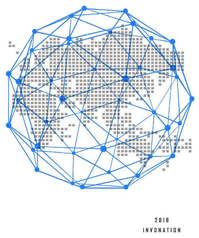
ENTERPRISE USERS MANUAL

DC8S Displayer Manual

SHANGHAI CIXI INSTRUMENT COMPANY

www.microflowmeter.com



2018
INFOMATION

INTRODUCTION

DC8S Series is the industry-special multi-parameter composite monitor,It can be replaced with a signal parameters measurement and control instrument,Enhance system reliability.

The DC8S will work perfectly with pulse sensor,such as Proximity switch;Photoelectric Switch, Encoder;Flow sensor etc. The DC8S can be equipped three programmable alarm contacts,and current signal,RS485;Contact with PLC to composition system to collect data and control.

PANEL

FUNCTION

- Total Flow
- Flow Rate
- Rate Alarm (Hi/Lo Alarm)
- Dosing
- 4-20mA
- RS485

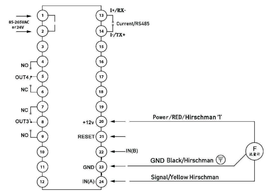
FEATURES

1. Intelligent Key lock parameter to avoid change and prevent others from changing.
2. Double 6 digital LED display,Multi-indicators to indicates working status.
3. Power Supply:12-30VDC or 85-265VAC;
4. EEPROM memory DATA Power off and Save 10 Years.
5. According to CE,EMC anti-interference
6. Total flow factor free to set
7. Total flow memory data when power off
8. Total flow free to set the output time.

MALFUNCTION

1. Measure Inaccurate,Deviations,No Signal;
   - Checking the wiring is correct;
   - Checking the sensor input signal,frequency is correct;
   - Checking the input,CPS is correct;
   - The K factor is correct;
   - The Input signal(0V) connected to GND
2. Cant set any parameters
   - Checking L KY Setting,whether to lock the parameters.

WIRING



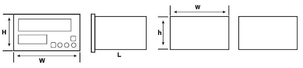
Note:If this wiring different with actual wiring,pls according to actual wiring.

WIRING

TECHNICALS

PARAMETERS	Power Supply	AC85~265V 50/60HzAAC/DC12~30V
	Power	<5W
	Relay capacity	250VAC/3A or 30VDC/5A
	External power AUX	DC12V/50mA(Max)
	Resiatance	≥100MΩ
	Strength	2KV/0.5mA 1 Min
	Anti-interference	Power: +/-2KV Input: +/-400V
	Anti-shock	10~55Hz: 0.75mm
	Enviroment	-25~50℃ ; 85~85%RH
	Input signal	Pulse
	Impedance	>10KΩ
	Input speed	5CPS/300CPS/5KCPS
	Count Range	0.00001~999999(6) 0.0001~9999.9999
	Input delay time	0.01~99.99s
	Factor range	0.00001~999999 0.0001~99999999

DIMENSION



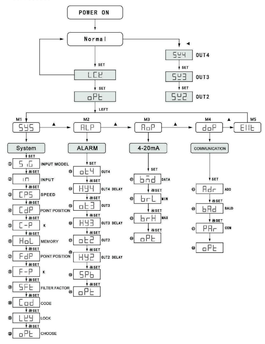
Model	Size HXW	Shell hXwXL	Hole aXb
DC48	48×48	45.5×45.5×94	46.5×46.5
DC72	72×72	69×69×94	70×70
DC8S	48×96	45.5×90.5×90	46.5×91.5

OPERATE

A. SET:Set and Enter ◀:Left (Choose set object) ▼: Reduce
▲:Increase RST:Reset

B:In MENU, Press ▼ +▲ to exit and store

C:Process:



OPERATION

1.1 System Parameters Setting Process

①	S.C	Input Type	SIG-NPN Sensor NPN type(Active low) SIG-PNP Sensor PNP type (Active high) RH-LIC(Rheiko)2P=Total,
②	IPT	Input (IN)	IN-UP,CPS=Total,CPD=instantaneous flow IN-UD-B,CPS=old,CPD=subtrahend,CPS=instantaneous flow IN=UD-C,Phase difference input mode
③	CPS	Input Speed	10:0.001~10Hz; 0.01~300Hz; 5K=0.05~5KHz (Default=5K)
④	CdP	Total point Position	Retained:0-30000:0000;0000;00;000;0000;00;000000
⑤	C-P	Total Ratio	Each Value could convert into instantaneous flow and press RST to change position.
⑥	HoL	Power off memory	HCL=YES with it, HCL=NO without it
⑦	FdP	Line speed point position	Retained:0-3 :000;000 :0000;00 :000000;0 :000000
⑧	F-P	Speed Ratio	Each Value could convert into instantaneous flow and press RST to change position
⑨	SPE	Filter constant	Filter frequency of instantaneous flow can be modified 0-12 times

