

ATS100 USER GUIDE





Contents

BEFO	ORE THE BEGINNING	5
PRO	DUCT OVERVIEW	5
KEY	FEATURES	6
BEFO	ORE USE	7
1.	Precautions for Charging	7
2.	Precautions for Use	8
3.	Other Cautions and Notes	9
PRO	DUCT SPECIFICATION	10
CON	IFIGURATION OF THE PRODUCT	11
1.	Product Components	
2.	Name of each part	11
QUA	AD LOCK MOUNTING AND TYPE	12
1.	QUAD LOCK MOUNTING	12
2.	QUAD LOCK TYPE	13
3.	Equipped with a Smartphone	13
REM	IOVING AND INSTALLING THE GUN HANDLE	14
1.	Removing the Gun Handle	14
2.	Installing Gun Handle	14
LED	INDICATION BY STATUS	15
BUT	TON OPERATION	16
1.	Power On	
2.	Power Off	16
3.	Data Communication Mode Setting	16
4.	Switch Barcode / RFID Function	16
СНА	RGING	17
1.	Charge using the adapter	17
2.	CHARGING WITH PC USB PORT	17
3.	Charging with Cradle	17
4.	Support for simultaneous charging of Smartphones	17

BLUI	ETOOTH DATA COMMUNICATION MODE SETTING	18
1.	Enter setting mode	
2.	LED Indication for each Bluetooth Mode	
USB	DATA COMMUNICATION MODE SETTING	19
1.	Enter Setting Mode	
2.	LED Indication for each USB Mode	19
SETT	ING DEVICE BY SCANNING BARCODES	20
1.	Function Description	20
2.	How to set up	
3.	Device Setting Barcode	21
USIN	IG ANDROID HOST DEMO APPLICATION	23
1.	Android Host – Bluetooth Connection	23
2.	Android Host – Bluetooth Disconnection	25
3.	Android Host – Remove Bluetooth Connection Information	25
4.	Android Host – USB Connection	
5.	Android Host – USB Disconnection	
6.	Android Host – Remove USB Connection Information	
7.	Android Host - RFID Tag Scan	
8.	Androdi Host – Barcode Scan	
9.	ANDROID HOST – DEMO APPLICATION MENU	
USIN	IG WINDOWS HOST DEMO APPLICATION	32
1.	Windows Host – Bluetooth Connection	
2.	Windows Host - Windows 7 Platform	
3.	Windows Host - Windows 10 Platform	
4.	Windows Host - USB Connection	
5.	WINDOWS HOST – DEMO APPLICATION CONNECTION	
6.	Windows Host - RFID Tag Scan	
7.	Windows Host – Barcode Scan	
USIN	IG IOS HOST DEMO APPLICATION	41
FIRM	IWARE UPDATE	42
1.	Firmware Update Preparation	
2.	Firmware Update Procedure	

ATS100 User Guide

SDK	(SOFTWARE DEVELOPMENT KIT)	45
PROI	DUCT WARRANTY	46
1.	ATS100 Product Details	46
2.	SDK Download	46
3.	WARRANTY AND TECHNICAL SUPPORT	46
4.	Certifications	46

Before the Beginning

The objective of user guide is to pass the basic contents related with **ATS100**'s maintenance and smooth uses. User guide inclusive of text, images, logos, product name may not be distributed, modified, displayed, reproduced (in whole or in part) without the prior written permission of **ATID Co,Ltd.** Furthermore, the described contents in this document are subject to change without notice for improving or maintaining the product and we inform the user that some material can be different with the described contents due to the firmware changes of product.

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Product Overview

ATS100 is an SLED-type barcode/RFID reader product. This product meets the basic performance of industrial products that can be used in waterproof/dustproof/dustproof and 1.5m drop tests above IP65 and can be used as data collectors in various fields, including medication management, inventory management, logistics delivery/tracking, production and access control.

This product can collect 1D/2D barcode and UHF RFID Tag information from one device. The collected data can be sent to the Host device via Bluetooth or USB transfer. SDK is supported for easy processing of collected data on host devices with Windows, Android, and iOS.

Key Features

- 1) This product is an SLED type barcode/RFID reader.
- 2) When the QUAD LOCK[®] Mount option is applied, the host device can be fixed on the top of the product and communication is possible with a wired cable.
- 3) It is a durable industrial product that meets IP65 and 1.5m drop standards.
- 4) Zebra (formerly Motorola)'s SE4710 barcode engine is adopted, enabling fast and accurate barcode data collection.
- 5) R2000 module from Impinj is built in, so UHF RFID Tag can be read-written.
- 6) Using a USB Type-C Cable, it can be connected to a PC and charged.
- 7) Even without a dedicated charging adapter, it can be charged using a regular smartphone charger.

Before Use

- Be sure to read and use safety precautions before using them.
- If there is any problem or inconvenience during use, please contact your dealer or place of purchase.
- Please ensure that the following is used more safely and correctly to prevent accidents and physical damage.
 - The user is responsible for any injury caused by the user who did not follow this instruction, • so please be sure to observe it.

1. Precautions for Charging

1) It is very dangerous to use a charger with a 2) Do not bend the power cord too much or damaged cord, so please replace the charger with a new one.



3) Do not plug multiple power outlets at the 4) Do not touch the power plug with wet hands same time. (This may cause a fire or electric shock.)

keep it pressed by heavy objects.



or pull the cord out. (This may cause electric shock and short circuits.)





2. Precautions for Use

Wipe the surface of the product lightly with a 1) dry towel, and do not use chemicals or cleaning agents as they will deteriorate the surface and peel off the paint.



