

User's Guide

SX2004-1 (8MR/16MR)

PROGRAMMABLE FOUNTAIN CONTROLLER

一、 Description of the function

The programmable sequential controller is a new type of programmable controller. It adopts the new high-speed MCU chip with great speed, big capacity of program and stable and reliable operation. It mainly accomplishes the control of time-segment, sequential-segment and the program. Easy to operate and to use with no professional programming languages and tools (programmer or computer). It is relevant cheaper than other programmable controllers. with built-in 100 time relays, the users can arbitrarily choose corresponding output point of every relay. Simply study of the instruction, the users can set the program. The product adopt the relay output and has the 220V/1A DC or AC load.

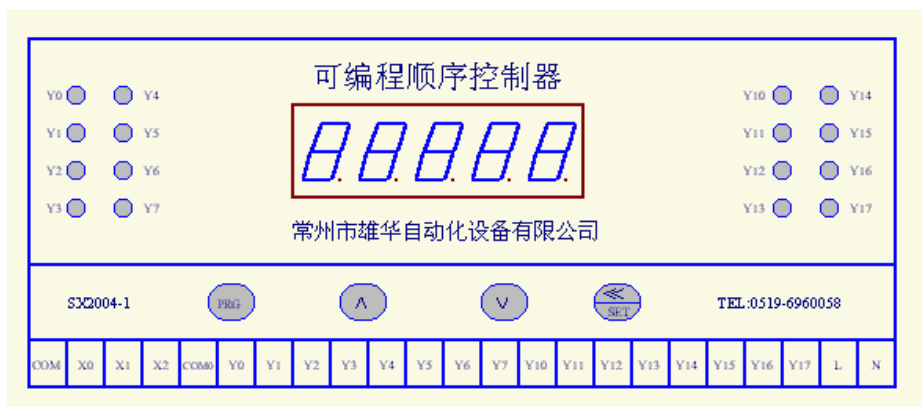
It is widely used in programmable fountain, programmable lights, sewerage, water supply, irrigation, bag pulse dust, electric boiler heating, street lights, neon light, water purifier, electric valve (solenoid valve) timing mud, grit removal control and so on.

- New high-speed MCU chip with great speed
- Big capacity of program and stable and reliable operation
- Accomplishes the control of time-segment, sequential-segment and the program
- Built-in 100 time relays
- Be used in programmable fountain, programmable lights, sewerage, water supply, irrigation, bag pulse dust, electric boiler heating, street lights, neon light, water purifier, electric valve (solenoid valve) timing mud, grit removal control and so on.
- The 220V/1A DC or AC load.
- 16/8-channel output

SX2004-1 (8MR) 8-channel output

SX2004-1 (16MR) 16-channel output

二、 Structure and Specifications



1、 Operation panel

a、 5-digital display : show the time ,output,function code

b、 Y0——Y17 indicator light: : Output indication

c、 PRG : Select set modes

press and hold PRG for 3 seconds : step through or exit program mode.

Press PRG to switch function code

press it to select “stepping time”or”stepping output”

d、 Increment \wedge and decrement \vee

Press \wedge / \vee to set the function code or digit

press and hold \wedge / \vee to continuously increase or decrease the number.

e、 SHIFT: SET/ 《

press and hold the button for 1.5 seconds : Confirm the date or exit the date settings mode

press it : move adjustment to next digit

2、 Terminal function

a. COM : input circuit common

b、 X10 : start X11: stop X12 X13

X0-X7 : switch signal input

COM0、 Y0、 Y1、 Y2..... Y17: switch output points (relay output /3A)

b. L、 N : supply power AC220V, 50Hz

Terminal function

- a. COM : input circuit common
- b. X0-X7 : input signal (set the function by user)
 COM0、Y0、Y1、Y2、Y3.....Y17 : output point (relay output /3A)
- c. L、N : supply power AC220V, 50Hz

3、 The Description of Function Setting And Display

- a、 The display will show ‘00000’ when the controller stops working
 The display will show the stepping time when the controller is working
- b、 Press PRG and hold for 3 seconds to enter into the program mode. The display will show the function code (“T000” or “d000”). Press PRG again for 3s to exit the program mode.
- c. When the display shows “T000” or “d000”,press \wedge 、 \vee to set the stepping time and stepping output (the stepping time allowance $\cong 30$, the stepping output allowance $\cong 30$)
- d. Press SET for 1.5s to enter the set mode.
 Press \wedge 、 \vee to increase or decrease a parameter value in set mode.After setting, press SET for 1.5s to save the parameter and return to the status of function code selection.

