



# BX-WIFI User Manual

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## 1 Summarize

### 1.1 Working mode

BX-5A1&WiFi、BX-5A2&WiFi、BX-5A4&WiFi controllers support the playing programs updating of LED display screen, which realized by the TCP/IP protocol communication of BX-WIFI module. And the working modes include two: " Stand-alone directly connect (AP mode) "、" Stable IP(Station/STA mode)

### 1.2 Set methods

The BX-WIFI module parameters are not set on LedshowTW 2012 software, but manually set by using " Internet Explorer ".

You'd better set the IP information to " Automatically obtain IP address " when it's your first time to operate BX-WIFI module or when it is on the reset mode status. Then, the computer will find and connect the wireless network firstly which with " BX-WIFI " character string. After that, you are supposed to input " http://192.168.100.1 " in " Internet Explorer ", then get into the page of BX-WIFI parameters setting.

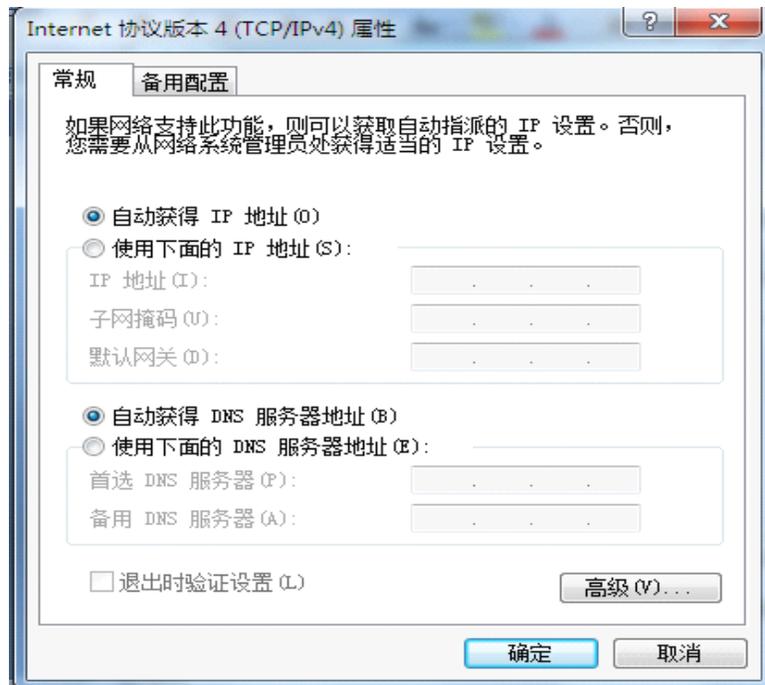
Note: Default account: admin; Default command: 888.

## 2 Stand-alone directly connect(AP mode)

The Stand-alone directly connect mode mainly used in the single display screen which do not need to connect with a complicated network. And it directly connects wireless by BX-WIFI controller and computer. BX-WIFI, on this mode, is as a wireless router. Well, the computer will connect BX-WIFI wireless network firstly, then, communicate with controller. And importantly, the computer should be configured with WIFI.

### 2.1 Simple set

If you do not have any requirement on BX-WIFI, you could use it directly. The default WIFI network domain of BX-WIFI is " BX-WiFi-B045031206190037 "; IP address is " 192.168.100.1 "; Sending interface is " 5005 ". And " B045031206190037 " is the only number on the back of BX-WIFI controller. IP information of computer WIFI should be " Automatically obtain IP address ", DNS " Automatically obtain DNS server address ". Showed as Picture 1.



Picture 1

Click  (on the lower right corner of the computer task bar), point out (Picture 2), select **BX-WiFi-B045031206190037** wireless network. After that, check the present network status, and if the status is " 192.168.100.XXX ", means the network connecting normal. At that time, you could communicate with BX-WIFI controller by wireless network with LedshowTW 2012 software. The set of LedshowTW 2012 is showed on " LedshowTW2012 software ".



Picture 2

By this way, because users do not do any set, there's no passwords, then, others could also visit this controller by this wireless network. So, others could modify any attribute of BX-WIFI.

## 2.2 User-defined set

Except the above operations, users could set the encrypted informations、 IP information in BX-WIFI. Open " Internet Explorer "→ input " 192.168.100.1 " on the address→ enter into login page of wireless module → input default account " admin ", default command " 888 " → enter into set page of BX-WIFI. Firstly, " BX-WIFI mode set " set as " AP mode ", click " OK " as to save the set. Then select " wireless access point settings ", showed as Picture 3.