- 3) Do not spray water directly on each part of 4) Do not use in places where there is a lot of the product during cleaning. (This may cause a fire, electric shock, or failure.)
- 5) Do not modify, remove, or repair it 6) arbitrarily. We are not responsible for any accidents caused by it.
- ഭ

Avoid high temperatures such as direct 2) sunlight and near heating appliances. If the product or charger smokes or smells strange, stop using it immediately and contact your dealer or purchaser. (This may cause a fire or electric shock.)



moisture, dust, or soot. (This may cause a fire, electric shock, or failure.)



away Keep from home appliances, vibrations, or magnetic types. (This may cause product malfunction.)



ATS100 User Guide

3. Other Cautions and Notes

1) Notes on handling

- Do not use highly volatile substances such as insecticides near this product.
- Be careful not to leave rubber or plastic products in contact with this product for a long time, as marks may be formed.
- If the product is used for a long time, the product may generate heat, but please rest assured that this is not a malfunction.

2) Precautions for using Lithium-ion Batteries

- This product uses a Li-ion battery.
- The lifespan of the battery varies depending on the period of use and usage, and the usage time gradually shortens after purchase.
- When not in use for a long time, fully charge the battery about once every 3 months and store it separately from the product.
- The warranty period of the battery is 6 months from the date of shipment. Batteries are consumables, so if any problems arise during use, please contact the place of purchase.

3) Provision of delivery charges related to initial defects and repairs

- Initial defect (15 days after receiving the product) : ATID bears the return shipping cost.
- Within the free repair period (excluding product damage) : One way is borne by our company.
- Paid repair period (after the warranty period) : The customer bears the return shipping cost.

4) No fast charger available

A/S is not available for problems that occur when using the fast charger.



Since the radio equipment may interfere with radio waves, this device cannot provide services related to human safety.

Product Specification

Perform	ance			
Processo	or	ARM7 Core		
Supported Platforms		Windows, Android, iOS (BLE Only)		
Internal	Storage	-		
Physical	l Characteristics			
Dimensio	ons (W x L x H)	76.1 x 173.7 x 139.8 mm (without QUARD LOCK [®])		
Weight		420g (With Battery)		
Power		5,200mAh Lithium-Ion Battery (Rechargeable)		
Display		-		
USB Inte	rface	1 USB Port / Type-C		
Notificat	ion	LED Indicator, Buzzer, Vibrator		
Data Co	ollection			
	Protocol	EPC GEN2, ISO/IEC 18000-6C		
	Reading Range	~ 6m (Depending on environment and tag type)		
	Writing Range	~ 0.5m		
	RF Output	1W (MAX)		
RFID		US / FCC : 902MHz ~ 928MHz		
(UHF)		EU / CE : 865MHz ~ 868MHz		
	Frequency Range	KR / KC : 917MHz ~ 921MHz		
		JP / TELEC : 916MHz ~ 921MHz (1W)		
		: 916MHz ~ 924MHz (0.25W / Optional)		
	Antenna	Circular Antenna / 1dBi		
Barcode		2D Engine (Support to read 1D & 2D Barcode)		
Commu	unication			
Bluetoot	h	BT V2.1+EDR / BLE V4.1		
WLAN		-		
User En	vironment			
Operating Temp		-20°C to 50°C		
Storage Temp		-30°C to 70°C		
Charging Temp		0°C to 45°C		
Humidity		5~95% (non-condensing, +25°C		
Drop Sp	ec	1.5m		
Sealing		IP65		

Configuration of the product

1. Product Components



Product Body







Gun Handle (Built-in Battery)

USB Cable (Type-C)

Hand Strap





Cradle (Option)

QUAD LOCK Mount (Option)

QUAD LOCK Adapter (Option)

2. Name of each part

- 1 : Power Button
- 2 : Communication Mode Switch Button
- 3 : Reset Button
- 4 : Trigger
- 5 : QUAD LOCK Connection Port
- 6 : Barcode Scanner
- 7 : RFID Antenna
- 8 : Barcode / RFID Toggle Button
- 9 : Charging LED
- 10 : Barcode / RFID LED
- 11 : Communication Mode LED
- 12 : Hand Strap Connection Hole
- 13 : USB Port (Type-C)
- 14 : Gun Handle Release Button
- 15 : Gun Handle (Built-in Battery)
- 16 : Cradle Connection Terminal





QUAD LOCK Mounting and Type

1. QUAD LOCK Mounting

- 1) Align the grooves of the QUAD LOCK 2) Push in the QUAD LOCK Mount's USB type Mount with the guides on both sides and insert.
 - terminal so that it is fully inserted into the QUAD LOCK[®] connection port.





3) Lock the QUAD LOCK Mount by sliding the lock to the left to prevent it from coming out.



2. QUAD LOCK Type

There are two types of QUAD LOCK USB cable connectors provided with this product: 'USB Type-C' and 'Micro USB'. Please select the appropriate type according to the Host device to be used together. For details, please contact the place of purchase or ATID.





3. Equipped with a Smartphone

- 1) Attach the QUAD LOCK Adapter to the back 2) Insert the groove part of the QUAD LOCK of the smartphone.
 - Adapter into the QUAD LOCK Mount attached to the main body.





- 3) Turn the smartphone 45 degrees to fix it in 4) Connect the USB cable to the smartphone the desired direction.
- USB connection port.



A USB cable does not need to be connected unless charging or data communication via the USB port is desired. Please decide whether to connect or not according to the environment of use.

Removing and Installing the Gun Handle

1. Removing the Gun Handle

1) Press the gun handle release button.



