314 PROTOCOL OF SERIAL INTERFACE

BAUDRATE:9600
PARITY: NO
DATA BITS: 8
STOP BITS : 1

The command of Digital Output is list below:

RS232 command	Function	Remarks
K(ASC 4BH)	Ask for model No.	Return 4 bytes
A(ASC 41H)	Inquire all encoded data	Return encoded 10 byte
H(ASC 48H)	Hold button	
M(ASC 4DH)	MAX/MIN button	
N(ASC 4EH)	Exit MAX/MIN mode	
T(ASC 54H)	TIME button	
C(ASC 43H)	C/F button	
E(ASC 45H)	REC button	

- **Command K:**
  Return 4 bytes of model No. For example, when sends command "K" to meter, it will return "3","1","4", “B”.
- **Command H:**
  Equivalent to one pushing on the HOLD button and no message is returned.
- **Command M:**
  Equivalent to one pushing on the MAX/MIN button and no message is returned.
- **Command N:**
  Equivalent to one pushing and hold the MAX/MIN button for two seconds to exit MAX/MIN mode.
- **Command T:**
  Equivalent to one pushing on the TIME button and no message is returned.
- **Command C:**
  Equivalent to one pushing on the °C/°F button and no message is returned.
- **Command E:**
  Equivalent to one pushing on the REC button and no message is returned.
- **Command A:**

1st BYTE:
The value of first byte is 02H. It represents the start of data string.

2nd BYTE:

bit7	bit6	bit5	Bit4	bit3	bit2	bit1	bit0
Low Battery	Auto Power Off	TIME	REC	C/F	HOLD	MAX/MIN	

bit 1 bit 0

0	0	→NORMAL mode.
0	1	→MAXMUN mode.
1	0	→MINIMUN mode.
1	1	→calculate MAX/MIN in background mode .

bit 2: 1→ HOLD, 0→not HOLD.
bit 3: 1→°F , 0→°C.
bit 4: 1→recording mode, 0→not recording.
bit 5: 1→Indicates the LCD is displaying time.
bit 6: 1→Auto power off enabled. 0→Auto power off disabled.
bit 7: 1→LOW BATTERY , 0→BATTERY OK

3rd BYTE:

bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
sign	OL	sign	OL	sign	OL	resolution	Memory full

bit 0: 1→Memory is full. 0→Memory is available.
bit 1: 1→T2 resolution is 1° , 0→T2 resolution is 0.1°
bit 2: T2 is OL , 0→not OL.
bit 3: 1→T2 value is minus , 0→T2 value is plus.
bit 4: 1→T1 is OL , 0→not OL
bit 5: 1→T1 value is minus , 0→T1 value is plus.

bit 6: 1→%RH is OL , 0→not OL.

bit 7: 1→%RH value is not available , 0→%RH value is plus.

4th BYTE: first byte indicates RH value with Binary format.

5th BYTE: last byte indicates RH value with Binary format.

6th BYTE: first byte indicates T1 value with Binary format.

7th BYTE: last byte indicates T1 value with Binary format.

8th BYTE: first byte indicates T2 value with Binary format.

9th BYTE: last byte indicates T2 value with Binary format.

10th BYTE: end byte, Its value is 03H, and it is used for end of Data Check.