The screenshot shows the BX-WIFI configuration web interface. On the left is a navigation menu with options: BX-WIFI模式设置, 无线接入点设置 (highlighted), 无线终端设置, and BX-WIFI管理. The main content area is divided into three sections:

- 无线接入点参数设置 (Wireless Access Point Parameters):**
  - 网络模式 (Network Mode): 11b/g/n mixed mode
  - 网络名称 (SSID) (Network Name (SSID)): BX-WIFI, with checkboxes for 隐藏 (Hidden) and 分离 (Separate)
  - BX-Wifi MAC地址 (BX-Wifi MAC Address): AC:CF:23:00:27:C4
  - 无线信道选择 (Wireless Channel Selection): 自动选取 (Auto Select)
- "BX-Wifi" (BX-Wifi):**
  - 加密模式 (Encryption Mode): Disable
- 局域网参数设置 (Local Area Network Parameters):**
  - IP 地址 (IP Address): 192.168.100.1
  - 子网掩码 (Subnet Mask): 255.255.255.0
  - DHCP 类型 (DHCP Type): 服务器 (Server)
  - DHCP 网关设置 (DHCP Gateway Settings): 192.168.100.1
  - 端口 (Port): 5005

Each section has "确定" (OK) and "取消" (Cancel) buttons.

Picture 3

" wireless access point settings " is mainly set the relevant parameters(BX-WIFI is as access point)." Network name (SSID) " parameter is the BX-WIFI wireless network name when it is as access point. Others, you could modify according to the default informations. Click " OK " as to save the informations.

When " Encryption mode " set BX-WIFI as access point, CLIENTS connects the encryption mode of BX-WIFI access point. And if the encryption mode is " Disable ", then, everyone could connect by WIFI. Well, users could select a encryption mode, and input the proper encrypting number, click " OK " as to save the informations. The function: if any computer needs to connect BX-WIFI wireless, then, the system will prompt that you need to input the correct wireless codes, then you will get into the wireless network.

" LAN parameters set " is mainly for BX-WIFI IP informations and communication port when BX-WIFI is as access point. After the set done, if computer connects into BX-WIFI wireless network, you need to set the IP informations of computer same with BX-WIFI, then it will connect successfully. Among them, the " DHCP type " sets as " server ". Click " OK " as to save the informations.

After set done, click " BX-WIFI management " → " restart ". In one minute, reselect connecting wireless network in the task bar. Then, set according to 2.1, the communication will be done.

### 3 Stable IP (Station mode)

Stable IP mode usually used in LAN or with one more display screens. Under this condition, you need to install a wireless router, BX-WIFI will connect with the wireless router automatically. Then, the computer gets into network by wireless router, as to communicate. Note: you must install a wireless router for BX-WIFI.

When BX-WIFI is on the factory initial status, open " Internet Explorer "→ input " 192.168.100.1 " on the address→ enter into login page of wireless module → input default account " admin ", default command " 888 " → enter into set page of BX-WIFI → enter into the page " wireless terminal set ".



Picture 4

搜索结果							
	网络名称(SSID)	MAC地址	信号强度	无线信道	加密算法	加密方式	网络类型
<input type="radio"/>	TP-LINK	00:25:86:65:c7:0e	100%	6	TKIP	WPAPSK	Infrastructure
<input type="radio"/>	ublicWifi	14:d6:4d:71:ee:ba	0%	1	TKIP	WPA2PSK	Infrastructure
<input type="radio"/>	TP-LINK_PocketAP_DF5F4C	38:83:45:df:5f:4c	39%	1	NONE	OPEN	Infrastructure
<input type="radio"/>	fmpotech	20:4e:7f:47:2a:66	0%	1	TKIP	WPA2PSK	Infrastructure
<input type="radio"/>	MERCURY_PocketAP_3EB308	5c:63:bf:3e:b3:08	0%	6	NONE	OPEN	Infrastructure
<input type="radio"/>	ONBON-RD	00:25:86:2f:23:08	100%	6	WEP	OPEN	Infrastructure
<input type="radio"/>	AILK_CM	28:10:7b:55:dd:7c	20%	6	TKIP	WPA2PSK	Infrastructure
<input type="radio"/>	ublicMWifioffice	b0:48:7a:41:99:ce	0%	6	AES	WPA2PSK	Infrastructure
<input type="radio"/>	SH-ONBON-2	00:22:3f:a5:79:81	34%	11	TKIP	WPA2PSK	Infrastructure
<input type="radio"/>	SONBUDDY	a2:07:d5:b0:f0:2a	0%	11	WEP	OPEN	Ad Hoc
<input type="radio"/>	0xC3DCC2EB3133B8F631	02:26:c6:01:54:a1	0%	11	WEP	OPEN	Ad Hoc