3) Pull the gun handle up.



2) Push gun handle back.





Be careful not to injure your hands while removing the gun handle.

2. Installing Gun Handle

- 1) Attach the gun handle to the **ATS100** body.
- Install the gun handle by sliding it forward. (The button with 'PUSH' written on it with a click sound must come up to ensure it is properly installed.)





LED Indication by status

ATS100 displays the current device settings or status as shown below with LED operation.

LED	Action	Function
	Blinking Red LED	Low Battery
Charging LED	Red LED On	Charging
	Green LED On	Full Charging
	Blue LED On	Barcode Mode
Barcode / RFID LED	Blinking Blue LED	Trigger Input Mode
	LED Off	RFID Mode
Communication Mode LED	Blinking Green LED	Bluetooth Mode
Communication Mode LED	Blinking Red LED	USB Mode



Button Operation

1. Power On

- 1) Turn on the power by pressing the power button \bigcirc until the buzzer sounds.
- 2) If the communication mode LED blinks after the buzzer sounds, the power is on.



If the gun handle has been disassembled and reassembled, the instrument will not power on immediately when the power button is pressed. This is not a malfunction, but a procedure to check the battery status when first connecting the battery. In this case, if you hold down the power button longer than normal, it will power on normally.

2. Power Off

- 1) If the power button is pressed while the power is on, the power is turned off.
- 2) If the communication mode LED turns off after the buzzer sounds, the power is off.

3. Data Communication Mode Setting

- 1) Press the communication mode switch button sequentially switch between 'Bluetooth data communication mode' and 'USB data communication mode'.
- 2) It takes about 2~3 seconds to change data communication mode.

4. Switch Barcode / RFID Function

Each time the Barcode/RFID toggle button *m* is pressed, the 'Barcode', 'RFID', 'Trigger Input' mode is sequentially switched.



'Trigger input mode' is a mode in which the barcode or RFID reading function does not operate when a trigger signal is input and only the trigger signal is input to the host device.

Charging

1. Charge using the adapter

- 1) Plug the charging adapter into the USB port on the back of the **ATS100**.
- It is recommended to use an adapter of 5V / 2A or higher. Charging time will increase if you use an adapter with a low power output.

2. Charging with PC USB Port

- 1) The device is charged even when a USB cable is connected for data communication with a PC.
- 2) In this case, it is charged at a low speed and if the device and the smartphone are connected, the smartphone is not charged.

3. Charging with Cradle

1) Fit the product to the cradle well.

- 2) Connect the USB port of the charger to the USB port located on the back of the cradle.
- Cradle and charging adapter sold separately. If you wish to purchase, please contact the dealer or place of purchase.

4. Support for simultaneous charging of Smartphones

- 1) When the **ATS100** is connected to the smartphone via the QUAD LOCK[®] USB cable, the **ATS100** and the smartphone are charged at the same time.
- 2) In Android and Windows, communication with **ATS100** through USB port is not possible while charging.
- 3) If the ATS100 is charged while it is connected to the device, the charging speed will be slow.
- 4) Simultaneous charging is not possible when connected to a PC. If you want simultaneous charging, use a charging adapter.
- 5) This product does not support Quick Charge.

<u>'Simultaneous charging of smartphones' may not be supported depending on the smartphone</u> model.

17







Bluetooth Data Communication Mode Setting

1. Enter setting mode

1) While pulling the trigger of the ATS100, press the power button to turn on the power.



- 3) Each time you press the barcode/RFID toggle 4) After setting the mode you want to set, Button M, 'BLE/HID/SPP' mode is switched Communication sequentially. mode LED operates differently depending on the mode.
 - Click

2) Press the Communication mode switch button set the communication mode LED to blink Green. (Set to Bluetooth mode.) Click



press and hold the power button to complete the setting.



2. LED Indication for each Bluetooth Mode



1) Green LED blinks quickly	: BLE Mode
2) Keep Green LED on	: HID Mode
3) Green LED blinks every 2 sec	: SPP Mode

If the Bluetooth data communication mode setting is incorrect, it may not be able to connect to the iPhone, Android, or Windows Host device being used. Please pay attention to the settings.

iPhone can only be connected in BLE mode.

For Android and Windows, SPP mode or HID mode can be used. However, in HID mode, the ATS100 main body cannot be controlled by the application.

USB Data Communication Mode Setting

1. Enter Setting Mode

1) While pulling the trigger of the ATS100, press 2) Press the Communication Mode Switch the Power Button to turn on the power.



3) Each time you press the barcode/RFID toggle 4) After setting the mode you want to set, press Button M, 'BLE/HID/SPP' mode is switched sequentially. Communication mode LED operates differently depending on the mode.

Button *set the communication mode* LED to blink Red. (set to USB mode.)



and hold the Power Button to complete the setting.





2. LED Indication for each USB Mode



- If the USB data communication mode setting is incorrect, it may not be able to connect to the Android or Windows device being used. Please pay attention to the settings.
- Connection with iPhone is not supported.
- For Android and Windows, SPP mode or HID mode can be used. However, in HID mode, the ATS100 main body cannot be controlled by the application.

Setting Device by Scanning Barcodes

1. Function Description

User can easily change device settings, such as changing Bluetooth data communication mode (BLE, HID, SPP) and USB data communication mode (VCP, HID), and setting system defaults, by reading a special barcode.



This setting mode is supported from firmware version 'ats-5.1.1.11'.

When setting with the USB cable connected, the device does not reset after setting.

2. How to set up

1) Press the power button to turn on the power.



