



CDMA  
WIRELESS LOCAL LOOP  
TERMINAL  
**ACW-T800/T1900**  
USER'S MANUAL

Printed in Korea

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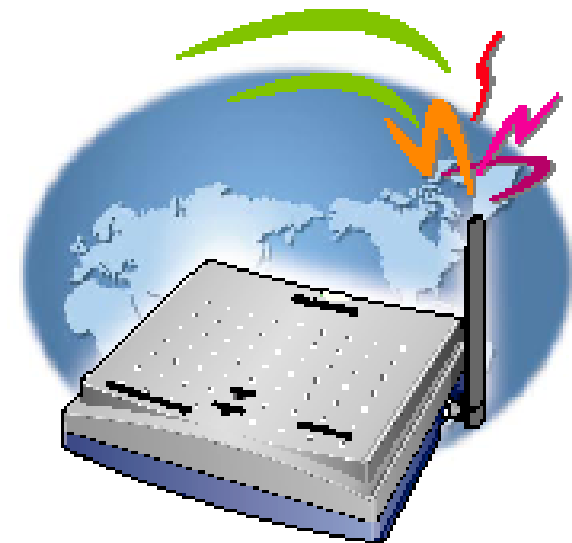
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# Description

The Fixed Wireless Terminal (FWT)s are next generation telecommunication terminals that provide the economic efficiency of wireless and integrated service of wireline.

AXESSTEL ACW-T800 & ACW-T1900 terminals connect traditional wired telephones to a wireless base station which delivers the call to the public telephone network, instead of direct wired connection the network.

Due to its wireless characters, the user can easily install the terminal and can relocate it anywhere within the serviced local area. It is very convenient to use in areas where the wired telephone installation is difficult.

The terminals will offer you with clear digital voice quality and various network service features that you will not know the difference with a conventional telephone.

## FEATURES

- 1 Incoming Call Light**
- 2 Received Signal Strength Indicator**
- 3 Internal Back-up Battery (optional)**
- 4 Analog Fax (optional)**

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# SAFETY PRECAUTIONS

- 1** Avoid places where there are dust, gas or fire.
- 2** Do not shake, hit or impact the phone.
- 3** If you wish to clean the outside of the terminal, use only a soft dry cloth. Such chemicals as alcohol, benzine or acetone can damage the surface of the terminal.
- 4** Do not twist or pull the cord out of the terminal.
- 5** Do not disassemble the FWT.
- 6** DO NOT use the power adaptor if:
  - The power cord is damaged.
  - The terminal has been dropped or damaged in any way.
- 7** Use only the AXESSTEL provided adapter. Do not use the AXESSTEL adapter for any other usage.
- 8** Use only the AXESSTEL provided antenna. Do not use the antenna for any other usage.
- 9** Do not install the terminal near water. For example, near a bathtub, sink, wet basement, or swimming pool.
- 10** Do not allow children to play with any radio equipment containing a transmitter. Children could hurt themselves or others (by poking themselves or others in the eye with the antenna). Children could also damage the FWT.

**NOTE:** The input voltage and the shape of the plug on this terminal may vary from country to country.

# FCC NOTE

***WARNING! Read this information before using your phone***



In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.

Use only the supplied or an approved antenna. Unauthorized antennas, modifications, or attachments could impair call quality, damage the phone, or result in violation of FCC regulations.

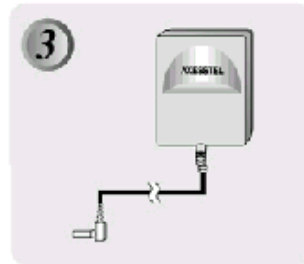
Do not use the phone with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result. Please contact your local dealer for replacement antenna.

