MultiConnect™ AW

Analog-to-Wireless Converter

Quick Start Guide

MultiTech®
Systems

MultiConnect™ AW Quick Start
MT100A2W & MT100A2W-G
82100426L, Revision B

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Record of Revisions

Revision	Date	Description
A	07/15/09	Initial release
B	03/26/10	Add Support portal link and firmware version 0.21G

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Online Support Portal: To Create an account and submit a Support Case on the portal, visit   https://support.multitech.com

Knowledge Base & Support Services: www.multitech.com/support.go

Warranty
Warranty information can be found at: http://www.multitech.com/warranty.go

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Introduction

This guide shows you how to set up your MultiConnect AW Analog-to-Wireless Converter. For detailed information, product description and specifications, refer to the User Guide, available on the MultiConnect AW CD accompanying your wireless converter.

Dial Port Caution

The dial port is **not** designed to be connected to a Public Telecommunications Network (PSTN/phone line) or used outside the building.

General Safety

The converter is designed for and intended to be used in fixed and mobile applications. "Fixed" means that the device is physically secured at one location and is not able to be easily moved to another location. In a "Mobile" application, the device may be moved regularly from one location to another.

Caution: Maintain a separation distance of at least 20 cm (8 inches) between the transmitter's antenna and the body of the user or nearby persons. The modem is not designed for, nor intended to be, used in applications within 20 cm (8 inches) of the body of the user.

RF Interference Issues

Avoid possible radio frequency (RF) interference by carefully following the safety guidelines below.

- Switch OFF the MultiConnect when in an aircraft. The use of cellular telephones in aircraft is illegal. It may endanger the operation of the aircraft and/or disrupt the cellular network. Failure to observe this instruction may lead to suspension or denial of cellular services to the offender, legal action, or both.
- Switch OFF the MultiConnect in the vicinity of gasoline or diesel-fuel pumps or before filling a vehicle with fuel.
- Switch OFF the MultiConnect in hospitals and any other place where medical equipment may be in use.
- Respect restrictions on the use of radio equipment in fuel depots, chemical plants, or in areas of blasting operations.

- There may be a hazard associated with the operation of your MultiConnect in the vicinity of inadequately protected personal medical devices such as hearing aids and pacemakers. Consult the manufacturers of the medical device to determine if it is adequately protected.
- Operation of the MultiConnect in the vicinity of other electronic equipment may cause interference if the equipment is inadequately protected. Observe any warning signs and manufacturers' recommendations.

Vehicle Safety

- Do not use your MultiConnect while driving.
- Respect national regulations on the use of cellular telephones in vehicles. Road safety always comes first.
- If incorrectly installed in a vehicle, the operation of Wireless MultiConnect telephone could interfere with the correct functioning of vehicle electronics. To avoid such problems, be sure that qualified personnel have performed the installation. Verification of the protection of vehicle electronics should be part of the installation.
- The use of an alert device to operate a vehicle's lights or horn on public roads is not permitted.

Package Contents

- 1 MultiConnect Converter
- 1 antenna
- 1 RS232 cable
- 1 power supply
- 1 Quick Start Guide
- 1 MultiConnect CD

Note: You must supply mounting screws.

Notes:
- Your wireless provider will supply the SIM card.
- See the User Guide for antenna specifications.

Activate Your Wireless Account

Please refer to the wireless account Activation Notices included with your MT100A2W-G unit and located on the MultiConnect CD. Choose the one for your wireless network provider and follow the directions to activate your account.

Insert SIM Card into Holder

The MultiConnect requires the power supply connection to begin operation. It also requires a SIM card (Subscriber Identity Module) in the MT100A2W-G unit to operate on a GPRS/GSM network. To install the SIM, do the following:

1. Using a small Phillips screwdriver, remove the two SIM door screws and remove the SIM door.

Note: When changing a SIM, ensure that power is removed from the unit.
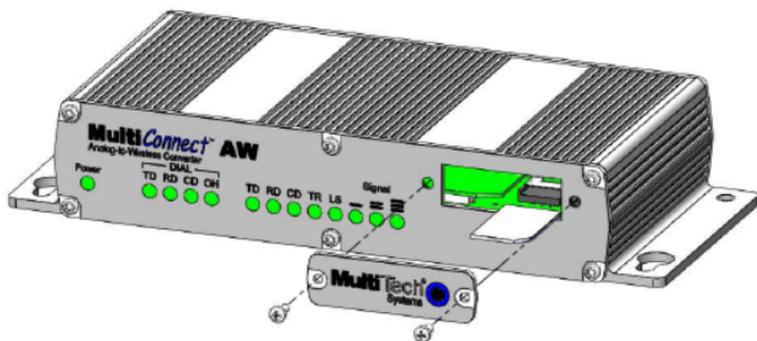
2. Insert the SIM card into the card holder. The above figure illustrates the correct SIM card orientation.

