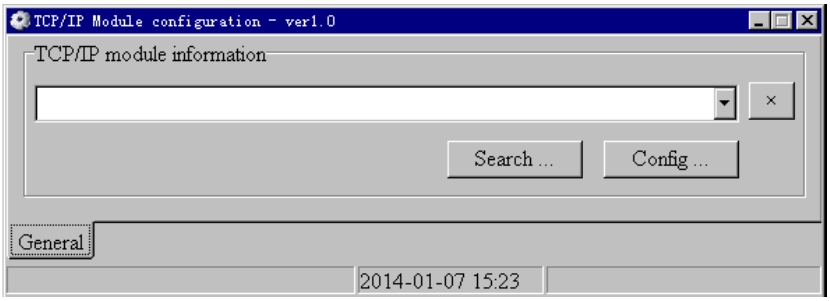
# TCP Module user instructions

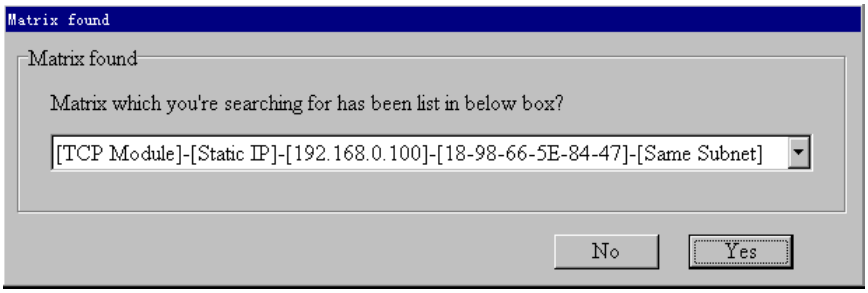
- Enable PC's RJ-45 interface and Disable PC's WIFI.
- Connect PC and Matrix with CAT6 cable directly through RJ-45 interface
- Set PC net properties as: IP = 192.168.0.200, Subnet mask = 255.255.255.0, Gateway = 192.168.0.1
- Run "TCP-IP module configuration - v1.0.exe", main window shown as below:




- Click "Search…" button to find out built-in TCP Module:

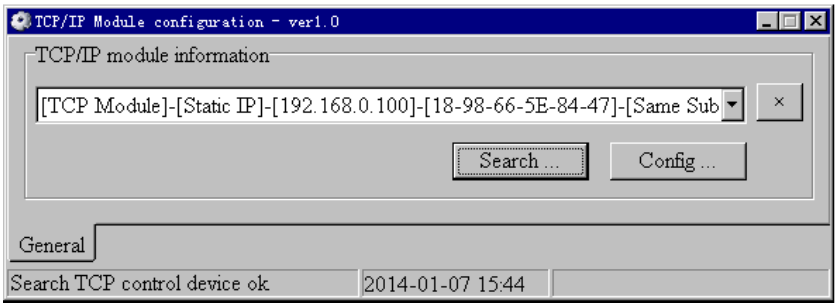
Searching…


Found

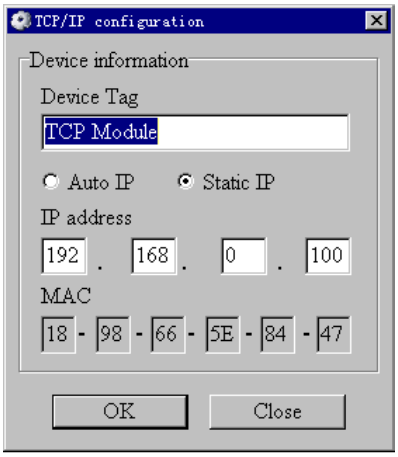



**NOTE: Default settings of TCP module are: Static IP mode and IP address is 192.168.0.100.**

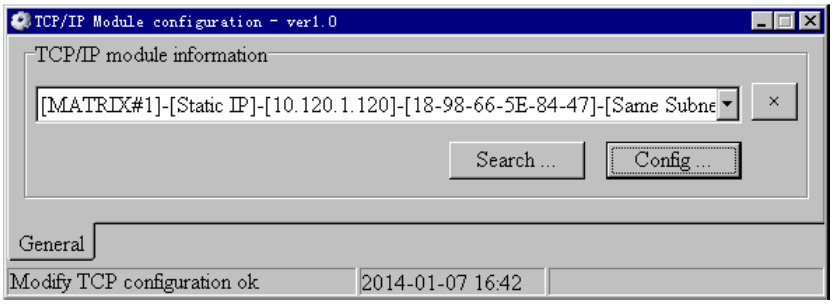
- Click "Yes" button, TCP Module item will be added in the list box:




- Click "Config …" button to modify Device Tag, IP mode and IP address of TCP Module:

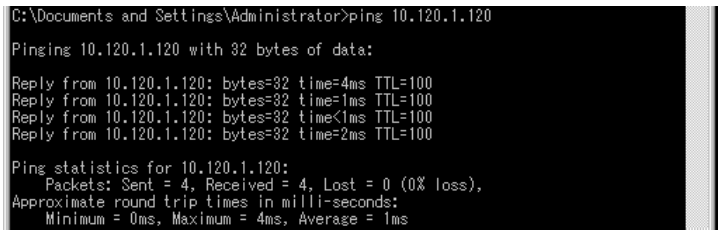



When filled ok then click "OK" button: Device Tag = "MATRIX#1", Static IP, IP Address = 10.120.1.120.


