AsReader®

DESKTOP-Type Mini User Manual

ASR-P35U-01

Contents

1 About DESKTOP-Type Mini

1.1. Introduction

Thank you for purchasing DESKTOP-Type Mini ASR-P35U-01.

This manual describes the considerations for using DESKTOP-Type Mini ASR-P35U-01 (hereinafter referred to as the ASR-P35U-01, or the AsReader). Please read the manual carefully and keep it as long as you have the device.

ASR-P35U-01 is a high-performance UHF RFID reader, which supports desktop and wall mounted use.

It supports USB serial port and HID data transmission mode. And it can be used with Android device and Windows PC.

ASR-P35U-01 can be widely used in a variety of radio frequency identification (RFID) application systems, such as asset management, inventory check, retail settlement, attendance management, conference check-in, access control and production process control.

If you have any comments or questions about this manual, please contact us through the following ways.

Asterisk Inc.
Shin-Osaka Dainichi Bldg. 201, 5-6-16 Nishinakajima, Yodogawa-ku, Osaka-city, 532-0011, Osaka, JAPAN
TEL: +81 (0) 50 5536 8733

★The contents of this manual are subject to change without prior notice. In addition, the images in this manual are all reference images and may be different from the actual product.

★In order not to damage your property and life safety, please read this manual carefully before using this device. We will not be responsible for any loss caused by non-compliance with this manual.

★We are not responsible for any damage caused by natural disasters, such as earthquake, lightning, wind, flood, fire outside our responsibility, third party behavior, other accidents, intentional or negligent, abuse or other improper use.

★If the damage is caused by falling or collision as determined by our company, the maintenance fee will be charged even within the warranty period.

★We will take appropriate measures to ensure that our products do not infringe other patents, but we are not responsible for any patent infringement caused by any of the following (1) to (4).

(1) Used in combination with components, products, equipment, data processing systems or software outside our company.

(2) Our products are used in unexpected ways.

(3) Modification of our products by any person or company other than our company.

(4) Use outside of the country where the products are purchased.

★RF exposure statement:

This equipment meets the exemption from the routine evaluation limits in section 2.5 of

RSS-102. It should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Cet équipement est conforme à l'exemption des limites d'évaluation habituelle de la section 2.5 de la norme RSS-102. Il doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et toute partie de votre corps.

1.2. Safety instructions

Please read the following instructions carefully to prevent injury, malfunction, fire, etc.

⚠ Warning
Do not attempt to disassemble, modify or repair the AsReader yourself, otherwise it may cause malfunction, fire or electric shock. We will not be held responsible for any problems that may occur with the AsReader, PC, smart devices, etc. due to modifications.
If you notice any abnormalities such as smoke, abnormal odor, or strange noise coming from the AsReader during use, stop using it immediately. Continued use may cause fire or electric shock.
Do not drop or throw the AsReader and subject it to strong impact. It may cause damage, fire, electric shock, or malfunction. It may also cause injury. If the AsReader is damaged by dropping and the inside of the AsReader is exposed, do not touch the exposed part with your hands, because there is a risk of electric shock or injury on the damaged part.
Do not allow metal or other objects to come into contact with the terminals of each connector. Doing so may cause a large current to flow, resulting in overheating, fire, or damage to the device.
Do not get the AsReader wet with water. Doing so may result in fire or electric shock. If foreign matter or water should get inside the AsReader, unplug the power cable immediately.
Do not use the AsReader with the power supply voltage other than the specified. Doing so may result in damage to the equipment or an accidental fire.
When constructing a system that may affect human life, such as the management of chemicals using the AsReader, please pay close attention to redundancy and safety design so that even if the data is incorrect, there is no possibility of affecting human life.
The AsReader is an RFID reader that uses UHF radio waves with an output power of 200mW. Therefore, depending on the application and location of use, it may affect medical equipment. In order to minimize this effect, the following must be strictly observed during operation. The AsReader operators should keep the AsReader no closer than 22cm from the site where the implantable medical device will be installed. The person wearing the implantable medical device should not come within 22cm of the AsReader. When taking the AsReader overseas, please consult with us in advance, as it is necessary to comply with the laws and regulations of each country and region.

Do not use, store, or leave the AsReader in hot places (eg. by the fire, near a heater, in direct sunlight, in a car in hot weather). It may cause rupture, malfunction, fire or injury.
Do not throw the AsReader into fire or heat. It may burst or cause a fire.
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 contains licence-exempt transmitter(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.
L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: 1. L'appareil ne doit pas produire de brouillage; 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
⚠ Caution
This product has been certified in accordance with the Japanese Radio Law. Since each country or region has different regulations regarding radio waves, it is necessary to comply with the respective regulations. Modification of this product is prohibited, and violations may result in penalties according to the regulations of each country or region.
Please refer to local regulations when you recycle this device.
If you notice any abnormalities, please discontinue use and contact your distributor immediately.
Do not place the product on an unstable surface such as a wobbly table or a tilted place. It may fall and cause damage.
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 Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment. The device has been evaluated to meet general RF exposure requirement.
To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation configurations of the transmitter and its antenna(s).