**All persons must be at least 20 cm from the antenna when the transmitter is operating and must not be co-located or operating in conjunction with any other antenna or transmitter in order to comply with FCC RF exposure requirements.**

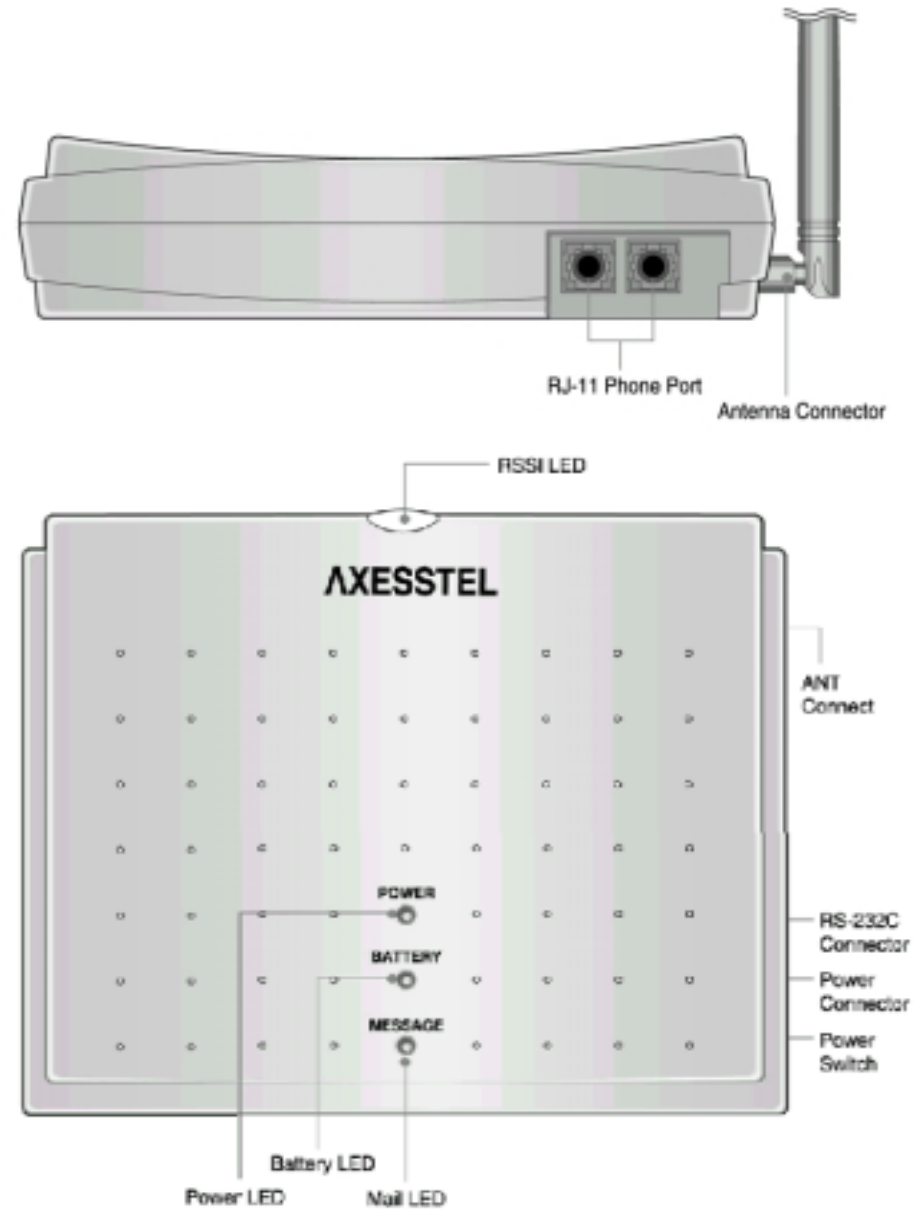
## CHECKING PARTS

Once you have opened your terminal package, check to make sure that you have all the parts shown below. If any piece is missing or broken, please call your agent or customer service.

