

## User Guide for Binatone ADSL CPE - Model : DM 856W

### 150M Wireless ADSL2+ Router

This user guide contains procedure for:

- i. Configuration to set up a PPPoE connection for IPv4 Internet access.
- ii. Verification of Internet connection status.
- iii. Change DNS address setting of ADSL Router.

1. Configuration to set up a PPPoE connection for IPv4 Internet access :

- a. Login into the ADSL router with IP address <http://192.168.1.1>. Enter Username as “admin” and **the password for the Username “admin” is “written on the back side of the Modem (Wi-Fi/Admin Password)”**



- b. Select **Interface setup** then click on **Internet**.
- c. **ATM VC Settings** : **Select** PVC - 0, Status –Activated, VPI - 0 and VCI – 32 ( Change only if required.)
- d. **IPV4/IPV6** : **IP version** : select **IPV4** button.

Interface	Interface Setup	Advanced Setup	Access Management
	Internet	LAN	Wireless
<b>ATM VC</b>	Virtual Circuit : PVC0 <input type="button" value="PVCs Summary"/>		
QoS	Status : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated		
	VPI : 0 (range: 0~255)		
VCI : 32 (range: 1~65535)			
<b>IPv4/IPv6</b>	ATM QoS : UBR <input type="button" value="v"/>		
	PCR : 0 cells/second		
	SCR : 0 cells/second		
	MBS : 0 cells		
IP Version : <input checked="" type="radio"/> IPv4 <input type="radio"/> IPv4/IPv6 <input type="radio"/> IPv6			

- e. Under the **Encapsulation** heading select ISP PPPoA/PPPoE
- f. Under **PPPoE/PPPoA** enter the **service name as MTNL**, **Username as the “Telephone number of the Customer and attach @a after Username if connected to SOTL or Alcatel network”**, **Password as CA number or the working password of the user.**

The screenshot shows a configuration interface with two main sections:

- Encapsulation:** Contains radio buttons for 'Dynamic IP Address', 'Static IP Address', 'PPPoA/PPPoE' (selected), and 'Bridge Mode'.
- PPPoE/PPPoA:** Contains input fields for 'Servicename: MTNL', 'Username: 24363181', and 'Password: [redacted]'. It also has a dropdown menu for 'Encapsulation: PPPoE LLC' and radio buttons for 'Bridge Interface: Activated' and 'Deactivated' (selected).

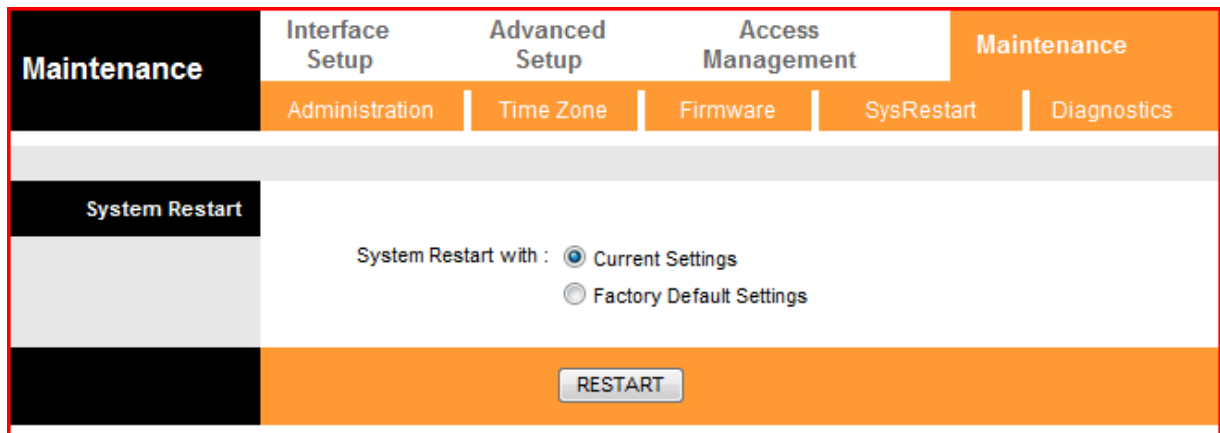
- g. Under the setting at Connection setting, IP Common Options and IPv4 Address configuration **keep all setting as default**. Check once whether all the parameters are as shown in the following figure.