1.3. Product appearance

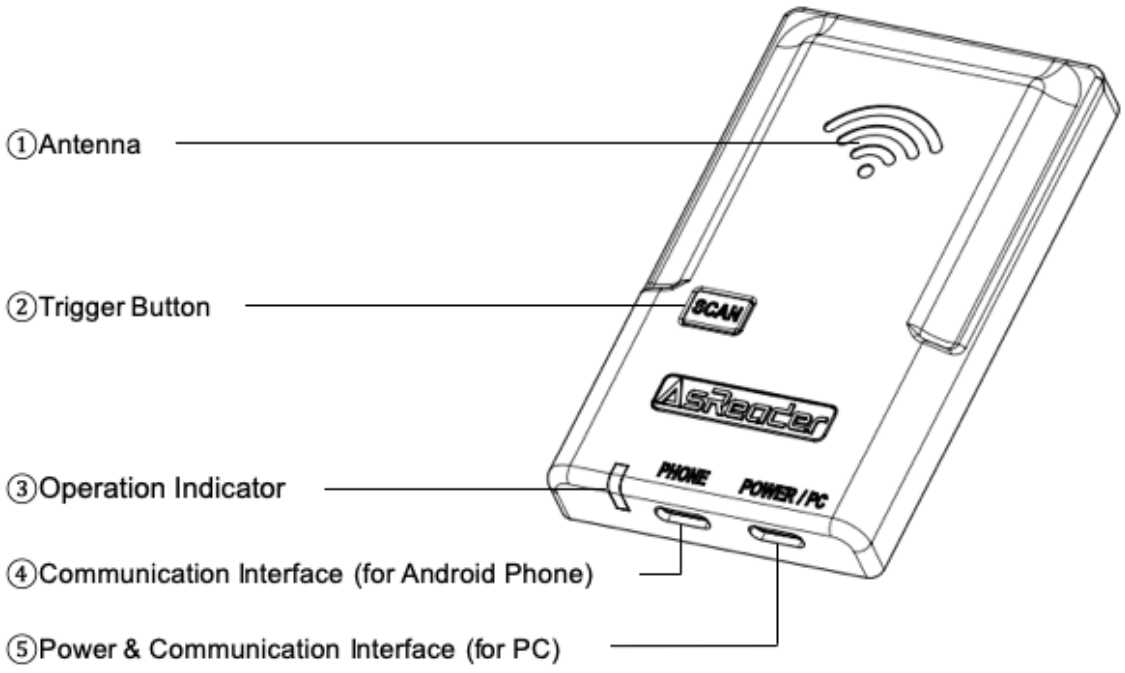

FIG. 1-3-1 Appearance (Front)