2) Press the Barcode/RFID Toggle Button to set to Barcode mode. (In Barcode Mode, the LED lights Blue.)



- 3) Aim at the barcode of the function you want 4) If the setting is completed normally, the to set and scan by pressing the trigger button.
- system is reset.



3. Device Setting Barcode

- When connected to the host device, it does not work even if the mode setting barcode is read.
- When setting with the USB cable connected, the device does not reset after setting.
- 1) Default setting (BT-SPP, USB-VCP Setting)



2) Bluetooth Data Communication Mode Setting

Setting	Setting Barcode
Bluetooth SPP	ATS100-BT-SPP
Bluetooth HID	ATS100-BT-HID
BLE	ATS100-BT-BLE

3) USB Data Communication Mode Setting

Setting	Setting Barcode
USB VCP	ATS100-USB-VCP
USB HID	ATS100-USB-HID

4) Setting PC/EPC data output format

- a) Set whether to transmit PC (Protocol Control) information when transmitting EPC Data of collected Tag to Host device.
- b) EPC Data of collected Tag data is transmitted as follows according to the setting.
 - PC + EPC : ex) 30001234567890
 - EPC only : ex) 1234567890

• This setting feature is supported from firmware version 'ats-5.1.2.1'.

• When setting with the USB cable connected, the device does not reset after setting.

Setting	Setting Barcode
PC + EPC	ATS100-REPORT-PC-EPC
EPC only	ATS100-REPORT-EPC

Using Android Host Demo Application

1. Android Host – Bluetooth Connection

- Install the Demo Application (Hereinafter : Demo App) included in the provided SDK. 1)
 - In order to connect the Android Demo App and the device, the Bluetooth Data • Communication Mode of the device must be set to SPP mode.
 - Demo App for Android is available from Android version 4.2 Jelly Bean or later.
 - For the smooth operation of the app, it is recommended to use a device with Android • version 6.0 or higher.
- 2) Run the downloaded Demo App with the 3) Click 'Allow' on the next screen to activate the icon shown below.
- Bluetooth function of the host device.





4) Click 'New Device' from the menu that 5) Select 'BLUETOOTH' on the converted 'Regist appears when you click the ____ icon in the upper right corner.

ATID Reader SE	=	ATID Reader SE	New Device
Registed Devices		Registed Devices	About

Device' screen and click the 'Scan Device' button.

Regist Device				
BLUETOOTH	USB	BLE		
Paired Devices				
New Devices				
SCAN DEVICE				

6) Connectable devices are displayed in 'New Devices'. If you click on the product, the device information is registered and you return to the previous screen.

Regist Device		ATID Reader SE	≡
BLUETOOTH USB	BLE	Registed Devices	
Paired Devices New Devices The Devices The Devices The Devices The Devices		★T\$100-6967 00.04:3E 54:09:67	8
STOP			

6) Connectable devices are displayed in 'New 7) Touch and hold the licon of registered Devices'. If you click on the product, the device information.

Registed
T

- 8) Click the 'Connect' Button among the 9) When connected to the device normally, the activated menus.'Bluetooth connection request' window is
 - When connected to the device normally, the 'Bluetooth connection request' window is activated. Click 'Pair' to connect the **ATS100** to the host device.





2. Android Host – Bluetooth Disconnection

1) device, touch and hold the 👔 icon of the registered device on the 'Registered Devices' selection screen.

T ATS100-6967

While the ATS100 is connected to the host 2) Click 'Disconnect' in the activated menu to disconnect the connection between the host device and the ATS100.

Registed	I Devideo		-
73	ATS100-6967 00:04:3E:54:69:67	·	*
		Disconnect	
		Delete	

3. Android Host – Remove Bluetooth Connection Information

1) While the ATS100 is connected to the host 2) Click 'Delete' in the activated menu to delete device, touch and hold the 🚯 icon of the registered device on the 'Registered Devices' selection screen.

(ے	CIICK	Delete		activateu	menu	ιΟ	uele
	ATS10	00 devic	e regist	tration info	ormatic	on.	

Registed Devices	
ATS100-6967 00043E546967	8





Even if the connected device is deleted from the app list, it is not removed from the Android device's Bluetooth connection list.

4. Android Host – USB Connection



The QUAD LOCK[®] option is required for USB connection.

The device must have USB data communication mode set to VCP mode in order for the demo app for Android and the device to connect to the USB port.

- 1) Connect the USB cable from the QUAD 2) Click 'New Device' from the menu that is LOCK® connector to the smartphone USB port.
 - activated when you click the 📃 icon in the upper right corner.



- select the 'USB' menu and click the 'Scan Device' button.
- 3) On the converted 'Regist Device' screen, 4) Connectable devices are displayed in the 'New Devices' item. If you click on the product, the device information is registered and you return to the previous screen.

BLUETOOTH USB	BLE	Registed Devices	
er Derices ΑΤ91USBSerial λrx Ελλλ		? AT91USBSerial	4





If you check the 'Enable connect an usb device automatically' option, it will be connected automatically from the next connection.

5) Touch and hold the icon to the right of 6) Click the 'Connect' button among the the registered device information.

ATID R	eader SE	≡
Registed	Devices	
?	Devices AT91USBSerial λrx ± δλλ	Ţ

ATID R	eader SE	≡
Registed	Devices	
?	AT91USBSer	ial 🜵
		Connect
		Enable Auto Connect
		Delete

7) When connected to the device normally, a window asking whether to allow access is activated. Click 'OK' to connect the ATS100 to the host device.