1. FWT Terminal
2. Antenna
3. AC/DC Adapter
4. User's Manual
5. Quick Reference Card
6. Back-up Battery (Optional)



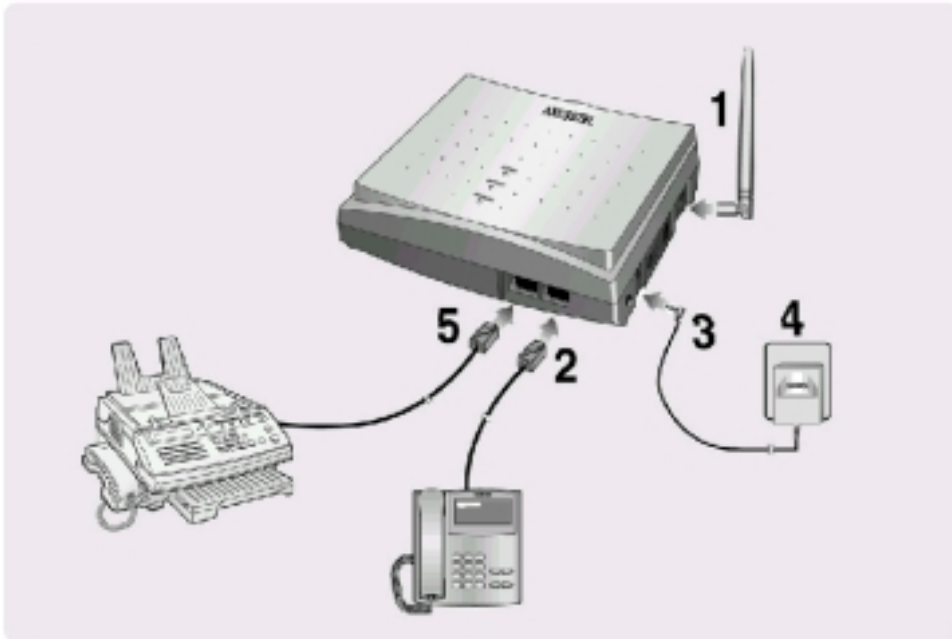
## TERMINAL INFORMATION



# SETTING UP YOUR TERMINAL

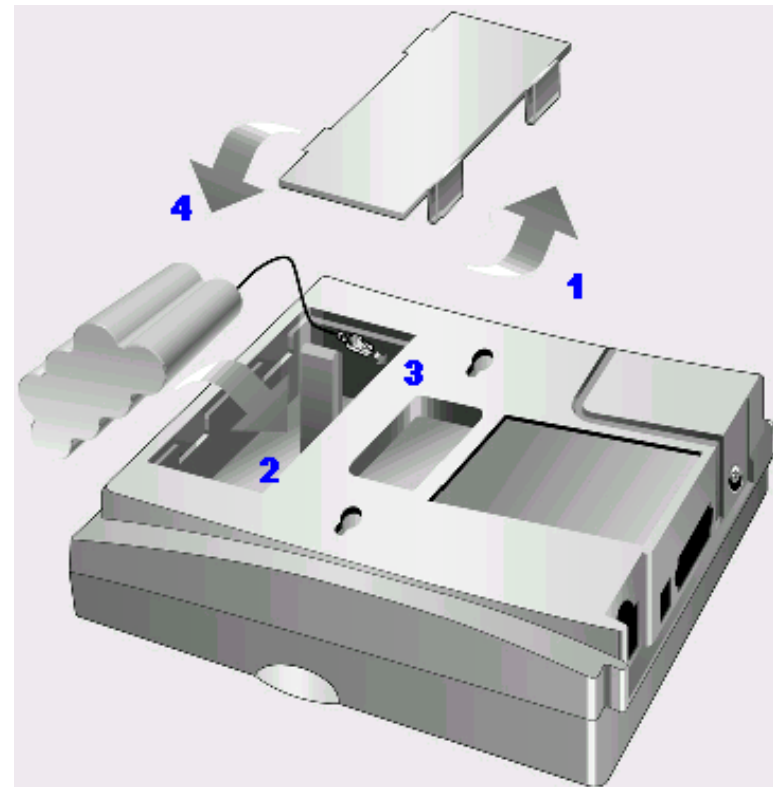
This FWT ACW-T800/T1900 operates by receiving electricity from an electrical outlet or internal battery.

