. For a 23-bit encoder, the high 7 bits of ABS 2 are set to 0, with the remaining 17 bits encoding the position.
bit).
2. ABMO~ AB represents the low, middle, and high bits of the encoders multi-turn position, where ABM is all zeros and the remaining data forms a 16-bit multi-turn information.
3. ENID is the ID of the encoder, with values of 0x11 (17-bit) or 0x17 (23-bit).

8.4.4 Fault Description

See the table below for ALMC faults:

Bit	0	1	2	3	4	5	6	7
Fault name	Over Speed	Full absolute status	Counting error	Counter overflow	Over heat	Multi-turn error	Battery error	Battery alarm

Description of each fault flag

Fault name	function declaration	countermeasure
Over Speed	Acceleration detected in a 5V dead battery state The magnitude exceeds 2000 rad/s ² , which is a significant indicator. It should only be used as its target, because in some cases... In some cases, it may not be detectable.	fault reset
Full absolute status	Encoder rotation detected during 5V power-up process Speed greater than 100rpm (±20 rpm)	Power on again
Counting error	single loop information solution failure	Power on again
Over heat	excess temperature	fault reset
Multi-turn error	Multiple circuit data loss, multiple circuit counting failure	fault reset
Counter overflow	When the multi-cycle counter overflows, the logic 1 is marked.	fault reset
Battery error	The battery voltage is below 2.75V. Set it.	Check the electromagnetic power supply line and replace the battery
Battery alarm	The battery voltage is below 2.75V. Set it.	The fault automatically disappears after replacing the battery with a properly voltageed one.



9. Communication protocol (25 bit/26 bit):

9.1 Overview		
unit	description	remarks
communication code	binary system	
communication circuit	differential drive	RS485
Data transfer content	Single-loop position information	25bits/26bit
	multi-loop position information	16bit
	status flag	(1)Over Speed (2)Full absolute status (3)Counting Error (4)Counter overflow (5)Over-heat (6)Multi-turn error (7)Battery alarm (8)Battery error
traffic rate	2.5Mbps	25bit
	10Mbps	26bit

*All protocol specifications in this encoder are client-specific. Incomplete compatibility may occur with some clients, which is normal. Customized protocols or compatibility requirements can be developed through mutual consultation.

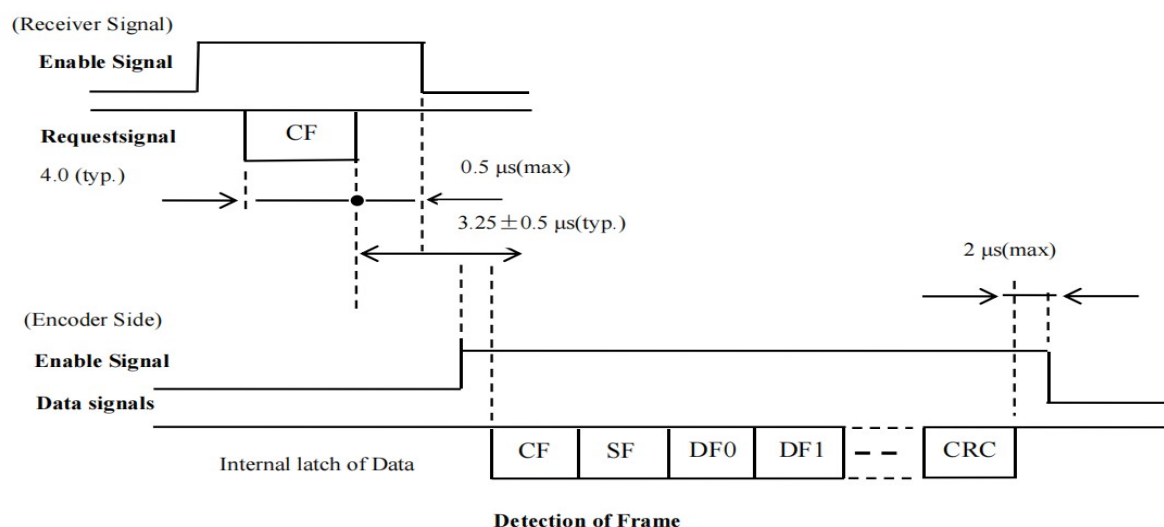
9.3 Frame Format

Each data frame is divided into several bytes, and the sending and receiving of each byte is realized by one start bit, eight data bits and one stop bit, with the low bits in front and the high bits in the back.