3. Verify that the SIM card fits properly; then replace the door.

Connect the Antenna, Serial Cable, Modem Cable, and Power

MT100A2W-G

MT100A2W

1. Connect a suitable antenna to the ANT connector on the MT100A2W-G model.

2. Connect the DE9 connector (9-pin) of the RS232 cable to the COMMAND connector on the unit and connect the other end to serial port on your PC.

3. For the MT100A2W model, connect an RS232 cable, male connector to the MODEM connector on the back of the unit. Connect the other end of the cable to your external wireless modem.

4. Connect the RJ11 phone cable to the DIAL connector on the unit and connect the other end of the phone cable to the customer's analog modem.

5. Remove the protective shipping cover. Attach the appropriate input connector to the power supply module by holding down on the slide lock and tipping the input connector to fit into the notch on top of the module and then lowering it into the slide lock. Then release the slide lock.
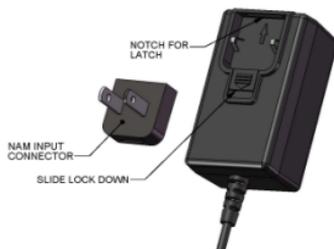
6. Screw-on the power lead from the power supply module to the power connection on the unit. Now, plug the power supply into your power source.

Configure your MultiConnect

Configuration of the MultiConnect varies slightly depending on which unit you are configuring. The MT100A2W-G has an internal GSM/GPRS wireless modem. The MT100A2W requires a Multi-Tech CDMA, RS232 based external modem for its cellular connection. Cellular Port configuration for the MT100A2W-G has more configuration options than the MT100A2W unit. The differences are detailed in Device Configuration section.

The following configuration procedures are based on the Windows XP Operating System. Other Windows operating systems have similar paths to HyperTerminal. See your system's online Help if you cannot find it.

HyperTerminal

1. Go to **Start I All Programs I Accessories I Communications** and then **click** on **HyperTerminal**.
2. In the **Name:** window, enter an applicable name for your MultiConnect connection. Click **OK**.
3. Change the **Connect using:** window to the COM port for the MultiConnect. Click on the down arrow and select your COM port.
4. Change the default **Bits per second:** window from 2400 to 115200. Click the **Apply** button and then **OK**.

Login

A blank HyperTerminal screen is displayed. Enter the default password of **admin**

What would you like this port to do? Screen is displayed.

Enter Selection => _ Enter **A** and press **OK**

Device Configuration

Initial configuration of the MultiConnect AW could involve just the Cellular Port menu which is dependent on cellular network that you are connecting to. The Device Configuration menu changes depending on the cellular network. The cellular network change is in Option 1 which defines the cellular network type; GPRS or GSM for the MT100A2W-G unit or CDMA for the MT100A2W unit.

The GPRS cellular network is for packet switched data, GSM cellular network is for circuit switched data, and CDMA cellular network is used with the Multi-Tech CDMA external cellular modem.

The Analog (PSTN) Port menu is defaulted to a typical configuration. The System Login option thru the System Reboot options refine the use of your MultiConnect AW.

1. The Device Configuration main menu is displayed.
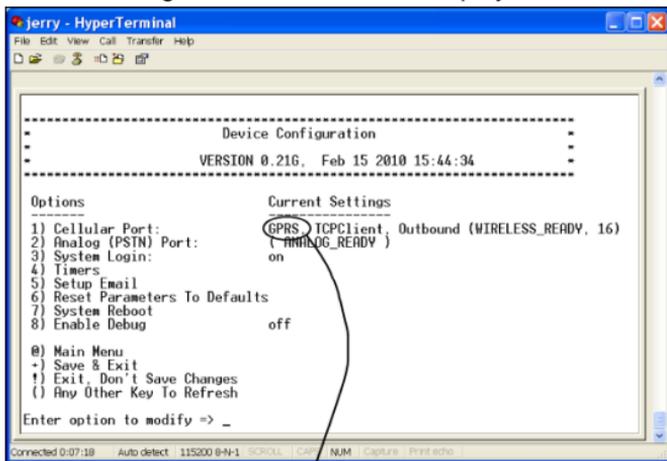
Example of a GPRS Device Configuration menu.
For a GSM Device Configuration menu, this would show GSM.
For a CDMA Device Configuration menu, this would show CDMA.

In the Enter option to modify => _ Enter **1** and press **OK**. The Cellular Port configuration menu is displayed.

GPRS Cellular Port Configuration

1. The following options need to be configured for your GPRS cellular network.
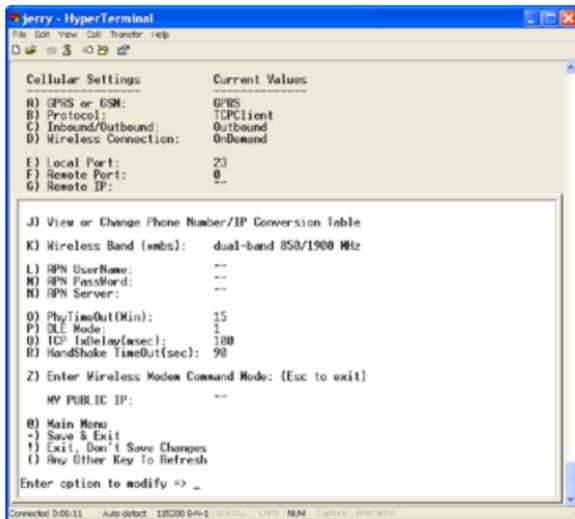
2. Configure options A thru D for your GPRS cellular network.