- 1 Connect the terminal mounted antenna on the side of the terminal.
- 2 Connect a conventional wired telephone to a RJ-11 phone port.  
**Use the telephone compatible to FCC part 68 as possible, otherwise it may not work properly.**
- 3 Plug the AC adaptor output into the rear DC 15V jack of the Terminal.
- 4 Plug the AC adaptor plug into an appropriate electrical outlet.
- 5 Connect a G3 analog facsimile machine to a dedicated RJ-11 port.



## How to install internal battery (optional)

- 1 Open battery cover on the bottom side of the FWT
- 2 Connect the DC power cable to FWT.
- 3 Insert the battery pack in the right position between the hold bars.
- 4 Close the battery cover.



## LED indications

LED	Color	Condition	Meaning
POWER	GREEN	On	Power is being supplied by AC adapter
	-	Off	No power / Power is being supplied by battery.
RSSI	GREEN	On	Best Service Condition
	YELLOW	On	Good Service Condition
	RED	On	Voice through the line is not clear but a call is available.
	-	Off	No Service Condition
	-	Blinking	Incoming call
BATTERY	GREEN	On	Battery is fully charged or supplying power.
	RED	On	Battery is being charged.
	-	Off	No battery is installed.
	YELLOW/RED	Blinking	Low Battery Warning
MAIL	GREEN	On	You have voice mail message. Contact your service provider to activate message service.
		Off	Normal operation without any voice mail message.

## Sound indications

Type	Condition	Meaning
Normal dial tone	20sec on; 300msec off	The FWT is in-service with adequate receive signal.
No Service Tone	1.5sec on; 800 msec off	FWT is not capable of making or receiving calls.
Outgoing call restriction tone	800 msec on; 200 msec off	FWT is not capable of making calls but is capable of receiving calls.
Voice mail tone	three times (100msec on;100msec off)	You have voice mail message.

## *Basic Operation*

**Power On/Off**

**Making Calls**

**Receiving Calls**

## POWER ON/OFF





There's power switch by the power jack on the side of the FWT

- 1 Press the power switch to turn on the FWT.
- 2 Press the power switch more than 2 seconds to turn off the FWT.

---




**NOTE:** When you turn on the FWT, it will automatically search for service signal. When it successfully acquires service state, it will generate a dial tone on the handset.

## MAKING CALLS

- 1 First, check to see that your FWT Phone is turned on.
- 2 Pick up the handset.  
You hear a dial tone. Press power switch if there's no dial tone.
- 3 Using the number keypad, dial the desired telephone number.  
**NOTE: When you finish entering phone number, press  or  button. Then, the call is connected immediately. If you don't press  or  button, the call will be connected automatically after 4 seconds.**
- 4 When the other person answers, begin your conversation.
- 5 To end the call, replace the handset.

---

**NOTE:**

- You can dial 32 digits including  or .
- You can dial emergency call by pressing and holding  without inputting any digits. You can't change the emergency call number.

## RECEIVING CALLS

The terminal signals the telephone(s) to ring when an incoming call is detected. Pick up the telephone handset and begin talking into the microphone on the handset.

- To disconnect when you're through, replace the handset.

---

**NOTE:**

- Be sure the phone's ringer is enabled.
- If you heard incoming call in picking up the handset, you can receive the call by pressing any key.

## ***Advanced Feature***

**Setting Connecting Tone**

**Changing the Lock Code**

**Restricting Outgoing Calls**

**Terminal Reset**

**Adjusting Voice Volume**

**Setting Alarm**






**Setting Caller ID Mode**

**Setting 1 min. Alert Beep**







## SETTING CONNECTING TONE


A discrete tone is generated when a call is connected successfully.

