

CDMA FWT-8848 (Gateway) User's Manual



CDMA FWT-8848 Version 1.1 -2011

1,General Description

CDMA FWT-8848 is a CDMA to Analog Converter(single port,insert 1 Ruim card only), the device can produce a FXS line to allow a regular phone to be connected and used just like a local landline(PSTN) except your calls will go out the CDMA network. This device can both receive and make calls.

The main application is: Connecting the RJ-11 FXS line to connect Ordinary telephone set for voice call, to connect PBX for call extentions, to connect billing systems for public phone use, to connect VoIP gateway to realize VoIP call termination, to connect alarm system for security purpose, etc. It is not a VOIP gateway, nor a CDMA+VOIP gateway, It is a GSM Fixed Wireless Terminal that produces a Analog FXS phone line.

Frequency Available:

- CDMA 800Mhz 2000 1x, employing Wavecom Q2358C, ZTE MC8331 Module to make,
- CDMA 800/1900Mhz 2000 1x, Dual band, employing Wavecom Q2438F module to make.

Appearance and Structure

Item	CDMA FWT-8848	Remark
Appearance		White/black
Material	ABS (Acrylonitrile Butadiene Styrene)	
Dimension	170mm×118mm×30mm	Excluding antenna
Weight	400g	Weight of Main unit
Power Switch	Rocker switch	
Power Socket	12V DC input	
Phone interface	RJ11	2 RJ-11 ports
Antenna interface	SMA-female	
LED display	No.1: Power, No.2.in use, No.3, in talk, No.4, Battery, if have, No. 5-7, Signal strength	From left to right(front side view)

Front side	LEDs display for Signal strength, Power, Working Status, Talking and Battery indicator;	
Rear side	1pcs SMA antenna connectors, 2 RJ-11 output, Power port and switch;	
Bottom side	1pcs Ruim card holder slots, you can insert Ruim card into the slot .	

2, Features:

- 1) It is a 1 channel CDMA converter which has 2 RJ-11 outputs for extensions;
- 2) It can connect with ordinary telephone set, PBX , VOIP Gateway, Billing meter etc. ;
- 3) Dialing tone frequency:450hz;
- 4) Employ Industrial module to make;
- 5) Can adjust dial interval from 0.5sec to 9 secs by setting up from telephone set;
- 6) Can adjust voice volume by setting up from telephone set;
- 7) Ruim card supported
- 8) Caller ID display;
- 9) DTMF Dialing;
- 10) Bell signal;
- 11) Polarity reversal (Voice detecting reversal polarity) (optional)
- 12) The RJ-11 socket which connect the phone or billing system for metering purpose;
- 13) Antenna socket (SMA);
- 14) IP Presetting;
- 15) Working status and Signal Strength by LED indicator;
- 16) back up Li-ion battery(Optional) 7.2V 1300mAh.standby 24hrs,talking time: 2.5hrs.

3, Technical Specifications

Air interface standard: CDMA 800/1900Mhz 2000 1x (backward IS-95A/B)

CDMA 800Mhz

CDMA 1900:

I) Transmission: 824 ~ 849MHz

I) Transmission: 1, 850 ~ 1, 910MHz

li) Reception: 869~ 894MHz

li) Reception: 1, 930 ~ 1, 990MHz

Phone interface: supply RJ-11 Phone Interface

Hanging voltage: 45V

Picking off voltage: 30mA / 41mA

Dialing tone Frequency: 450Hz

Antenna interface: Antenna amplifying>2.5db

Sensitivity:<-104dbi

Transmitting power<3W

Color: White /Black (optional)

AC-Adapter interface: Input: AC 110~240VAC 50~60Hz

Output: 12DC 1A.

