

User Manual

WiFi Module

Model Name: DTV001

Date: 21 - June- 2012

User Manual

MiTAC Information Technology Corp.
187, Tiding Boulevard, Section 2, Taipei, Taiwan, R.O.C.

Having checked this document, I certify that it conforms to the requirements of the Contract in all respects, except as otherwise indicated.
System Integration Manager

Bill Zhun

Project Manager

B. WAN

Subject	Installation Manual Description	
Summary	This description presents the WiFi Module be installed into DTV system user manual. The system installation is described in terms of system and software.	
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Document History		
Level - Submission	Date	Comment
A-1	21 – June- 2012	

Warnings:

1. Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.
2. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
3. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Note:

1. This WiFi module and its’ FCC grant is limited OEM or manufacture to use, for marketing sell is not allowed.
2. Any device/ host be installed with this WiFi module that its’ label must indicates “contains FCC ID: ODI2012DTV001”.

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1. INTRODUCTION

1.1. Purpose

This document provides instructions for setup WiFi Module.

1.2. Manufacturer Information

MiTAC Information Technology Corp.

187, Tiding Boulevard, Section 2, Taipei, Taiwan, R.O.C.

1.3. Overview

- ❖ Complies with IEEE 802.11n; 802.11g; 802.11b standard for 2.4GHz Wireless LAN.
- ❖ Supports PPPoE, Dynamic IP, and static IP broadband connection.
- ❖ Supports UPnP, DDNS, static routing, VPN Pass-through.
- ❖ Wi-Fi protected security(WPS), set your security at a push button.
- ❖ Supports virtual server, special application and DMZ host.
- ❖ Supports SSID broadcast control and MAC access control list.
- ❖ Supports 64/128bit WEP, 128bit WPA standard (TKIP/AES), supports MIC, IV Expansion, Shared Key Authentication and IEEE 802.1X.

1.4. Specification

Standards	IEEE802.11n current draft, IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u, IEEE 802.3x
Protocol	CSMA/CA, CSMA/CD, TCP/IP, ICMP, NAT, PPPoE, DHCP, PPTP, UDP, NAT, DN, DDNS, VPN
Port LAN	4*100M/1000M BaseTX (Auto MDI/MDIX)
Port WAN	1*100M/1000M BaseTX (Auto MDI/MDIX)
Wireless parameter RF Frequency	2.412~2.462GHz
Data Rate	11n: 300/270/243/216/162/108/81/54/27Mbps 135/121.5/108/81/54/40.5/27/13.5Mbps 130/117/104/78/52/39/26/13Mbps 72/65/58.5/52/39/26/19.5/13/6.5Mbps 11g: 54/48/36/24/18/12/9/6M (auto-negotiation) 11b: 11/5.5/2/1M (auto-negotiation)

Wireless Transmit Power	802.11b:20dBm, 802.11g/n: 26dBm
Receiver Sensitivity	270M: -65dBm@10% PER 135M: -65dBm@10% PER 54M: -68dBm@10% PER 11M: -85dBm@8% PER 6M: -88dBm@10% PER 1M: -90dBm@8% PER
Channels	1-11 (North America)
WLAN Modulation Scheme	BPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)
Antenna Type	2.4GHz PIFA antenna
Wireless Operation Mode	Wireless Bridge /Client/ WAN /WDS
Wireless Security	WEP 64/128 bit; MAC based Association; SSID broadcast disable; Wi-Fi Protection Access (TBD), WPA, WPA2, WPS
LED	1*Power, 1*CPU Status, 1*Wireless, 1*WAN, 4*LAN
Media	100BASE-TX: UTP/STP
Management type	Local/Remote Web-based configuration
Operating Temperature	0 ~ 55°C
Storage	-20 ~ 65°C
Humidity	5 ~ 95% non-condensing
Power External	Input DC 9V, 0.8A