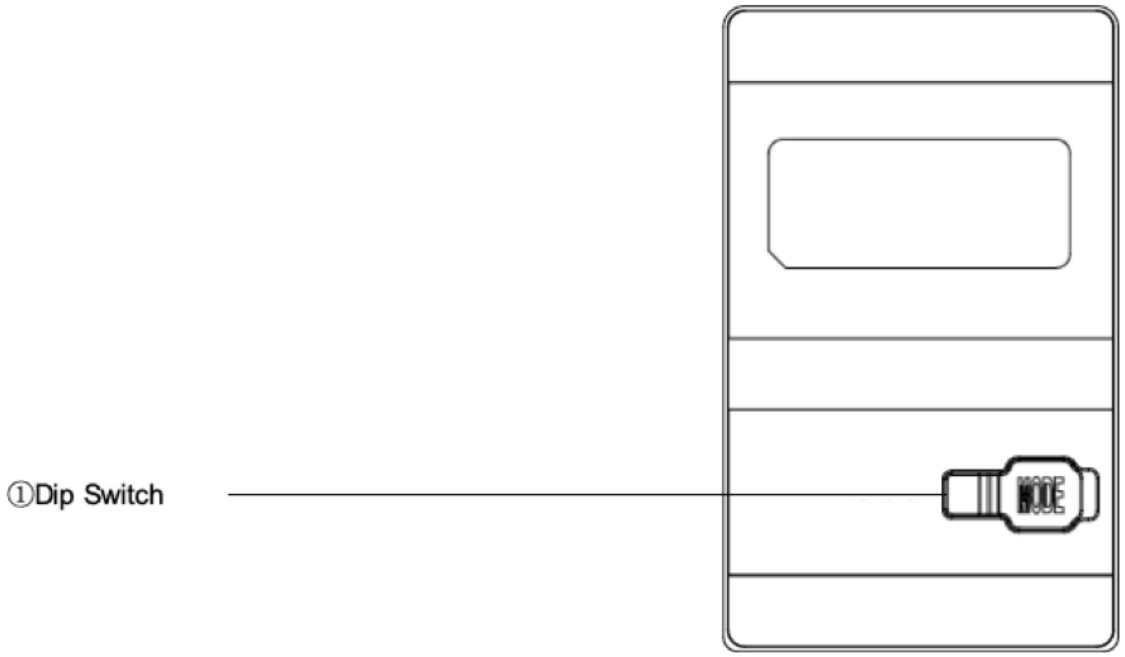

FIG. 1-3-2 Appearance (Back)

1.4. Product specification

Model		ASR-P35U-01
RFID	Spec	ISO 18000-63 (old 18000-6C) / EPC global Class 1 Gen 2
	Radio frequency	Japan: 920.6 ~ 923.4MHz North America: 917.1 ~ 926.9Mhz Europe: 865.7 ~ 867.5Mhz
	Output	Japan: Max 200mW 23dBm North America: Max 500mW 27dBm Europe: Max 500mW 27dBm
	Reading distance	100cm (It may vary depending on the type of smart device or RFID tags used and the usage conditions.)
	Polarization characteristics	Circularly Polarized Antenna (internal)
	Functions	Inventory/Read/Write/Lock/Kill
Power Source		USB Type-C Input: 5V/1A
Button		Trigger button, Dip switch
Interface	Communication interface	USB Type-C (for Android Phone)
	Power & communication interface	USB Type-C (for PC)
Appearance	Dimensions (W)x(D)x(H)	90 × 55 × 13mm
	Weight	Approx. 80g
	Material	PC+ABS
	Color	White
	LED Indicator	[Operation Indicator] - Blue AsReader powered on (flash slowly) AsReader connected (light on) AsReader reads RFID tags (flash quickly)
Environment	Operation temp.	-10 ~ 45 ˚C, 20 ~ 85 % RH
	Storage temp.	-20 ~ 60 ˚C, 10 ~ 95 % RH
	IP Rating	IP54 compliant
	Anti-drop	(Six-sided, 4 edge, once each) 1.5m
Certifications (TBD)		TELEC FCC/ISED CE/UKCA
Supported OS		Windows OS Android OS
Accessories		USB Type-A to USB Type-C data cable, Mounting frame

2 Basic operations

- **Power on/off**

  Use the USB Type-C data cable to connect the AsReader to the power adapter via the Power & Communication Interface (see FIG. 1-3-1⑤). The Operation Indicator flashes slowly when power on is successful (see FIG. 1-3-1③). And there will be two buzzing prompts.

  As shown in the figure below.

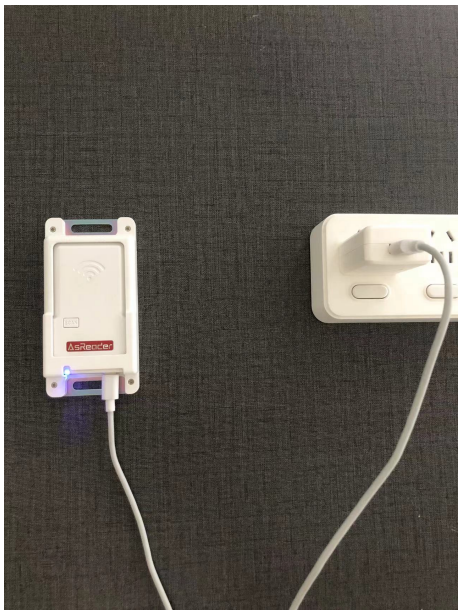

FIG. 2-1 Power on

  Unplug the USB Type-C data cable to power off.

- **Power supply**

  5V/1A.

3 Working mode

◆ **The product has two working modes: HID mode, serial port mode.**

- HID mode

  HID (Human Interface Device) mode: When this product is connected to a mobile device (or a PC), this product is recognized as a keyboard, and the data read by this product is sent to the mobile device (or the PC) as it is and displayed on the text input tool. Therefore, there is no need to use an App. HID mode supports Android device and PC.

- Serial port mode

  This mode enables real-time data transfer between AsReader and the App.

  Supported OS: Android, Windows.

◆ **How to change mode?**

When the AsReader is on or off, turn the Dip Switch to the corresponding gear (see FIG. 1-3-2①). Wherein, 1 is reserved.

Serial port mode: 2-ON

HID mode: 2-OFF

FIG. 3-1 Change mode

If it is powered on, the mode switching is completed after two buzzing.