Description of Panel Setting

display	function			remark\range			
t <u>XX</u>	Time setting ,in total 100 stepping periods of time			t00-t99			
d XX	Output setting Y0-Y17点			0000-FFFF (details please refer to the table of output)			
<u>0</u> XXXX	‘0’=0.1s as a unit			0-999.9s			
	Example : ”0359” =35.9s “0999”=99.9			359*0.1sec=35.9s 999*0.1s=99.9s			
<u>1</u> XXXX	’1’=1s as a unit			0-9999s			
<u>2</u> XXXX	‘2’=1minute as a unit			0-9999min			
3XXXX	txx	<u>3</u>	<u>X</u>	<u>X X X</u>	dxx	0 0	<u>X X</u>
Jump instruction	Function code	0-9 jump 10-times	Continuous working times 1-999 times	function code	Decimal system, the jump position <u>X X</u>		

	例1	<div style="border: 1px solid black; padding: 2px; display: inline-block;">Txx 3 0000</div> endless cycle <div style="border: 1px solid black; padding: 2px; display: inline-block;">dxx 0000</div> return to the starting position("0" step)
	例2	<div style="border: 1px solid black; padding: 2px; display: inline-block;">txx 3 2055</div> the second jump instruction, circulate running for 55 Times <div style="border: 1px solid black; padding: 2px; display: inline-block;">dxx 0016</div> jump to the "16" step
4XXXX	end instruction	The programs will end when execute the instruction.
5XXXX	maintain instruction	The programs will maintain the status quo when execute the instruction.

The Table of The Output

○--no-output

●--output

	Y 0	Y 1	Y 2	Y 3
0XXX	○	○	○	○
1XXX	●	○	○	○
2XXX	○	●	○	○
3XXX	●	●	○	○
4XXX	○	○	●	○
5XXX	●	○	●	○
6XXX	○	●	●	○
7XXX	●	●	●	○
8XXX	○	○	○	●
9XXX	●	○	○	●
AXXX	○	●	○	●
BXXX	●	●	○	●
CXXX	○	○	●	●
DXXX	●	○	●	●
EXXX	○	●	●	●

FXXX	●	●	●	●		Y4	Y5	Y6	Y7
X0XX	○	○	○	○		○	○	○	○
X1XX	●	○	○	○		●	○	○	○
X2XX	○	●	○	○		○	●	○	○
X3XX	●	●	○	○		●	●	○	○
X4XX	○	○	●	○		○	○	●	○
X5XX	●	○	●	○		●	○	●	○
X6XX	○	●	●	○		○	●	●	○
X7XX	●	●	●	○		●	●	●	○
X8XX	○	○	○	●		○	○	○	●
X9XX	●	○	○	●		●	○	○	●
XAXX	○	●	○	●		○	●	○	●
XBXX	●	●	○	●		●	●	○	●
XCXX	○	○	●	●		○	○	●	●
XDXX	●	○	●	●		●	○	●	●
XEXX	○	●	●	●		○	●	●	●
XFXX	●	●	●	●		●	●	●	●

	Y10	Y11	Y12	Y13		Y14	Y15	Y16	Y17
XX0X	○	○	○	○	XXX0	○	○	○	○
XX1X	●	○	○	○	XXX1	●	○	○	○
XX2X	○	●	○	○	XXX2	○	●	○	○
XX3X	●	●	○	○	XXX3	●	●	○	○
XX4X	○	○	●	○	XXX4	○	○	●	○
XX5X	●	○	●	○	XXX5	●	○	●	○
XX6X	○	●	●	○	XXX6	○	●	●	○
XX7X	●	●	●	○	XXX7	●	●	●	○
XX8X	○	○	○	●	XXX8	○	○	○	●
XX9X	●	○	○	●	XXX9	●	○	○	●
XXAX	○	●	○	●	XXXA	○	●	○	●
XXBX	●	●	○	●	XXXB	●	●	○	●
XXCX	○	○	●	●	XXXC	○	○	●	●
XXDX	●	○	●	●	XXXD	●	○	●	●
XXEX	○	●	●	●	XXXE	○	●	●	●
XXFX	●	●	●	●	XXXF	●	●	●	●

the table of function setting

Function code	range	Value time	Function code	range	Value output
T0	0-49999		D0	0-FFFF	
T1	0-49999		D1	0-FFFF	
T2	0-49999		D2	0-FFFF	
T3	0-49999		D3	0-FFFF	
T4	0-49999		D4	0-FFFF	

T98	0-49999		D98	0-FFFF	
T99	0-49999		D99	0-FFFF	

The detailed settings of parameter and the code refer to 3.5

The Dimensions