2. SYSTEM SETUP DESCRIPTION

2.1. System default setting

IPC Setting

Default IP : 192.168.20.120

VNC Connect Setting: Use software to connect. Ex. UltraVNC

2.2. MiSling Setting & Upgrade Firmware

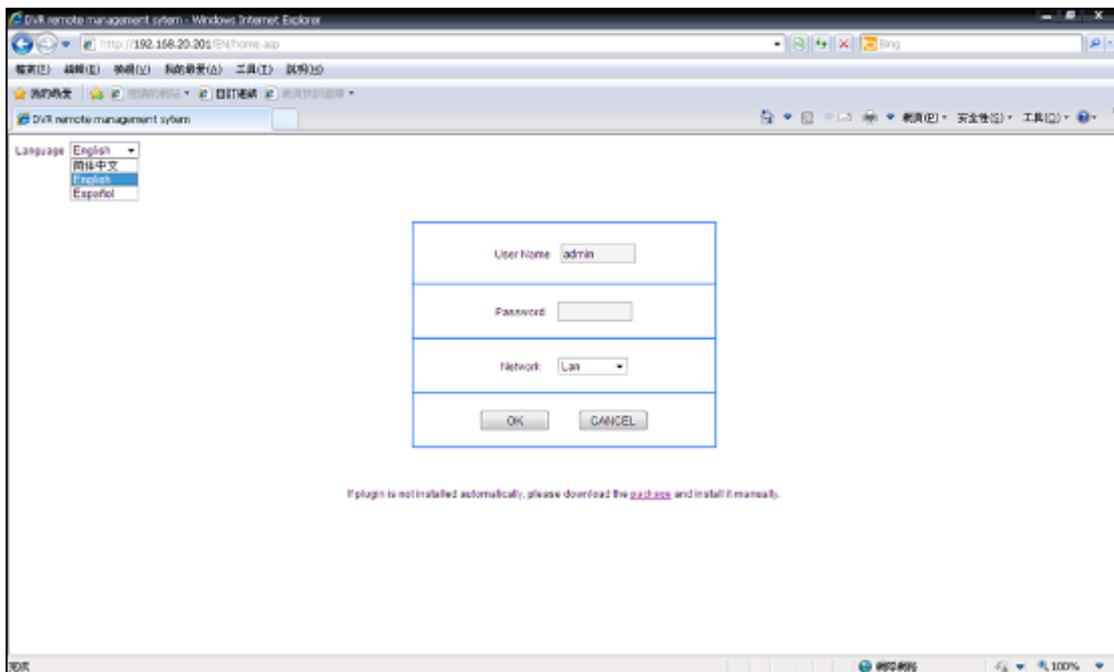
Default IP : 192.168.20.201

Configure Setting:

1. Open IE browser and key in IP address:192.168.20.201

Username: admin

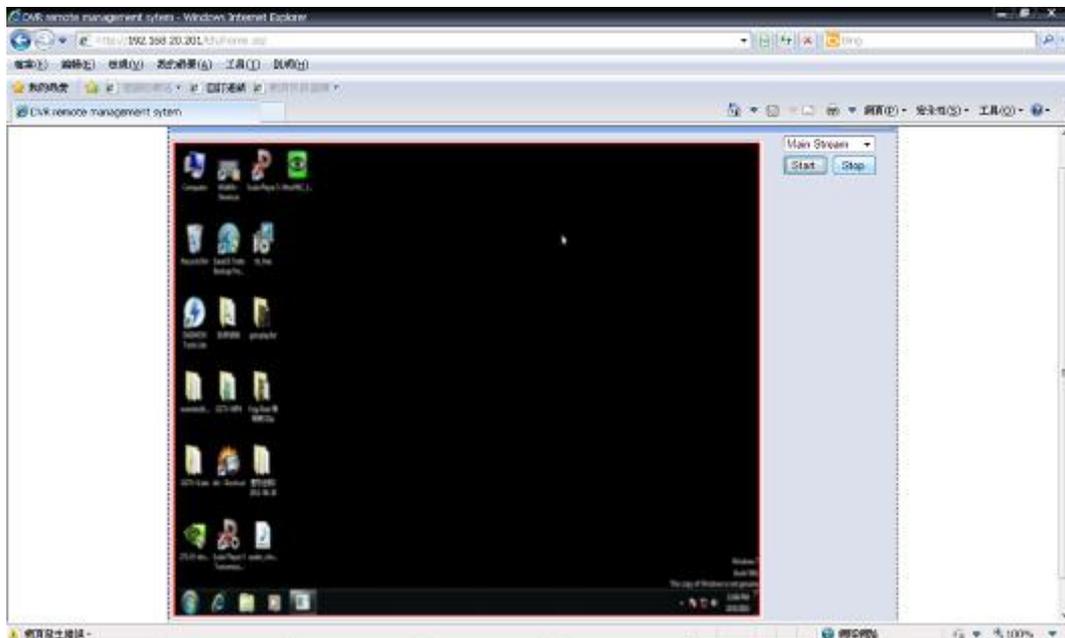
Password: None



2. Download and install ActiveXSetup.zip



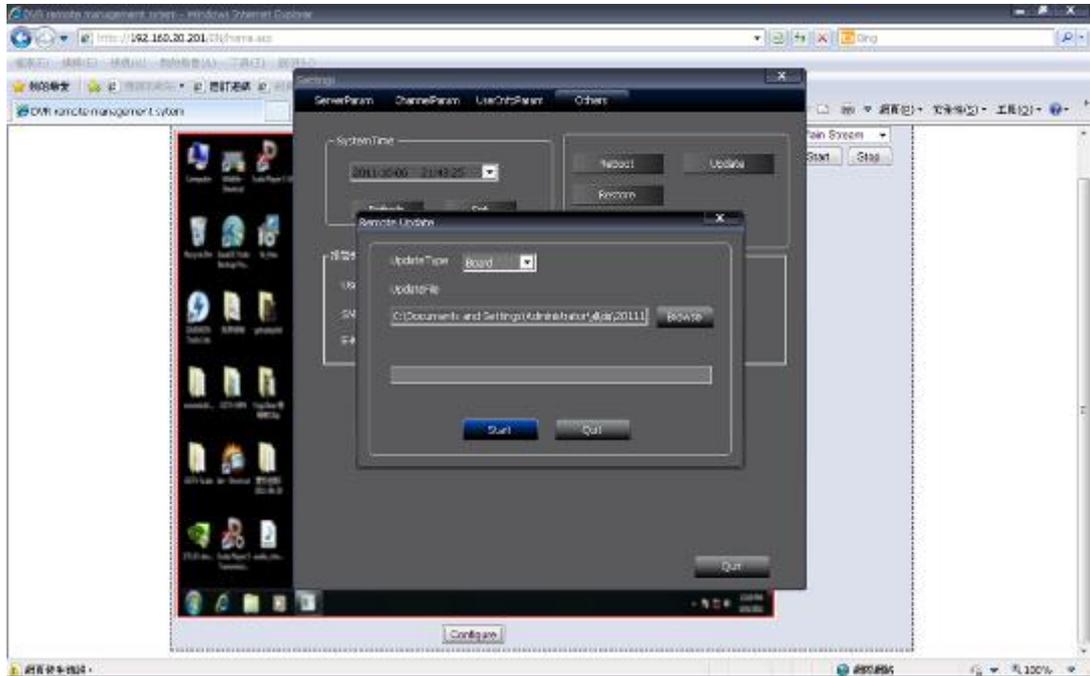
3. Once ActiveX has been installed, login and Press Start button, and then you will see the Video Streaming from MiSling.



4. Press configure button, and select “ChannelParam”, different “Bit Rate” value can be select. (Default Value is 2Mbps)



5. To remote upgrade MiSling firmware, select “Other” and choose “Board” in “UpgradeType”, and then browse file source.



2.3. MiCube Setting & Upgrade Firmware

Default Setting:

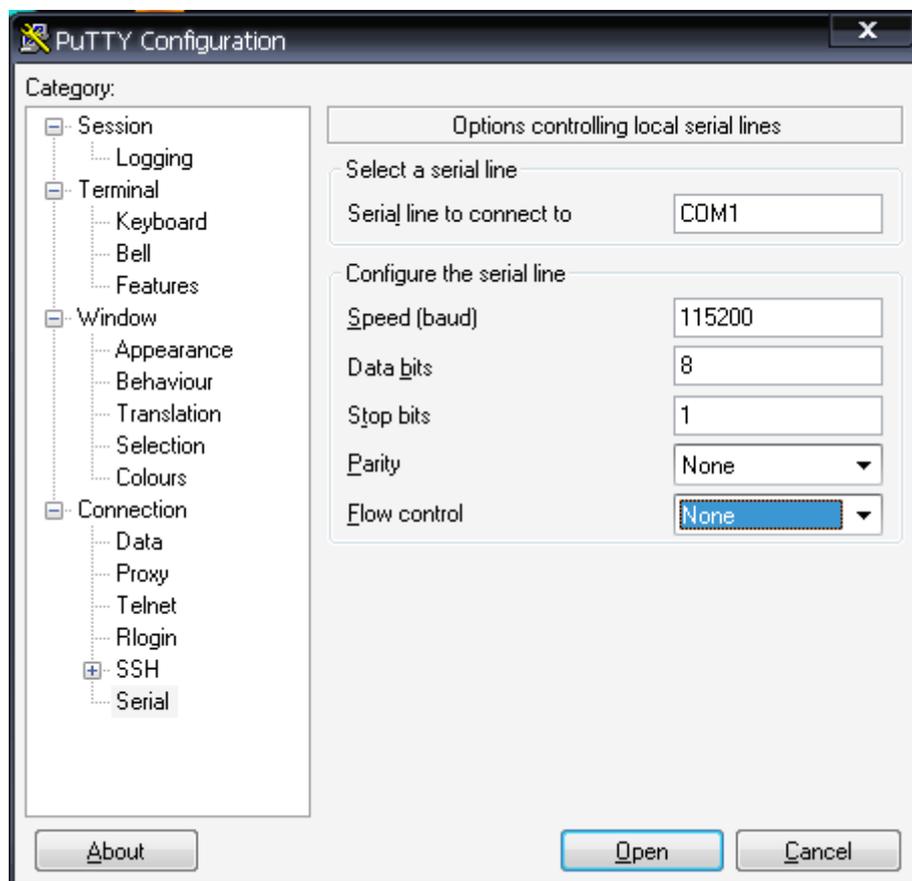
WiFi IP: 192.168.20.1~254

*Notice. Avoid 192.168.20.120 & 192.168.20.201, occupied by IPC and MiSling.