◆ **How to read RFID tags in the HID mode?**

Put the RFID tags close to the Antenna of the AsReader (see FIG. 1-3-1①). Press the Trigger Button (see FIG. 1-3-1②), and the blue light flashes quickly. The data will be entered at the cursor on the screen of the Android device or PC. Press the Trigger Button again to stop reading.

4 How to connect (Serial port mode)

Operation steps:

◆ **Android**

● **Method 1**

1. Power on the AsReader (see Power on/off).
2. Launch the ASR-P3xU app for Android.
3. Connect Android phone and the AsReader with USB Type-C to USB Type-C data cable via the Communication Interface (see FIG. 1-3-1④), and it will connect automatically. The Operation Indicator keeps ON when the connection is successful.

* If your phone interface is not USB Type-C, you can use a cable which is suitable for your phone interface to connect.

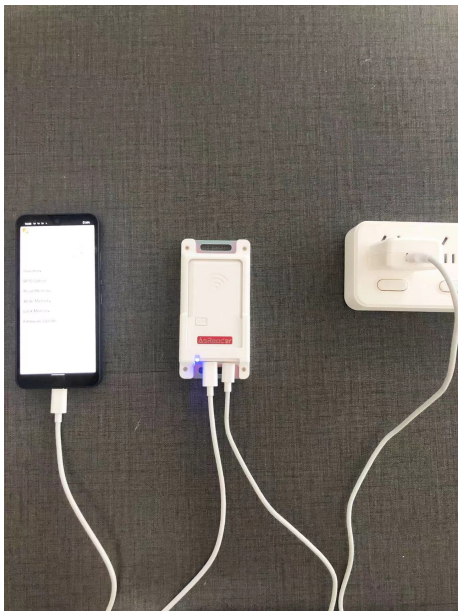

FIG. 4-1 Connect Android phone (Method 1)

- **Method 2**

1. Launch the ASR-P3xU app for Android.
2. Connect Android phone and the AsReader with USB Type-C to USB Type-C data cable via the Power & Communication Interface. The Operation Indicator keeps ON when power on, and the connection is successful. There will be two buzzing prompts.

*In this method, the AsReader is powered by the Android phone.

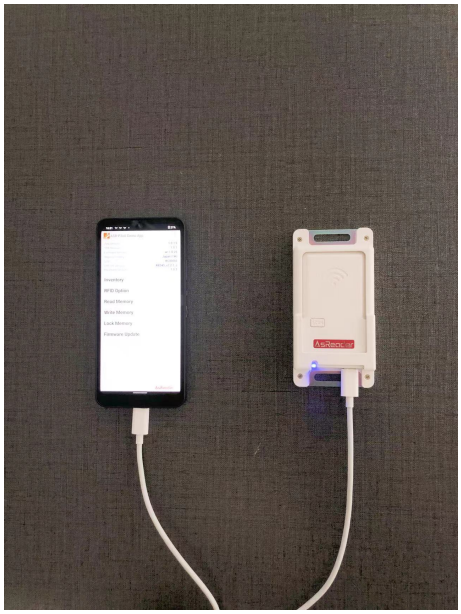

FIG. 4-2 Connect Android phone (Method 2)

◆ **Windows**

1. Use the USB Type-C data cable to connect the AsReader to the Windows PC via the Power & Communication Interface. The Operation Indicator keeps ON when power on, and the connection is successful. There will be two buzzing prompts.
2. Launch the ASR-P3xU app for Windows.

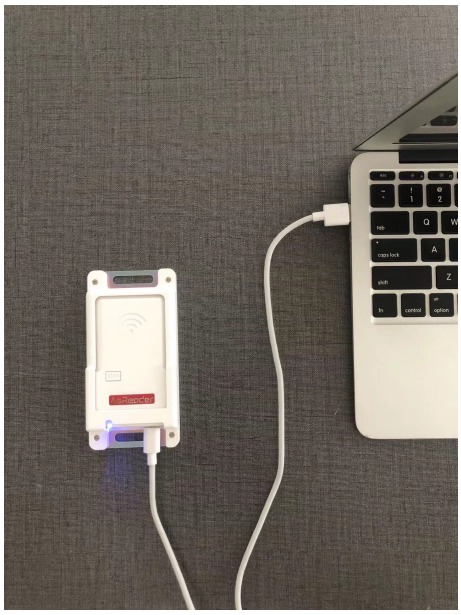

FIG. 4-3 Connect Windows PC

AsReader DESKTOP-Type Mini

(ASR-P35U-01)

User Manual

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Asterisk Inc.

Shin-Osaka Dainichi Bldg. 201, 5-6-16 Nishinakajima, Yodogawa-ku, Osaka-city,

532-0011, Osaka, JAPAN