5. Android Host - USB Disconnection

1) device, touch and hold the registered device information ψ icon on the 'Registed Devices' selection screen.

ATID Reader SE	≡
Registed Devices	
ATS100 ATS200207001	Ţ

With the ATS100 connected to the host 2) Click 'Disconnect' in the activated menu to disconnect the connection between the host device and the ATS100.



6. Android Host – Remove USB Connection Information

- 1) With the ATS100 connected to the host 2) Click 'Delete' in the activated menu to delete device, touch and hold the registered device information ψ icon on the 'Registed Devices' selection screen.
 - ATS100 device registration information.

Registed Devices	=
ATS100 ATS200207001	Ŷ



7. Android Host - RFID Tag Scan



In order to connect the Android Demo App and the device, the Data Communication Mode of the device must be set to 'SPP' for Bluetooth connection and 'VCP' for USB connection.

1) After completing the connection with the 2) Click 'RFID' in the menu at the top of the host device, touch and hold the device name shown below on the connected device on the 'Registed Devices' screen to enter the 'Inventory' screen.



'Inventory' screen.





- 3) Click the 'Start' button on the Demo App or pull the ATS100 trigger to start data reading.
- 4) The collected data is displayed on the 'Data' screen of the Demo App. Click the 'Stop' button on the Demo App or release the ATS100 trigger to stop data collection.





8. Androdi Host – Barcode Scan



- 1) After completing the connection with the host device, touch and hold the device name shown below on the connected device on the 'Registed Devices' screen to enter the 'Inventory' screen.
 - ATID Reader SE ATS100-6967 *

2) Click 'BARCODE' in the menu at the top of the 'Inventory' screen.

f Inventor	ry			
RFID	BAR	CODE	KEY	
Data				6
Tag/Total Count		0	0	
	St	art		
Setting			Clear	

- To enter the 'Inventory' screen, you must touch the device name for a certain period of time.
- If you select the 'BARCODE' menu on the 'Inventory' screen, if the current setting of ATS100 is RFID mode, it is automatically changed to barcode mode. The reverse works the same.
- 3) Click the 'Start' Button on the Demo App or 4) If the barcode is read normally, the collected pull the ATS100 trigger to start data reading.
- data is displayed on the 'Data' screen of the Demo App.



9. Android Host – Demo Application Menu

As shown in the following figure, if you touch the eigen icon on the top right of the Inventory screen or swipe the screen from left to right with your finger, you can see the demo menu appear. In this menu, you can check device information and make basic settings.



- 1) Device Name : Device name composed of device name and Bluetooth MAC Address.
- 2) Device Address : Bluetooth MAC Address of the device.
- 3) Firmware Version : The firmware version currently installed in the device.
- 4) **Inventory** : Returns to the Inventory screen. You can also return by touching an area other than the menu.
- 5) Access Memory : Enters Memory Access mode of Tag.
- 6) Search RFID Tag : Enters the Search RFID Tag mode.
- 7) Device Options
 - Firmware Version
 - Serial No : Displays the serial number information of the device.
 - Auto Off Time : Set the time to turn off the device when not in use.
 - Button Mode : Sets the buzzer sound when the button is pressed.
 - Button Notify : Set whether to operate the buzzer and vibrator when the button is pressed.
 - Alert Notify : Set whether to operate the buzzer and vibrator when a notification occurs.
- 8) Battery Level : Displays the current remaining battery status.

For details on how to use the Demo App, refer to the 'ATID Reader Demo Guide for Android' document included in the SDK.

Using Windows Host Demo Application

1. Windows Host – Bluetooth Connection

To transmit/receive data to/from Windows platform devices using Bluetooth, **ATS100** requires a PC with built-in Bluetooth function or a dedicated Bluetooth dongle. This chapter describes the Bluetooth connection method for Windows 7 and Windows 10, which are representative Windows platforms.

- For details related to the Bluetooth function of the host device, please check with the place of purchase of the PC or the person in charge of product installation.
- In this chapter, it is assumed that the Bluetooth-related driver is installed normally.
- For any problems that occur while using the product or during the installation process, please contact the dealer or manufacturer where you purchased the product.
- If the Bluetooth driver is not installed normally, or if a special driver supported separately by Windows 7 and Windows 10 OS is used, the contents of this manual may not match.

2. Windows Host - Windows 7 Platform

- 1) Set the communication mode of **ATS100** to 'Bluetooth Data Communication Mode' and set it to SPP mode.
- 2) Select 'Start \rightarrow Control Panel \rightarrow Devices and Printers \rightarrow Add a Device'.



3) The Bluetooth device is automatically searched. After selecting the '**ATS100-XXXX'** that you want to connect to, press 'Next' to proceed with adding a device.

Windows wi	ill continue to look for new devi	, ces and display them here.	
Ĵ	UC96_SPP Bluetooth Other	AT388-cha Bluetooth Keyboard	
a.	Sound Drum Bluetooth Bluetooth headset	ATS100-e38c Bluetooth Keyboard]
			-

4) When the connection code confirmation window is displayed, click 'Next' to proceed. The connection code does not need to be specially changed.

0	🔮 Add a device	×
	Compare pairing codes between your computer and this device This will verify that you are connecting to the correct device.	9
	605340 Does the code above match the code on the device: • Yes • No • The device is not displaying a code	ATS100-e38c
	What if this code does not match the code on my device?	
	C	Next Cancel

5) After a while, Windows7 will automatically search for the driver and proceed with the installation, and the screen will display a message Add device complete.