GPRS Network Dependent		
Option	**Default**	**Description**
A) GPRS or GSM	GPRS	Select GPRS
B) Protocol	TCPClient	Select either TCPClient, Telnet, UDP, or Pass Thru.
C) Inbound or Outbound	Outbound	Select either 0)Auto Detect. 1) PPP Client (outbound), or 2) PPP Client Inbound (Listening)
D) Wireless Connection	On Demand	Select either On Demand or Always On. ATTN: If Always On is desired, wait until you have made all your other configuration changes before selecting this option.

3. Options E thru G are dependent on your local/remote port.

Port Dependent		
Option	**Default**	**Description**
E) Local Port	23	The Local Port is for inbound communications.
F) Remote Port	0	The TCP/IP port that the remote device is listening on.
G) Remote IP	None	The IP address of the remote device on the network you are going to.

4. The Wireless Band is set depending on the region of the world the unit is set up for, e.g., 850/1900MHz for NAM.

Wireless Band		
Option	**Default**	**Selection**
K) Wireless Band		This option is default depending on the region of the world the unit is being set up for, e.g., 900/1800MHz for Europe.
		0) dual-band 850/1900 MHz
		1) dual-band 900/1800 MHz

5. Configure options L thru N dependent on your APN.

APN Dependent		
Option	**Default**	**Selection**
L) APN User Name		The user name may not be required by all network providers.
M) APN Password		The password may not be required by all network providers.
N) APN Server		The APN assigned by your cellular network provider.

6. Save your configuration by pressing the + key. Then return to the Main Device Configuration menu and wait for the wireless and analog networks to become ready. The Current Settings will change to: (WIRELESS_READY) (ANALOG_READY).

Initial configuration of your GPRS version is complete.

GSM Cellular Port Configuration

1. The GSM Cellular Port menu is displayed.

2. Configure your GSM network dependent options.

GSM network Dependent		
Option	**Default**	**Description**
A) GPRS or GSM	GPRS	Select GSM
B) Protocol	PassThru	No selection
K) Wireless Band		This option is default depending on the region of the world the unit is being set up for, e.g., 850/1900MHz for NAM.
		0) dual-band 850/1900 MHz
		1) dual-band 900/1800 MHz

3. Save your configuration by pressing the + key. Then return to the Main Device Configuration menu and wait for the cellular wireless network and the analog modem to change to a READY state. The Current Settings will change to: (WIRELESS_READY) (ANALOG_READY).

Initial configuration of your GSM version is complete.

CDMA Cellular Port Configuration

1. The CDMA Cellular Port menu is displayed
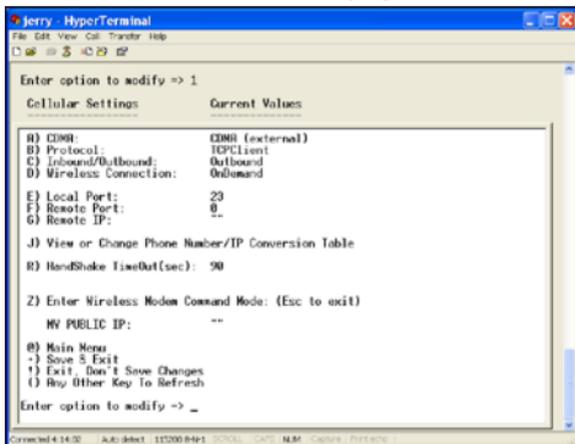
2. Configure options A thru D depending on your CDMA cellular network.

CDMA Network Dependent		
Option	**Default**	**Description**
A) CDMA	CDMA (External)	No selection
B) Protocol	TCPClient	Select either TCPClient, Telnet, UDP, or Pass Thru
C) Inbound or Outbound	Outbound	Select either: 0) Auto Detect. 1) PPP Client (Outbound), or 2) PPP Client Inbound (Listening)
D) Wireless Connection	OnDemand	Select either OnDemand or Always On ATTN: If Always On is desired, wait until you have made all your other configuration changes before selecting this option.

3. Configure options E thru G dependent on your local and/or remote port.

Port Dependent		
Option	**Default**	**Description**
E) Local Port	23	The Local Port is the port that listensfor inbound traffic
F) Remote Port	0	Port that remote cellular network is listening on.
G) Remote IP	None	Remote IP address of remote device on cellular network.

4. Save your configuration by pressing the + key. Then return to the Main Device Configuration menu and wait for the cellular wireless network and the analog modem to change to a READY state. The Current Settings will change to: (WIRELESS_READY) (ANALOG_READY).

Initial configuration of your CDMA version is complete.