

DEKAI TELECOM CO., LIMITED _

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**GSM FWT W/ PSTN 70A00-2
(Gateway)**

User's Manual

Brand: HAI

Model: 70A00-2

Manufacturer: Dekai Telecom Co., Limited

Important Safety Instructions:

1. Read all safety and operating instructions before using.
2. This product should not be used near water.
3. Only use dry cloth to clean this product.
4. Do not block any ventilation openings.
5. Do not install this product near any heat sources; such as, radiators, heat registers, stoves, or other appliances (including heat producing amplifiers) that produce heat.
6. Only use attachments specified by the manufacturer.
7. Unplug this apparatus during lightning storms.
8. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
9. Refer all servicing to qualified service personnel.
10. Servicing is required when the apparatus has been damaged in any way; such as, a liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, the apparatus does not operate normally, or has been physically damaged.
11. **WARNING:**To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
12. **WARNING:**Battery(built-in) may explode if mistreated. Do not disassemble or dispose of in fire



GSM FWT W/ PSTN 70A00-2 Version 1.1 -2011

1, General Description

When PSTN line is connected and active, you will hear a normal dial tone (from the PSTN) after phone is picked up. The call will dial out through PSTN.(Be default)

When the FWT is in GSM mode without active PSTN line, you will hear a gsm dial tone (from the FWT) after phone is picked up. The call will dial out through GSM.


If PSTN and GSM all are available, you could pick up the phone and enter “* *” (two star keys) before press other digits, the FWT would switch to GSM mode, then the call will dial out through GSM .

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Available:

- GSM850/900/1800/1900Mhz Quadband, employing M10(Quectel) module to make.

Appearance and Structure

Item	GSM&PSTN FWT 70A00-2	Remark
Appearance		Black
Material	ABS (Acrylonitrile Butadiene Styrene)	
Dimension	170mm×118mm×30mm	Excluding antenna
Weight	250g	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)

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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 Sim card holder slots, you can insert Sim card into the slot .	

2, Features:

- 1) Simple to install and easy to maintain
- 2) Steady module and reliable design ensures good performance
- 3) Provides optimized circuit directly connecting the exchange device for extensions
- 4) Compatible to most telephones, PBX device.
- 5) Strong signals with high gain antenna
- 6) Attractive plastic casing
- 7) SIM card supported (1.8V, 3V)
- 8) Caller ID display
- 9) Provides reversal polarity signal for metering
- 10) No noise and clear voice
- 11) Suitable for wide voltage range and low power consumption
- 12) Suitable for all kinds of weather and environment
- 13) RJ-11 ports (1 fxs for pstn line and 1 fxs port)
- 14) Locking PIN / network (optional)

3, Technical Specifications

Air interface standard: GSM850/1900Mhz,900/1,800Mhz phase 2+ full band

Frequency ranges:

GSM850:824-849MHz (TX) ;869-894MHz (RX)

PCS1900:1850-1910MHz (TX) ;1930-1990MHz (RX)

Phone interface: supply RJ-11 Phone Interface

Hanging voltage: 45V

Picking off voltage: 30mA / 41mA

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Dialing tone Frequency: 450Hz

Antenna interface: Antenna amplifying>2.5dBi

Sensitivity:<-104DBM

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
GSM FWT W/ PSTN 70A00-2	1pcs	Quadband
Ac- adapter	1pcs	AC-110-240V, DC12V/1A
Antenna	1pcs	Magnetic Antenna with 3m cable
Telephone cable	1pcs	1m cable
User's Manual	1pcs	English

G.W: 0.65kg per unit, 20pcs/CTN, 13kg /CTN,

CTN Size: 59cmX35cmX26cm

6, Installation and Connection

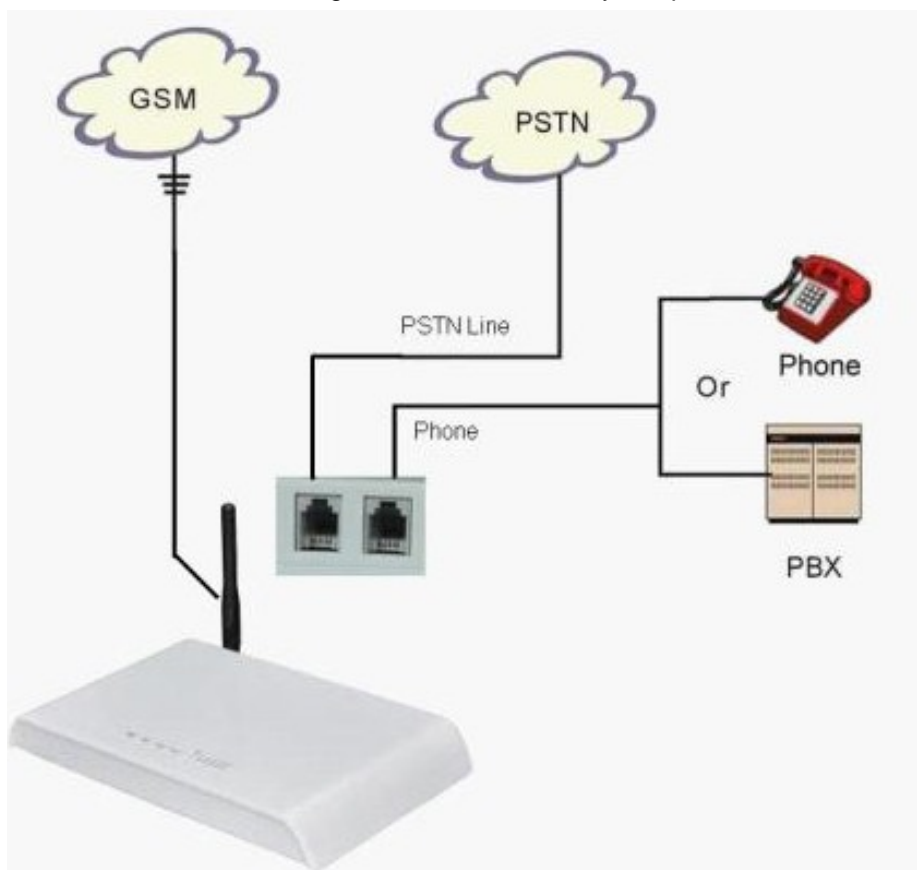
The Condition for Installation

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

1. Open the rear cover, insert SIM card for every Sim card holder.
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.