The screenshot shows three stacked configuration sections:

- Connection Setting:** Includes radio buttons for 'Always On (Recommended)' (selected), 'Connect On-Demand (Close if idle for 0 minutes)', and 'Connect Manually'. It also has a 'TCP MSS Option: TCP MSS 1360 bytes'.
- IP Common Options:** Includes a 'Default Route: Yes' radio button.
- IPv4 Address:** Includes 'Get IP Address: Dynamic' (selected), 'Static IP Address: 0.0.0.0', 'IP Subnet Mask: 0.0.0.0', 'Gateway: 0.0.0.0', 'TCP MTU Option: TCP MTU 1492 bytes', 'NAT: Enable', 'Dynamic Route: RIP2-B', 'Direction: Both', and 'Multicast: Disabled'.

At the bottom, there is a 'Dual Stack Lite' section with 'Enable: Disable' (selected) and a 'SAVE' button.

- h. Save the configuration.
- i. To make the changes permanent restart the router. Select **Maintenance** then **SysRestart**, then **System Restart with Current Settings**. Then click on **Restart**.



## 2. Verification of Internet connection status :

Click on Status Tab. Under WAN - check the IP address, subnet and gateway, all should be present, it indicates Internet connection is OK. The Internet connection status can also be verified from the Green Internet LED – on the front panel.

WAN				
PVC	VP/WCI	IP Address	Subnet	GateWay
PVC0	0/32	59.183.7.227	255.255.255.255	59.183.63.254
PVC1	0/33	N/A	N/A	N/A
PVC2	0/34	N/A	N/A	N/A
PVC3	0/36	N/A	N/A	N/A
PVC4	0/37	N/A	N/A	N/A
PVC5	0/35	N/A	N/A	N/A
PVC6	1/33	N/A	N/A	N/A
PVC7	1/35	N/A	N/A	N/A

3. Change DNS IP address setting of ADSL CPE :

- a. Select **Interface setup** then click on **LAN**.
- b. Under DNS change as Primary DNS server : **59.185.3.10** and Secondary DNS server : **59.185.3.11**

The screenshot displays the configuration page for an ADSL CPE. The interface is divided into several sections: 'Interface' (black), 'Interface Setup' (orange), 'Advanced Setup' (white), 'Access Management' (white), and 'Maintenance' (white). Under 'Interface Setup', there are three tabs: 'Internet', 'LAN', and 'Wireless'. The 'LAN' tab is selected. The 'DHCP Server' section is visible, with 'DHCP' set to 'Enabled'. Below this, there are fields for 'Starting IP Address' (192.168.1.100), 'IP Pool Count' (101), and 'Lease Time' (86400 seconds). There are also four checkboxes for 'Physical Ports' (1, 2, 3, 4), all of which are checked. The 'DNS' section is also visible, with 'DNS Relay' set to 'Use User Discovered DNS Server Only'. Below this, there are fields for 'Primary DNS Server' (59.185.3.10) and 'Secondary DNS Server' (59.185.3.11).

- c. Save the configuration.

## User Guide for Wireless security

### Model : Binatone DM 856W 150M Wireless ADSL2+ Router

This guide provides you simple steps to secure your wireless router.

**Wi-Fi ON/OFF switch** : Wireless access to the Wireless ADSL router can be opened or closed with the help of a physical Wi-Fi ON/OFF switch provided on the front panel of the Wireless ADSL router. The Wi-Fi ON/OFF switch is a toggle switch, to make the Wi-Fi ON or OFF, keep it pressed for 2-3 seconds.

Whenever not required it is better to keep the Wi-Fi access in OFF state.

