Serial Command Guide For WizFi630 Users

(Version 1.2)



This document describes usages for WizFi630 WIFI AP Module. Descriptions scope and boundary is limited as bellows

- Testing environments
- Networks operation mode
- Serial operation Modem
- Supplied software usages
- Serial command definition



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Table of contents

| 1. | T | EST ENVIRONMENT SETUP | 1 |
|----|----|---|----|
| 1 | .1 | System Setup | 1 |
| 1 | .2 | WizFi630's default serial configuration. | 1 |
| 1 | .3 | PC #3 Setup | 1 |
| 1 | .4 | PC #1 and PC#2 Serial Setup. | 1 |
| 2. | SI | IMPLE SERIAL COMMAND AT SERIAL TERMINAL PROGRAM | 2 |
| 3. | W | IZSMARTSCRIPT FOR WIZFI630 | 3 |
| 3 | .1 | Run Program | 3 |
| 3 | .2 | Get Basic | 4 |
| 3 | .3 | Functions | |
| 3 | .4 | Set Operation Mode | 14 |
| 3 | .5 | Set Serial | |
| 4. | SI | ERIAL COMMAND DEFINITIONS | 20 |
| 4 | .1 | Network | |
| 4 | .2 | Wireless | 23 |
| 4 | .3 | Security | |
| 4 | .4 | Serial | |
| 4 | .5 | Others | |
| 4 | .6 | Return Code | |
| 4 | .7 | Exception | |
| 5. | A | CCESSING MODULE VIA WEB BROWSER | 37 |
| 6. | Μ | ORE INFORMATION | 37 |



PC #3

1. Test Environment Setup 1.1 System Setup



[Factory Default] Network Mode : AP Mode **DHCP Server : Enabled** IP Address : 192.168.16.254 Net Mask : 255.255.255.0 WIFI SSID : WLAN-AP Serial config: 38400/8/no/1/no flow ctrl

<WizFi630> 802.11 b/g/n WIFI AP Module

<PC#1> Serial Terminal Program running and connected to WizFi630's Serial Port #1 <PC#2> Serial Terminal Program running and connected to WizFi630's Serial Port #2 <PC#3> TCP Server application is running

1.2 WizFi630's default serial configuration.

- A. WizFi630 Serial Port #1 enabled
- B. Serial configuration : 38400 / 8 data / No Parity / 1 Stopbits / No Flow control
- C. TCP Client Mode / Connection Port 5000
- D. Aux Connection Disabled
- E. WizFi630 Serial Port #2 disabled

1.3 PC #3 Setup.

- A. PC#3's WIFI site survey and connect to ssid named "WLAN-AP"
- B. Check IP address of PC#3
- C. Check IP address at "CMD window", use ipconfig

1.4 PC #1 and PC#2 Serial Setup.

- A. Connect Serial cable from PC #1 to WizFi630's Serial Port #1
- B. Connect Serial cable from PC #2 to WizFi630's Serial Port #2



2. Simple serial command at serial terminal program

① <RF>

This command gets module's firmware version and normally used to check module is working or not

(2) <ATDT>

This command changes module's "serial working mode" as data mode

This is special command so do not type each character and <ATDT> copy and paste it at terminal program.

3 <+++>

This command changes module's serial working mode as "command mode".

In serial command, Incoming serial data is processed as serial command. In data mode, Incoming serial data is processed as data and it is sent remote network hosts. This is special command so do not type each character and <+++> copy and paste it at the terminal program..

(4) <ATDT?>

This command responses module's current serial working mode.

Response "1" : serial server is data mode

Response "0" : serial server is command mode

This is special command so do not type each character and <ATDT?> copy and paste it at terminal program.

(5) <WP>

This command set network TCP/UDP port number. As network server mode, it works as network incoming port number As network client mode, it is remote host network port number to connect server Ex) <WP5000> // Set port # as 5000

⑥ <WX>

This command set remote host IP address. When set, module connect remote host automatically. Ex) <WX192.168.16.11>

⑦ <RQ>

This command responses serial server's network connection status. 0: Not Connect 1: Connect as client 2: Connected as server

3: Connected as Client/Server

(8) <WL>

This command saves configured data to flash.

When this command is processed, configured data is kept even if rebooting.

(9) <abc11>;

This is not command and it is one of sample user data for test



3. WIZSmartScript for WizFi630

3.1 Run Program

- 1) Execute the "WIZSmartScript.exe" file.
- (2) If you run the WIZSmartScript program, you can see the KEY Confirm Dialog as shown below.
- (3) If you enter the received CODE and KEY, you can operate the program in normal mode.

| KEY Confirm | n Dialog 🗙 |
|---|--|
| CODE | <u>ОК</u> |
| 🞇 WIZSmartScript - (c)2010 WIZnet, A | .ll Rights Reserved. 🗕 🗖 🗙 |
| Model WizFi630 | WizFi Demo Program |
| Group A. Get Basic R Sprint 1. Get Medule Information | |
| Start Script | |
| Start Scipt | |
| Module Info. | |
| Network Info. | |
| Factory Default | |
| | |
| | |
| COM 5 SSID | |
| Baud 38400 💌 KEY | |
| IP | |
| Gateway | |
| | Clear Console(When Script Start) V Auto Scroll |
| MAC | Clear History Clear Console Exit |



3.2 Get Basic

- A. Get Module Information
 - (1) Input the COM port of PC and baud rate. (Default Baud Rate : 38400)
 - ② Select "WizFi630" for Model, "A. Get Basic" for Group and "1. Get Module Information" for Script.
 - If you click "Start Script", you can see the basic information of WizFi630 as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | |
|---|--|--|
| Model WizFi630 | ΟΚ | |
| Group A. Get Basic | <\$192 168 16 254> | |
| Script 1. Get Module Information | <pre><do> : Operation Mode (0:AP, 1:Gateway, 2: AP+WDS, 3:Cli</do></pre> | |
| Start Script | <pre><so> <bb> : Wireless Band (0: 11b+g, 2: 11b, 3:11g, 6: n, 9:b</bb></so></pre> | |
| Medula Info | <s9></s9> | |
| Module milo. | <us> : SSTU <swlan-ap></swlan-ap></us> | |
| Network Info. | <dc> : Channel (0: Auto, 1~13: channel number)</dc> | |
| Factory Default | <sii> <dp> : Status Checking (connection status SSID BSSID</dp></sii> | |
| | <4> | |
| | <du> : Security Status</du> | |
| | AuthMode: O(Open or Shared), 1(Open), 2(802,1x), 3(Sh | |
| cou 5 com | Encrypt: O(None),1 (WEP), 2(TKIP), 3(AES), 4(TKIP_AES | |
| David 20100 | KeyLength: O(None), 1(WEP64), 2(WEP128) DefaultKey: 1 -4 | |
| Baud 38400 | KeyFormat(WEP): O(Ascii), 1(Hex) | |
| IP | KeyFormat(WPA-PSK): O(Passphrase), 1(Hex) | |
| Gateway 🗸 👻 | ▼ | |
| Connection | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | |
| MAC | Clear History Clear Console Exit | |



- B. Get Network Information
 - Select "WizFi630" for Model, "A. Get Basic" for Group and "2. Get Network" for Script.
 - If you click "Start Script", you can see the network information of WizFi630 as below.

| 📽 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | |
|---|---|--|
| Model WizFi630 | ок | |
| Group A. Get Basic | <bb> : Gateway</bb> | |
| Script 2. Liet Network | <\$192,168,16,254> | |
| Start Script | <rd> : DHCP Server (0:Disable, 1:Enable)</rd> | |
| | (<51> <bh> : DHCP Poll</bh> | |
| Module Info. | <\$192,168,16,11_192,168,16,50> | |
| Matural Info | <pre><dl> : Wireless Active Client List (MAC_Channel_TxRate_</dl></pre> | |
| NEWOK IND. | <pre><s> <rl> : DHCP Client List (IPaddress MAC address)</rl></s></pre> | |
| Factory Default | <s></s> | |
| | <rv> : DNS Server (0:Auto_DNS Server IP address, 1:Manua</rv> | |
| | <pre><51_8.8.8.8_168.126.63.1> </pre> <pre>(8T> : WAN Port (0:Static 1:DHCP Client 2:PPPoF) </pre> | |
| | <\$0_192,168,16,254_255,255,255,08,8,8,8> | |
| | <rc> : TCP Connection(Main Port) (0: Not Connect, 1:Conr</rc> | |
| | <pre><su> <rd> : TCP Connection(Aux Port) (0: Not Connect 1:Connect)</rd></su></pre> | |
| Baud 38400 - KET | <\$0> | |
| IP | <pre><qz> : System Status(0: Normal, 1: Flash Erase, 2: Flast content</qz></pre> | |
| Gateway 🔹 | <00> | |
| Connection | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | |
| MAC | Clear History Clear Console Exit | |