1.2 Alarm parameters Setting process

⑩	oL4	OUT4 Output	OT4 with B Output(NF N.R.C;H-L;HI-LO)[F.N.R.C;H-L]OUT4 output mode HI-L;Fin alarm mo;Input.
⑪	HI1	OUT4 Delay	OT4 Delay Range:0.01~99.99s/OUT~HI-LO,OUT4 instantaneous flow backlash
⑫	oL3	OUT3 Output	OT3 4 outputs (HCL,TIM,FHI,FLO)HCL;LB TIM is OUT3 Total alarm mode FHI;FLO is OUT3 instantaneous flow alarm model
⑬	HI2	OUT3 Delay	OT3 Delay range:0.01~99.99s/OUT~HI-LO, instantaneous flow backlash

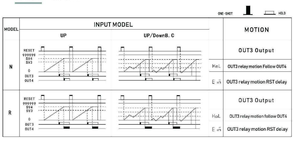
1.3 Transmitter parameters setting process

⑭	bnd	Transmitter	BND=BC,Transmitter signal is Total transmitter BND=BF,Transmitter signal is instantaneous transmitter
⑮	brL	Low Frequency ratio	Press LEFT key to set when value flashing adjust by TOP.BELOW Can change frequency ratio range:-999999~999999 To press SET to store.
⑯	brH	High Frequency ratio	Press LEFT key to set when value flashing adjust by TOP.BELOW Can change frequency ratio range:-999999~999999 To press SET to store.

1.4 Communication parameter setting Process

⑰	Adr	Communication	Press LEFT key to set when value flashing adjust by TOP BELOW SLAVE add,Range:0-255,Store by SET key
⑱	bAd	Baud rate	Press LEFT key to set when value falshing Adjust by TOP BELOW key Range:4800 9600 19200 38400 [bps],Srote by SET
⑲	PAr	COM Parameter	1.8.1.n(1 stop bit no check)1.8.2.n(2 stop bit,no check) 1.8.1.e(1 stop bit no check) .1.8.2.E (2 stop bit,no check)

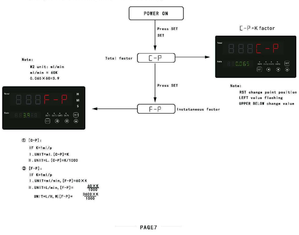
ALARM MODEL



OPERATION

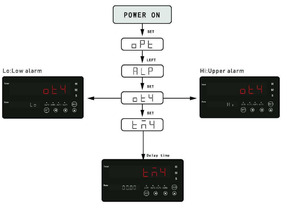
1. System parameters

Example M2 UNIT:ml/min. K=0.065ml/p

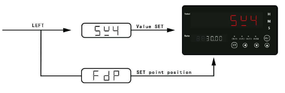


SIGNAL ALARM

1 Signal instataneous alarm

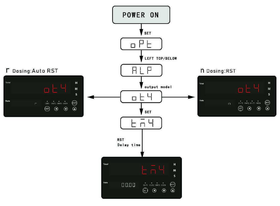


2 Signal instataneous alarm

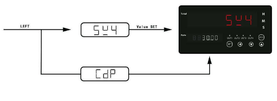


Signal Total alarm

1 Signal total alarm

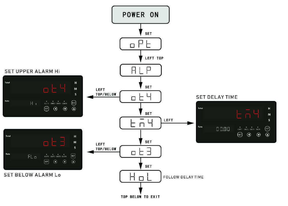


2 Signal Total alarm value



Double alarm

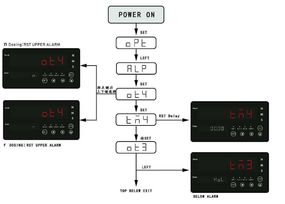
1:Double instataneous alarm



2 Double alarm value Set

Double dosing set

1 Double dosing setting



2 Value of double alarm

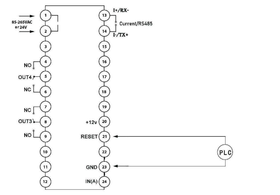
REMOTE CONTROL RESET

1. Case analysis – Dispensing

Set total alarm control,To control the DC8S reset by PLS system

To set the DC8S to control the signal amount of glue,Once reach alarm,the PLC will control the DC8S to reset,and working continue.