		23
\bigcirc	🚏 Add a device	
	This device has been successfully added to this computer	
	Windows is now checking for drivers and will install them if necessary. You may need to wait for this to finish before your device is ready to use.	
	To verify if this device finished installing properly, look for it in <u>Devices and Printers</u> .	
		ATS100-e38 c
		Close

6) Double-click the newly added 'ATS100-XXXX' in 'Control Panel → Devices and Printers' to display its properties, and then move to the 'Service' tab.

		ATS200-e38c Propertie
🕞 💮 – 🎼 🕨 Control Panel 🕨 All Control Panel Items 🕨 Devices and Printers 🕨	 Search Devices and Printers 	Construct Construction
Add a device Add a printer	E • 0	General Hardware Services Buetooth
4 Devices (9)		This Bluetooth device offers the following services. To use a service, select the check box.
		Bluetooth Services
ATID-RF-PC ATS100-e38c CSR8510 A10 E2360 SanDisk 3.2	Gen1 ST1000DM003-1S ST31000524AS USB Optical B102 ATA Device ATA Device Mouse	
Wired Keyboard 400 4 Printers and Faxes (6)		
DecoCentre-III 3007 Fax Fax Microsoft XP5 Document Writer CLP 300 Sries PCL6 on MHG-PC	sMADZIND_B2 B	
15 items		OK Cancel Apply

7) After checking all the services that appear in the Bluetooth service, click the OK button to finish adding services and adding Bluetooth devices. From this menu, user can find the COM port information assigned to the Bluetooth device.

3. Windows Host - Windows 10 Platform

- 1) Set the communication mode of ATS100 to 'Bluetooth Data Communication Mode' and set it to 'SPP' mode.
- 2) Enter the Windows Settings menu through ' \blacksquare Start \rightarrow 🚳 Settings' of Windows.
- 3) Select 'Device' menu in Windows settings.

		Windows Settings		
	iđ	ind a setting	٩	
System Display, sound, notifications, power	Bluetooth, printers, mouse	Phone Link your Android, iPhone	Network & Internet Wi-Fi, airplane mode, VPN	Personalization Background, lock screen, colors
Apps Uninstall, defaults, optional features	Accounts Your accounts, email, sync, work, other people	Time & Language Speech, region, date	Gaming Xbox Game Bar, captures, Game Mode	Ease of Access Narrator, magnifier, high contrast
Search Find my files, permissions	Privacy Location, camera, microphone	Update & Security Windows Update, recovery, backup		

4) Check that the Bluetooth function is turned on. If it is off, turn on the Bluetooth function.

5) Select 'Add Bluetooth or other device' menu.

Blu	etooth & other devices								
+	Add Bluetooth or other device								
Blueto	ooth								
	On								
Now o	discoverable as "ATID-LW-015"								
Mou	ise, keyboard, & pen								
	AT188N-dbd1 Paired								
	ATS100-6450 Paired								
	ATS100-6937 Paired								

6) Select the device type to add as Bluetooth. When selected, it starts searching for nearby Bluetooth devices that are requesting pairing.

	Bluetooth Mice, keyboards, pens, or audio and other kinds of Bluetooth de	vices
נ	Wireless display or dock Wireless monitors, TVs, or PCs that use Miracast, or wireless doc	ks .
	Everything else Xbox controllers with Wireless Adapter, DLNA, and more	

7) If you click the device you want to connect to among the found Bluetooth devices, the pairing information screen of the target device is activated. After checking that it matches information of the screen of **ATS100**, if it matches, click the 'Connect' button.

Add a device X	Add a device
Add a device	Add a device
Make sure your device is turned on and discoverable. Select a device below to connect.	Make sure your device is turned on and discoverable. Select a device below to connect.
Junknown device	Unknown device
G Unknown device	ATS100 6467 Connecting
ධ ATS100-6967	Press Connect if the PIN on ATS108-896/imatches this one. 489954
	Connect Cancel
Cancel	Cancel

The 4 digits after the device name to be searched are the last 4 digits of the Bluetooth Module MAC Address. This 4 digit value is entered as a different value for all devices. 8) When pairing is completed normally, 'Your device is ready to go!' message is displayed. Click the Done button to complete the pairing process.

Add a device		
Your device is ready to go!		
ATS100-6967		
	Done	

9) When the device is added successfully, the device will be registered with the message 'Paired'.

Othe	er devices
::::::	ATS100-6967 Paired

The COM Port information assigned to the device can be checked in the 'Hardware' tab of the 'Properties' of the connected device in 'Devices and Printers' of the control panel.



10) After confirming that the **ATS100** and the host device are connected, set the desired operation mode before use.

4. Windows Host - USB Connection

A USB cable is required to transmit/receive data to/from a Windows platform device using the ATS100 USB interface.

- For USB connection with Windows Host, the communication mode setting of the device • must be set to USB data communication mode.
- - The USB data communication mode of the device must be set to VCP mode.
 - Check whether '.NET Framework 3.5' is installed.
 - Turn on the product and set the 2) Plug the supplied USB cable into the USB port 1) communication mode to 'USB Data Communication Mode'.

on the back of the ATS100.

- Click **DDB**
- 3) Connect the USB cable to the PC.



4) Check the COM Port assigned to the machine in Device Manager in Control Panel.





The COM port number assigned to the device differs depending on the host PC situation.

5. Windows Host – Demo Application Connection

1) Run the Demo App, select the device you want to connect to the 'Device' item, and select the 'COM Port' number assigned to the device.