- C. Get Wireless Information
 - Select "WizFi630" for Model, "A. Get Basic" for Group and "3. Get Wireless" for Script.
 - If you click "Start Script", you can see the wireless information of WizFi630 as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | |
|---|--|--|
| Model WizFi630 | ОК | |
| Group A. Get Basic R | <02> | |
| Script 3. Get Wireless | <pre><bm> : WMM (0:Disable, 1:Enable)</bm></pre> | |
| Start Script | <\$1> | |
| | <pre><ua> : MAC Access Control (U:Disable, 1:AllowListed, 2:L <sd></sd></ua></pre> | |
| Module Info. | <pre><dt> : WPS (0:Disable, 1:Enable)</dt></pre> | |
| Network Info | <s0></s0> | |
| ricework mile. | <dn>: ATTAS NAME <swlan-ap></swlan-ap></dn> | |
| Factory Default | <pre><qp> : Status Checking (0:not-connected 1:connected, cor</qp></pre> | |
| | <4> Allo : Security Status | |
| | AuthMode_Encrypt[_DefaultKey_KeyLength_KeyFormat_KeyVa | |
| | AuthMode: O(Open or Shared), 1(Open), 2(802.1x), 3(St | |
| сом 5 💽 SSID | Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES), 4(TKIP_AES)= Keylength: 0(None), 1(WEP64), 2(WEP128) | |
| Baud 38400 - KEY | DefaultKey: 1 -4 | |
| | KeyFormat(WEP): O(Ascii), 1(Hex) | |
| IP | KeyFormat(WPA-PSK): U(Passphrase), 1(Hex) | |
| Gateway | · · · · · · · · · · · · · · · · · · · | |
| Connection | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | |
| MAC | Clear History Clear Console Exit | |



- D. Get Wireless(Client) Information
 - Select "WizFi630" for Model, "A. Get Basic" for Group and "4. Get Wireless (Client)" for Script.
 - If you click "Start Script", you can see the wireless(Client) information of WizFi630 as below.

| 💥 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🗕 🗖 🗙 | | | |
|---|-----|--|--|
| Model WizFi630 | | ок | |
| Group A. Get Basic | T B | | |
| Script 4. Get Wireless(Client) | 3 | <df> : Get Profile count_Active_SSID_Channel_AuthMode_Encrypt_Keyld_Keyl_Active_S</df> | |
| Start Script | | count: O-n, Number of profiles Active: 1(Actie Profile) | |
| Module Info. | | AuthMode: 1(Open), 3(Shared), 5(WPA-PSK), 7(WPA2-PSK) | |
| Network Info. | | Encrypt: O(None),1 (WEP), 2(TKIP), 3(AES) KeyId: 1-4, Always 2 when WPA-PSK/WPA2-PSK | |
| Factory Default | | Key: Encryption Key <s1_1_wizard-ap_0_1_0_1_none></s1_1_wizard-ap_0_1_0_1_none> | |
| | | | |
| | | | |
| COM 8 SSID | - | | |
| Baud 38400 💌 KEY | | | |
| IP | + | | |
| Gateway | + | · · · · · · · · · · · · · · · · · · · | |
| Connection | - | ▲ ► | |
| | | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | |
| MAC | - | Clear History Clear Console Exit | |
| | | | |



- E. Get Wireless(AP-Client) Information
 - Select "WizFi630" for Model, "A. Get Basic" for Group and "5. Get Wireless (Client-AP)" for Script.
 - If you click "Start Script", you can see the wireless(AP-Client) information of WizFi630 as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | | |
|---|---|--|--|
| Model WizFi630 | ОК | | |
| Script 5. Get Wireless(AP-Client) | <as> : Get SSID(AP Client)</as> | | |
| Start Script | <swizard-ap> <au> : Security Status(AP Client) AuthMode_Encrypt_channel[_DefaultKeyID_Key] AuthMode: 1(Open) 3(Shared) 5(WPA-PSK) 7(WPA2-PSK)</au></swizard-ap> | | |
| Module Info. | Encrypt: O(None),1 (WEP), 2(TKIP), 3(AES) | | |
| Network Info. | DefaultKeyID: 1 -4 | | |
| Factory Default | Key: WEP이면 5,10,13,26chars, WPA-PSK이면 8-63chars <s1_0_11></s1_0_11> | | |
| | | | |
| | | | |
| COM 5 SSID | | | |
| Baud 38400 💌 KEY | | | |
| IP | | | |
| Gateway 🗾 | | | |
| Connection | | | |
| × | Clear Console(When Script Start) | | |
| MAC | Clear History Clear Console Exit | | |



- F. Get Serial Information
 - Select "WizFi630" for Model, "A. Get Basic" for Group and "6. Get Serial" for Script.
 - If you click "Start Script", you can see the serial information of WizFi630 as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | |
|---|--|--|
| Model WizFi630 | ОК | |
| Group A. Liet Basic R | 2005 | |
| Script 6. Get Serial | <0><0> | |
| Start Script | <qc> : Char</qc> | |
| | <suu></suu> | |
| Module Info. | <\$0> | |
| Network Info. | <qu> : TCP Connection Option (0: TCP Client Mode일 (∦ se <so></so></qu> | |
| Factory Default | <pre><ru> : Main Port (Enable: O(Disable) 1(Enable), Protoco <so></so></ru></pre> | |
| | <pre><ru> : Aux Port (Enable: O(Disable) 1(Enable), Protocol <so></so></ru></pre> | |
| | <pre><re> : Data Flow (0: serial data를 main,aux port로 전송, <so></so></re></pre> | |
| слы 5 - SSID - | <pre><rz> : Get Insert Tag (0:Disable, 1:Enable) </rz></pre> | |
| Baud 38400 - KEY - | <cs> : Connection Status</cs> | |
| IP | <pre><atdt?> : Mode Status (0:Command Mode, 1:Data Mode)</atdt?></pre> | |
| Gateway | <\$1> | |
| Connection | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | |
| MAC | Clear History Clear Console Exit | |



3.3 Functions

- A. Site Survey(AP Scan)
 - (1) Input the COM port of PC and baud rate. (Default Baud Rate : 38400)
 - Select "WizFi630" for Model, "B. Functions" for Group and "1. Site Survey" for Script.
 - ③ If you click "Start Script", WizFi630 will find the APs and you can see the process as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, Al | ll Rights Reserved. 🛛 🗕 🗖 🗙 |
|---------------------------------------|--|
| Model WizFi630 | ок |
| Group B. Functions R | 2015 |
| Script 1. Site Survey | <sbelkin54g_001cdf971a64_1_20_wpa1pskwpa2psk :="" th="" wiznetkaize<=""></sbelkin54g_001cdf971a64_1_20_wpa1pskwpa2psk> |
| Start Script | |
| Module Info. | |
| Network Info. | |
| Factory Default | |
| | |
| | |
| COM 5 SSID | |
| Baud 38400 - KEY - | |
| IP | |
| Gateway | |
| Connection | |
| | Clear Console(When Script Start) V Auto Scroll |
| MAC | Clear History Clear Console Exit |



- B. Restart
 - Select "WizFi630" for Model, "B. Functions" for Group and "2. Restart" for Script.
 - 2 If you click "Start Script", WizFi630 will reboot and you can see the process as below.

| 💥 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | | |
|---|--|--|--|
| Model WizFi630 | ОК | | |
| Group B. Functions R | <wr> : Restart</wr> | | |
| Start Script | <s> Module is now restarting Wait a second please!!!</s> | | |
| Module Info. | | | |
| Network Info. | | | |
| Factory Default | | | |
| | | | |
| | | | |
| CDM 5 SSID | | | |
| Baud 38400 KEY | | | |
| IP M | | | |
| Connection | | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | | |
| MAC | Clear History Clear Console Exit | | |