- 1 Pick up the handset.
- 2 Press  and .
- 3 Press .
- 4 Press  to set connecting tone.  
Press  to cancel connecting tone.

## CHANGING THE LOCK CODE







Used when you wish to change the lock code of the terminal. The programmed lock code prevents the terminal from being operational to any other person without your permission. This feature can be disabled and enabled through simple keypad number code entry. When you first buy the phone, the lock number is 0000.

- 1 Pick up the handset.
- 2 Press  and .
- 3 Press .
- 4 Press .
- 5 Enter 4 digit Lock Code Number.  
(The default lock code is preset to 0000 at the factory.)  
**NOTE:** If the code is correct, it will confirm with a tone.  
If the code is incorrect, it returns to the standby mode with error beep..

- 6 Enter 4 digit new lock code number.  
It sounds confirmation beep.
- 7 Enter 4 digit new Lock Code Number again.  
If it is different from the new Lock code you entered in the beginning, it returns to the standby mode with error tone.
- 8 Press  to store new Lock Code.  
If you press other key, it returns to the standby mode with error tone.  
**NOTE:** If it is correct, it sounds confirmation beep.

## RESTRICTING OUTGOING CALLS

Used when you wish to block outgoing calls from being made, but still wish to receive incoming calls at any time. This feature can be disabled and enabled through simple keypad number code entry.

- 1 Pick up the handset.
- 2 Press  and .
- 3 Press .
- 4 Press .
- 5 Enter 4 digits Lock Code Number.  
(The default lock code is preset to 0000 at the factory.)  
**NOTE:** If the code is correct, it will confirm with a tone.  
If not, it returns to the stand by mode with error beep.
- 6 Press  to set outgoing call restrict.  
Press  to release outgoing call restrict.  
**NOTE:** If someone tries to make a call when outgoing call restriction is set, it sounds outgoing call restriction tone and howler tone.

## TERMINAL RESET

Resets the terminal back to the initial service status of factory pre-programmed state. This feature can be disabled and enabled through simple keypad number code entry.

- 1 Pick up the handset.
- 2 Press and .
- 3 Press .
- 4 Press .
- 5 Enter 4 digits Lock Code Number.  
(The default lock code is preset to 0000 at the factory.)  
NOTE: If the code is correct, it will confirm with a tone.  
If not, it returns to the stand by mode with error beep.
- 6 Press .
- 7 Wait until you hear a confirmation tone.

## ADJUSTING VOICE VOLUME

You can control the sound volume on your phone

- 1 Pick up the handset.
- 2 Press and .
- 3 Press .
- 4 (up) or (down).

---

**NOTE:** This feature is automatically set after 3 seconds with a confirmation tone.

## SETTING ALARM

You can set alarm on your phone.

- 1 Pick up the handset.
- 2 Press and .
- 3 Press .
- 4 Enter alarm time (00:00~23:59).
- 5 Press to set alarm.  
Press to release alarm setting.

---

**NOTE:** When you hear the alarm, pick up the handset to turn off alarm.

## SETTING CALLER ID MODE

If your phone connected to the FWT is caller ID enabled, you can set the FWT to display the caller number or name on the phone.






- 1 Pick up the handset.
- 2 Press and .
- 3 Press .
- 4 Press .
- 5 Press for DTMF type phone.  
Press for Bellcore type phone.  
Press to release Caller ID setting.

---

**NOTE:** The default setting of Caller ID is DTMF type.

## SETTING 1 min. ALERT BEEP

A discrete tone is generated after each minute interval into the call conversation to notify you that a minute has passed since the beginning of the call or after the previous time of discrete tone, regardless of when you make or receive a call.

- 1 Pick up the handset.
- 2 Press  and .
- 3 Press .
- 4 Press  to set 1 minute alert beep.  
Press  to cancel 1 minute alert beep.