Terms used in data frame transmission:

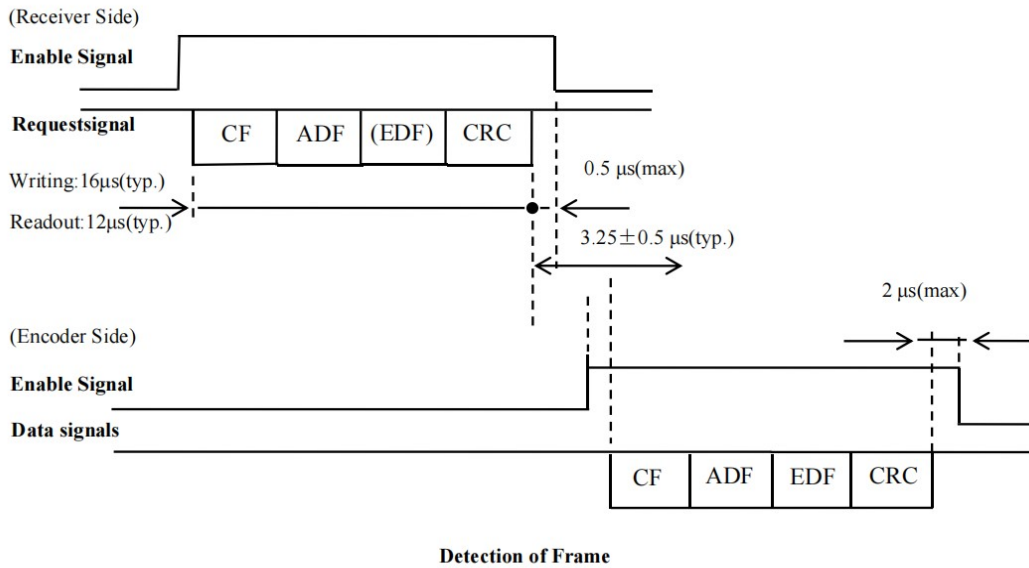
cell	description	remarks
CF	Control Field	Use this to identify different command types
SF	Status Field	The encoder state is obtained through this section.
DF	Data Field	encoder position data
ADF	Address Field	Accessible encoder address
EDF	E2PRM Field	Address content
CRC	CRC verification	Polynomial: $\times 8+1$ (XOR of all data except CRC)

9.3.1 Location Data Reading

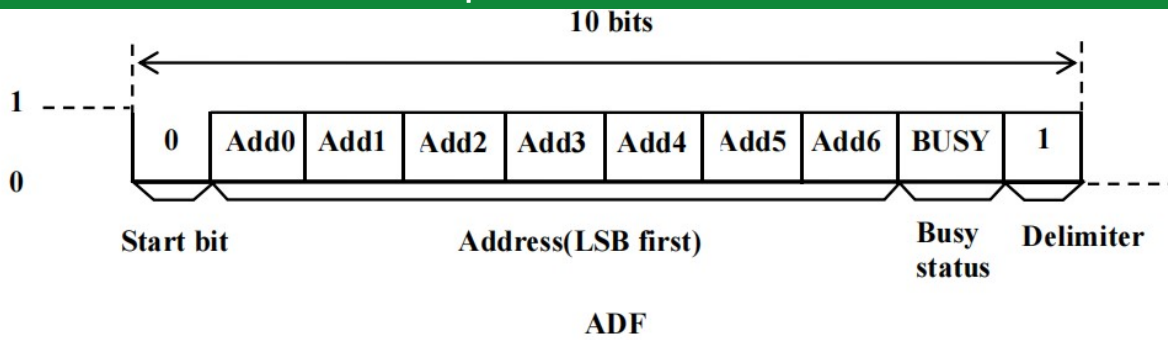


※ The number of DF data points varies depending on the CF.

9.3.2 EEPROM Read and Write



9.3.3 ADF and EDF in EEPROM Operations



- (1) Startbit: Fixed
- (2) Address: EEPROM address range 0-127
- (3) Busy status: The access status of EEPROM can be checked through the busy status bit.

9.4 Detailed Description

9.4.1 Control Field(CF)		
CF class	CF content	remarks
read data	ID2 (0x92)	25-bit encoder ID information read (0x19) 26-bit encoder ID information read (0x1A)
	ID3 (0x1A)	Read all data (single cycle + multiple cycles + fault flag + encoder D)
	ID4 (0xA2)	Read single loop position
	ID5 (0x2A)	Read single and multiple loop positions
write EEPROM	ID6 (0x32)	The 8-bit "user data" can be written to the specified address. Within 20 μs after the instruction format is sent, the encoder transmits the data back during this process. Do not communicate with the encoder.
a slight pause in reading EEPROM	IDD (0xEA)	The 8-bit "user data" can be read from the specified address. Within 20 μs after the instruction format is sent, the encoder will return the data. During this process, do not Communicate with the encoder.
reset	ID7 (0xBA)	The reset instruction requires that the instruction be sent continuously 10 times with a time interval of not less than 62.5us, and all fault flag bits are reset.
	ID8 (0xC2)	The reset command requires sending 10 consecutive commands at intervals of no less than 62.5 microseconds to reset any single cycle position to zero. Even after a power cycle, this position Keep the position data after reset.
	IDC (0x62)	The reset instruction requires sending 10 consecutive commands at intervals of no less than 62.5 microseconds to reset all multi-turn data (without affecting single-turn data) and reset all fault flag bits.