- C. Factory Default
 - Select "WizFi630" for Model, "B. Functions" for Group and "3. Factory Default" for Script.
 - 2 If you click "Start Script", WizFi630 will reset to factory default and you can see the process as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | | |
|---|--|--|--|
| Model WizFi630 | ок | | |
| Group B. Functions R | | | |
| Script 3. Factory Default | <wf> : Factory Default <s></s></wf> | | |
| Start Script | Module is now restarting, | | |
| | Wait a second please!!! | | |
| Module Info. | | | |
| Network Info. | | | |
| Factory Default | | | |
| | | | |
| | | | |
| | | | |
| COM 5 SSID | | | |
| Baud 38400 - KEY - | | | |
| IP | | | |
| Gateway | | | |
| Connection | | | |
| ×. | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | | |
| MAC | Clear History Clear Console Exit | | |



- D. Send 6xx Command
 - Select "WizFi630" for Model, "B. Functions" for Group and "4. Send 6xx Command" for Script.
 - (2) Enter the valid value into the blank field.
 - ③ If you click "Start Script", WizFi630 will send the user command and you can see the process as below.

| 💥 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🗕 🗖 🗙 | | |
|---|---|--|
| Model WizFi630 | ΟΚ | |
| Script 4. Send 6xx Command | [Enter data into UserData4.] | |
| Start Script | < R⊳ <\$192.168.16.254> | |
| Module Info. | | |
| Network Info. | | |
| Factory Default | | |
| | | |
| | | |
| COM 8 SSID | | |
| Baud 38400 - KEY - | | |
| IP | | |
| Gateway | | |
| Connection | Charles Course Martines Contraction (Charles Second | |
| HI ···································· | Clear Lonsole When Script Starty Auto Scroll | |
| | | |



3.4 Set Operation Mode A. Access Point Mode

- - (1) Input the COM port of PC and baud rate. (Default Baud Rate : 38400)
 - ② Select "WizFi630" for Model, "C. Set operation Mode" for Group and "1. Access Point Mode" for Script.
 - (3) If you click "Start Script", you can see the process as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, / | All Rights Reserved. 🗕 🗖 🗙 |
|---|--|
| 88:88:35 | ок |
| Model WizFi630 Group C. Set Operation Mode R Script 1. Access Point Mode Start Script | <g00> : Operation Mode (0:AP, 1:Gateway, 2: AP+WDS, 3:Clier <s6> (Wait for some seconds to apply) <wt0_192,168,16,254_255,255,255,0_192,168,16,254_8,8,8,8> <s></s></wt0_192,168,16,254_255,255,255,0_192,168,16,254_8,8,8,8></s6></g00> |
| Module Info. Network Info. | <gswizfi630-ap> : SSID <s> <gco> : Channel (0: Auto, 1~13: channel number) <s></s></gco></s></gswizfi630-ap> |
| Factory Default | <pre><secirity> AuthMode_Encrypt[_DefaultKey_KeyLength_KeyFormat_KeyValue AuthMode: 0(Open or Shared), 1(Open), 2(802,1x), 3(Share Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES), 4(TKIP_AES) KeyLength: 0(None), 1(WEP64), 2(WEP128) DefaultKey: 1-4 KeyEcrmet(WEP): 0(Aecii) 1(Nex)</secirity></pre> |
| COM 5 • SSID • Baud 38400 • KEY • IP • Gateway • | <pre><gu1_0_0_0_12345678> : Secirity Status <s> <wl> : Flash Write <s></s></wl></s></gu1_0_0_0_12345678></pre> |
| Connection - | ✓ Clear Console(When Script Start) ✓ Auto Scroll Clear History Clear Console |



- B. Gateway Mode
 - Select "WizFi630" for Model, "C. Set operation Mode" for Group and "2. Gateway Mode" for Script.
 - 2 If you click "Start Script", you can see the process as below.

| 📽 WIZSmartScript - (c)2010 WIZnet, A | Il Rights Reserved 🗆 🗙 | | | | | |
|---|--|--|--|--|--|--|
| 88:88:48 | ОК | | | | | |
| | <g01> : Operation Mode (0:AP, 1:Gateway, 2: AP+WDS, 3:Clien <s> (Wait for some seconds to apply) <wt1> : Set WAN Port <s6> <wu122 16="" 169="" 254=""> : Set LAN Port (LD)</wu122></s6></wt1></s></g01> | | | | | |
| Model WizFi630 Group C. Set Operation Mode Script 2. Gateway Mode | <pre><wilig2,166,16,254> : Set LAN Port (TP) <s6> <wilig255,255,255,0> : Set LAN Port (Subnet Mask) <s6> <wilig2,168,16,11_192,168,16,50> : DHCP Poll <s6></s6></wilig2,168,16,11_192,168,16,50></s6></wilig255,255,255,0></s6></wilig2,166,16,254></pre> | | | | | |
| Start Script | <pre><so> <wvo> : DNS Server (0:Auto_DNS Server IP address, 1:Manual) <s> <gswizfi630-gw> : SSID <s> <gco> : Channel (0: Auto, 1~13: channel number) <s> </s></gco></s></gswizfi630-gw></s></wvo></so></pre> | | | | | |
| Module Info. Network Info. | | | | | | |
| Factory Default | <pre><sectrity> AuthMode_Encrypt[_DefaultKey_KeyLength_KeyFormat_KeyValue AuthMode: 0(Open or Shared), 1(Open), 2(802,1x), 3(Share Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES), 4(TKIP_AES) KeyLength: 0(None), 1(WEP64), 2(WEP128) DefaultKey: 1-4</sectrity></pre> | | | | | |
| COM 5 SSID SSID | <pre>KeyFormat(WEP): 0(Ascii), 1(Hex) KeyFormat(WPA-PSK): 0(Passphrase), 1(Hex) <gu1_0_0_0_0_12345678> : Secirity Status</gu1_0_0_0_0_12345678></pre> | | | | | |
| IP Gateway Connection | <s> <wl> : Flash Write <s></s></wl></s> | | | | | |
| MAC | Clear Console(When Script Start) V Auto Scroll Clear History Clear Console Exit | | | | | |



- C. Client Mode(WPA, Static IP)
 - Select "WizFi630" for Model, "C. Set operation Mode" for Group and "3. Client Mode(WPA, StaticIP)" for Script.
 - (2) Enter the valid value into the SSID and Key field.
 - ③ Enter the valid value into the IP and Gateway field.
 - (4) If you click "Start Script", WizFi630 will associate to the AP with Static IP and you can see the process as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🛛 🗕 📼 🗙 | | | | | | | |
|---|---|--|--|--|--|--|--|
| Model WizFi630 | ОК | | | | | | |
| Group C. Set Uperation Mode R | [Insert static ip address into UserData1 and gateway into [| | | | | | |
| Start Script | <g03> : Operation Mode (0:AP, 1:Gateway, 2: AP+WDS, 3:Clier <s6></s6></g03> | | | | | | |
| Module Info. | (wait for some seconds to apply) | | | | | | |
| Network Info. | <#T0_192,168,1,10_255,255,255,0_192,168,1,1_8,8,8,8> : Set <s></s> | | | | | | |
| Factory Default | <di> <sbelkin54g_001cdf971a64_1_10_wpa1pskwpa2psk:wiznetkaize <gibelkin54g_0123456789> : Connect AP <s6> <wl> : Flash Write <s></s></wl></s6></gibelkin54g_0123456789></sbelkin54g_001cdf971a64_1_10_wpa1pskwpa2psk:wiznetkaize </di> | | | | | | |
| COM 5 - SSID belkin54g - | <wr> : Module Restart <s></s></wr> | | | | | | |
| Baud 38400 - KEY 0123456789 - | Module is now restarting | | | | | | |
| IP 192.168.1.10 | Wait a second please!!! | | | | | | |
| Connection | 4 | | | | | | |
| | 🔽 Clear Console(When Script Start) 🛛 🔽 Auto Scroll | | | | | | |
| MAC | Clear History Clear Console Exit | | | | | | |



- D. Client Mode(WPA, DHCP)
 - Select "WizFi630" for Model, "C. Set operation Mode" for Group and "4. Client Mode(WPA, DHCP)" for Script
 - (2) Enter the valid value into the SSID and Key field.
 - ③ If you click "Start Script", WizFi630 will associate to the AP with DHCP and you can see the process as below.

