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INTRODUCTION

- Thank you for purchasing FSU810.
- To ensure correct usage of this equipment, please read this User Guide thoroughly.
- The illustrations used in this document were created expressly for instructional purposes and may differ slightly from the actual phone.
- Changes or modifications not expressly approved by UTStarcom, Inc. could void the user's authority to operate this equipment.
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference

to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.
- The antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located with or operated in conjunction with any other antenna or transmitter.

HOW TO USE THIS INSTRUCTION MANUAL



- In this manual, "press" means to press the key and then release; "press and hold" means to press the key for 2 sec or more and then release.
- In this manual, "service area" refers to area that FSU810 can receive signals effectively.
- Before using this equipment, please read these "Safety

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Precautions" thoroughly to ensure correct and safety usage.

- The cautions included here are provided to prevent danger to persons and property.
- The following explain the degree of danger and damage that could occur if these safety precautions are not observed correctly.

SAFERTY PRECAUTIONS

1 DANGER	This symbol indicates that erroneous operations may directly result in property damage or injury.	
⚠ WARNING	This symbol indicates that erroneous operations may result in the possibility of property damage or injury.	
⚠ CAUTION	This symbol indicates that erroneous operations may result in the possibility of injury or physical damage.	

• The following symbols indicate explanations of what is to be

observed.

Q	This symbol indicates a prohibited action.
<u>0</u>	This symbol indicates an action that must always be performed.
1	This symbol indicates that disassembly is prohibited.
<u> </u>	This symbol indicates that the plug of the power cord must be removed form the outlet.

Handling the Equipment and Power Adapter



Use only the battery and power adapter designated for this equipment. Otherwise, it may cause battery leakage, overheating, explosion or even fire.





Do not store in places with high humidity, high temperature or much dust, to avoid malfunction.



The equipment, battery and the power adapter are not waterproof, so they should be kept from wetting by rain or etc.





Do not apply strong impact or vibration, and do not throw. Such actions could result in battery leakage, overheating, cracking or fire.	O
Do not place the equipment or power adapter inside a microwave oven or high-voltage appliances. Otherwise, it may result in battery leakage, overheating or cracking as well as phone or power adapter overheating, smoke, fire or circuit damage.	
Do not use in places with volatile gases, which may result in fire, malfunction or damage.	O
Do not disassemble or modify the equipment or power adapter. Otherwise, it may cause personal injury or malfunction.	
The antennas used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located with or operated in conjunction with any other antenna or transmitter.	9

Handling the Phone

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Do not use the equipment while driving. Otherwise, it may cause a traffic accident. Stop the vehicle in a safe place before using the equipment.	\bigcirc
Disconnect the power adapter and remove the battery in areas such as aircraft, hospital, etc., where such usage is forbidden to avoid influence on electronic devices and electrical medical equipment. Observe the relative stipulations when you have to use the equipment in such area.	0
Do not use the equipment near electronic equipment easy to be interfered. Radio frequency interference may result in malfunction of the electronic equipment. The following are such electronic equipment: Hearing aids, pacemakers and other clinical electronic devices, fire detectors, automatic doors and other automatically controlled devices. If you have to use the equipment near electronic medical devices such as pacemakers, please consult with the device manufacturer or local dealer.	<u>Q</u>



In rare cases, using the equipment inside certain model of vehicle can adversely affect the electronic equipment inside the vehicle. Do not use the equipment in such cases, because it is dangerous for personal security.



Keep magnetic card, etc., away from the equipment. Otherwise, the contents of floppy disks, cash cards, etc., can be erased.



Keep pins, nails, hairpins, etc., away from the receiver speaker. A dynamic speaker is used and this will magnetically attract such objects, which may result in personal injury.



Handling the Battery

A DANGER

Do not throw the battery into fire to avoid fire or cracking the battery.	Ø
Do not apply force if the battery cannot be correctly installed to the phone. Such actions may result in battery leakage, overheating, cracking or fire.	
Do not short the battery by connecting the terminals with metal objects such as paper clips or wire.	O
Do not solder the battery terminals directly. This can result in battery leakage, overheating, cracking and fire.	O

There is danger of loss of vision if the battery fluid should get into the eyes, so, in such case, do not rub the eyes. Wash the eyes with clean water and immediately consult a physician.