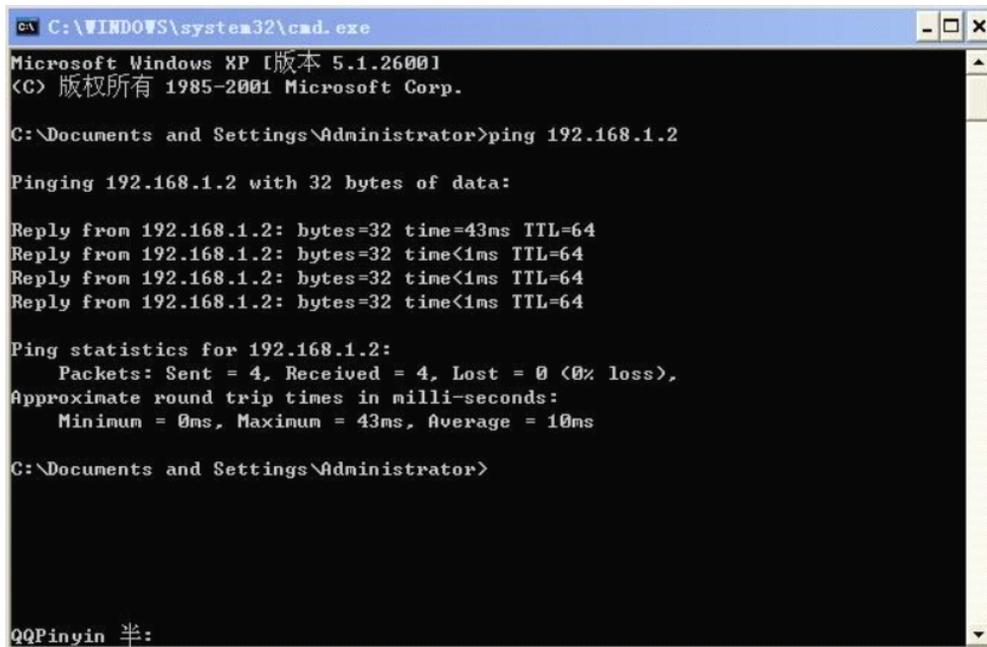
Picture 5

" wireless terminal parameters set " mainly used to set the relevant parameter when BX-WIFI module connects into wireless router. " Network name (SSID) which BX-WIFI gets to connect " is the name you will connect with wireless router. Also, users could click " search " as to find out the present wireless network(showed as picture 5), click " OK ", you will be in. And meanwhile, it will correspond the encryption mode automatically, but if the wireless network has been encrypted, you need to input the passwords as to get into; if there's MAC address filter limit in wireless router, you need to input the MAC codes. Click " OK ".

If there's MAC address filter limit in wireless router, you need to join into this MAC address. Then, BX-WIFI would connect into wireless router.

" BX-WIFI IP address set " mainly used to set BX-WIFI IP informations and data communication port when BX-WIFI is in wireless network. Click " OK ".

After the above two steps, entering into the page " BX-WIFI mode set ". Click " Station mode " → " OK " → enter into " BX-WIFI management " → click " restart ". Then, close the present setting process, connect with wireless router, and input the correct IP address. After one minute, the restarted BX-WIFI will connect with wireless router automatically. At that time, you 'd better try to use Ping command Ping module in the system, the IP address of BX-WIFI. And if Ping succeed (like picture 6 showed), it means that the computer and BX-WIFI connect well by wireless router. About LedshowTW 2012 software set, please set according to the below " LedshowTW 2012 software set ".



```

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=43ms TTL=64
Reply from 192.168.1.2: bytes=32 time<1ms TTL=64
Reply from 192.168.1.2: bytes=32 time<1ms TTL=64
Reply from 192.168.1.2: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 43ms, Average = 10ms

C:\Documents and Settings\Administrator>
QQPinyin 半:

```

Picture 6

## 4 Set in operating

If you need to reset BX-WIFI in operating process, you could set directly by " Internet Explorer ", whatever the mode of module is at that time, only if you know the present set parameters of module.