| 🞇 WIZSmartScript - (c)2010 WIZnet, A | .ll Rights Reserved. 🗕 🗖 🗙 | | | | | | |
|--------------------------------------|--|--|--|--|--|--|--|
| Model WizFi630 | ОК | | | | | | |
| Script 3-2. Client Mode(WPA, DHCF | <603> : Operation Mode (0:AP, 1:Gateway, 2: AP+WDS, 3:Clier | | | | | | |
| Start Script | <56> (Wait for some seconds to apply) | | | | | | |
| Module Info. | <pre><wt1> : Set WAN Port (0:Static, 1:DHCP Client, 2:PPPoE) <s6></s6></wt1></pre> | | | | | | |
| Network Info. | <pre><sbelkin54g_001cdf971a64_1_20_wpa1pskwpa2psk:wiznetkaize <gibelkin54g_0123456789=""> : Connect AP <s></s></sbelkin54g_001cdf971a64_1_20_wpa1pskwpa2psk:wiznetkaize></pre> | | | | | | |
| Factory Default | | | | | | | |
| | <wl> : Flash Write</wl> | | | | | | |
| | <>> <wr> : Module Restart</wr> | | | | | | |
| | <s> Module is now restarting</s> | | | | | | |
| COM 5 - SSID belkin54g - | Wait a second please!!! | | | | | | |
| Baud 38400 - KEY 0123456789 - | | | | | | | |
| IP | | | | | | | |
| Gateway | | | | | | | |
| Connection | | | | | | | |
| _ | Clear Console(When Script Start) | | | | | | |
| MAC | Clear History Clear Console Exit | | | | | | |



3.5 Set Serial

- A. TCP Server(5000)
 - (1) Input the COM port of PC and baud rate. (Default Baud Rate : 38400)
 - Select "WizFi630" for Model, "D. Set Serial" for Group and "1. TCP Server(5000)" for Script.
 - (3) If you click "Start Script", you can see the process as below.

| 📽 WIZSmartScript - (c)2010 WIZnet, / | All Rights Reserved. – 📼 🗙 | | | | | |
|--------------------------------------|---|--|--|--|--|--|
| Model WizFi630 | ок | | | | | |
| Script 1 TCP Server(5000) | <pre><wko> : Protocol(0:TCP, 1:UDP)</wko></pre> | | | | | |
| Start Script | <s6> <wm2> : Mode (0:Client, 1:Mixed, 2:Server) <s> <wp5000> : Port</wp5000></s></wm2></s6> | | | | | |
| Module Info. | <s6></s6> | | | | | |
| Network Info. | <wl> : Flash Write <s></s></wl> | | | | | |
| Factory Default | <wr> : Module Restart <s></s></wr> | | | | | |
| | Module is now restarting Wait a second please!!! | | | | | |
| | | | | | | |
| CDM 5 - SSID - | | | | | | |
| IP | | | | | | |
| Gateway | | | | | | |
| Connection | | | | | | |
| | Clear Console(When Script Start) V Auto Scroll | | | | | |
| MAC | Clear History Clear Console Exit | | | | | |



- B. TCP Client(192.168.16.101-5000)
 - Select "WizFi630" for Model, "D. Set Serial" for Group and "2. TCP Client(192.168.16.101-5000)" for Script.
 - (2) If you click "Start Script", you can see the process as below.

| 💥 WIZSmartScript - (c)2010 WIZnet, All Rights Reserved. 🗕 🗖 🗴 | | | | | | | |
|---|---|--|--|--|--|--|--|
| Model WizFi630 R Group D. Set Serial R Script 2. TCP Client(192.168.16.101) R | OK | | | | | | |
| Start Script | <pre><56> <wmo> : Mode (0:Client, 1:Mixed, 2:Server) </wmo></pre> | | | | | | |
| Module Info. Network Info. Factory Default | <pre><s> <wx192,168,16,110> : Server IP <s> <wp5000> : Port <s6> <wl> : Flash Write <s> <wr> : Module Restart <s> Module is now restarting Wait a second please!!!</s></wr></s></wl></s6></wp5000></s></wx192,168,16,110></s></pre> | | | | | | |
| COM 5 - SSID - Baud 38400 - KEY - | | | | | | | |
| IP Gateway Connection | | | | | | | |
| MAC | ✓ Clear Console(When Script Start) ✓ Auto Scroll Clear History Clear Console Exit | | | | | | |



4. Serial command definitions

4.1 Network

| Contents | OP | CMD | Command Syntax | Response Syntax | Time (ms) | Example | Contents |
|--------------------------------|-----|-----|---|---|--------------|---|---|
| Version | Get | RF | <rf></rf> | <svx.x.x></svx.x.x> | 16 | <\$v1.0.6> | Get Firmware Version |
| MAC Address | Get | RA | <ra></ra> | <s0xx.xx.xx.xx.xx.xx_1xx.xx.xx.xx.xx.xx_2xx.xx.xx.xx.xx x> 0:Ethernet MAC address 1:Wireless MAC address 2:Ethernet MAC address(WAN)</s0xx.xx.xx.xx.xx.xx_1xx.xx.xx.xx.xx.xx_2xx.xx.xx.xx.xx | 16 | <s00ba0000001_100ba0000002 _200ba00000008></s00ba0000001_100ba0000002 | Get MAC address module |
| IP Address | Get | RI | <ri></ri> | <sxxx.xxx.xxx.xxx></sxxx.xxx.xxx.xxx> | 16 | <s192.168.1.254></s192.168.1.254> | Get IP address |
| IF AUUIESS | Set | WI | <wixxx.xxx.xxx></wixxx.xxx.xxx> | <\$> | 172 | <w192.168.1.254></w192.168.1.254> | Change IP address |
| Subpot Mack | Get | RS | <rs></rs> | <sxxx.xxx.xxx.xxx></sxxx.xxx.xxx.xxx> | 16 | <\$255.255.255.0> | Get subnet mask |
| Subnet Mask | Set | WS | <wsxxx.xxx.xxx.xxx></wsxxx.xxx.xxx.xxx> | <\$> | 109 | <ws255.255.255.0></ws255.255.255.0> | Set subnet mask |
| Cotomor | Get | RG | <rg></rg> | <sxxx.xxx.xxx.xxx></sxxx.xxx.xxx.xxx> | 16 | <\$192.168.1.254> | Get gateway |
| Gateway | Set | WG | <wgxxx.xxx.xxx.xxx></wgxxx.xxx.xxx.xxx> | <\$> | 78 | <wg192.168.1.254></wg192.168.1.254> | Set gateway |
| | Get | RD | <rd></rd> | <sx> 1:Enable 0:Disable</sx> | 16 | <\$1> | Get DHCP Server working status |
| DHCP Server | | - | <wdx></wdx> | | | | |
| | Set | WD | 1:Enable | <sx></sx> | 78 | <wd1></wd1> | Set DHCP Server working status |
| | | | 0:Disable | | | | |
| DHCP | Get | RH | <rh></rh> | <sxxx.xxx.xxx.xxx_xxx.xxx.xxx></sxxx.xxx.xxx.xxx_xxx.xxx.xxx> | 16 | <\$192.168.1.100_192.168.1.200> | Start address_End address |
| Start/End IP | Set | WH | <whxxx.xxxx.xxx.xxx_xxx.xxx.xxx.xxx></whxxx.xxxx.xxx.xxx_xxx.xxx.xxx.xxx> | <\$> | 156 | <wh192.168.1.10_192.168.1.100></wh192.168.1.10_192.168.1.100> | |
| Wireless Active Client List | Get | DL | <dl></dl> | <pre><sxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>16</td><td><s00089ff4da1e_1_54m_70></s00089ff4da1e_1_54m_70></td><td>Return connected clients information Client/Adhoc Mode: Not Support</td></sxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<></pre> | 16 | <s00089ff4da1e_1_54m_70></s00089ff4da1e_1_54m_70> | Return connected clients information Client/Adhoc Mode: Not Support |
| DHCP Client List | Get | RL | <rl></rl> | <\$xxx.xxx.xxx.xxx_xxxxxxxxxxxxxxxxxxxxxx | 62 | <s192.168.1.2_00089ff4da1e></s192.168.1.2_00089ff4da1e> | Return DHCP clients information |