Ethernet IP : 192.168.3.3

Upgrade Firmware from MiControl Server

- Use RS232 Debug Setting:



- Start MiControl Center Server & Sensor_collector Server
- Change Version in Version.Mapping File
- Put Firmware into correct Document.
- Wait Server auto upgrade

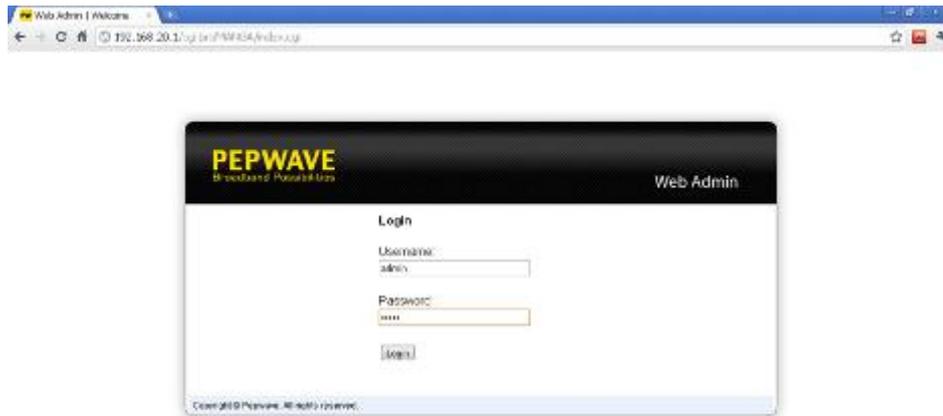
2.4. Pepwave M1 Setting

Default IP: 192.168.20.1

Username: admin

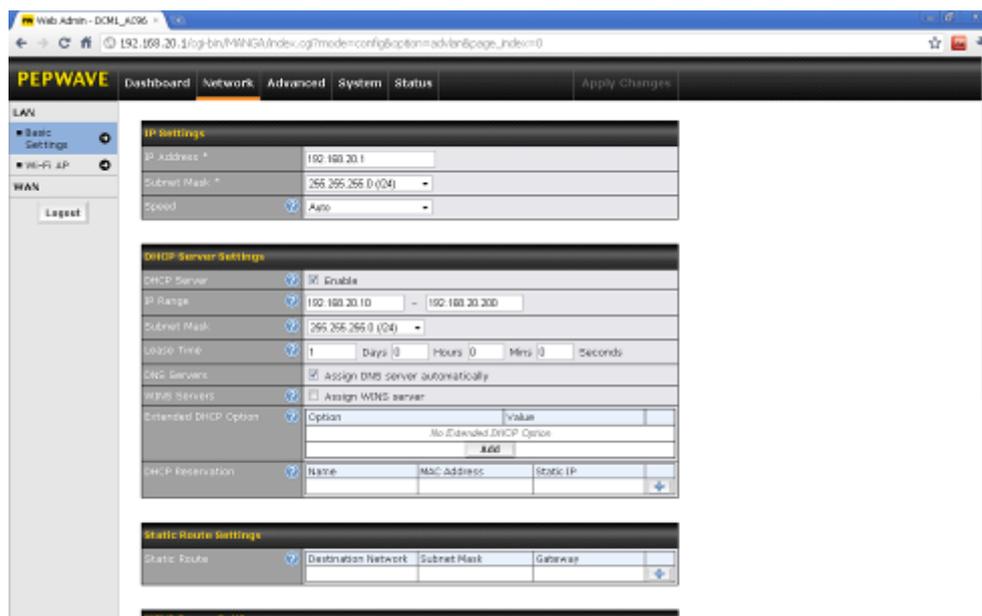
Password: admin

1. Login Pepwave M1



2. Select Network, you can change IP from IP Settings

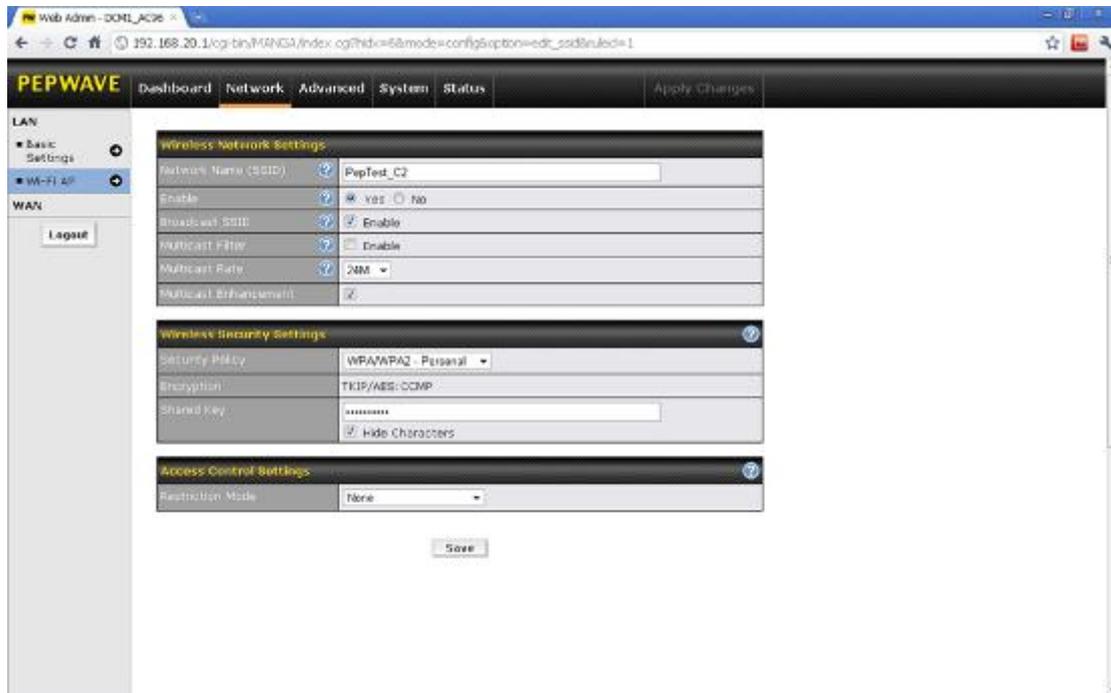
2-1 Basic Settings:



3. Wi-Fi AP: (Disable in default)

You can change SSID and Password!

*Notice: The Multicast Enhancement option always enable.



4. Press“System” button and Select“Firmware” , you can Upgrade M1 Firmware.



2.5. TOTOLINK Setting

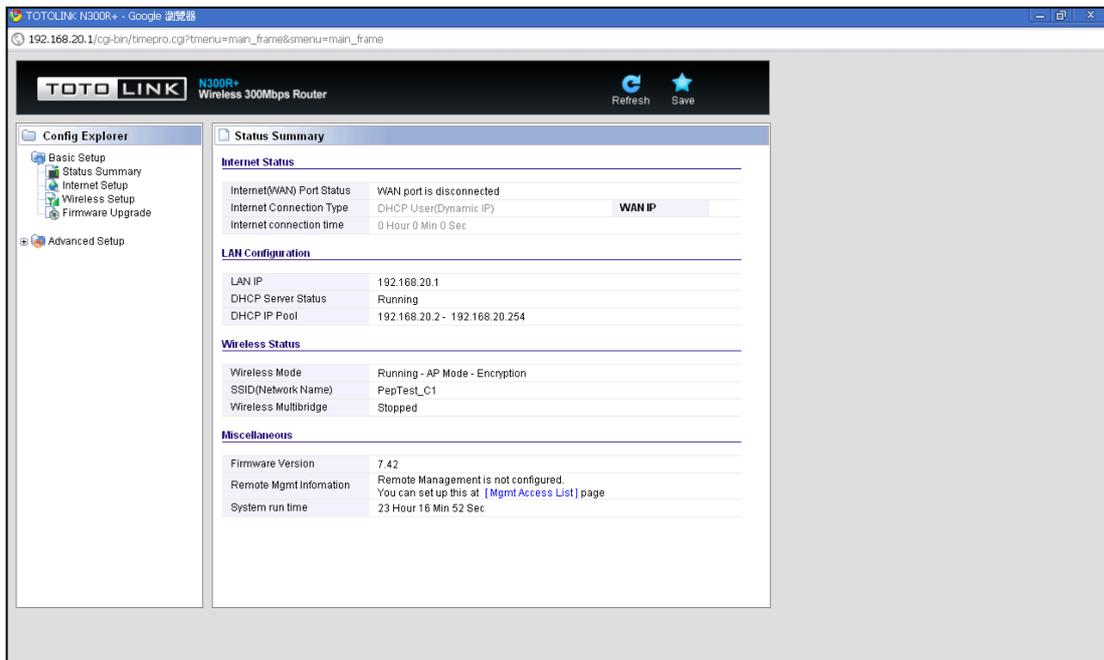
Default IP: 192.168.20.1

Username: admin

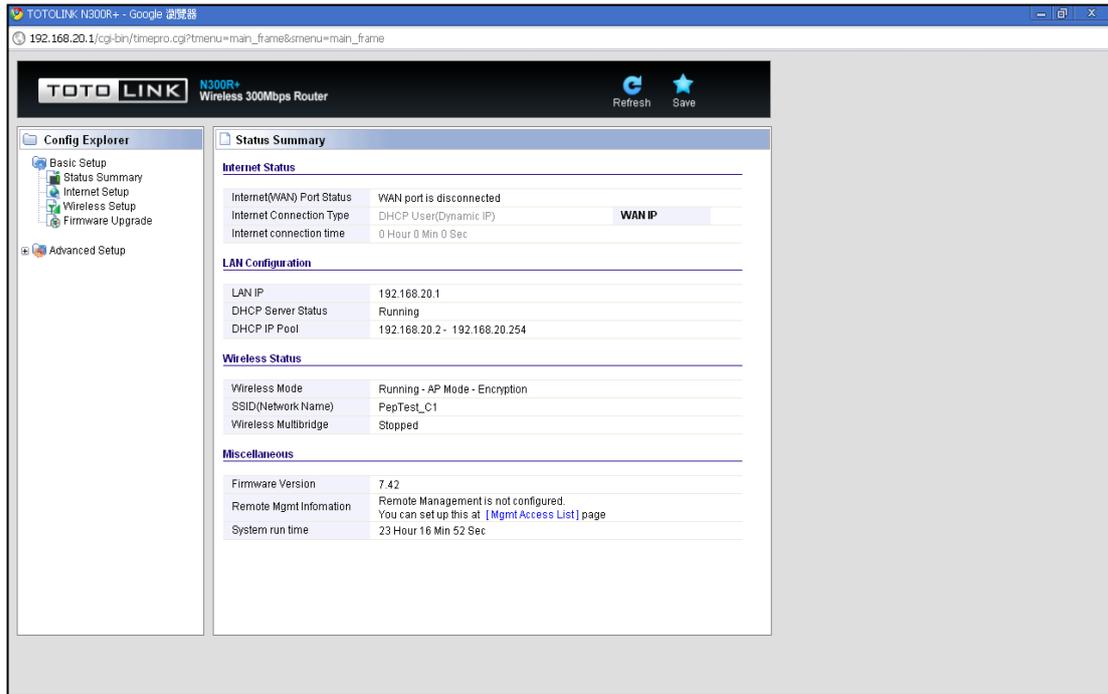
Password: admin



1. Login TOTOLINK

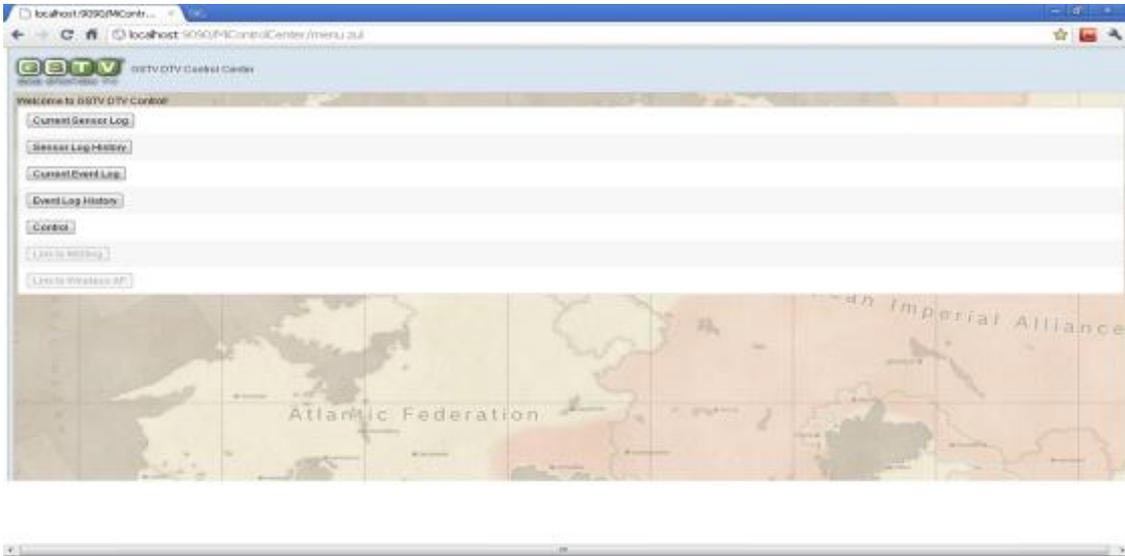


2. Select Wireless Setup, you can change IP in LAN configuration.

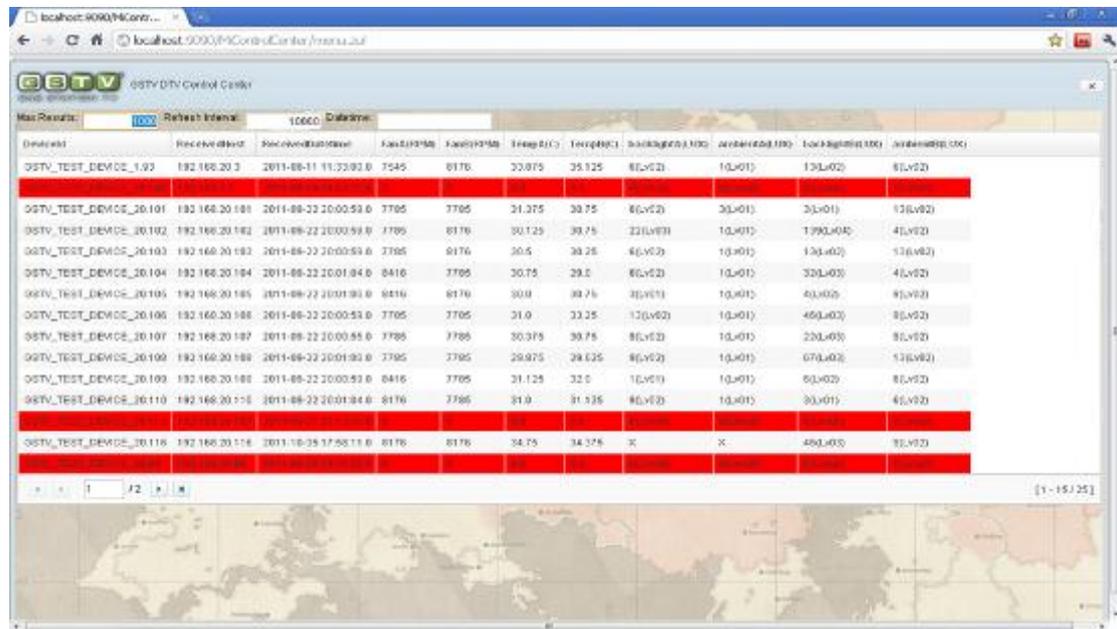


2.6. MiControlCenter

1. Menu.zul



2. Current Sensor Log



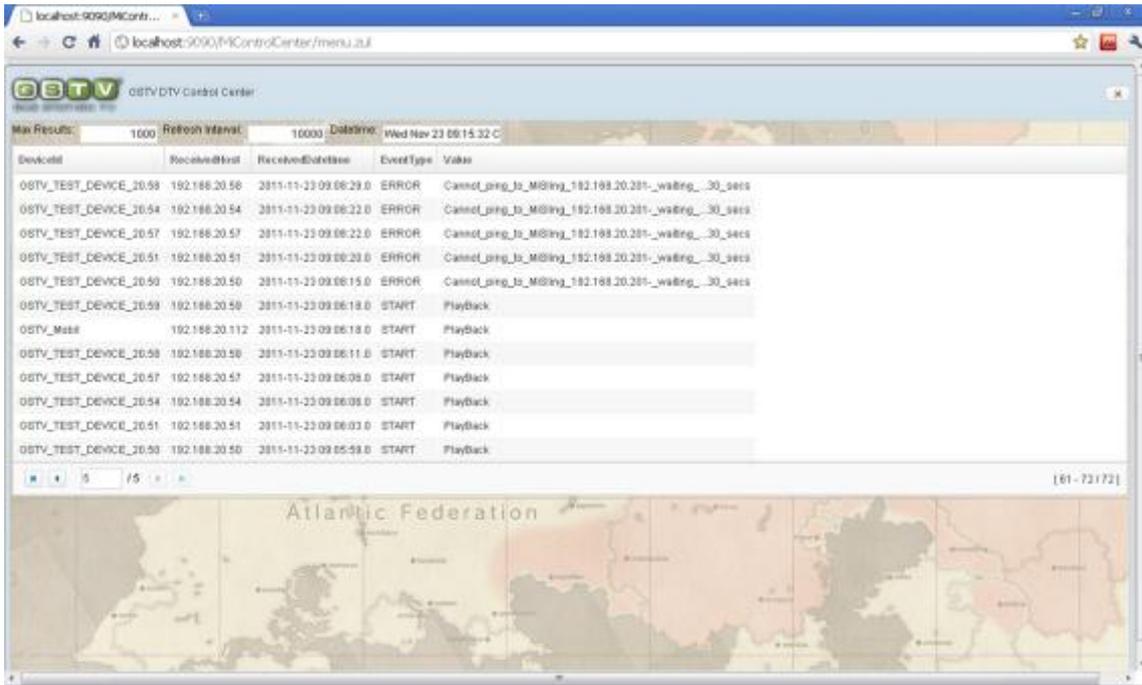
3. Sensor Log History

DeviceID	ReceivedIst	ReceivedDateIst	FwdtsPPM	FwdtsPPM	TempRtC	TempRtC	backlight(L)	ambient(L)	backlight(R)	ambient(R)
