

**Changzhou Xionghua Tongtai Automation Equipment Co., Ltd**

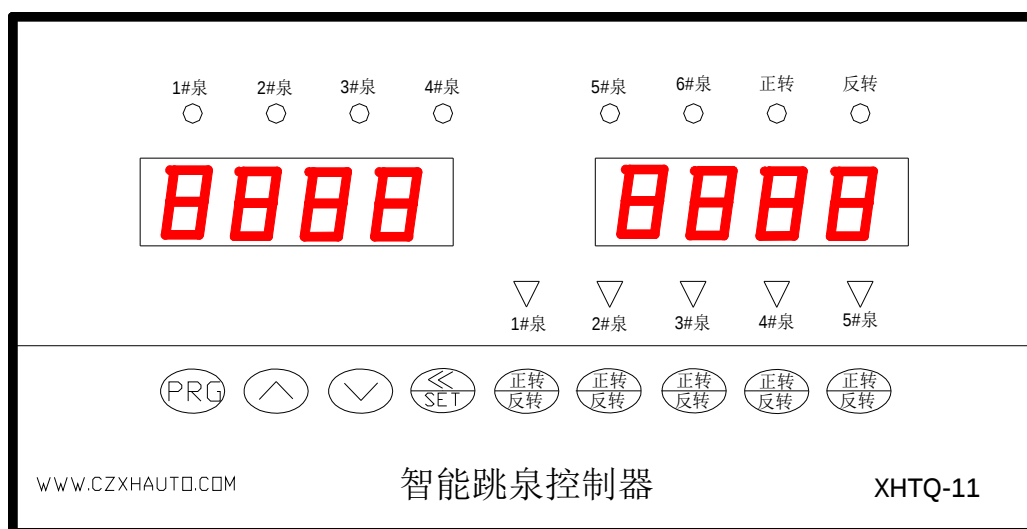


**User's Guide**  
**Intelligent Jumping Jet Fountain Controller**  
**XHTQ-11**

## Feature

Intelligent jumping fountain controller connects to 6 stepper motor drivers. The controller will form vital water output. The length and output speed of water segments can be controlled to form jumping fountains. The controller is easy to operate, and easy to modify.

## The description of the panel and terminal



## panel instruction

a.left 4-digital :

①show the program NO. When operating ②show the date NO. when setting

b.right 4-digital show :

① show the time when operating②show the date value when setting

c. 1#fountain-6# fountain round indicator: indicate operating state

d. forward,reverse indicator : indicator output state

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

f. [^]和[∨]: date up/down or code selection

g.[《/SET]: confirm the setting/ move the setting cursor

Press the button and hold, the cursor will move between the left and right display

Press the button to confirm the function mode or the date value.

h.[forward/reverse]: support manul starting the corresponding fountain controller,[《/SET] manually control the obverse/reverse of the corresponding 6# fountain controllers

## Terminal Function

a. L、N : supply power AC220V, 50Hz

b. X0、COM : connect the two terminal, the procedure will automatically run

X10、COM: after connecting X10、COM, X1、X2、X3、X4、X5、X6 will be able to realize the remote manul controlling 1#-6#fountain

c. 12V : 12V input into the step controller

d、Y1、Y11: connect with 1# fountain step controller

Y2、Y12: connect with 2# fountain step controller

Y3、Y13: connect with 3# fountain step controller

Y4、Y14: connect with 4# fountain step controller

Y5、Y15: connect with 5# fountain step controller

Y6、Y16: connect with 6# fountain step controller

### Function Table

| Function code |     | Function name                 | Date content                                                                                                                             | range   | setting | Unit  |
|---------------|-----|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|-------|
| LP-u          |     | Running speed                 | Adapt to any speed of the step driver                                                                                                    | 0-9999  | 1000    | Hz    |
| LP-n          |     | Rotation angle                | From start position to end station<br>(the position of the barrier chip retaining water )<br>Step angle * setting value = rotation angle | 1-2000  | 20      | pulse |
| LP-b          |     | Rectify pulse numbers         | The barrier chip first time to return to the start position to correct the error                                                         | 0-9999  | 2       | pulse |
| LP-bb         |     | Start                         | In first power-on, the controller locates the position of the barrier chip                                                               | 0-9999  | 20      | pulse |
| Stps          |     | The numbers of water patterns | The number of the water pattern changes                                                                                                  | 60      | 6       | nos   |
| 1# set        | T 0 | running time                  | The running time of the 1# program                                                                                                       | 0-999.9 | 20      | 1s    |
|               | C 0 | Start time                    | the residence time of 1# program at start                                                                                                | 0-999.9 | 3.0     | 0.1s  |
|               | P 0 | End time                      | the residence time of 1# program at end                                                                                                  | 0-999.9 | 3.0     | 0.1s  |
|               | F 0 | Output selection              | Running point selection of 1# program                                                                                                    | 0-3F    | 3F      |       |
| 2# set        | T 1 | Running time                  | The running time of the 2# program                                                                                                       | 0-999.9 | 10      | 1s    |
|               | C 1 | Start time                    | the residence time of 2# program at start                                                                                                | 0-999.9 | 3.0     | 0.1s  |
|               | P 1 | End time                      | the residence time of 2# program at end                                                                                                  | 0-999.9 | 2.0     | 0.1s  |
|               | F 1 | Output selection              | Running point selection of 2# program                                                                                                    | 0-3F    | 2A      |       |
| 3# set        | T 2 | Running time                  | The running time of the 3# program                                                                                                       | 0-999.9 | 10      | 1s    |
|               | C 2 | Start time                    | the residence time of 3# program at start                                                                                                | 0-999.9 | 3.0     | 0.1s  |
|               | P 2 | End time                      | the residence time of 3# program at end                                                                                                  | 0-999.9 | 2.0     | 0.1s  |
|               | F 2 | Output                        | Running point selection of 3# program                                                                                                    | 0-3F    | 15      |       |
| 4# set        | T 3 | Running time                  | The running time of the 4 # program                                                                                                      | 0-999.9 | 10      | 1s    |
|               | C 3 | Start time                    | The residence time of 4# program at start                                                                                                | 0-999.9 | 2.0     | 0.1s  |
|               | P 3 | End time                      | The residence time of 4# program at end                                                                                                  | 0-999.9 | 1.0     | 0.1s  |