| | - | - | | IPaddress_MAC address | | - - - | - - - |
|------------|-----|----|---|---|-----|--|-----------------------------|
| | - | - | | | | • | |
| DNS Server | Set | wv | <wv0> or <wv1_xxx.xxx.xxx.xxx[_xx.xx.xxx] 0:Auto_DNS Server IP address 1:Manual</wv1_xxx.xxx.xxx.xxx[_xx.xx.xxx] </wv0> | <s></s> | 16 | <wv1_ 61.41.153.2_203.248.252.2> or <wv0></wv0></wv1_ | Set DNS server IP address |
| | Get | RV | <rv></rv> | <sx_xxx.xxx.xxx.xxx[_xx.xx.xx]> 0:Auto_DNS Server IP address 1:Manual</sx_xxx.xxx.xxx.xxx[_xx.xx.xx]> | 16 | <s1_ 61.41.153.2_203.248.252.2=""> or <s0></s0></s1_> | Get DNS server IP address |
| | Get | RT | <rt></rt> | <s0_xxx.xxx.xxx.xxx_xxx_xxx.xxx_xxx_xxx_xx< td=""><td>16</td><td><\$0_182.29.231.10_255.255.255.0_ 182.29.231.1_182.29.231.150> or <\$1_182.29.231.10_255.255.255.0_ 182.29.231.1> or <\$2_username_password></td><td>Get WAN port IP information</td></s0_xxx.xxx.xxx.xxx_xxx_xxx.xxx_xxx_xxx_xx<> | 16 | <\$0_182.29.231.10_255.255.255.0_ 182.29.231.1_182.29.231.150> or <\$1_182.29.231.10_255.255.255.0_ 182.29.231.1> or <\$2_username_password> | Get WAN port IP information |
| WAN Port | Set | WT | <wt0_xxx.xxx.xxx.xxx_xxx.xxx.xxx.xxx.xxx x.xxx_xxx.xxx.</wt0_xxx.xxx.xxx.xxx_xxx.xxx.xxx.xxx.xxx | <s></s> | 375 | <wt0_182.29.231.10_255.255.255. 0_182.29.231.1_182.29.231.150> or <wt1> or <wt2_username_password></wt2_username_password></wt1></wt0_182.29.231.10_255.255.255. | Set WAN port information |



| | Get | RC | <rc></rc> | <sx> 0: Not Connect 1:Connect</sx> | 16 | <\$1> | when protocol is TCP available (Main/Aux Port connection status) |
|-------------------|-----|----|-----------|---|----|-------------------------------------|---|
| TCP Connection | Get | RQ | <rq></rq> | <sx> 0: Not Connect 1: Client Connect 2: Server Connect 3: Client/Server Connect</sx> | 16 | <s1></s1> | when protocol is TCP available (Main Port connection status) |
| | Get | RY | <ry></ry> | <sx> 0: Not Connect 1: Client Connect 2: Server Connect 3: Client/Server Connect</sx> | 16 | <s1></s1> | when protocol is TCP available (Aux Port connection status) |
| | Set | wc | <wc></wc> | <s></s> | 16 | <wc></wc> | Close TCP connection (Main/Aux Port) |
| | Set | wq | <wq></wq> | <s></s> | 16 | <wq></wq> | Close TCP connection (Main Port) |
| | Set | WY | <wy></wy> | <\$> | 16 | <wy></wy> | Close TCP connection (Aux Port) |
| System Status | Get | QZ | <qz></qz> | <sx> 0: Normal 1: Flash Erase in process 2: Flash Write in process 3: F/W Upgrade in process</sx> | 16 | <s1></s1> | Current System status for flash access |
| NTP Server | Get | QN | <qn></qn> | <sxxx> xxx: NTP Server</sxxx> | | <stime.bora.net></stime.bora.net> | Get NTP Server information |
| NTP Server | Set | ON | | <\$> | | <ontime.bora.net></ontime.bora.net> | Set NTP Server |
| System Time | Get | QM | <qm></qm> | <syear_month_day_hour_min_sec></syear_month_day_hour_min_sec> | | <\$2011_9_14_10_10_30> | Get current system time |



| 4.2 Wir | 4.2 Wireless | | | | | | | |
|-----------|--------------|-----|--|--|--------------|--|---|--|
| Contents | OP | CMD | Command Syntax | Response Syntax | Time (ms) | Example | Contents | |
| Wireless | Get | DB | <db></db> | <sx> :0: 11b+g, 2: 11b, 3:11g, 6: n, 9:b+g+n</sx> | 16 | <\$9> | Get wireless band Client/Adhoc Mode: Not Support | |
| Band | Set | GB | <gbx> :0: 11b+g, 2: 11b, 3:11g, 6: n, 9:b+g+n</gbx> | <\$> | 78 | <gb6></gb6> | Set wireless band information Client/Adhoc Mode: Not Support | |
| Operation | Get | DO | <do></do> | <sx> 0:AP, 1:Gateway, 3:Client, 4: Adhoc, 5: AP-Client GW, 6: AP-Client Multi-Bridge</sx> | 16 | <s0></s0> | Get operation mode | |
| Mode | Set | GO | <gox> 0:AP, 1:Gateway, 3:Client, 4: Adhoc, 5: AP- Client GW, 6: AP-Client Multi-Bridge</gox> | <s></s> | 766 | <go1></go1> | Change operation mode | |
| SCID | Get | DS | <pre></pre> | <sxxxx~> :1~32 characters</sxxxx~> | 32 | <swlanssid></swlanssid> | Get SSID Client/Adhoc Mode: Not Support | |
| עונכ | Set | GS | <gsxxxx~> 1~32 chars</gsxxxx~> | <\$> | 94 | <gschanged_ssid></gschanged_ssid> | Change SSID Client/Adhoc Mode: Not Support | |
| Channel | Get | DC | <dc></dc> | <sx> 0: Auto 1~13: channel number</sx> | 16 | <\$6> | Get Wireless operation channel Client/Adhoc Mode: Not Support | |
| Channer | Set | GC | <gcx> 0: Auto 1~13: channel number</gcx> | <s></s> | 156 | <gc0></gc0> | Change wireless operation channel Client/Adhoc Mode: Not Support | |
| | Get | DW | <dw></dw> | <sx_x_xxxxxxxxxxxxxxxxx 3:disable,5:bridge,6:repeater,7:Lazy_count_MACaddr ess_Comment[_MACaddress_Comment]</sx_x_xxxxxxxxxxxxxxxxx | 16 | <s1_3_1_000102030405_test1> or <s2_3_1_000102030405_test2></s2_3_1_000102030405_test2></s1_3_1_000102030405_test1> | Get WDS Client/Adhoc Mode: Not Support | |
| WDS | Set | GW | <gwx_x_x_xxxxxxxxxxxxxxxxx 3:disable,5:bridge,6:repeater,7:Lazy_ 1:add,2:delete_ count_MACaddress_Comment[_MACaddress_</gwx_x_x_xxxxxxxxxxxxxxxxx | <\$> | 141 | <dw1_3_1_000102030405_test1> or <dw0_3_1_000102030405_test2></dw0_3_1_000102030405_test2></dw1_3_1_000102030405_test1> | Set WDS Client/Adhoc Mode: Not Support | |



| | | | Comment] | | | | |
|-----------------------|-----|----|--|--|----|--|--|
| | Get | DP | <dp></dp> | <sxxx> 1-100: power(%)</sxxx> | 16 | <s14></s14> | Get Tx Power Client/Adhoc Mode: Not Support |
| Tx Power | Set | GP | <gpxxx> 1-100: power(%)</gpxxx> | <\$> | 94 | <gp16> or <gp99></gp99></gp16> | Set Tx Power Client/Adhoc Mode: Not Support |
| Data Rate | Get | DR | <dr></dr> | <sxx> 20MHz: 7,14.5,21.5,28.5,43.5,57.5,65,72 40MHz: 15,30,45,60,90,120,135,150 b only: 1, 2, 5, 11 g only, bg mode: 1, 2, 5, 6, 9, 11, 12, 18, 24, 36, 48, 54</sxx> | 16 | <\$300> | Get Data Rate Client/Adhoc Mode: Not Support |
| | Set | GR | <grxx> 20MHz: 7,14.5,21.5,28.5,43.5,57.5,65,72, 40MHz: 15,30,45,60,90,120,135,150, b only: 1, 2, 5, 11 g only, bg mode: 1, 2, 5, 6, 9, 11, 12, 18, 24, 36, 48, 54</grxx> | <\$> | 94 | <gr300></gr300> | Set Data Rate Client/Adhoc Mode: Not Support |
| Broadcast SSID | Get | DH | <dh></dh> | <sx> :0:Enable, 1:Disable</sx> | 16 | <\$1> | Get Hidden SSID Client/Adhoc Mode: Not Support |
| Dioaucast 3310 | Set | GH | <ghx> 0:Enable, 1:Disable</ghx> | <\$> | 94 | <gh0></gh0> | Set Hidden SSID Client/Adhoc Mode: Not Support |
| WMM | Get | DM | <dm></dm> | <sx> 1:Enable, 0:Disable</sx> | 16 | <\$1> | Get WMM Status Client/Adhoc Mode: Not Support |
| | Set | GM | <gmx> 1:Enable, 0:Disable</gmx> | <s></s> | 94 | <gm1></gm1> | Set WMM Client/Adhoc Mode: Not Support |
| MAC Access Control | Get | DA | <da></da> | <sx_x_xxxxxxxxxxxxxxxxxxxxxxx 0:Disable, 1:AllowListed, 2:DenyListed[_count_MACaddress]</sx_x_xxxxxxxxxxxxxxxxxxxxxxx | 16 | <\$1_2_000b01000002_000b0100ff0 2> | Get MAC Access Control Client/Adhoc Mode: Not Support |