AC-Adapter type: EU,US,AU,British can be optional

4,Operation Circumstance:

Operation temperature: -10c~60C

Storage temperature:-20C~70C

Operation humidity:45%-95%

Atmosphere pressure:86-106Kpa

Environment noise: <60DB

Transmitting Power:2W

Sensitivity: <-104dbm

Antenna Amplifying: >2.5db

Dialing frequency: 450Hz

Hanging voltage: 45V

Picking current: 30mA/41mA

5,Packing List

Name	Quantity	Remark
CDMA FWT-8848	1pcs	800Mhz or 800/1900Mhz
Ac- adapter	1pcs	AC-110-240V, DC12V/1A
Antenna	1pcs	Magnetic Antenna with 3m cable
User's Manual	1pcs	English

G.W: 0.75kg per unit. 20pcs/CTN, 16kg /CTN,CTN Size: 55cmX34.5cmX32.5cm

6,Installation And Connection

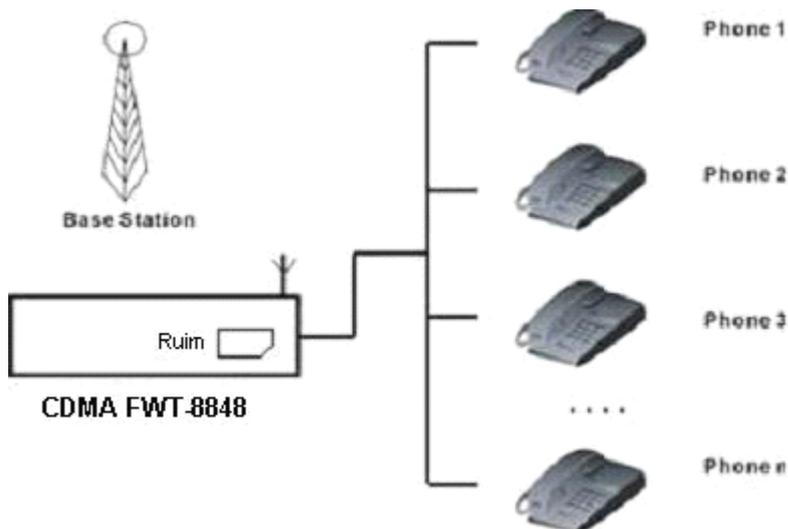
The Condition for Installation

The terminal asks for 110- 220V AV power supply. It must be installed in the area where the CDMA network can cover. The strength of the signal can affect the quality of voice.

1. Screw off the screws that are on the back of the terminal, Insert Ruim card for every Ruim card holder, and then tighten the screws.
2. Install antenna. In order to ensure the quality of voice, antenna must be put beyond 1.5 from the telephone and terminal.
3. On end of the telephone line connects to the "Phone" port of the terminal, the other end connects to telephone.
4. "Power" port connects to power adapter that is connected to 110-220V AC power supply.

1) The Installation for Connecting to Ordinary Telephone

The Sketch for connecting ordinary Telephone

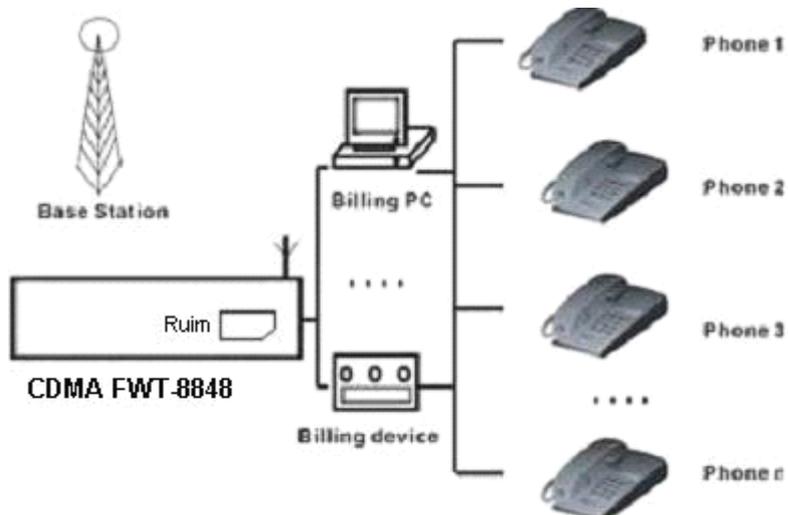


Draw your attention: Because there are many types of ordinary telephone and their electric parameters are different. In order to avoid mutual disturbance between telephone and terminal and affect voice quality. The distance between telephone and terminal is 1.5m at least.