Note: CF consists of one byte, with categories and content as shown in the table above.

9.4.2 Status Field(SF)		
item	description	remarks

Bit0	Rsvd	All zeros
Bit1	Rsvd	
Bit2	Rsvd	
Bit3	Rsvd	
Bit4	CountingError	Encoder position calculation failure, this bit will set to "1"
Bit5	Multiple circuit errors, battery error, and battery alarm	View sub-faults in ALM
Bit6	Rsvd	All zeros
Bit7	Rsvd	

Note: CF consists of one byte, with categories and content as shown in the table above.

9.4.3 DataField(DF0~DF7)								
CF type	DF0	DF1	DF2	DF3	DF4	DF5	DF6	DF7
ID2 (0x92)	ENID							
ID3 (0x1A)	ABS0	ABS1	ABS2	ENID	ABS3	ABM0	ABM1	ALMC
ID4 (0xA2)	ABS0	ABS1	ABS2	ABS3				
ID5 (0x2A)	ABS0	ABS1	ABS2	ABS3	ABM0	ABM1		
ID7 (0xBA)	ABS0	ABS1	ABS2					
ID8 (0xC2)	ABS0	ABS1	ABS2					
IDC (0x62)	ABS0	ABS1	ABS2					

※The number of bytes in DF varies depending on the CF type, as specified in the table above.

The 25-bit encoder ABS0~ABS3 encodes the absolute position of a single circle with 32 bits of data, where ABS0 is the least significant bit and ABS3 is the most significant bit. The lower 7 bits of ABS3 are set to "0", and the remaining valid data forms the 25-bit single-circle position data.

The 26-bit encoder ABS0~ABS3 encodes the absolute position of a single circle with 32 bits, where ABS0 is the least significant bit and ABS3 is the most significant bit. The lower 6 bits of ABS0 are set to "0", and the remaining valid data forms the 26-bit single-circle position data.

The ABM0~ABM encoders multi-turn position consists of two data bits (low and high) that form a 16-bit multi-turn information.

ENID is the ID of the encoder, with the 25-bit value being 0x19 and the 26-bit value being 0x1A.

ALM bit encoding fault flag



9.4.4 Fault Description

1. ALMC failure details are shown in the table below:

Bit	0	1	2	3	4	5	6	7
Fault name fit	Over speed	Full absolute ststus	Counting error	Counter overflow	Over heat	Multi-turn error	Battery error	Battery alarm

2. The explanations for each fault flag are shown in the table below:

Fault name	function declaration	countermeasure
Over speed	5V power loss, acceleration detected exceeds limit in battery state 2000 rad/s ² . This marker should be reserved exclusively for this target, as it may not be detectable under certain conditions.	fault reset
Full absolute ststus	During the 5V power-on process, the encoder speed was detected to exceed 100rpm (± 20 rpm).	Power on again
Counting error	single loop information solution failure	Power on again
Over heat	excess temperature	fault reset
Multi-turn error	Multiple circuit data loss, multiple circuit counting failure	fault reset
Counter overflow	When the multi-cycle count overflow occurs, the logic 1 is marked. come out	fault reset
Battery error	The battery voltage is below 2.75V. Set it.	Check the battery power supply line and replace the battery
Battery alarm	The battery voltage is below 3.1V. Set	The fault automatically disappears after replacing the battery with a properly voltageed one.