| r | | | • | · | | | |
|--------------------------------------|-----|----|---|--|------|---|---|
| | Set | GA | <gax_x_x_xxxxxxxxxxxxxxx~> 0:Disable,1:AllowListed,2:DenyListed,3:all_delet e[_1:add,2:delete_count_MACaddress]</gax_x_x_xxxxxxxxxxxxxxx~> | <s></s> | 735 | <ga2_2_000b01000002_000b0100f f02></ga2_2_000b01000002_000b0100f | Set MAC Access Control Client/Adhoc Mode: Not Support |
| Site Survey (Sync Command) | Get | DI | <di></di> | <sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>2063</td><td><sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>Do the site survey and send site survey list. Get Site Survey</td></sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<></td></sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<> | 2063 | <sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>Do the site survey and send site survey list. Get Site Survey</td></sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<> | Do the site survey and send site survey list. Get Site Survey |
| Site Survey Start (Async Command) | Set | GQ | <gq></gq> | <\$> | 32 | <gq></gq> | Do the site survey start command. |
| Site Survey List (Async Command) | Get | DQ | <dq></dq> | <sxxxx_xxxxxxxxxxxx_xx_xx_x> SSID_BSSID_Channel_RSSI_Security when AP is hidden state, SSID shows blank.</sxxxx_xxxxxxxxxxxx_xx_xx_x> | 46 | <sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>Get the current Site(AP) List, This command should be worked together "GQ" command. Call "GQ" command and call DQ command after 2 second.</td></sxxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<> | Get the current Site(AP) List, This command should be worked together "GQ" command. Call "GQ" command and call DQ command after 2 second. |
| Connection AP | Set | GI | <ssid_key> Ssid: AP's SSID key: Encryption key <u>Using <gi> command after <di> (Site</di></gi></u> <u>Survey) command.</u> <u>Need AP's authentication method is WEP and</u> <u>default KeyId is "1"</u> <u>Other authentication method or default</u> <u>KeyID, you can use <gu> command.</gu></u></ssid_key> | <\$> | 2078 | <gitest1_12345></gitest1_12345> | Set Connection AP |
| WDC | Get | DT | <dt></dt> | <sx> :0:disable, 1:enable</sx> | 16 | <s0> or <s1></s1></s0> | Get WPS Status |
| WP5 | Set | GT | <gtx> 0:disable, 1:enable</gtx> | <\$> | 156 | <gt0> or <gt1></gt1></gt0> | Set WPS |
| Alias Name | Get | DN | <dn></dn> | <sxxx> Maximum 29 characters</sxxx> | 16 | <swifi1></swifi1> | Get Alias Name |



| | Set | GN | | <\$> | 78 | <gnwifi></gnwifi> | -Set Alias Name |
|-------------------------|-----|----|---|--|------|---|--|
| Status Checking | Get | QP | <qp></qp> | <sx_xxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx< td=""><td>16</td><td><s1_damosysip604work_00089 :fbe7a84_1_54M_70></s1_damosysip604work_00089 </td><td>Get Wireless Connection Status</td></sx_xxxx_xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx<> | 16 | <s1_damosysip604work_00089 :fbe7a84_1_54M_70></s1_damosysip604work_00089 | Get Wireless Connection Status |
| Get Profile | Get | DF | <df></df> | <sx_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_< td=""><td>16</td><td><s0> or <s1_0_ccccccc_0_1_0_1_none> or <s2_0_aaaaaaaaa_0_3_1_1_12345_0 _ccccccc_0_5_2_2_1234567890></s2_0_aaaaaaaaa_0_3_1_1_12345_0 </s1_0_ccccccc_0_1_0_1_none></s0></td><td>Get Profile Available at Client/Adhoc Mode</td></sx_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_x_<> | 16 | <s0> or <s1_0_ccccccc_0_1_0_1_none> or <s2_0_aaaaaaaaa_0_3_1_1_12345_0 _ccccccc_0_5_2_2_1234567890></s2_0_aaaaaaaaa_0_3_1_1_12345_0 </s1_0_ccccccc_0_1_0_1_none></s0> | Get Profile Available at Client/Adhoc Mode |
| Set Profile | Set | GF | <sx_x_x_x_x_x_x> add/del_SSID_Channel_AuthMode_Encrypt_Ke yId_Key add/del: 1(add), 0(delete) SSID: SSID of profile AuthMode: 1(Open), 3(Shared), 5(WPA-PSK), 7(WPA2-PSK) Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES) KeyId: 1-4, Always "2" when WPA-PSK/WPA2- PSK Key: Encryption Key</sx_x_x_x_x_x_x> | <s></s> | 1812 | <gf1_test-ssid_0_1_0_1_dummy> or <gf1_test-ssid_0_3_1_1_12345> or <gf0_test-ssid_0_3_1_1_12345></gf0_test-ssid_0_3_1_1_12345></gf1_test-ssid_0_3_1_1_12345></gf1_test-ssid_0_1_0_1_dummy> | Set WIFI Profile Add WIFI profile and make it activate Available at Client/Adhoc Mode ! This command will save data to<br flash automatically!!> |
| Get SSID (AP-Client) | Get | AS | <as></as> | <sxxxx> 1-32chars</sxxxx> | 31 | <swlan-ap></swlan-ap> | At AP-Client Mode, Set Client side's SSID |
| Set SSID (AP-Client) | Set | PS | <psxxx> 1-32chars</psxxx> | <s></s> | 78 | <pswlan-ap></pswlan-ap> | At AP-Client Mode, Set Client side's SSID |



| AP Connect (AP-Client) | Set | PI | <ssid_key> Ssid: AP's SSID key: Encryption key <u>Using <pi> command after <di> (Site</di></pi></u> <u>Survey) command.</u> <u>Need AP's authentication method is WEP and</u> <u>default KeyId is "1"</u> <u>Other authentication method or default</u> <u>KeyID, you can use <pu> command.</pu></u></ssid_key> | <s></s> | 594 | <pissid_key></pissid_key> | At AP-Client Mode, connect to AP |
|--------------------------------|-----|----|---|--|-----|--|--|
| Security Status (AP-Client) | Get | AU | <au></au> | <sx_x_x_x_x> AuthMode_Encrypt_channel[_DefaultKeyID_Key] AuthMode: 1(Open), 3(Shared), 5(WPA-PSK), 7(WPA2-PSK) Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES) Channel: AP's channel information DefaultKeyID: 1 -4 Key: 5,10,13,26chars when WEP, 8-63chars when WPA-PSK</sx_x_x_x_x> | 16 | <au1_0_1> or <au1_1_10_1_12345> or <au3_1_9_1_12345> or <au5_3_1_2_1234567890></au5_3_1_2_1234567890></au3_1_9_1_12345></au1_1_10_1_12345></au1_0_1> | At AP-Client Mode, get Client's Security information Channel should be same with AP's Channel |
| Security Status (AP-Client) | Set | PU | <sx_x_x_x_x> AuthMode_Encrypt_Channel[_DefaultKeyID_Ke y] AuthMode: 1(Open), 3(Shared), 5(WPA-PSK), 7(WPA2-PSK) Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES) Channel: AP's channel information DefaultKeyID: 1 -4 Key: 5,10,13,26chars when WEP, 8-63chars when WPA-PSK</sx_x_x_x_x> | <s></s> | 328 | <pu1_0_1> or <pu1_1_4_1_12345> or <pu5_3_10_2_12345678></pu5_3_10_2_12345678></pu1_1_4_1_12345></pu1_0_1> | At AP-Client Mode, change Client's Security information. Channel should be same with AP's channel |