Do not use or leave the battery close to places such as a fire, heater, etc., where temperature is high. This could result in battery leakage, overheating, cracking and fire.





When the battery is recharged or stored, if there is something wrong such as generation of heat, discoloration, deformation, etc., remove the battery from the equipment and do not use it any more. Otherwise, it may result in battery leakage, overheating, cracking or fire.



If battery fluid should adhere to the skin or clothing, immediately wash with clean water to prevent skin injury.



If the battery leaks fluid or emits a strange odor, immediately move it away from any open flame to avoid any chance of catching fire or cracking.





Do not place the equipment at places with temperature more than 45 $^{\circ}$ C for a long time. Otherwise, it may cause battery leakage, overheating, and performance degradation or usage life shortened.



Among the battery cord, the red line is anode, the black line is cathode, and the yellow line is sensor outlet



Handling the Power Adapter

A DANGER

Always use AC110/220V±10% power supply for the power adapter. Other voltages can result in electrical shock, fire or malfunction.	<u>0</u>
Never short the power adapter. Otherwise, it may result in equipment malfunction, electrical shock, smoke or fire.	Q
Do not use the power adapter if the power cord is damaged (exposed or broken wires, etc.). Otherwise, it may result in fire or electrical shock.	
Wipe off any dust that may accumulate on the power supply plug to prevent any chance of catching fire.	0
Do not place containers of fluid such as water near the power adapter. The fluid can cause overheating, electrical shock or other malfunctions.	Q

In the case of intrusion by a fluid such as water, immediately remove the power cord from the power outlet to prevent overheating, fire, electrical shock and malfunction.

Do not use the power adapter in places with high humidity, such as bathrooms, to avoid fire and malfunction.

Do not touch the power adapter, power cord or power

Do not touch the power adapter, power cord or power outlet with wet hands. Otherwise, it may cause electrical shock.





Always disconnect the power plug from the power outlet before cleaning to avoid any chance of electrical shock.



Do not place heavy objects on the power cord or make modifications. Such action may result in electrical shock or fire.



Requests Concerning the Phone

Avoid extremely high or low temperature.

Always use the equipment at places in the temperature range of – 10° C ~40°C, and humidity range of 45%~95%.

Usage near ordinary phones, TVs, radios and OA equipment may adversely affect the communication with the equipment, and so it should be avoided.

Requests Concerning the Battery

Store in a cool, well-ventilated place where there is no direct sunlight.

If the battery is kept no power for a long time, if may become impossible to recharge the battery.

Do not discard old batteries together with normal trash.

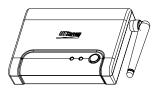
In areas where regulations concerning batteries are in force, follow the instructions of the local authorities.

1. GETTING STARTED

1.1 Check the phone and its accessories

Open the package and check the components. If you find there is something missing or anything damaged, please contact your local distributor.

FUS810 Fixed Subscriber Unit (including the indoor antenna)



• Power Adaptor (one)



- Rechargeable battery (one)
- User Guide (one)
- Service Guide

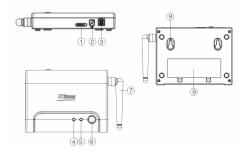
· Certificate of conformity

1.2 Phone specifications

Size	Approximately 160mm x	
	120mm×30mm(not including	
	antenna)	
Weight	Approximately	
	370g(including the battery)	
Battery	Ni-MH 4.8V 1600mAH	
Transmitting Power	Approximately 10mW	
Power Adaptor	Input 80V—320V	
·	Output 6.5V 680mA	
Battery Standby	Approximately 10 hours	
Time	-	

- Install the battery correctly before getting started.
- Standby time refers to normal operation with the receiver in the cradle and the phone available for calls.
- After a power outage, battery-power supplied standby time depends on network conditions and phone usage.
 Poor network conditions and extensive usage will diminish available standby time.

