TC0301

PROTOCOL
OF SERIAL INTERFACE

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

Perfect Prime®

Command list:

RS232	Function	Note
K(ASC 4BH)	Ask for model No.	Return 4 bytes
H(ASC 48H)	Simulate Hold button	Simulate HOLD button
T(ASC 54H)	TC0301:T1/T2/T1-T2(TIMER)	Simulate T1/T2/T1-T2 button(TC0301)
M(ASC 4DH)	Simulate AVG/MAX/MIN	Simulate AVG/MAX/MINbutton
N(ASC 4EH)	Simulate canceling AVG/MAX/MIN	Simulate hold AVG/MAX/MIN button for 2 seconds
R(ASC 52H)	Simulate REL button	Simulate RELbutton
C(ASC 43H)	Simulate C/F button	Simulate C/F
A(ASC 41H)	Ask for LCD reading	See below

Explanation:

Command K:Return 4 bytes. For example, when sends command "K" to 300, then it will return "3","0","0",ASCII(13).

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	K/J	MAX/AVG/MIN		

bit 2   bit 1   bit0

0	0	0	->normal mode
0	0	1	->MAXIMUM mode
0	1	0	->MINIMUM mode
1	0	0	->AVG mode
1	1	1	-> calculate MAX/MIN/AVG in background and lcd

"MAX""AVG""MIN" will flash.

bit3:1->0->K TYPE 1->J TYPE(301 only has K type)

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
		point	minus	OL	point	minus	OL

bit0:1->main window value is OL 0->not OL

bit0:1->main window value is OL 0->not OL

bit1:1->main window value is minus, 0->main window value is plus.

bit2:1->4th byte and 5th byte represent #### 0-> 4th byte and 5th byte represent ###.#

bit3:1->sub window value is OL 0->not OL

bit4:1->sub window value is minus, 0->sub window value is plus.

bit5:1->6th byte and 7th byte represent #### 0-> 6th byte and 7th byte represent ###.#

bit7 bit6:00->Main window is T1-T2,sub window is T1

01->Main window is T1-T2, sub window is T2

10->Main window is T1, sub window is T2

11->Main window is T2, sub window is T1

4th BYTE: first two BCD code of main window value.

5th BYTE: last two BCD code of main window value

6th BYTE: first two BCD code of sub window value.

7th BYTE: last two BCD code of sub window value.

8th BYTE:

The last byte is the end byte , it value is 3, first and last byte are used to check frame error.