r-----



4.3 Security Time Command Syntax OP CMD **Response Syntax** Example Contents Contents (ms) <Sx_x_x_x_x_x_x_x_x> AuthMode_Encrypt[_DefaultKey_KeyLength_KeyFor mat_KeyValue_radiusPasswd_radiusIP_radiusPort] Using When AP/GW Mode, AuthMode: 1-a AuthMode: 1(Open), 2(802.1x), 3(Shared), 4(WPA), 5(WPA-PSK), 6(WPA2), 7(WPA2-PSK), 8(WEPAUTO), EncryptType: 0-4 Using When Client Mode, Get Security Status ⁹(WPA1WPA2), a(WPAPSKWPA2PSK) Security Status : Get : **DU** :<DU> 16 Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES), AuthMode: 1,3,5,7 Client/Adhoc Mode: Not Support 4(TKIP AES) EncryptType: 0-3 KeyLength: 0(None), 1(WEP64), 2(WEP128) DefaultKey: 1 -4 <S0_0> or <S1_1_1_0_12345> KeyFormat(WEP): 0(Ascii), 1(Hex) KeyFormat(WPA-PSK): 0(Passphrase), 1(Hex) <GUx_x_x_x_x_x_x_x AuthMode_Encrypt[_DefaultKey_KeyLength_K eyFormat_KeyValue_radiusPasswd_radiusIP_ra diusPort] Change Security. It takes time min : 4, max 10 seconds AuthMode: 1(Open), 2(802.1x), 3(Shared), 4(WPA), 5(WPA-PSK), 6(WPA2), 7(WPA2-PSK), Client/Adhoc Mode: Not Support 8(WEPAUTO), 9(WPA1WPA2), <GU0_0> or (Caution : it takes more than 4 Security Control : Set : **GU** <S> 406 a(WPAPSKWPA2PSK) <GU1 1 1 1 0 12345> seconds to be applied, please Encrypt: 0(None),1 (WEP), 2(TKIP), 3(AES), double check execution GU command after getting response :4(TKIP AES) KeyLength: 0(None), 1(WEP64), 2(WEP128) via DU command.) DefaultKey: 1 - 4 KeyFormat(WEP): 0(Ascii), 1(Hex) KeyFormat(WPA-PSK): 0(Passphrase), 1(Hex)



| 4.4 Seria | ıl | | | | | | |
|---|--------|-----|---|--|--------------|---------------------------------|--------------------|
| Contents | OP | CMD | Command Syntax | Response Syntax | Time (ms) | Example | Contents |
| Drotogol | Get | RK | <rk></rk> | <sx> TCP_0, UDP_1</sx> | 16 | <s0></s0> | Get Protocol |
| Protocol | Set | WK | <wkx> TCP_0, UDP_1</wkx> | <s></s> | 78 | <wk1></wk1> | Set Protocol |
| | Get | RM | <rm></rm> | <sx> 0:Client, 1:Mixed, 2:Server</sx> | 16 | <\$0> | Get Mode |
| Mode | Set WM | wм | <wmx> 0:Client, 1:Mixed, 2:Server</wmx> | <\$> | 78 | <rm0></rm0> | Set Mode |
| Sonvor IP | Get | RX | <rx></rx> | <sxxx.xxx.xxx.xxx></sxxx.xxx.xxx.xxx> | 16 | <\$192.168.1.1> | Get Server IP |
| Server IF | Set | WX | <wxxxx.xxx.xxx></wxxxx.xxx.xxx> | <\$> | 78 | <wx192.168.1.1></wx192.168.1.1> | Set Server IP |
| Dert | Get | RP | <rp></rp> | <\$xxxxx> | 16 | <pre><s1000></s1000></pre> | Get Port |
| Ροπ | Set | WP | <wpx> 0~65535</wpx> | <s></s> | 94 | <wp1000></wp1000> | Set Port |
| Baudrate_DataBit_P arity_Flow_Stopbits | Get | RB | <rb></rb> | <sxxxx> [Baudrate]1: 115200, 2: 57600, 3: 38400, 4: 19200, 5: 9600, 6: 4800, 7: 2400,8: 1200, 0: 230400, 9: 460800, a: 921600 [data byte]7: 7bit,8:8bit [parity] 0: no parity, 1: Odd, 2: Even [Flow] 0: no, 1: Xon/Xoff, 2: RTS/CTS [Stopbits]; 1: 1stop, 2:2stop</sxxxx> | 16 | <\$18001> | Get Serial Setting |



| | Set | WB | <pre><wbxxxx> [Baudrate]1: 115200, 2: 57600, 3: 38400, 4: 19200, 5: 9600, 6: 4800, 7: 2400,8: 1200, 0: 230400, 9: 460800, a: 921600 [data byte]7: 7bit,8:8bit [parity] 0: no parity, 1: Odd, 2: Even [Flow] 0: no, 1: Xon/Xoff, 2: RTS/CTS [Stopbits]; 1: 1stop, 2:2stop</wbxxxx></pre> | <s></s> | 359 | <wb38001></wb38001> | Set Serial Setting |
|--------------------------|-----|----|---|---|-----|---|---------------------------|
| Domain Nome | Get | RW | <rw></rw> | <sxxxx> Max 64 characters</sxxxx> | 16 | <pre></pre> < Sdamosys.dyndns.org > | Get Domain Name |
| Domain Name | Set | ww | <sxxxx> Max 64 characters</sxxxx> | <s></s> | 78 | <wwdamosys.dyndns.org></wwdamosys.dyndns.org> | Set Domain Name |
| Time | Get | QT | <qt></qt> | <sxxxxx> 0~65535</sxxxxx> | 16 | <\$100> | Get Time |
| Time | Set | ОТ | <0Txxxxx> 0~65535 | <\$> | 78 | <qt10></qt10> | Set Time |
| C . | Get | QS | <qs></qs> | <sxxx> 0~255</sxxx> | 16 | <\$10> | Get Size |
| Size | Set | OS | <osxxx> 0~255</osxxx> | <s></s> | 78 | <os10></os10> | Set Size |
| Charl | Get | QC | <qc></qc> | <sxx> 00~ff</sxx> | 16 | <\$2a> | Get Delimiter |
| Cnar | Set | ос | <ocxx> 00~ff</ocxx> | <s></s> | 78 | <oc2a></oc2a> | Set Delimiter |
| | Get | QI | <qi></qi> | <sxx> 00~60</sxx> | 16 | <s10></s10> | Get Inactivity Time |
| | Set | OI | <0Ixx> :00~60 | <\$> | 78 | <0I10> | Set Inactivity Time |
| TCP Connection Option | Get | QU | <qu></qu> | <sx> 0: TCP Client Mode, Serial to LAN auto connection 1: TCP Client Mode, Serial to LAN connection made in serial data in</sx> | 16 | <\$0> | Get TCP Connection Option |



| | Set | ou | <ou> 0: TCP Client Mode, Serial to LAN auto connection 1: TCP Client Mode, Serial to LAN connection made in serial data in</ou> | <s></s> | 78 | <ou0></ou0> | Set TCP Connection Option |
|-----------|-----|----|---|---|-----|--|---------------------------|
| | Get | RO | <ro></ro> | <sx_x_a.b.c.d_x> Enable[_Protocol_Mode_ServerIP or Domain_ServerPort] Enable: 0(Disable), 1(Enable), Disable (In disable, other data is ignored Protocol: 0(UDP), 1(TCP) Mode: 0(Server), 1(Client), 2(Mixed) ServerIP: a.b.c.d Domain: xxx.yyy.zzz ServerPort: 0-65535</sx_x_a.b.c.d_x> | 16 | <s0> or <s1_0_0_192.168.1.1_1000></s1_0_0_192.168.1.1_1000></s0> | Get Main Port Status |
| Main Port | Set | wo | <wox_x_x_a.b.c.d_x> Enable[_Protocol_Mode_ServerIP or Domain_ServerPort] Enable: 0(Disable), 1(Enable), Disable (In disable, other data is ignored Protocol: 0(UDP), 1(TCP) Mode: 0(Server), 1(Client), 2(Mixed) ServerIP: a.b.c.d Domain: xxx.yyy.zzz ServerPort: 0-65535</wox_x_x_a.b.c.d_x> | <\$> | 500 | <wo0> or <wo1_0_0_192.168.1.1_1000></wo1_0_0_192.168.1.1_1000></wo0> | Set Main Port Status |