Waring



Note: RESET and GND reset by touch at moment

MODBUS-RTU

Register format:16bit(SHORT),8000~7FFF(-32768~32767);32bit(LONG)

MODBUS	HEX	Bytes	Name	Ins	Range	Action
40001	0000	4	PV1	Total	F0BC1-04F23F(-199999~999999)	R
40002	0001	4	PV2	Instataneous	F0BC1-04F23F(-199999~999999)	R
40003	0002	4	SV4	SV4	F0BC1-04F23F(-199999~999999)	R/W
40004	0003	4	SV3	SV3	F0BC1-04F23F(-199999~999999)	R/W
40005	0004	4	SV2	SV2	F0BC1-04F23F(-199999~999999)	R/W
40006	0005	2	S1G	Signal	0000-0001(0-1) 0:NPN,1:PNP	R/W
40007	0006	2	INP	Input	0000-0003(0-3) 0:UD;B,1:UD-C,2:B,3:UP	R/W
40008	0007	2	CPS	Cutoff frequency	0000-0002(0-2) 0:5K,1:300,2:10	R/W
40009	0008	2	CDP	Total point	0000-0003(0-3) 0:0,1:0.0,2:0.00,3:0.000	R/W
400010	0009	4	C-P	Total K factor	F0BDC1-04F23F(-199999~999999)	R/W
400011	000A	2	HoL	Memory	0000-0001 (0-0001) 0:No,1:Yes	R/W
400012	000B	2	FDP	Instataneous point	0000-0003 (0-3) 0:0,1:0.0,2:0.00	R/W
400013	000C	4	F-P	Instataneous K	0000-0003 (0-3) 0.0,1:0.0,2:0.00	R/W
400014	000D	2	SFT	Filter factor	0000-000C (0-12)	R/W
400015	000E	2	C0D	Code	0000-270F (0-9999)	R/W
400016	000F	2	LKY	LOCK	0000-0001 (0-1) 0: NO,1:YES	R/W
400017	0010	2	OT4	OUT4	0000-0003 (0-3) 0:C,1:N,2:H,3:L,4:N,5:L,6:H,7:LO	R/W
400018	0011	2	TM4	OUT4 DELAY	0000-270F (0-9999)	R/W
400019	0012	2	OT3	OUT3	0000-0003 (0-3) 0:No,1:TIM,2:FHI,3:FLO	R/W
400020	0013	2	TM3	OUT3 DELAY	0000-270F (3-9999)	R/W
400021	0014	2	OT2	OUT2	0000-0001 (0-1) 0: HI,1:LO	R/W
400022	0015	2	TM2	OUT2 DELAY	0000-270F (3-9999)	R/W
400023	0016	4	SPB	ALARM	F0BDC1-0F423F(-199999~999999)	R/W
400024	0017	2	ADR	SALVE	0000-00FF(0-255)	R/W
400025	0018	2	BAD	BAUD RATE	0000-0003(0-3)0:4.8K,1:9.6K,2:19.2K,3:38.4K	R/W
400026	0019	2	PAR	COM	0000-0003(0-3)0:1.8.1,N,1.8.2,N 2:1.8.1,O,3:1.8.1,E	R/W

MODBUS-RTU

1) Command 03H, read the coil value, eg: read OUT4 with ON state

SLAVE add	Command	Parameter first address		Coil numbers		Check code	
01	01	HByte	Lbyte	HByte	Lbyte	Lbyte	HByte
		00	03	00	01	0D	CA

Slave Correct Respond

SLAVE add	Command	Byte length	DATA	CHECK code
01	01	01	01	90 48

Slave Wrong Respond

01	81	xx	xx xx

2) Command 03H, write the coil value, write the totalize value reset

Master send

SLAVE add	Command	Content		Check code		
01	05	HByte	Lbyte	HByte	Lbyte	Lbyte	HByte
		00	05	FF	00	9C	3B

Slave Correct Respond

SLAVE add	Command	Rtn add	Check code	
01	05	00 05	D1	DA

Slave Wrong Respond

01	85	xx	xx xx

3) Command 03H, read the parameters keeped by the registers,if PV1=0X08(HEX) (read 10 registers one time)

Master send

Instrument add	Command	Parameter first address		Data		Check code	
01	03	HByte	Lbyte	HByte	Lbyte	Lbyte	HByte
		00	00	00	02	C4	3B

Slave Correct Respond

Instrument add	Command	Byte length	Data				Check code	
01	03	08	13	E8	00	00	43	

Slave Wrong Respond

01	83	XX	XX XX