## ***FAX Service (Optional)***

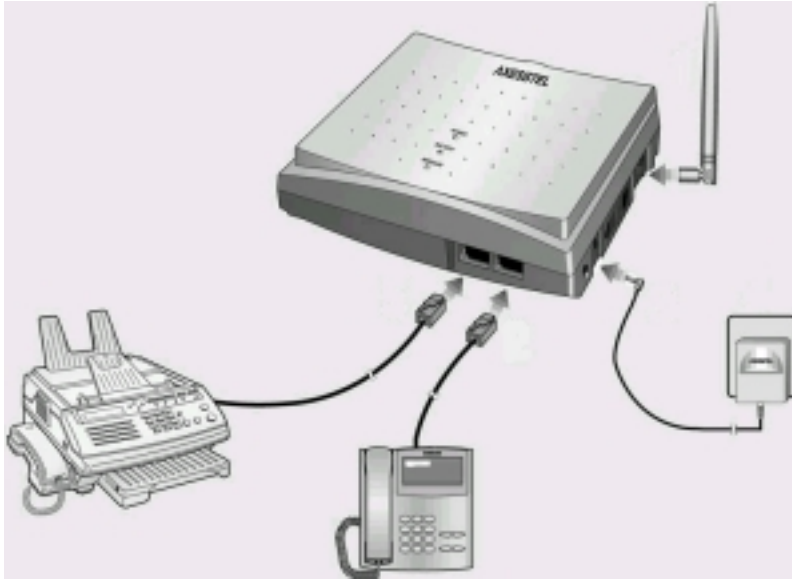
**Fax Set-Up**

**Sending Fax Message**

**Receiving Fax Message**

## FAX SET-UP

To send or receive fax messages, the FWT should be equipped with an analog fax module (optional). Connect a conventional fax machine to the FWT.



## SENDING FAX MESSAGE

You can send and receive fax messages using a fax machine connected to the FWT.

### Dual Dialing Method

- 1 Load documents to send into a fax machine.
- 2 Pick up the handset or press On-Hook button of the fax machine.
- 3 Press **[\*]**, **[\*]**, **[9]**, **[1]** and wait for dial tone.
- 4 Dial destination fax number when you hear dial tone.

### Pre-digit Method

- 1 Load documents to send into a fax machine.
- 2 Pick up the handset or press On-Hook button of the fax machine.
- 3 Dial **[\*]**, **[9]**, **[9]**, **[\*]**, and destination fax number in sequence. The FWT will make a call automatically.

## RECEIVING FAX MESSAGE

You can set the FWT to “Always” or “Once” fax reception mode.

- 1 Pick up the handset or press On-hook key of the fax machine.
- 2 Press **[\*]**, **[\*]**, **[9]**, **[2]** to set “**Always Mode**”.  
Press **[\*]**, **[\*]**, **[9]**, **[5]** to set “**Once Mode**”.
- 3 Wait for a confirmation dial tone. The FWT is ready to receive fax messages.

**NOTE1:** If you set the FWT to **always mode**, the FWT will transfer every call to the fax machine connected. If you set the FWT to **once mode**, the FWT will transfer the first incoming call to the fax machine and set back to **voice call mode** automatically.

**NOTE2:** To set back the FWT from the **always fax mode** to **voice call mode**,

- 1 Pick up the handset or press On-Hook key.
- 2 Press **[\*]**, **[\*]**, **[9]**, **[3]** in sequence.
- 3 Wait for a confirmation dial tone.

## ***Optional Features***

**Call Waiting**

**Three-Way Calling**

**Call Forwarding**

**Caller ID**

**Voice Mail Service**

## CALL WAITING

Call Waiting is a feature, which enables you to be alerted to a second incoming call while you are on the first call of your telephone. Contact your service provider to activate or deactivate Call Waiting.