| | Get | RU | <ru></ru> | <sx_x_x_a.b.c.d_x> Enable[_Protocol_Mode_ServerIP or Domain_ServerPort] Enable: 0(Disable), 1(Enable) (In Disable, other data is ignored) Protocol: 0(UDP), 1(TCP)</sx_x_x_a.b.c.d_x> | 16 | <s0> or <s1_0_0_192.168.1.1_1000></s1_0_0_192.168.1.1_1000></s0> | Get Aux Port Status |
|-----------|-----|----|--|---|-----|--|-------------------------|
| Aux Port | | | | Mode: 0(Server), 1(Client) ServerIP: a.b.c.d Domain: xxx.yyy.zzz ServerPort: 0-65535 | | | |
| | Set | WU | <wux_x_x_a.b.c.d_x> Enable[_Protocol_Mode_ServerIP or Domain_ServerPort] Enable: 0(Disable), 1(Enable) (In Disable, other data is ignored) Protocol: 0(UDP), 1(TCP) Mode: 0(Server), 1(Client) ServerIP: a.b.c.d Domain: xxx.yyy.zzz ServerPort: 0-65535</wux_x_x_a.b.c.d_x> | <s></s> | 437 | <wu0> or <wu1_0_0_192.168.1.1_1000></wu1_0_0_192.168.1.1_1000></wu0> | Set Aux Port Status |
| | Get | RE | <re></re> | <sx> 0: send incoming serial data to LAN main and aux port 1: send incoming serial data to LAN main 2: send incoming serial data to LAN Aux</sx> | 16 | <\$0> | CIMOS specific commands |
| Data Flow | Set | WE | <wex> 0: send incoming serial data to LAN main and aux port 1: send incoming serial data to LAN main 2: send incoming serial data to LAN Aux</wex> | <\$> | 16 | <we1></we1> | CIMOS specific commands |



| | | | | | | | WIZnet |
|----------------------|-----|-----|---|--|-----|------------------------------------|--|
| Get Insert Tag | Get | RZ | <rz></rz> | <sx_xxx_xxx> enable(0- 1)[_mainport_delimeter1_auxport_delimeter] 0: disable(default) 1: enable delimeter mac 16 characters</sx_xxx_xxx> | 16 | <s0> or <s1_@_#></s1_@_#></s0> | |
| Insert Tag | Set | wz | <wzx_xxx_xxx> enable(0-1)[_main-delimeter1_aux-delimeter] 0: disable(default) 1: enable delimeter max 16 characters</wzx_xxx_xxx> | <s></s> | 219 | <wz0> or <wz1_@_#></wz1_@_#></wz0> | Set serial data tag for main and aux |
| Client Mode | Set | сс | <ccxxxx_xx> ip-address_port, ip-address: a.b.c.d, port: tcp port(0-65535)</ccxxxx_xx> | <s></s> | 281 | <\$192.168.1.1_1000> | set serial main port connection for specific client only |
| Connection Status | Get | cs | <cs></cs> | <ok> : TCP is well connected <fail> : TCP is not connected</fail></ok> | 16 | <ok> or <fail></fail></ok> | get serial main port connection for specific client only same with <rc> but response is different</rc> |
| Connection End | Set | cq | <cqx> (0-65535)</cqx> | <\$> | 219 | <cq1000></cq1000> | Change serial main as TCP server mode. For specific client only |
| Data Mode | Set | AT | <atd>></atd> | <s></s> | 110 | <atdt></atdt> | change serial server as Data(Normal) Mode |
| Command Mode | Set | +++ | <+++> | <\$> | 110 | <+++> | change serial server as Command Mode |
| Mode Status | Get | AT | <atd>></atd> | <s0> or <s1> 0: command mode, 1: data mode</s1></s0> | 16 | <atdt?></atdt?> | get current serial server mode |
| Escape Mode | Get | QX | <qx></qx> | <sx> 0: disabled, 1: enabled</sx> | | <s1> or <s0></s0></s1> | get usage of Escape Sequence |

| | | | | | | | WIZnet |
|-------------|-----|------|-------------|-----------------|------|--|-----------------------------------|
| | | | | | - | 2 - - - | Set mode switch |
| | - | | | | - | | "use_hw_switch_pin". |
| | : : | | | <u>.</u> | : | Į | Serial mode switch can be control |
| Escape Mode | Set | ОХ | <oxx></oxx> | <\$> | - | <ox0> or <ox1></ox1></ox0> | via GPIO |
| | | | | - | | if 0, only <atdt> and <+++></atdt> | |
| | : | | | · • • | - | - | command is available for mode |
| | | | | | |] | switch |
| | | | | | | | Save committed command to |
| Flach Write | | 1/0/ | 214/1 5 | module's flash. | | | |
| Flash white | set | VVL | <~~L> | <>> | 1404 | < VVL> | Saved data is available after |
| | | | | | | | rebooting. |



| 4.5 Other | rs | | | | | | |
|------------------|-----|-----|----------------|-----------------|--------------|-----------|---------------------|
| Contents | OP | CMD | Command Syntax | Response Syntax | Time (ms) | Example | Contents |
| Factory Default | Set | WF | <wf></wf> | <s></s> | 2844 | <wf></wf> | Set Factory Default |
| Restart | Set | WR | <wr></wr> | <\$> | 16 | <wr></wr> | Set System Restart |



4.6 Return Code <S> or Command success S <Sxx...> F <F> command operation failed Command failed because of no '<' 0 <0> ----..... - - - - -1 <1> No supported command is inputted - - - -2 Command parameter is mismatch <2> 3 <3> Command failed because of no '>' Not supported command in current running 4 <4> mode No more job is requested In WDS : requested to add more than 4 5 <5> In Profile: requested to add more than 2 In ACL :requested to add more than 16 Already configured with same data 6 <6>

4.7 Exception

| In SSID, PSK, if parameter has "_", then it is processed "". When |
|--|
| response data has "", then process it as"_" |
| ex) |
| <ds>> <s11_22>: SSID: 11_22</s11_22></ds> |
| <gs11_22>> <s>: SSID: 11_22</s></gs11_22> |
| <qp>> <s1_11_22_000102030405>: SSID: 11_22</s1_11_22_000102030405></qp> |
| Flash Write: |
| when every set command comes, it does not save it to flash. |

So send "WL" command to save it to flash



5. Accessing module via Web Browser

- A. All of control is done via web
 - (1) Connect your PC to WizFi630 EVB via LAN or WIFI
 - (2) Set your PC get the IP address automatically
 - 3 Run Web Browser
 - ④ Input http://192.168.16.254
 - (5) User Account : admin / User Password : admin
 - 6 Following is the web access picture

| | 192,100,10,234/110me.a | sp | |
|--------------------------------|---|------------------------------|--|
| | WLAN G | ateway Module | |
| WLAN AP | lt display system | System Status | |
| 🖻 😋 Internet Settings | | System Information | |
| LAN | time, operation mode and internet configuration and | F/W Version | DS620P-11n-4M-usb-sta-PCIe_v1.1.22-2011/11/29, 14:51:29 |
| VPN Config | connection | System Up Time | 1 hour, 39 mins, 0 secs |
| QoS(802.1p) | | Operation Mode | Access Point Mode |
| 🛛 😋 Wireless Settings | | Wireless Driver Version | 2.6.0.0 |
| -> Basic | | Internet Configurations | |
| Advanced Security | | Connected Type | STATIC |
| WDS | | WAN IP Address | 192.168.16.254 |
| WPS | | Subnet Mask | 255.255.255.0 |
| Station List | | Default Gateway | 192.168.16.254 |
| Packet Statistics | | Primary Domain Name Server | 8.8.8.8 |
| Serial Port#1 | | Secondary Domain Name Server | 168.123.63.1 |
| Serial Port#2 | | MAC Address | 00:50:38:03:00:88 |
| 🗄 😋 Managements | | Local Network | |
| System Mgmt | | Local IP Address | 192.168.16.254 |
| Firmware Mgmt Config Maret | | Local Netmask | 255.255.255.0 |
| Port Mamt | | MAC Address | 00:50:38:03:00:88 |
| Packet Statistics | | Ethernet Port Status | |
| System Status | | | |

6. More information

- Website : www.wiznet.co.kr
- WizFi630-User Manual (software user manual)
- WizFi630 Data Sheet
- WizFi630 Series Application Notes