2) The installation for connecting to billing device for metering

If the users demand to register cost during calls, billing device can be connected between terminal and ordinary telephone. Billing device register cost according to the anti-polarity signal that is provided by terminal.

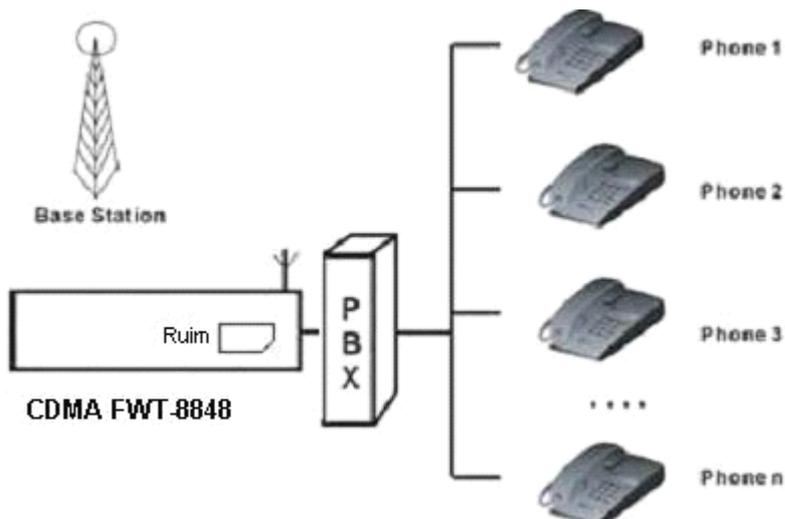
The sketch for connecting to Billing device or Computer charging system



3) The installation for connecting to PBX for call extentions

If users want to connect small PBX to this terminal, connect terminal's "Phone port" to the PBX.

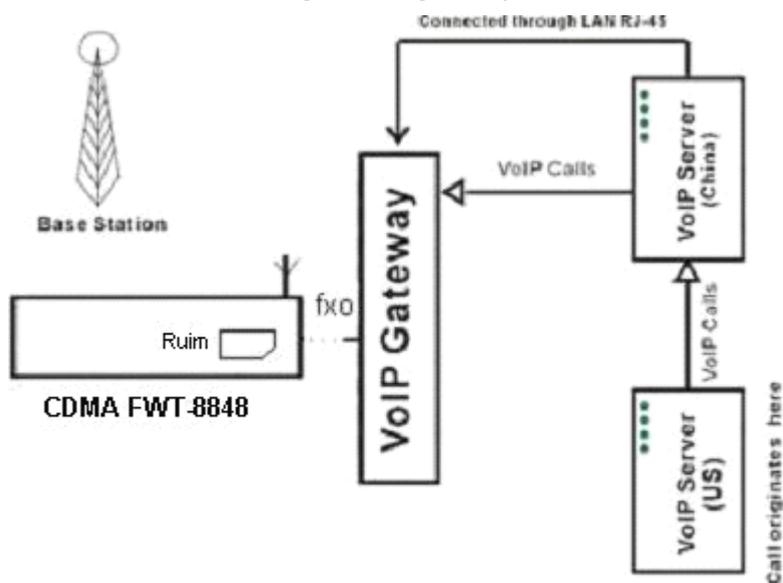
The sketch for connecting to PBX device.



4) The installation for connecting VoIP gateway for Call Termination

Suppose a VoIP call originates from US, which was transferred from US Server to China Server on VoIP, finally the call will be terminated from internet to CDMA network and to be sent out to the destination answer side.