|         |      |                  |                                            |         |      |      |
|---------|------|------------------|--------------------------------------------|---------|------|------|
|         | F 3  | Output selection | Running point selection of 4# program      | 0-3F    | 3F   |      |
| 5# set  | T 4  | Running time     | The running time of the 5# program         | 0-999.9 | 10   | 1s   |
|         | C 4  | Start time       | the residence time of 5# program at start  | 0-999.9 | 2.0  | 0.1s |
|         | P 4  | End time         | the residence time of 5# program at end    | 0-999.9 | 1.0  | 0.1s |
|         | F 4  | Output selection | Running point selection of 5# program      | 0-3F    | 2A   |      |
| 6# set  | T 5  | Running time     | The running time of the 6# program         | 0-999.9 | 10   | 1s   |
|         | C 5  | Start time       | the residence time of 6# program at start  | 0-999.9 | 2.0  | 0.1s |
|         | P 5  | End time         | the residence time of 6# program at end    | 0-999.9 | 1.0  | 0.1s |
|         | F 5  | Output selection | Running point selection of 6# program      | 0-3F    | 15   |      |
| 7# set  | T 6  | Running time     | The running time of the 7# program         | 0-999.9 |      | 1s   |
|         | C 6  | Start time       | the residence time of 7# program at start  | 0-999.9 |      | 0.1s |
|         | P 6  | End time         | the residence time of 7# program at end    | 0-999.9 |      | 0.1s |
|         | F 6  | Output selection | Running point selection of 7# program      | 0-3F    |      |      |
| 8# set  | T 7  | Running time     | The running time of the 8# program         | 0-999.9 |      | 1s   |
|         | C 7  | Start time       | the residence time of 8# program at start  | 0-999.9 |      | 0.1s |
|         | P 7  | End time         | the residence time of 7# program at end    | 0-999.9 |      |      |
|         | F 7  | Output selection | Running point selection of 7# program      | 0-3F    |      |      |
| 9# set  | T8   | Running time     | The running time of the 9# program         | 0-999.9 | 0.1s | 1s   |
|         | C8   | Start time       | the residence time of 9# program at start  | 0-999.9 | 0.1s | 0.1s |
|         | P8   | End time         | the residence time of 9# program at end    | 0-999.9 | 0.1s | 0.1s |
|         | F 8  | Output selection | Running point selection of 9# program      | 0-3F    | Xx3F |      |
| 10# set | T 9  | Running time     | The running time of the 10# program        | 0-999.9 | 2s   | 1s   |
|         | C 9  | Start time       | the residence time of 10# program at start | 0-999.9 | XXXX | 0.1s |
|         | P 9  | End time         | the residence time of 10# program at end   | 0-999.9 | XXXX | 0.1s |
|         | F 9  | Output selection | Running point selection of 10# program     | 0-3F    | XX00 |      |
| 11# set | T 10 | Running time     | The running time of the 11# program        | 0-999.9 | 3s   | 1s   |
|         | C 10 | Start time       | the residence time of 11# program at start | 0-999.9 | 0.5s | 0.1s |
|         | P 10 | End time         | the residence time of 11# program at end   | 0-999.9 | 0.5s | 0.1s |
|         | F 10 | Output selection | Running point selection of 11# program     | 0-3F    | XX01 |      |
| 12# set | T 11 | Running time     | The running time of the 12# program        | 0-999.9 | 3s   | 1s   |
|         | C 11 | Start time       | the residence time of 12# program at start | 0-999.9 | 0.5s | 0.1s |
|         | P 11 | End time         | the residence time of 12# program at end   | 0-999.9 | 0.5s | 0.1s |
|         | F 11 | Output selection | Running point selection of 12# program     | 0-3F    | XX03 |      |
| 13#     | T 12 | Running time     | The running time of the 13# program        | 0-999.9 | 3s   | 1s   |