- 1 You will hear a beep from the earpiece when a second call is incoming.
- 2 Press the hook shortly to answer to the second call.
- 3 Press the hook again to get back to the first call.

## THREE-WAY CALLING

Three-Way Calling is a feature that enables you to set up a three-way conversation with two other users. Contact your service provider to activate or deactivate Three-way Calling.

- 1 Place a call.
- 2 Press the hook shortly and place another call.
- 3 When the second call is answered, press the hook lightly to start a three-way call.

## CALLER ID

See Page 26: Setting Caller ID Mode

## VOICE MAIL SERVICE

Voice Mail Service is a feature that allows the terminal to receive voice mail and forward it to your telephone when you press a certain sequence of keypad number. Contact your service provider to activate or deactivate Voice Mail Service.






















































## *Miscellaneous*

**Menu Options Table**

**Troubleshooting**

**Specifications**

# MENU OPTIONS TABLE

	I	II	III	IV	V	VI	VII	Explanation
<b>1. Setting Connecting Tone</b>	 , 		 set  release					Decides whether a discrete tone should sound when a call is connected.
<b>2. Changing the lock code</b>	 , 			Enter 4 digits lock code	Enter new 4 digits lock code	Enter new 4 digits lock code again		Used when you change the lock code of the phone.
<b>3. Restricting Outgoing Calls</b>	 , 			Enter 4 digits lock code	 set  release			Used when you limit use of the outgoing calls.
<b>4. Terminal Reset</b>	 , 			Enter 4 digits lock code.				Return phone to factory settings.
<b>5. Adjusting Voice Volume</b>	 , 		 up  down	Wait 3 seconds				Adjusts the Volume of phone.
<b>6. Setting Alarm</b>	 , 		Enter alarm time (00:00~23: 59)	 set  release				Used when you want to set alarm time.
<b>7. Setting Caller ID Mode</b>	 , 			 DTMF  Bellcore  Release				Used when you want to set the phone to display the caller number or name.
<b>8. Setting 1 Min. Alert Beep</b>	 , 		 set  release					Decides whether alert beep should sound at one minute intervals when you make or receive a call.
<b>9. Fax Transmission</b>	 , 		 Wait for dial tone	Enter fax number				Used when you want to send a message by a fax machine connected to the FWT.
<b>10. Fax Reception</b>	 , 		 Always mode  Once mode  Reset to voice mode					Used when you receive a message by a fax machine connected to the FWT.

## TROUBLESHOOTING

- **Troubleshoot the conventional wired telephone**

In the event you are unable to place or receive telephone calls, first be sure that the connection wire is properly connected to the RJ-11 phone port on the terminal and to the RJ-11 port of the telephone. If unsure whether or not the telephone is operational, connect a telephone, which is known to be operational to the terminal. If service is available with the operational telephone, replace or repair your telephone equipment. If service is still not available, then follow instructions under "Troubleshoot the Fixed Wireless Terminal".

- **Troubleshoot the Fixed Wireless Terminal**

Check for the appropriate power indication on the LED. If no power, check the adaptor (or External Power Supply) connection between the electrical outlet and the terminal. Check for the appropriate Received Signal Strength Indication (RSSI), Power, and Message Indication through the designated LED, respectively.

## SPECIFICATIONS

Frequency Range	ACW-T800	TX: 824~849MHz RX: 869~894MHz
	ACW-T1900	TX: 1850~1910 MHz RX: 1930~1990 MHz
Channel Bandwidth	CDMA 1.25 MHz	
Multi Connection	4 REN	
RJ-11 Phone/Analog Fax Port	2	
Power Supply (Adapter)	Input: AC 110~240V 50~60Hz Output: DC 15V 1A	
Temperature of operation	-20°C~ +50°C	
Relative humidity	5% ~ +95%	
Temperature of storage	-25°C ~ +75°C	
Dimension	200x170x48.5 (mm)	
Weight (without internal battery)	560g	