9.5 Overview of BISS and SSI:

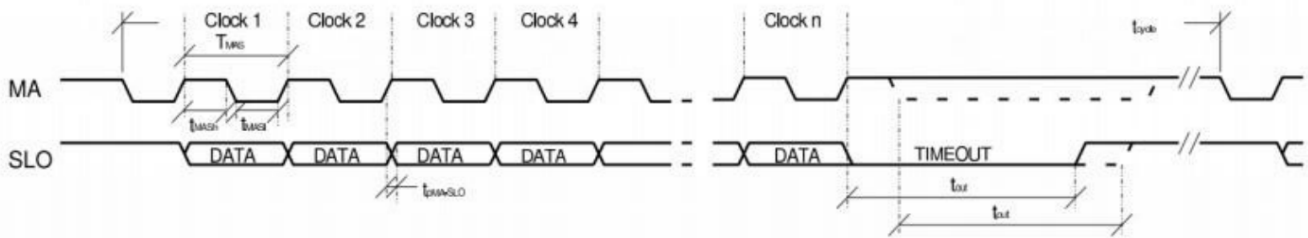


图 1：采用 SSI 协议的 I/O 接口时序

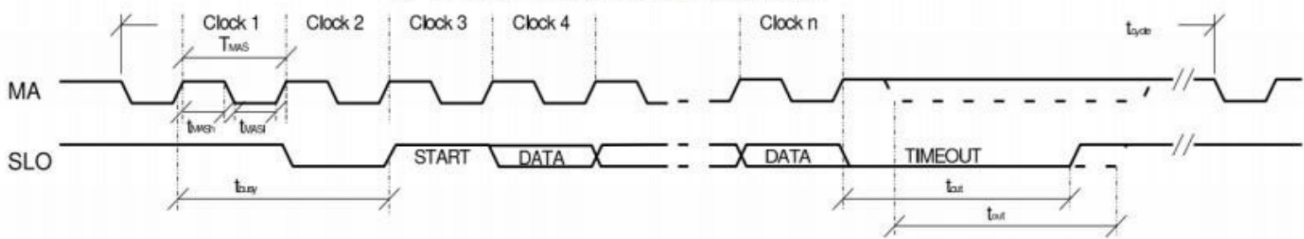


Figure 2: I/O interface timing with BiSSC protocol

order number	symbol	parameter	condition	minimum	maximum	unit
SS I 1001	protocol TMAS	allow clock cycle	The $t_{out1,2,8,16}$ μ s can be factory-set	250	2xtout	ns
1002	tMASH	high level duration of clock signal		25	tout	ns
1003	MASI	low level duration of clock signal		25	tout	ns
1004	tyce	Permitted cycle time: Example of 19-bit single-turn data calculated by 3 track cursor code	MODE_ST=0x05...0x07, UBL_M=13bit, UBL_N+SBL_N=7bit, UBL_S+SBL_S=7bit	11.25		μ s
BiSSC protocol (NBISS=0x0)						
1005	TMAS	allow clock cycle	The $t_{out1,2,8,16}$ μ s can be factory-set	100		ns
1006	tMASH	high level duration of clock signal		25	Lout	ns
1007	tMASI	low level duration of clock signal		25		ns
1008	tbusy	minimum data output delay	Mode settings: ST=0x05 to 0x0B, 0x0D to 0x0F, with MAlo \rightarrow hi and SLOlo \rightarrow hi transitions	2xTMAS		μ s
1009	busy	Maximum Data Output Delay: An Example of 19-bit Single Cycle Data Calculated from 3-track Cursor Code	Mode setting: 0x0....0x02, fclk (MA): 10 MHz, UBL_x and SBL_x refer to 1004		5.3	μ s
1010	tbusy	Maximum Data Output Delay: An Example of 19-bit Single Cycle Data Calculated from 3-track Cursor Code	Mode setting: 0x03 to 0x04, fclk (MA) at 10 MHz, UBL_x and SBL_x as specified in 1004		10	μ s

1011	tbusy	Maximum data output delay: Example of 39-bit single-cycle data from 3-track interpolation without synchronization	MODE_ST=0x0C, fclk(MA)=10 MHz, UBL_M13bit, UBL_N13bit, UBL_S 13 b it		14	μs
1012	tcycle	Allow cycle period: 19-bit single-cycle data calculated by 3-bit track cursor code	MODE_ST=0x05. ... 0x07. For UBL_x and SBL_x, refer to 1004	11.25		μs

10 Temperature Alarm Setting and Temperature Measurement

10.1.1 Install a temperature alarm device and measure the temperature at the encoder end by using the EEPROM interface command.

10.1.2 Temperature alarm settings: Use EEPROM page 7 address 4 for temperature reading, and address 5 for temperature measurement.

10.1.3 Overtemperature Alarm Settings Table

Address	EEP ROMdata		Over heat detection Temperature
	Edd7	edd6. Edd()	
Page7	0	X X X X X X X	Not output
Address4	1	0000001	+1° C
	1	0000010	+2° C
	1	0000011	+3° C

	1	1111111	+126° C
	1	1111111	+127° C

10.1.4 Read Temperature

Address	EEP ROMdata		Temperature measurements
	Edd7	edd6. Edd ()	
Page7		10000000	-128° C
Address5		10000001	-127° C
	
		11111111	-1° C
		00000000	±0° C
		00000001	+1° C
	
		01111110	+126° C
		01111111	+127° C