

P 8005/ interface protocol

Interface protocol (modification)

9600 bit, with start and stop bit, 8 bit transmitting, without parity check.

The communication protocol from SCM to PC

Protocol 1.: data transmitting protocol

Identification	data						
code							
hex		BCD code					
A5	0D						
A5	06						

The first byte fixed at A5, which is data identification code.

The following is BCD code for 2 byte(data display) or 3 byte(time).

Time style: 0A5H + 06H + 3 byte data

2 kinds of data style: Renovating data style --- 0A5H + 0DH + 2 byte data + A5H + 0BH

Renovating bargraph style --- 0A5H + 0DH + 2 byte data + A5H + 0CH

The indicated bargraph segments are calculated according to 2 byte data and current range.(the last bit of BCD is decimal fraction).

Command and function:

	Command and function:								
	hex	indicator	Data range	Available					
				reading					
A5H	1BH	dBA	0-130.0 dB	0.1 dB		dBA / dBC only one can be			
A5H	1CH	dBC	0-130.0 dB	0.1 dB		displayed			
A5H	02H	FAST	FAST/SLOW only one can be displayed						
A5H	03H	SLOW							
A5H	04H	MAX	MAX/MIN only one can be displayed or non of them						
A5H	05H	MIN	displayed						
A5H	06H	TIME	1:00:00-12:	59:59	ay and renovating time, date,				
					year,	month etc.			
A5H	07H	OVER	Display OVER bargraph and current measured readings						
A5H	08H	UNDER							
A5H	OffH	hold	PC only receive command but not display HOLD symbol						
A5H	0AH	REC	Automatically Saving function (A5H 1AH cancel REC)						
A5H	ОВН	Display renovating data and bargraph							
A5H	0CH	Display renovating bargraph but not data							
A5H	0DH	Display measured readings with decimal all the time.							
A5H	0EH	CANCEL MAX/MIN							
A5	11H	CANCEL OVER& UNDER							
	1								

		range					
A5H	10H	30 Db80 dB					
A5H	20H	50 dB100 dB					
A5H	30H	80 dB130 dB					
A5H	40H	30 dB130dB display AUTO at the same time					

Protocol 2:

In PC interface protocol, the received data should be managed as following:

- 1. according to received data and measured range, calculating and display the bargraph segements (bargraph segements are 51).
- 2. Switchable received data at anytime, when to receive the data, displaying the Max/Min noise, average value and opposite time, with automatic saving function.
- 3. Input the data to access or excel table
- 4. change it to graph
- 5. choosing COM jack, bit, start bit and 8 bit transmitting.
- 6. Transmitting 5AH OACH reading DATA LOGGER receiving ODDH start data analyzing (with saving or not function)

The communication protocol from SCM to PC

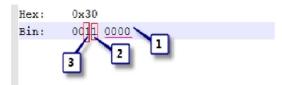
The command style of PC:

Command and function:

command		function										
33H		Power off										
55H		Send out rec command (cancel rec command)										
11H		display max (display min、cancel MAX/MIN)										
77H		Display FAST (display SLOW)										
88H		Range Switch										
99H		Send out dBA command (send out dBC command)										
0ACH		DATA	A LOGO	GER rea	d functio	n						
	DATA LOGGER protocol											
	1. data receiving											
BBH	ХН	XL	aa/cc	year	month	date	hour	minute	Sec.	Sampling	ACH	data
										rate		
BBH	Star	itart signal										
XH/XL	Data	Data volume										
AAH/CCH	DBA	DBA&DBC										
ACH	Star	Start receiving data										
DDH	Ove	Over symbol										

Data format example:

1COUNT TIME: A5 06 30 54 27 0x30 REPRESENT HOUR h = 0x30:



1 ---- single digit hour

2 ---- tens digit hours

3 ---- moring (AM) or afternoon (PM)

Formula calculated as follows:

hour = h&0x0f + ((h>>4)&0x01)*10 + ((h>>5)&0x01)*12

special:

if (hour == 24)

hour = 12;

That is, when the calculated time of 24, the actual 12

If the time is 24, actually is 12.

0x54 represents 54min minutes 0x27 represents 27sec seconds Over time so the time is: 22:54:27

2, other fields please check below.

For other details, please refer to the table, such as (example)

A5 1B ---- dBA

A5 4B ---- range (50 --- 100 dB)