The Installation for Connecting to PSTN & Ordinary Telephone

The Sketch for connecting to PSTN And Ordinary Telephone set.



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.

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 GSM FWT W/ PSTN 70A00-2 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 GSM FWT W/ PSTN 70A00-2 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 ""

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instead if IP number is less than 5 digit.

7) Bar incoming call setting

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

8) FSK setting

*#17#00# setting caller ID

17-order, 00-value, 00-DTMF, 01-FSK, default setting is 01

9) Pin Lock &Network Lock Setting (optional)

1) PIN Lock

1, Set to open PIN code check and automatic PIN lock function

*#07#*1234# 07-command, 1234- the current SIM card PIN code

If set successfully, the device will open PIN code check, and automatically change the current SIM Card into "PIN on" from "PIN off"

2, Set to close PIN code check and automatic PIN lock function

*#08#*1234# 08-command, 1234- the current SIM card PIN code

If set successfully, the device will close PIN code check and automatic PIN lock function.

3, Set to change PIN code, open automatic PIN lock function

*#09#1234*56785678# 09-command, 1234- the current sim card PIN code, 5678-new PIN code. (5678 can be any other 4 digits number, suppose you can use 2009).

If set successfully, the device will change the current sim card PIN code as you want.5678, or the any other 4 digit PIN codes, and open automatic PIN lock function.

2) Network Lock

1, Set to open Network lock function

*#10#01234# 10-command, 01234-password

2, Set to close Network lock function

*#11#01234# 11-command, 01234-password

3, Set the Network codes

*#12#1*46003*46003# 12-command, 1--No. Of IMSI, 46003--the IMSI code for

China Telecom

***#12#2*46000*46000#** 12-command, 2--No. Of IMSI, 46000--the IMSI code for China Mobile

8, Make Calls and Answer Incoming Calls

Make 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.

Answer 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.

9, Troubleshooting

Symptom	Problem
Always hear busy signal when the phone is off-hook	SIM card is not installed or the SIM card is not making a proper connection with the contacts on the SIM card holder.
Can not connect with GSM network	Reorient the antenna. Signal too weak at location.
Signal Strength Indication is weak	Reorient the antenna. Antenna is connected improperly.
No dial tone	Telephone line is improperly connected.
Noise during calls	Signal too weak.
Unit unexpectedly shut down	Unit needs to be rebooted. Switch off the power and wait a moment, then restart it.

10, Preventing Malfunction

- Avoid using, placing or storing the equipment in places subject to strong sunlight or high temperatures. Exposure to intense sunlight and heat may cause the battery to leak, overheat or explode, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing. Ensure that there is good ventilation when using the equipment
- Do not store the equipment in humid or dusty areas. Storage in such areas could lead to fire, electrical shock, or other damage.
- Do not operate beyond its specified temperature, humidity, or power source ratings. Do not use this device in a high temperature or high humidity area

11, Customer Information

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1. This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.
2. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.
3. If this equipment [US: DEKOT09B70A00-2] causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.
4. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.
5. If trouble is experienced with this equipment [US: DEKOT09B70A00-2], for repair or warranty information, Service can be facilitated through our office at:
U.S. Agent: HOME AUTOMATION, INC.
Address: 4330 Michoud Blvd., New Orleans, LA 70129, USA
Tel: 504-7369810
Fax: 504-2532957
Canada Agent: [EECOL Electric, Inc.](#)
[Address: 63 Sunpark Dr. S.E. Calgary, Alberta, Canada T2X3V4](#)
[Tel: 403-253-1952](#)
[Fax: 403-252-6441](#)
If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.
6. Please follow instructions for repairing if any (e.g. battery replacement section); otherwise do not alternate or repair any parts of device except specified. For trouble-shooting, please refer Item 9 of the User Manual.
7. Connection to party line service is subject to state tariffs. Contact the state

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public utility commission, public service commission or corporation commission for information.

8. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this [US: DEKOT09B70A00-2] does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.
9. If the telephone company requests information on what equipment is connected to their lines, inform them of:
 - a) The ringer equivalence number [0.9B]
 - b) The USOC jack required [RJ11C]
 - c) Facility Interface Codes ("FIC") [XXX]
 - d) Service Order Codes ("SOC") [XXX]
 - e) The FCC Registration Number [US: DEKOT09B70A00-2]
10. The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. The REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point. For this product the FCC Registration number is [US: DEKOT09B70A00-2] indicates the REN would be 0.9B.
11. If this product is equipped with a corded or cordless handset, it is hearing aid compatible.

FCC Caution:

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could avoid the user's authority to operate this equipment. (Example - use only shielded interference cable when connecting to computer or peripheral devices.

FCC Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 25 centimeters between the radiator and your body.

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※ 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.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. It was required to meet requirement of RSS-Gen Section 7.1.3.

Warranty Card

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

Type of Equipment	GSM FWT W/ PSTN 70A00-2		
User's name		Contact with:	
Contact Tel.no.			
Address			
Date of Ex-works			
Date of Maintenance	Damage	Management	Maintainer

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Sales Agent (Stamp)		Purchasing Date	
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