If BX-WIFI is in Stand-alone directly connect (AP mode), you only need to input IP address in " IP address " of " LAN parameters set " in " Internet Explorer ", then, connect into BX-WIFI module. After that, you could modify the relevant attributes according to the above set methods.

If BX-WIFI is in Stable IP (Station mode), you only need to input IP address in " IP address " of " BX-WIFI IP address set " in " Internet Explorer ", then, connect into BX-WIFI module. After that, you could modify the relevant attributes according to the above set methods.

If you forget the original setting attributes, but also want to reset, you need to press on RST button on BX-WIFI controller about 10 seconds as to recover. And about one minute, BX-WIFI module will restore the factory settings, then, the wireless network name of BX-WIFI is " BX-WIFI ". After that, you could modify the relevant attributes according to the above set methods.

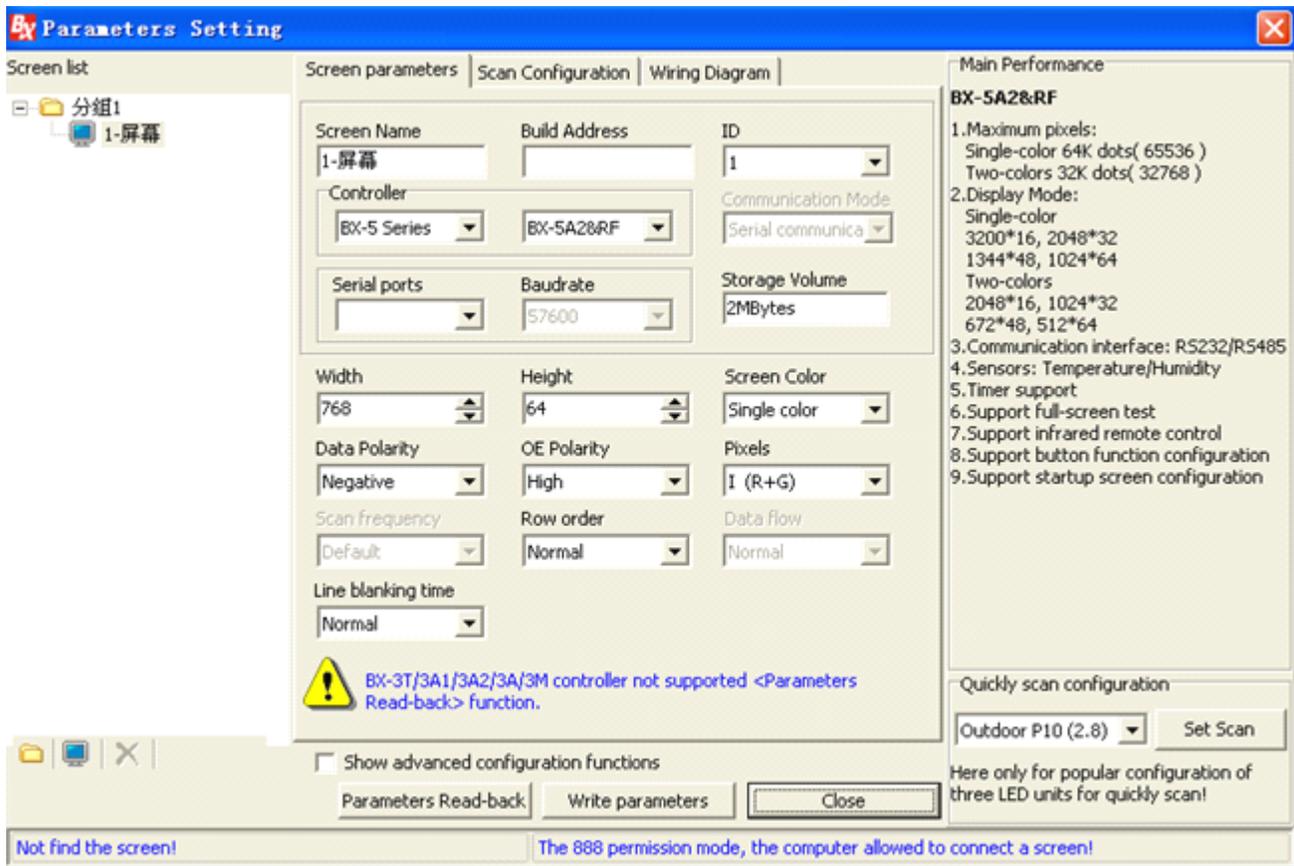
## 5 Modify account 、 command

If you want to modify BX-WIFI account 、 command, you could modify the account and login command in " managers set " of " BX-WIFI management " after login BX-WIFI in " Internet Explorer ". Then, click " restart ".