GSTV_TEST_DEVICE_20 57	192.168.20.57	2011-11-23 10:22:10.8	7425	7545	30.75	K	87(L)020	16(L)01	43(L)02	16(L)01
GSTV_TEST_DEVICE_20 51	192.168.20.51	2011-11-23 10:22:17.8	7545	7545	30.5	K	87(L)020	16(L)01	13(L)02	16(L)01
GSTV_TEST_DEVICE_20 85	192.168.20.85	2011-11-23 10:22:15.8	7545	7545	37.75	K	49(L)020	16(L)01	30(L)01	16(L)01
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:13.8	8178	7545	36.875	K	139(L)040	20(L)01	30(L)01	16(L)01
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:13.8	7545	7545	30.0	K	289(L)040	36(L)02	96(L)040	16(L)01
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:13.8	7425	7425	37.375	K	29.825	16(L)01	49(L)020	16(L)01
GSTV_TEST_DEVICE_20 54	192.168.20.54	2011-11-23 10:22:10.8	8178	7545	30.5	K	31.375	88(L)040	30(L)01	23(L)020
GSTV_TEST_DEVICE_20 57	192.168.20.57	2011-11-23 10:22:07.8	7545	7545	37.8	K	87(L)020	20(L)01	40(L)020	30(L)01
GSTV_TEST_DEVICE_20 51	192.168.20.51	2011-11-23 10:22:00.8	7545	7545	30.5	K	87(L)020	16(L)01	13(L)020	16(L)01
GSTV_TEST_DEVICE_20 85	192.168.20.85	2011-11-23 10:22:03.8	7545	7425	37.5	K	49(L)020	16(L)01	30(L)01	16(L)01
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:01.8	8178	7545	36.875	K	139(L)040	20(L)01	30(L)01	16(L)01
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:01.8	7545	7545	30.8	K	32.125	289(L)040	36(L)02	96(L)040
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 10:22:01.8	7425	7425	37.375	K	29.825	16(L)01	30(L)01	49(L)020
GSTV_TEST_DEVICE_20 54	192.168.20.54	2011-11-23 10:22:00.8	8178	7425	30.5	K	31.5	88(L)040	40(L)020	23(L)020