1.3 Description of components



- 1. Data Communication Port (indicated DATA).
- 2. Power Adaptor Socket
- 3. Phone/Fax Extension Interface

4. Network Signal Strength Indicator

If FSU810 receives a good network signal, the green indicator will light steadily; If FSU810 receives a marginal network signal, the green indicator will wink; If FSU810 fails to receive any signals, this green indicator will not light.

5. Power Indicator

When FSU810 is supplied power via the power adaptor, the red indicator will light steady; If FSU810 is supplied directly

by the battery, the red indicator will wink; If the battery is totally exhausted, the indicator will not light.

6. Power Key

- Pressing and holding, will switch the FSU810 on and off.
- After switching the FUS810 off, please wait for a moment before switching it on again.

7.Included Whip Antenna

• Do not bend or shake the antenna to prevent damage.

8. Holes for Hanging

• FSU810 can be wall-mounted to save space.

9. Battery Compartment Cover

1.4 Battery installation

 To ensure proper operation in the event of a power failure, the battery must be correctly installed.



Remove the battery compartment cover.

Install the battery.

• The battery connector is keyed to insure correct installation and polarity.

Secure the battery compartment cover. Make sure that the cover is tightly secured.

1.5 Supply power

Connect the 3-phase plug of the power adaptor to an electrical source outlet;

Connect the power adaptor to the according socket of FSU810.

- Make sure all the facilities are properly connected;
- Please use the power adaptor to supply power instead of battery alone. If the electricity goes out, the battery will

 A grounded power outlet is required to insure safety and correct operation.

1.6 Charge the battery

- Please install the battery correctly according to the illustration above.
- The battery backup is rated for 10 hours when fully charged, depending on the Network conditions and the frequency of usage.
- The battery is designed for emergency use, for example, when there is an unexpected power cut, the battery will supply power automatically.
- Avoid total battery drain. When the electrical power is restored, the battery will recharge itself via the power adaptor until fully charged.
- When you charge the battery, it is advisable to keep the FSU810 on. Do not disconnect and re-connect the power adapter from the unit.
- As the battery is exhausted, the quality of communication may be affected, and eventually the unit will stop working.

1.7 Getting started

- When the facilities and battery are correctly installed, press and hold the power key for 3 seconds to switch FSU810 on.
- If FSU810 is located properly in the region of the network, both the signal and power indicators will light. If the FSU810 receives a good network signal, the green indicator will light steadily; If FSU810 receives a marginal network signal, the green indicator will wink; If FSU810 fails to receive any signals, this green indicator will not light.
- Place FSU810 in a location with adequate signal reception to ensure communication quality.
- Orient the antenna to the appropriate direction so that FSU810 receives the strongest signal.
- Do not remove the antenna lest it be damaged.
- · Never remove the battery.

2. FUNCTIONS AND OPERATIONS

- FSU810 receives radio signals from the PAS network and its Public Switched Telephone Number is determined and programmed by the network operator. FSU810 replaces the wired connection between the common telephone and the central office with a radio link. A telephone set or the network interface can connect to FSU810.
- In order to prevent the interference and keep the good voice quality, please keep the telephone away from FSU810 by at least 1m.
- Although FSU810 can be connected with a fax machine, it does not match with all kinds of fax machines.
- FSU810 can be connected to a computer with a USB Data cable with the ability to transmit data at 32Kbps wirelessly using the Personal Handy Phone System (PHS) Internet Access Forum Standard (PIAFS) standard.

2.1 Connected with a telephone

- 1. Connect the telephone cord to the correct interface of FSU810.
- 2. Then connect the telephone cord with a common telephone.
 - FSU810 can be connected to a telephone, a fax machine or a fare register, but MUST NOT be connected to a jack with an active fixed-line.
 - When in the coverage area and with adequate signal the

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service provided will be equivalent but not exactly the same as wired line service.