**NOTE: Static IP mode is recommended**

- After these modifications, put the Matrix under the router or net switcher which PC will connect with. Set PC's net same as Matrix connects.
- Ping the Matrix IP address by PC. It means OK when reply received.

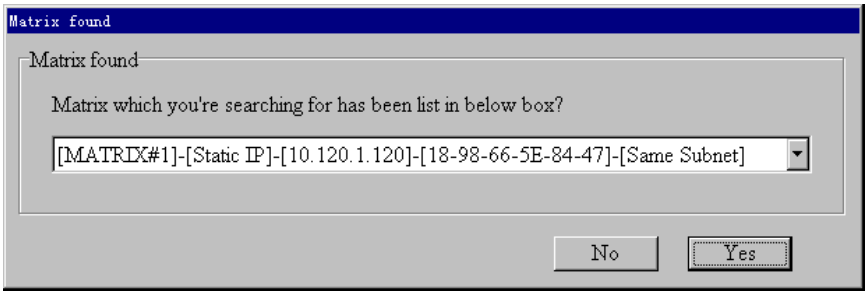



- Then Telnet commands can be used to control Matrix.

- Run “TCP-IP module configuration - v1.0.exe” again.
- Search TCP control module

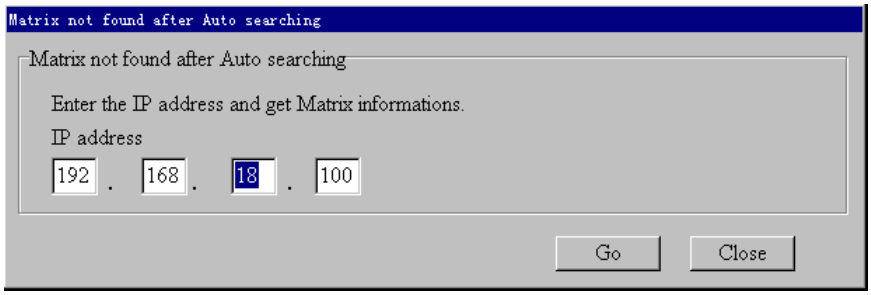
①Click “Search” button to pop up auto searching window:


②Because TCP control module is in same subnet, it will be found after auto searching:

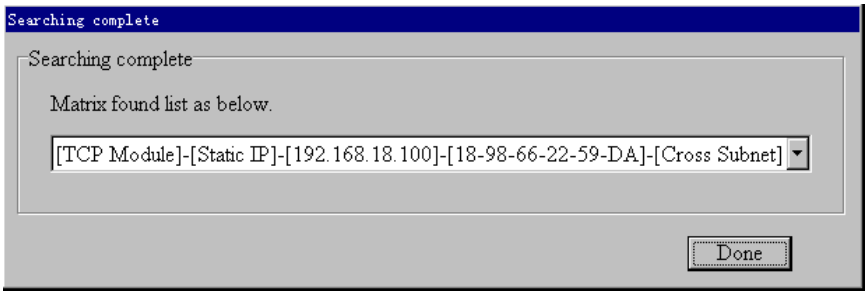



**NOTE: Default settings of TCP module are: Static IP mode and IP address is 192.168.0.100.**

③If the TCP control module is in cross subnet, IP address should be entered manually in edit boxes like as below:

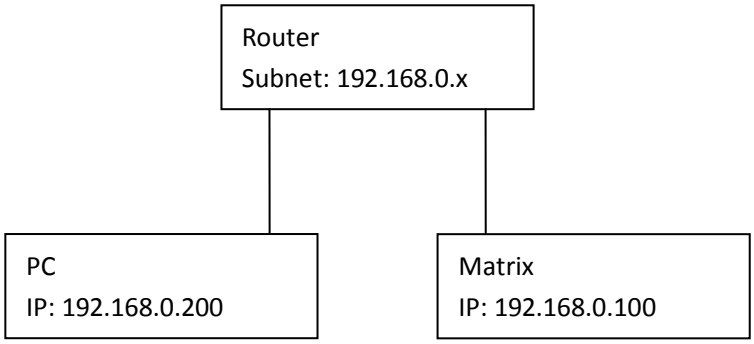



④Then click “Go” button, TCP control module will be found:

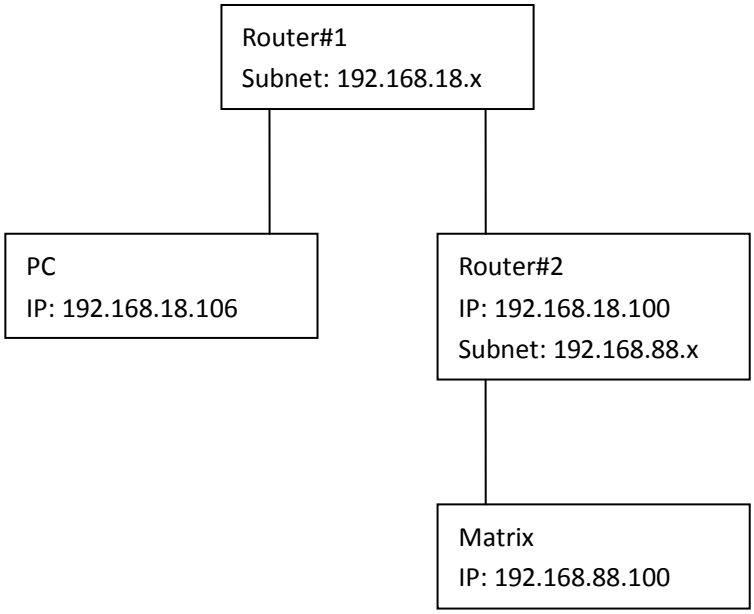



**NOTE:**

**① Same subnet means Matrix connects a router which is same as PC connects, for example as below:**




**② Cross subnet means Matrix connects a router which is different from PC connects, for example as below:**




**Items list below should be added in router#1's "Virtual Server" setting page:**

| Service port | IP address | Protocol | Status |
|---|---|---|---|
| 8000 | 192.168.18.100 | TCP | Active |
| 30600 | 192.168.18.100 | UDP | Active |
| 30601 | 192.168.18.100 | UDP | Active |

**Items list below should be added in router#2's "Virtual Server" setting page:**

| Service port | IP address | Protocol | Status |
|---|---|---|---|
| 8000 | 192.168.88.100 | TCP | Active |
| 30600 | 192.168.88.100 | UDP | Active |
| 30601 | 192.168.88.100 | UDP | Active |

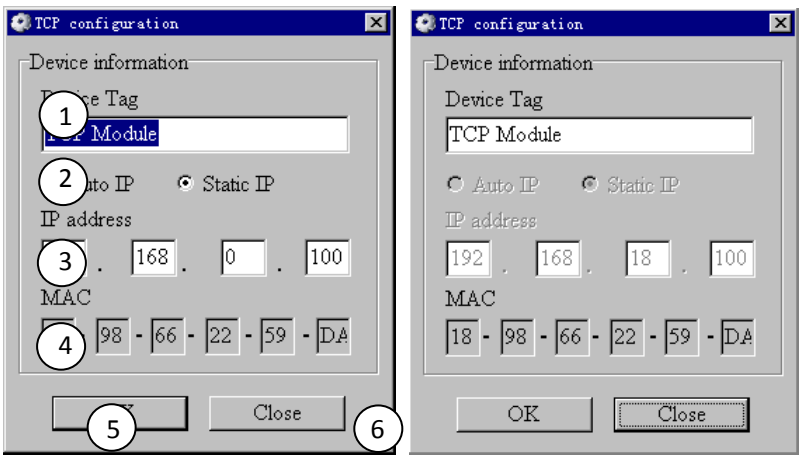
**After setting these three items on each Router's "Virtual Server" setting page, PC can relocate the Matrix over ports 8000/30600/30601 of TCP/UDP/UDP protocols.**

**③ It's recommended that the Matrix is installed in same subnet.**

**④ In same subnet, both DHCP and Static IP modes are supported, while only Static IP mode is supported in cross subnet mode.**

- Set TCP control configuration

Click Config button to show TCP configuration window.




① Set tag to identify Matrix device

② Set IP mode: Subnet should support DHCP protocol when set Auto IP mode, then Matrix device will obtain IP automatically. Otherwise, set Static IP mode and designate a useable IP for Matrix device. **Note: In cross subnet this setting can not be changed, only Static IP supported.**

③ Set IP address, not editable when Auto IP mode selected. **Note: The last IP BYTE's range is 2-252. In cross subnet this setting can not be changed.**

④ Matrix device MAC address, read only.

⑤ Click OK to set configuration. If configuration is set OK, Matrix devices will be searched out again

⑥ Click to Close the window and configuration cancelled