Correction	REDTA	G Values						Connect	tor	- BFID T2	G Values					
VCI VIII VIIII VIIII VIIII VIIII VIII VIII	No.	Value		RSN	Phase	Fequency	#	Version	COM13 COM13 COM10 COM12 COM10 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM12 COM13 COM12 COM13 COM13 COM14 COM14 COM15	No.	Value		RSS	Prase	Requercy	1
miae	Batteda	Valuer						Firmare		Barnele	Values					-
Invertory Stored Data Access	No	Type	Code ID Value				2		Inventory Doned Data Access	No.	Type	Code ID Value				2
Optione	Court	0	0 Operation Mode	Are:	are 🗌 No	r RSSI Stat	Contracute Day		Optone	Court	0	0 Greater Viole	C Alle	Save (Fib Nat	r. 📄 RSSI Tran	Cirtisi Sta

- If the 'Port name' does not match the device to be connected, check the communication mode status and driver installation status again.
- If there is a problem installing the driver for Windows, please manually install the USB driver distributed with the SDK.
- 2) Click the 'Connect' button to connect the **ATS100** to the host device. When the connection is completed normally, the buttons of the demo app are also activated.

ATID Reader Demo		- 🗆 ×	ATID Reader Demo		- 🗆 ×
Connection	RFID TAG Values		Connection	RFID TAG Values	
I VCP O WR	No. Value	RSSI Phase Frequency #	IN VOF O WR	No. Value	RSSI Phase Frequency #
Device Port name			Device Port name		
ATC100 C (POM10 C			ATS120 - COM12 -		
Connect			Disconnect		
Vension			Version		
Demo 2.0.0.7			Demo 2.0.0.7		
5/N			S/N ATS10018030001		
Rmware	<u>s</u>		Finnvare ats-5.1.1.11		
	Barcode Values			Barcode Values	
Inventory	No. Type Code ID Value	2	inventory	No. Type Code ID Value	*
Stored Data			Stored Data		
Access			Access		
Mask	¢		Mask	٤	3
Options	Court Operation Mode	Auto Savo Ritor RSSI Continuous	Options	Court Operation Mode	Auto Save Continuous
	O RFD D Barcode	Clear Start Step	Battery Level (\$1%)	RFID O Bacode O Tagger Event	Cear Stat Stop
		^		[14:29:35:543] (NFO: Report RSSI [Faite] [14:29:35:543] (NFO: ContinuounMode [True] [14:29:35:520] (NFO: ContinuounMode [True]	^
Atid			Atid	14.29.35.775 INFO. AutoSaraMode (Felse) 14.29.35.976 INFO. Endint	Į.

3) If you want to disconnect from the host device, click the 'Disconnect' button to disconnect.



6. Windows Host - RFID Tag Scan

- 1) Referring to the above, connect the **ATS100** to the host device and connect the Demo App.
- 2) Check if 'Operation Mode' is set to RFID, and if not, set it to RFID.



3) Click the 'Start' button on the demo app or pull the trigger of ATS100.



4) If the 'Continuous' item is checked, the tag scan stops when the 'Stop' button is pressed or the trigger is released. A list of recognized tags is displayed in 'RFID TAG Values'.

RED Ta	S Maluar								
Na. Not. 750 Pear Pear 1 2002/754/F1000100000000 6 0.00 0.00 0.00 2 340000000000000000000 0.0 0.0 0.0 0.0 0.0 3 20000000000000000000000 0.0 <td< th=""><th>Frequency 0.00 0.00 0.00 0.00 0.00 0.00</th><th colspan="3">су Л 10 6 4 1 11 2</th></td<>						Frequency 0.00 0.00 0.00 0.00 0.00 0.00	су Л 10 6 4 1 11 2		
Demote	10 me								
No.	Туре	Code ID	Volue				*		
¢								3	
Court	6 47	Openin () RDI	e Note O D Encode O Tegger Event	Ali	Sere 🗌 M	a 🗌 RSS Nat	E Control Step		
	RFID TAI No. 1 2 3 4 5 6 8 8 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	PMD 120 Vews No 1 2 3000 VV 3000 VV 30000000000000000000000	PUED 152 Volum: No Second Volum: Second Volum: Second Volum: Second Volum: Second Volum: Benefit Volum: Control Control Grant Volum: Control Grant Volum: Control Grant Volum:	MOD TAS Value:	Proto 103 Mode 00 1 3000000000000000000000000000000000000	MOD TAS Main Image: Control of Contro	MOD TAS Value Procession Proc	No. Local Product No. Product	

7. Windows Host – Barcode Scan

- 1) Referring to the above, connect the **ATS100** to the host device and connect the Demo App.
- 2) Check if 'Operation Mode' is set to 'Barcode', if not, set it to 'Barcode'.



3) Click the 'Start' button on the Demo App or pull the trigger of **ATS100**.



4) If the 'Continuous' item is checked, the barcode scanning stops when the 'Stop' button is pressed or the trigger is released. A list of recognized tags is displayed in 'Barcode Values'.

ATID Re	eader Demo									- 0	>
Connection		RED TA	G Volum								
(i) VCP ○ Wi6		No. Value					Phase	Freque	ency #		
Device	Potneme										
ATS100	COM13										
1	Deconnect										
Version											
Demo 2	20.0.7										
5/N	ATS10018030001										
innare [e	da-5.1.1.11	Barcode	Values								-
		No.	Type	Code ID	Value						
	Inventory	1	GIR Code	P01	01 http://mate.naver.com/0g9EV			2			
5	Stored Data										
	Access										
	Mask										
Optione		Court	a Operation Mode			1.1	Auto Save	🗆 Filter	RSSI	Continu	ous
Battery Level (80%)		O RFID Becode O Tagger Event		Bercode Trigger Event		Cear		Start	Skop		
	8	14.32.24.2	38 EVENT, onBarco	deReadData - (1	3R Code] http://n.ate.never.com/0q9E)	/					
-		14 32 29.7	25 EVENT onReade	AttenChange	- [Decoding]						
		14 32 30 8	60 EVENT onBatto	serreacData - [i sectionChanges	un Lode; http://misiteinaver.com/0q981 d - [Stop Operation]	() () () () () () () () () ()					



For details on how to use the Demo App, refer to the 'ATID Reader Demo Guide for Windows' document included in the SDK.