NOTE:

- * Before dialing, make sure that signal strength is sufficient.
- * Pick up the receiver and wait for the dial tone before dialing. Dial tone can be delivered from the Central Office to the phone and may be delayed slightly to allow the connection to be established, depending on local service options.
- * It is normal if there is a delay after dialing while the system is setting up the wireless connection.
- * If you have subscribed to Voice Mail service, and the system is optioned for Central Office dial tone, please listen for stutter dial tone to determine if you have a voice mail message. (REQUIRES NETWORK SUPPORT)
- If you have picked up the phone but not yet dialed a number, and a call is coming in, there will be no ring nor caller ID displayed but a tone in the receiver. Press the cradle button to answer the call (This action should finish in 1 second).
- The communication quality of the phone is directly affected by the signal-reception condition of FSU810. Therefore please put FSU810 at an appropriate position and keep it in the region of the Network.
- Pressing and holding the power key switches FSU810 on or

- off. When FSU810 is switched off, the phone will not function and the indicator lights will go out.
- If you have subscribed to the Caller ID Service (requires network support), the caller's number will be displayed.
- In order to insure good voice quality, please keep the phone away from FSU810 by at least 1m.

2.2 Connected with a fax machine

- Connect the FSU810 with a fax machine the same way as connecting it with a telephone.
- The phone number of the fax is determined and programmed by the network operator.
- When the fax is connected with FSU810, it works similar to being connected to a fixed-line.
- The performance of the connected fax machine depends on the properties of the fax itself and the local network condition, consequently, please use the fax when the network signals are better.

2.3 Wireless internet access(requires network support)

 This function is used in conjunction with the PAS USB PIAFS data cable / modem. FSU810 can provide 32K wireless access to the Internet, and can communicate with computers wirelessly at 32K. Please refer to the PAS USB Communications Cable / modem User Guide for further information.

- 1. Insert the PAS modem's DDI connector into the data communication port (indicated DATA) of FSU810.
- 2. Insert the USB connector of the PAS modem into the USB port of the computer. For driver installation, property settings and dial-up, please refer to the PAS modem User Guide.
 - When disconnecting the PAS modem from the FSU810 phone, use thumb and forefinger to press the tab on the connector of the PAS modem and withdraw the cable gently.
 - To prevent service interruption due to insufficient power during periods of extensive use, please make sure that the phone's power adaptor is properly installed and the battery power is sufficient.
 - When accessing the Internet in a place where the signal is weak, it is possible that the connection may drop.

3. REFERRENCE INFORMATION

- 3.1 Care and maintenance
 - . Daily cleaning:

Please use a soft and dry cloth to remove the dust or dirt on the equipment.

• Cleaning of stubborn dirt:

Please use a soft wet towel with diluted cleaning detergent to clean it, then wipe with a dry cloth.

 Never use solvents like benzene, thinner or gasoline as detergent by reason of that they will spoil the exterior of FSU810 or change the color of it.

3.2 Troubleshooting

• When encountering difficult during usage, please consult the following troubleshooting table:

Phenomena	Diagnosis	Elimination
	Check the connection between FSU810 and the power adaptor.	Connect FSU810 with the power adaptor correctly.
FSU810 can not be started	Verify that the power adaptor is connected to a working electrical outlet.	Connect the 3- phase plug of the charger with the outlet of a working electrical source.
Poor voice quality or the phone fails to function.	Make sure FSU810 is located in the region of the network services. See if there are some objects nearby that will obstruct or absorb the signals.	Move FSU810 to the appropriate location.

If the malfunction symptoms are not listed in the above table, or the corresponding solution is invalid, please contact your local UTStarcom Customer Service Center.

For Technical Support and Assistance please visit the UTStarcom website at http://www.utstar.com

Select "Support " and be directed to the Toll Free number of the UTStarcom International Professional Service Regional Center that serves your area.

Or you can call the UTStarcom North America Professional Service organization at 1-(866) 663-3266.

4. ACCESSORIES

4.1 The 4.5dbi Omni antenna

Install the antenna outdoors and connect it to the FSU via the COAX cable that is supplied with the antenna.

4.2 The 10dbi directional antenna

Install the antenna outdoors and connect it to the FSU via the COAX cable that is supplied with the antenna. Orient the antenna, per the label on the antenna, to point at the cell providing the strongest signal.

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