#### 1. Secured Access through data encryption:

For secured data transmission between wireless clients ( Laptop, Mobile etc. ) and Wireless ADSL router, different encryption standards are available. You can select any of the encryption standards but both sides (On wireless router and Client) this encryption standard should be the same. For eg: WPA-PSK/WPA2-PSK encrypts data frames before transmitting over the wireless network.

Wireless configuration on Wireless ADSL Router:

Step 1. Login into the ADSL router with IP address <http://192.168.1.1>. Enter Username as “admin” and the password for the Username “admin” is “written on the back side of the Modem (Wi-Fi/Admin Password) ”

Step 2. Select Interface setup then click on Wireless.

Step 3. Check the access point is Activated, if deactivated then it should be activated.

Interface	Interface Setup	Advanced Setup	Access Management
	Internet	LAN	Wireless
<b>Access Point Settings</b>			
Access Point : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated Channel : INDIA <input type="text"/> Auto <input type="text"/> C Beacon Interval(ms) : 100 (range: 20~1000) RTS/CTS Threshold : 2347 (range: 1500~2347) Fragmentation Threshold (bytes) : 2346 (range: 256~2346, even number) DTIM(ms) : 1 (range: 1~255) Wireless Mode : 802.11b+g+n			

Step 4: Note the Pre-shared key. It is required to set it on the client like LAPTOP or Mobile for wireless access to this Wireless ADSL Router. ( It is better to change the Pre-shared key. To change the Pre-shared key enter the desired key at Pre-shared key field and save the setting. Use the new key on Laptop or Mobile)

<b>Multiple SSIDs Settings</b>	
SSID Index : 1 <input type="text"/> PerSSID Switch : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated Broadcast SSID : <input checked="" type="radio"/> Yes <input type="radio"/> No SSID : MTNL_022F4E_1 <input type="text"/> Authentication Type : WPA-PSK/WPA2-PSK <input type="text"/>	
<b>WPA-PSK/WPA2-PSK</b>	
Encryption : AES <input type="text"/> Pre-Shared Key : 01431827 <input type="text"/> (8-63 ASCII characters or 64 hexadecimal characters)	

Note: Pl do not share Pre-Shared key with unknown person.

Step 2: Save the configuration.

## 2. Restricted Access based on MAC Address

Restricting of access to Wireless ADSL router can also be done by putting MAC Address of NIC Card ( Wireless Adapter / Wireless network connection) from which only access to be allowed.

The procedure is as explained below:

Step 1. Select Interface setup then click on Wireless .

Step 2. Under **Wireless MAC address Filter** Select **Activated** button.

Step 3 Enter the MAC address of the Wireless LAN adapter ( Physical address) in the field Mac Address #1. ( Pl enter the MAC address with “:” separated fields. )

Step 4. If more devices needs to be connected enter the MAC address in different fields.

The following figure shows the capture of ipconfig /all command output and configuration on the ADSL router page.

The image shows a screenshot of an ADSL router configuration page and a Windows command prompt window. The router configuration page is on the left, and the command prompt is on the right. The router configuration page has several sections: 'Multiple SSIDs Settings', 'WPA-PSK/WPA2-PSK', and 'Wireless MAC Address Filter'. The 'Wireless MAC Address Filter' section is highlighted with a red box. It shows the 'Active' radio button selected as 'Activated', the 'Action' dropdown set to 'Allow Association', and the 'Mac Address #1' field containing '00:21:5C:27:FE:57'. The command prompt window shows the output of the 'ipconfig /all' command, with the 'Wireless LAN adapter Wireless Network Connection:' section highlighted by a red box. This section shows the 'Media State' as 'Media disconnected', the 'Description' as 'Intel(R) Wireless', and the 'Physical Address' as '00-21-5C-27-FE-57'.

Step 5: Save the configuration.

Note :

Both the settings (Secured Access through data encryption and **Restricted Access based on MAC Address**) can be used simultaneously. But, once the Wireless MAC address Filter is activated then MAC address of all the devices using this Wireless ADSL Router must be registered under “ Mac Address # “ field as shown in above figure.