AT288-UHF User Guide V1.0.0

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ATID Co., Ltd.

#1205, Byuksan/Gyungln Digital Valley II, #481-10, Gasan-Dong, Gumchon-Gu, Seoul, Korea Tel: +82-2-544-1436

Fax: +82-2-544-1436 Fax: +82-2-2113-0040 www.atid1.com

betty@atd1.com njkim@atid1.com

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Before You Begin

This section provides you with safety information, technical support information, and sources for additional productinformation.

Who should read this manual?

This manual is written for the person who is responsible for installing, configuring, and maintaining the AT288-UHF.

This manual provides you with information about the features of the AT288, and how to install, configure, operate, and maintain it.

Before you work with the AT288-UHF, you should be familiar with your network and general networking terms, such as IP address.

Safety information

Your safety is extremely important. Read and follow all warnings and cautions in this document before you handle and operate ATID equipment. If you do not follow the safety warnings and cautions, you might be seriously injured, and the equipment and data are also might be damaged.

WARNING

A warning requires you must pay attention to the operating procedure, practice, condition, and statement strictly, or might be injured seriously.

This device is designed to meet the requirements for RF exposure requirements.

CAUTION

A caution alerts you that you must be observe strictly when you operating procedure, practicing, configuring, for preventing from damage and destruction of equipment, and loss of data.

User Information

This device may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

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 technical for help.
- 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 technical for help.

This device complies with Part 15 of the FCC's 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 undesirable operation.

We declare that this device is compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.



Chapter 1. Caution when using

Before you handle and operate your device, Please read through and familiar with the contents of this manual.

1. How to use the battery correctly

- When you dropped the main body or battery in water, please do not put it on the stove or heater for drying. Just keep it in natural temperature or contact with purchase place.
- Please do not take the metal object to approach to the terminal of battery
- If you do not use the battery for a long time after charging, please keep it at room temperature.
- According to the life of battery and the processing time of its using, the buffering time can be shortened. In this case, please contact your dealer.
- You have to charging the device with the provided adaptor from factory.

2. Caution when using

- User careless or products repair might damage the stored data. Manufacture is not responsible for this damage, so important data should be kept separately
- If you has problem, do not try to repair or disassemble the product arbitrarily, please contact customer service center.
- Do not use your where have electromagnetic wave or the risk may occur such as hospital, plane so on.
- Ahigh temperature or high humidity environment will causes trouble, Please note that.
- Please do not using other sharp object to touch the screen, otherwise it might be get damaged or not working properly.
- Please be careful not to touch the metal paper cuttingsaw tooth, so as not to get injured
- If smell odors, occurs smoke or noise during use product, immediately disconnect the charger and off the power, then Please contact with customer service center
- If you have any other questions during use, please contact the customer service center

Chapter 2. Products compositions

This product is 900Mhz's RFID Reader/Writer, which is recognized Tag's data and it is transmitting to top units via Bluetooth. Its various function applied to Industry, Enterprise, Logistics and so on, can be used extensively in many fields.

1. Packagecomponents

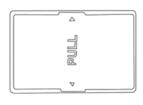
After opening the product packaging box, check the items listed as below:







2. Adaptor and AC Cable



3. Battery pack







5. Necklace Strap



Cradle(option)

^{*}If there is missing or defective products on the above, please contact the customer support center or your place of purchase.

2. Name of Each part



3.Function of Each Part

Part	Description
ChargeLED	Power LED will be Red when the battery is charging, or will be green when it is charged completely.
Cradle Connector	Enable you to connect to PC or charging the battery while using cradle.
Sync / Power Jack	When you connect to PC with Sync Cable, the Pc sync Mode and battery charge will run Concurrently. When you connect the AC-DC adaptor, the battery starts to charge
Strap Hole	Enable you to attach a hand strap or necklace strap for the convenience of using, while need to use the device for a long period time
Power Key	It is for device's power on or off. There has two power key, front and left side
Scan Button	It is for reading data from RFID TAG, it is front and left/right side of product
RF Power Control Key	RFID Scan the strength of the RF during the launch (the century) to adjust.
RF Power window	Currently set to indicate the strength of the RF. (30dBm is stronger toward the output.)
Charge LED	It shows when it is charged completely.
Scan LED	Press the Scan button, it shows Access condition of RFID Tag
Muti/Once Key	Switch Tag access Model
Muti/Once LED	Display the Tag Access Model
BT/USB key	Switch the data transfer mode.
BT/USB LED	Displays the current data transfer mode
6C/6B KEY	Switch the UHF Tag's 6B, 6C Mode
6C/6B LED	Displays the UHF Tag's 6B, 6C Mode.