## 6 The relevant sets about LedshowTW 2012 software

After BX-WIFI module set done, you need to do some relevant sets to the corresponding controller attributes of LedshowTW 2012 software before updating the display informations of BX-WIFI controller.

Open LedshowTW 2012 software, in main menu, click " set " → " set parameters " → enter into " set parameters " window ( like picture 7 showed ) → select corresponding BX-WIFI controller in " Controller " → add " WIFI set " in parameters set tab. At that time, you could select " WIFI set " tab, then enter into WIFI set window.

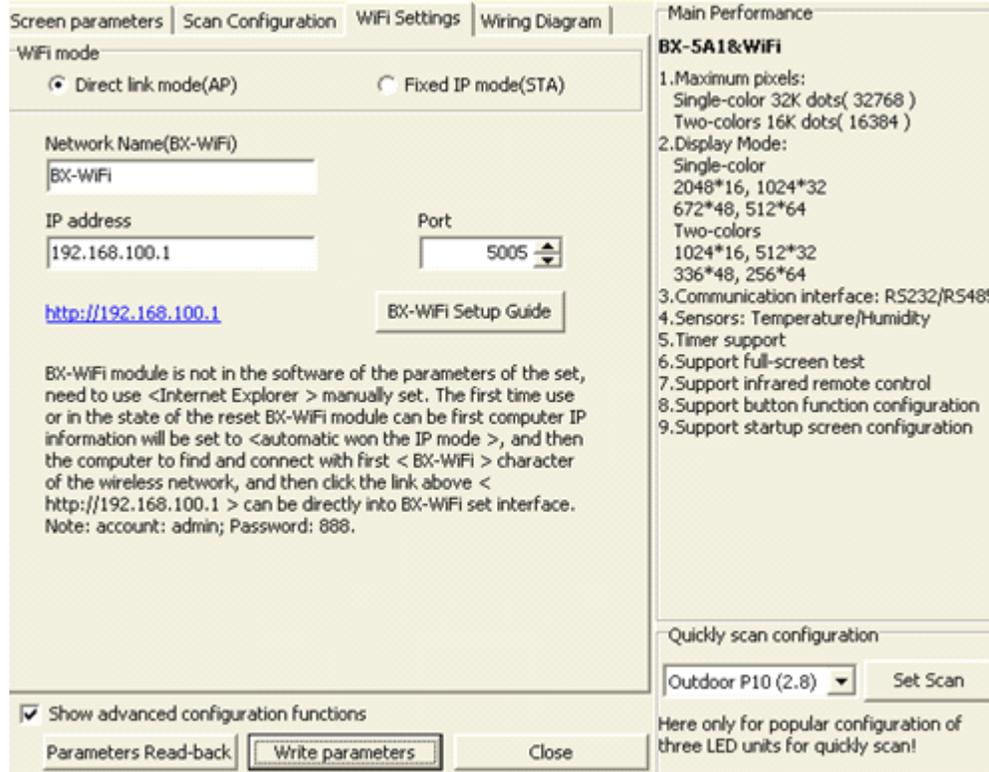


Picture 7

Picture 8

In " WIFI set ", you could select the corresponding mode according to what you have set in WIFI.

When set as " Stand-alone directly connect (AP mode), showed as picture 8, the parameters like " network name (BX-WIFI) ", " IP address ", " port " should correspond with the parameters like " network name(SSID) ", " IP address ", " port " of " wireless access point set " in BX-WIFI parameters setting process.



Picture 9

When set as " Stable IP mode (STA) " mode (like picture 9 showed), the parameters like " network name (BX-WIFI) "、" IP address "、" port " should correspond with the parameters like " network name(SSID) which BX-WIFI gets into"、" IP address "、" port " of " wireless terminal set " in BX-WIFI parameters setting process.