Using iOS Host Demo Application

- 1) In order to send/receive data with iOS platform devices for **ATS100**, the 'Bluetooth Data Communication Mode' setting of **ATS100** must be set to BLE mode.
- 2) User can download the Demo App through the 'App Store'.

Back Regist Device	Kegist Device			ATID Reader De	mo
Paired Device			Save		
	[C Inventory	F * Barcode	Key Event Report	App Version	201904.01
				ATS100-6639	lacksquare
New Devices					
ATS100-6639					
	Tag/Total Count	0/0 art		New Device	
Stop	Setting	Clear			

- The demo app is available from iOS version 10.2 or later.
- For details on how to use the demo app, refer to the 'ATID Reader Demo Guide for iOS' document included in the SDK.

Firmware Update

This product may be updated in the future to enhance its functionality and performance. If there is a problem during Firmware's update operation, the product may not be recoverable. So, if you don't have knowledge of software and hardware, please contact your place of purchase or manufacturer for updates.

1. Firmware Update Preparation

- 1) PC with Windows 7 or higher version (USB 2.0 Port)
- 2) ATS100
- 3) USB Type-C Cable
- 4) Firmware File (xxxx.bin)
- 5) Firmware Update Tool (Available from reseller or manufacturer if required)

2. Firmware Update Procedure

- 1) Save the firmware file in a specific folder on your PC.
- 2) Execute the firmware update program.

A DOWNLOAD 4.0	×
select comport v offline	no device
Load Binary File	DOWNLOAD
	CODE ~ 0x008000(212992)
	^
	~

3) After clicking the 'Load Binary File' button, designate the folder where the firmware file was previously saved.

A DOWNLOAD 4.0	:	×				
select comprt v offline Load Binary File	no device DOWNLOAD					
file size : 204566 file date : 2018.12.10 01:50:00	CODE ~	/				
C:₩Users₩User₩Documents₩Atid₩4. AT388₩AT388N Firmware Note						
	^					
	v					

4) Connect **ATS100** to PC using USB Cable.



- 5) Set the communication mode setting of **ATS100** to USB mode, VCP.
- 6) Click the 'select comport' button of Firmware Download Tool. Then, select the COM Port assigned to **ATS100** connected to your PC.

select comport 🛛 🗸 offline	no device
COM16 Load Binary File	DOWNLOAD
file size : 204566 file date : 2018.12.10 01:50:00	CODE 0x008000(212992)
C:\Users\User\Documents\Atid\4. A	T388₩AT388N Firmware No
	1



COM Port is assigned a different number depending on the PC situation.

Control Panel 'Device Manager \rightarrow Ports (COM & LPT)' Please check the COM Port number assigned to 'AT91 USB to Serial Converter' before entering.



7) Click the 'offline' button to attempt to connect to the device. When connected normally, the button changes to 'online' and displays the current firmware version.



8) Click the 'DOWNLOAD' button to start the firmware update.



- <u>If the update is interrupted while the update is in progress, the device may become</u> unusable.
- The update may fail due to external factors. In this case, please try again.
- 9) After a while, the product will automatically restart when the download is complete.

SDK (Software Development Kit)

When the device operates in interactive mode, a separate program must be developed by referring to the SDK provided by ATID in order to utilize the data transmitted from the host device. ATID Bluetooth Reader SDK supports three platforms: Android, Windows, and iOS.

Platform	Development Tool	Development Language		
Android	Andorid Studio	Java		
Windows	Visual Studio	.NET Framework (C#), UWP (C#)		
iOS	XCODE	Objective-C		
SDK Package	Deteile			
Configuration	Details			
Demo	Demo Application			
Doc	Development documents such as user guides / manuals,			
	programmer guides, demo guides, etc.			
Lib	Library for application development			
Sample	Sample Code			
USB Drive for Windows	Windows USB Driver of ATID Bluetooth Reader			



Each folder is composed of subfolders for each platform as shown below.



Product Warranty

1. ATS100 Product Details

For more information on product details ATS100, please visit the address below.

http://www.atid1.com

2. SDK Download

If you need an ATS100 SDK, please contact us or the place of purchase.

3. Warranty and Technical Support

All **ATID** products can be repaired free of charge for one year based on the product manufacturing date. However, in principle, any defects caused by customer carelessness in use shall be repaired even during the free repair period.

For warranty, technical support and inquiries on this product, please contact the distributor or ATID.

4. Certifications

This product is KC, FCC, CE and TELEC certified, but we are not responsible for any issues arising during use outside of the certified area.

For details, please contact the distributor or ATID.

ATID Co.,Ltd.

Address : #1402, 83, Gasan Digital-1ro, Geumcheon-gu, Seoul, Republic of Korea (Zip code. 08589)

Phone : +82-2-544-1436

Fax : +82-2-859-0045

Homepage : <u>www.atid1.com</u>

Email : inquiry@atid1.com

The contents of the user manual are subject to change without notice for product specifications change or improvement.