Chapter3. Basic Functions

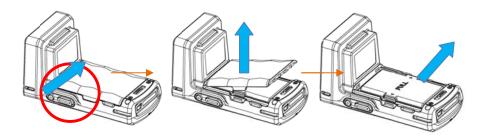
1. Power and Battery

Main Battery: 3.7V 2,000mA Lithium - ion

1.1 Detaching and Attaching Battery

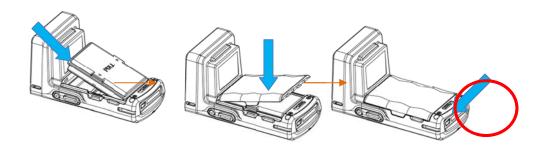
> Detaching Battery

Slide the battery latch to the right (UNLOCK side), and then lift the main battery out of the compartment along both sides of groove.



> Attaching Battery

Put the top part of battery into the upward groove, and then press down the bottom of battery into the battery compartment, slide battery latch to the left (LOCK side) to attach battery firmly



1.2 Charging Battery

This product connects to your PC and Sync Cable for charging, or the product included in the charge via a dedicated AC-DC Adaptor is available.

You have to charge the battery via dedicated adapter, which provided from the factory.

"Power LED" is Red while charging or is Green when charged completely.

> Connecting Adapter

- 1. Plug the adapter cable to 220V socket.
- 2. Connect adapter DC cable to the "Power connecting jack" of the main body.
- 3. "Power LED" is Red while charging

Caution:

You must to charge the battery by using dedicated adapter, which provided from factory, or your device might get damage.

1.3 Power On and Off

There are two power key as below, Please use the more comfortable key, depending on your situation



▶ 전원 켜기

Press the power button, then window and around the LED will be ON and supply the power, it is ready for the working.

If the device stops working then press the button one second, the power will be off

Low Power Warning

Front of the device's Battery LED is flashing in RED, stop using and connect the AC-DC adapter or cardle for charging

NOTE:

Battery life is largely affected from the user using method and surrounding environments. A 2200mA battery is usually needs $4 \sim 12$ hours to get charged completely.

2. Setting product operation mode

When you use only this product, it will be working simply, unable to take of the data, And you can get only tag's UID data

2.1 Switching the data transfer mode

This device has three different type of data operation mode USB, Bluetooth, Memory Transfer (batch Process)

Every time when you press the BT/USB KEY, the USB and Bluetooth operation mode is changed and the current transfer mode is indicated by an LED

However, Memory transfer mode command by a separate set isavailable

NOTE:

Please check the SDK manual and Demo program, if you have question which is relating Command

2.2 USB Mode settings and connection

You need to use additional program and device driver for using USB MODE Please contact the customer support center or your place of purchase.

> USB Connection

- ① Please set up the AT288's USB driver after set up the 'USB to serial driver.exe' in PC
- 2 Press the BT/USB KEY then set up the USB MODE
- ③Please connect the Sync cable to sync/Power connector which is bottom on the device And the opposite one should connect PC's USB connector
- If the PC is recognized USB; please check the COM Port by equipment operator.
- ⑤After running a dedicated PC Demo program, and set up the COM port, please press the Connect button for performing the task

2.3 Bluetooth Mode settings and connection

In order to use Bluetooth Mode as a separate, dedicated Program and Bluetooth Dongle for PC or a separate Bluetooth-enabled Android, Windows Base, the Device is required

Please contact the customer support center or your place of purchase.

Other Mobile Device (PDA or smartphone) associated with the use of a Bluetooth; please see the user manual for details

Connecting the Bluetooth in the PC(Windows)

- 1 If the PC does not support the Bluetooth, please connect the Bluetooth Dongle to PC first then set up the driver.
- 2 If the PC can support the Bluetooth, please check to set up well or the device is performing well
- (3) Please power on and press the BT/USB key for set up the Bluetooth Mode
- 4 After running the Bluetooth programin the Windows Control panel, Device discovery (Device Search) will proceed
- 5 Device Discovery (Device Search) will proceed.
- 6 If you find the AT288, proceed the Paring
- 7 The Pin code, Password is '0000"
- 8 Paring is completed on a PC Bluetooth, Please check the AT28's Com port in the device manager

or Bluetooth device management program

After running a dedicated PC Demo program, and set up the COM port, please press the
Connect button for performing the task.

> Connecting the Bluetoothin the Mobile device

- > The Mobile device is based on Android Smart phone or tablet PC
 - ① Set up the Android- only demo program in the Smart phone
 - 2 Please power on and press the BT/USB key for set up the Bluetooth Mode
 - 3 After starting the demo program, accept to use the Bluetooth function
 - 4 If you find the AT288, precede the Paring with AT288
 - 5 The Pin code, Password is '0000"
 - 6 Click the 'Connect a device" in Demo program, try to contact with AT288
 - 7 When the connection is completed, check the device's performing in the Demo program

NOTE:

For more detailed, please see the additional SDK manual and Demo program's manual