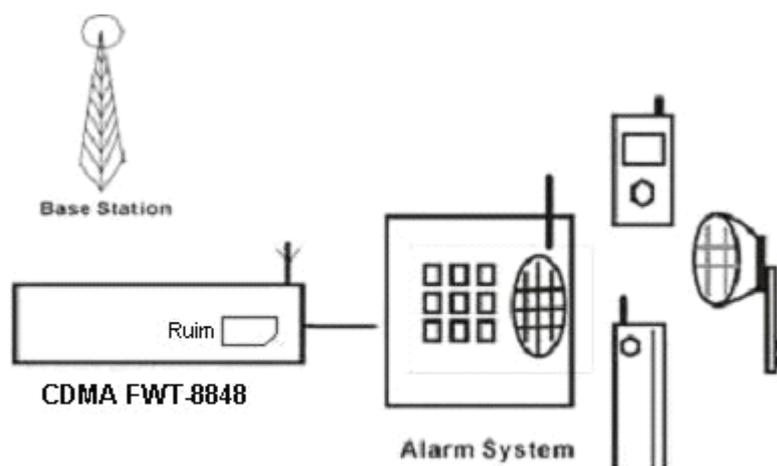
The sketch for connecting to VoIP gateway



5) The installation for connecting to alarm system for Security

The CDMA FWT can substitute the PSTN for connecting to alarm system for security purpose when PSTN failure or not available.

The sketch for connecting to alarm system



7, Function Setting

Before you do the following function settings, Lift handset or press hands free key of telephone set, then you can press the buttons according to the following instructions to finish setting, you will hear 2 beeps when you finish, this testify setting successfully.

1) Restore to factory default setting

*#99#99# restore to factory default setting.

2) Adjust dial interval

*#01#30# , 01--command, 30--time, Max 9.9 seconds, Min 0.5 seconds, default setting is 3 seconds.

*If you use CDMA FWT-8848 for connecting to VoIP gateway, you can set dial interval as 0.5 second, it can make PDD<5 sec (Method: *#01#05#);

*If you use CDMA FWT-8848 for connecting telephone, PBX, billing device, you can set dial interval as 3 seconds or 5 seconds as you like (Method: *#01#30#, set the dial interval as 3 seconds).

3) Adjust Earphone Volume

*#02#15# 02--command, 15--volume, Max 16, Min 1, default setting is 15.

4) Adjust Mic. Volume (sensitivity)

*#03#10# 03--command, 10--amount, Max 16, Min 1, default setting is 10.

5) Setting local area code

*#04#*0755# 10--command, *0755—area code, Max 5 numbers, use "*" instead if area code is less than 5 digits.

6) Setting IP numbers

#05#17911# 05--command, 17911—IP numbers, Max 5 numbers, use "" instead if IP number is less than 5 digit.

7) Hide Caller ID (been sent out)Setting (optional)

*#13#01# 13--command, 01--value, Max-02, Min-00 Default setting is 00
00-- presentation indicator is used according to the subscription of the CLIR service
01 – CLIR allowed
02 – CLIR prohibited

Notice: This Setting need CDMA carrier support.

8) Bar incoming call Setting

*#14#00# 14--command, 00--value, 00--no barring, 01--set barring default setting --00

9)FSK setting (optional) (should confirm before order)

*#17#00# setting caller ID
17--order, 00--value, 00-DTMF, 01-FSK, default setting is 00
This setting need terminal has FSK Chip set support

10) Billing Mode setting

*#15#00#

15--command, 00--value, 01-reversal polarity, 02-12 KHz, 03-16 KHz, default setting-- 01

8,Making Calls and Answer Incoming Calls

Making Calls

1. Lift the handset or press “hand-free” key, you will hear dialing tone, then you can dial the telephone numbers you want to call.
2. Dialing: dialing the telephone numbers you want to call
3. On completion of dialed digits, you can press “#” to transmit the called telephone numbers. If you don't dial any key for continual 3 seconds during the dialing, terminal transmits called telephone numbers automatically.
4. During calls, if the telephone numbers is not free ones, the terminal sends out anti-polarity signal.
5. If the calling party or called party hangs up, the terminal stops sending out anti-polarity signal.

Answering Incoming Calls

When some calls are coming in, if the connected telephone has the function of displaying incoming calls, the telephone rings and displays the incoming telephone numbers. Now users can lift the handset or press “hand-free” to answer it.

Warranty Card

Please fill in the blanks carefully, and keep it properly as the voucher for warranty.

Type of Equipment	CDMA FWT-8848		
User's name		Contact with:	
Contact Tel.no.			
Address			
Date of Ex-works			
Date of Maintenance	Damage	Management	Maintainer
Sales Agent (Stamp)		Purchasing Date	