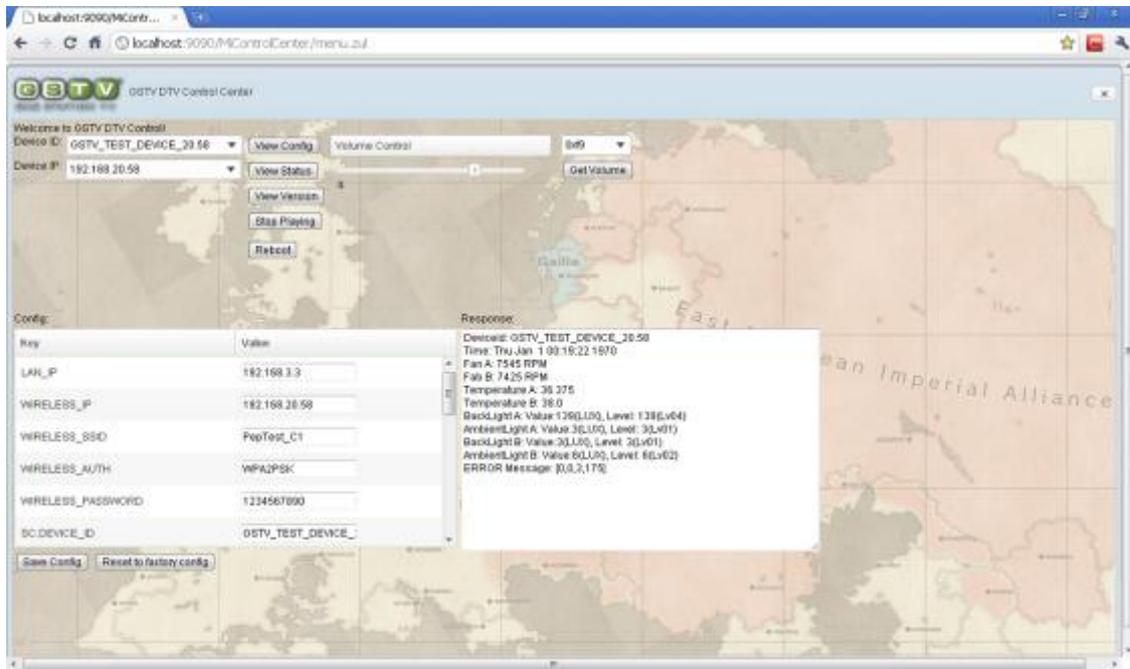
4. Current Event Log

DeviceID	ReceivedIst	ReceivedDateIst	Event Type	Value
GSTV_Mcast	192.168.20.112	2011-11-23 09:24:51.0	MULTICAST	215160
GSTV_TEST_DEVICE_20 50	192.168.20.50	2011-11-23 09:24:45.0	MULTICAST	219743
GSTV_TEST_DEVICE_20 51	192.168.20.51	2011-11-23 09:25:18.0	MULTICAST	225825
GSTV_TEST_DEVICE_20 54	192.168.20.54	2011-11-23 09:24:42.0	MULTICAST	217023
GSTV_TEST_DEVICE_20 57	192.168.20.57	2011-11-23 09:25:18.0	MULTICAST	225220
GSTV_TEST_DEVICE_20 58	192.168.20.58	2011-11-23 09:24:02.0	ERROR	No more multicast packets received.
GSTV_TEST_DEVICE_20 59	192.168.20.59	2011-11-23 09:24:44.0	MULTICAST	214467

5. Event Log History



6. Control



2.7. Troubleshooting

No Video Output:

1. Check M1 SSID and Password on MiCube Config.
2. Check M1, MiSling, MiCube Network.
3. Log in MiSling and check video output in configure interface (192.168.20.201)
4. Check MiCube used Telnet or RS232 Console
5. Check Hardware Error.