TC0304/ TC0309

# PROTOCOL

## OF SERIAL INTERFACE


BAUDRATE: 9600
PARITY: none
DATA BITS: 8
STOP BITS: 1

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# COMMAND A:



## 1st BYTE:

The first byte is the start byte , it value is 2.

## 2nd BYTE:

| bit7 | bit6 | bit5 | bit4 | bit3 | bit2 | bit1 | bit0 |
|---|---|---|---|---|---|---|---|
| C/F | Low Bat | Hold | REL | T1-T2 | MAX/MIN | | Recording |

**bit0:** 1->now is recording , 0->not recording

**bit 2 bit 1**

0 0 ->normal mode

0 1 ->MAXIMUM mode

1 0 ->MINIMUM mode

1 1 -> calculate MAX/MIN in background and lcd "MAX""MIN" will flash.

**bit3:**1 ->LCD now is displaying T1-T2 .

**bit4:**1->REL

**bit5:**1- HOLD 0->not HOLD

**bit6:**1->LOW BATTERY 0->BATTERY NORMAL

**bit7:**1->C 0->F

## 3rd BYTE:

| bit7 | bit6 | bit5 | bit4 | bit3 | bit2 | bit1 | bit0 |
|---|---|---|---|---|---|---|---|
| Auto Off | | | | | | | MemFull |

Bit7:1->Auto power off enabled.

**4th BYTE:** T1_State db ? ;
**5th BYTE:** T2_state db ? ;
**6th BYTE:** T3_state db ? ;
**7th BYTE:** T4_state db ? ;

## 8th BYTE and 9th BYTE:

For example: 8th and 9th byte are 0x01 0x02 then channel 1 will be 0x0102 that is 258 in decimal , then divided by 10 , that is 25.8 degree

## 10th BYTE and 11th BYTE:

For example: 10th and 11th byte are 0x01 0x02 then channel 2 will be 0x0102 that is 258 in decimal , then divided by 10 , that is 25.8 degree

## 12th BYTE and 13th BYTE:

For example: 12th and 13th byte are 0x01 0x02 then channel 3 will be 0x0102 that is 258 in decimal , then divided by 10 , that is 25.8 degree

## 14th BYTE and 15th BYTE:

For example: 14th and 15th byte are 0x01 0x02 then channel 4 will be 0x0102 that is 258 in decimal , then divided by 10 , that is 25.8 degree

**16th BYTE** and **17th BYTE:**
When you press the REL key to read the value of channel 1, the solution is the same as above

**18th BYTE** and **19th BYTE:**
When you press the REL key to read the value of channel 2, the solution is the same as above

**20th BYTE** and **21st BYTE:**
When you press the REL key to read the value of channel 3, the solution is the same as above

**22nd BYTE** and **23rd BYTE:**
When you press the REL key to read the value of channel 4, the solution is the same as above

**24th BYTE** and **25th BYTE:**
When you press the MAX/MIN key to read the minimum value of channel 1, the solution is the same as above

**26th BYTE** and **27th BYTE:**
When you press the MAX/MIN key to read the minimum value of channel 2, the solution is the same as above

**28th BYTE** and **29th BYTE:**
When you press the MAX/MIN key to read the minimum value of channel 3, the solution is the same as above

**30th BYTE** and **31st BYTE:**
When you press the MAX/MIN key to read the minimum value of channel 4, the solution is the same as above

**32nd BYTE** and **33rd BYTE:**
When you press the MAX/MIN key to read the maximum value of channel 1, the solution is the same as above

**34th BYTE** and **35th BYTE:**
When you press the MAX/MIN key to read the maximum value of channel 2, the solution is the same as above

**36th BYTE** and **37th BYTE:**
When you press the MAX/MIN key to read the maximum value of channel 3, the solution is the same as above

**38th BYTE** and **39th BYTE:**
When you press the MAX/MIN key to read the maximum value of channel 4, the solution is the same as above

**40th BYTE:** Channel_OL_Set ;
**41st BYTE:** Rel_OL_Set ;
**42nd BYTE:** Max_OL_Set ;
**43rd BYTE:** Min_OL_Set ;
**44th BYTE:** Channel_X1_X10

**45th BYTE:**
The last byte is the end byte , it value is 3, first and last byte are used to check frame error.
For example: 8th and 9th byte are 0x01 0x02 then T1 will be 0x0102 that is 258 in decimal , then divided by 10 , that is 25.8 degree