|            |      |                  |                                            |         |      |      |
|------------|------|------------------|--------------------------------------------|---------|------|------|
| set        | C 12 | Start time       | the residence time of 13# program at start | 0-999.9 | 0.5s | 0.1s |
|            | P 12 | End time         | the residence time of 13# program at end   | 0-999.9 | 0.5s | 0.1s |
|            | F 12 | Output selection | Running point selection of 13# program     | 0-3F    | XX07 |      |
| 14#<br>set | T 13 | Running time     | The running time of the 14# program        | 0-999.9 | 3s   | 1s   |
|            | C 13 | Start time       | the residence time of 14# program at start | 0-999.9 | 0.5s | 0.1s |
|            | P 13 | End time         | the residence time of 14# program at end   | 0-999.9 | 0.5s | 0.1s |
|            | F 13 | Output selection | Running point selection of 14# program     | 0-3F    | XX0F |      |
| 15#<br>set | T 14 | Running time     | The running time of the 15# program        | 0-999.9 | 3s   | 1s   |
|            | C 14 | Start time       | the residence time of 15# program at start | 0-999.9 | 0.5s | 0.1s |
|            | P14  | End time         | the residence time of 15# program at end   | 0-999.9 | 0.5s | 0.1s |
|            | F14  | Output selection | Running point selection of 15# program     | 0-3F    | XX1F |      |
| 16#<br>set | T 15 | Running time     | The running time of the 16# program        | 0-999.9 | 3s   | 1s   |
|            | C 15 | Start time       | the residence time of 16# program at start | 0-999.9 | 0.5s | 0.1s |
|            | P 15 | End time         | the residence time of 16# program at end   | 0-999.9 | 0.5s | 0.1s |
|            | F 15 | Output selection | Running point selection of 16# program     | 0-3F    | XX3F |      |
| 17#<br>set | T 16 | Running time     | The running time of the 17# program        | 0-999.9 | 2s   | 1s   |
|            | C 16 | Start time       | the residence time of 17# program at start | 0-999.9 | XXXX | 0.1s |
|            | P 16 | End time         | the residence time of 17# program at end   | 0-999.9 | XXXX | 0.1s |
|            | F 16 | Output selection | Running point selection of 17# program     | 0-3F    | XX00 |      |
| 18#<br>set | T 17 | Running time     | The running time of the 18# program        | 0-999.9 | 10s  | 1s   |
|            | C 17 | Start time       | the residence time of 18# program at start | 0-999.9 | 0.5s | 0.1s |
|            | P 17 | End time         | the residence time of 18# program at end   | 0-999.9 | 1s   | 0.1s |
|            | F 17 | Output selection | Running point selection of 18# program     | 0-3F    | XX3F |      |
| 19#<br>set | T 18 | Running time     | The running time of the 19# program        | 0-999.9 | 2s   | 1s   |
|            | C 18 | Start time       | the residence time of 19# program at start | 0-999.9 | XXXX | 0.1s |
|            | P 18 | End time         | the residence time of 19# program at end   | 0-999.9 | XXXX | 0.1s |
|            | F 18 | Output selection | Running point selection of 19# program     | 0-3F    | XX00 |      |
| 20#<br>set | T 19 | Running time     | The running time of the 20# program        | 0-999.9 | 10s  | 1s   |
|            | C 19 | Start time       | the residence time of 20# program at start | 0-999.9 | 1s   | 0.1s |
|            | P 19 | End time         | the residence time of 20# program at end   | 0-999.9 | 0.5s | 0.1s |
|            | F 19 | Output selection | Running point selection of 20# program     | 0-3F    | XX3F |      |

## the rights and interests protecting function

| code        | function                | range   | unit | remark                                                                          |
|-------------|-------------------------|---------|------|---------------------------------------------------------------------------------|
| <b>T 59</b> | Enter the time password | 0—9999  | —    | Enter 4321, then set the dates, after setting, change the password              |
| <b>T 60</b> | Set the halt time       | 0—9999  | hour | the value in excess of 6000. the timing halt function will be invalid           |
| <b>C 60</b> | Actual running time     | 0-999.9 | hour | Actual time means that stop running at halt time but it can be operated by hand |

## the steps of date setting

| step | operation                  | display     | remark                                                     |
|------|----------------------------|-------------|------------------------------------------------------------|
|      |                            |             | Status display when power on                               |
| 1    | PRG<br>Press and hold 3s   | Lp-u        | <b>Running speed</b>                                       |
| 2    | SET<br>Press and hold 1.5s | 1000        | <b>Set the running speed</b>                               |
| 3    | ∧ and ∨<br>» /SET          | 0500        | <b>Set the running speed</b>                               |
| 4    | SET<br>Press and hold 1.5s | <b>Lp-u</b> | <b>Store the dates of the running speed</b>                |
| 5    | ∧ and ∨<br>» /SET          | Lp-n        | Select the function codes and the dates need to be changed |

## Installation

External size 150\*75\*130

Installation type : mount on the panel of the cabinet

Perforate size : 150\*75

[illegible]