

User Manual

Presentation Scanner

FUZZYSCAN



FUZZYSCAN
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cino[®]

Presentation Scanner

User Manual

International Edition, Version A1

Disclosures

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Safety Precautions

For safe and proper use of the scanner, be sure to read the Safety Precautions section in this manual before using the scanners.

Eye Safety

The lights emitted from the barcode scanner, especially the laser light beam, produce intense light for the purpose of illuminating barcodes. The laser or LED light beam can cause severe damage to the eyes, and could cause blindness. Therefore, DO NOT stare into the scanner's laser or LED light beam.

Product Regulatory Compliance

FCC

The Cino presentation scanners have been tested in accordance with the procedures given in ANSI C63.4-2014 and the energy emitted is pursuant to Part 15 Subpart B of the 47 CFR FCC Rules in both radiated and conducted emissions class B limited.

CE Standards

The CE mark on all Cino presentation scanners indicates that this product has been tested in accordance with procedures prescribed in EUROPEAN COUNCIL DIRECTIVE 2014/30/EU and confirmed to comply with the EUROPEAN STANDARD.

BSMI

BSMI marks indicate that Cino presentation scanners have been tested in accordance with CNS 13438/CNS14336 standard of the BSMI rules.

RCM

Cino presentation scanners have been tested in accordance with the procedure given in AN/NZS CISPR 32 and passed the test performed according to AS/NZS CISPR 32:2015 Class B Standard.

KCC

Cino presentation scanners have been registered under the Clause 3, Article 58-2 of Radio Waves Act.

VCCI

Cino presentation scanners have been tested in accordance with the procedures prescribed in implementation regulation from Voluntary Control Council for Inteference (VCCI) and shown compliance with the VCCI-CISPR 32:2016, Class B standard.

LED Eye Safety

Cino presentation scanners have been tested in compliance with IEC62471 Exempt group standard of the LED Eye Safety rules.

Environmental Regulations

Cino presentation scanners are fully compliant with both RoHS Directive of European Union and RoHS Directive of China.

About This Manual

This manual provides general instructions on the setup, operation, and troubleshooting of Cino presentation scanners. Please read this manual thoroughly before using the scanners for optimum performance.

- **Chapter 1, Getting Started**

Provides basic information on Cino presentation scanners and the types of interface cables that users can select from.

- **Chapter 2, Using the Scanner**

Describes the scanners' various operation modes, and their functionalities. It also presents relevant scanner accessories that are available.

- **Chapter 3, Configuration**

Introduces the various ways to configure Cino handheld scanners, and discusses the default settings available.

- **Chapter 4, DataWizard Premium**

Presents the means by which Cino presentation scanners can be programmed to execute data formatting and other complex data processing tasks.

- **Chapter 5, Troubleshooting**

Offers examples of problems that users may encounter, as well as possible causes and potential solutions.

- **Appendix**

Contains explanations on the audio and visual indications produced by Cino scanners. It also provides frequently used command barcodes.

Other Documentation

You may also refer to the following documents for additional information, which are available for download at www.cino.com.tw.

- **FuzzyScan Quick Start Guide**
Quick introduction to the most common scanner setup and operations.
- **FuzzyScan Barcode Programming Manual**
Programming instructions and configuration barcodes for Cino scanners.
- **DataWizard Premium User Guide**
Instructions on performing complex data processing and manipulation, including writing programming scripts to customize scanner operations.
- **FuzzyScan Serial Command Manual**
Information on using serial commands to program or control Cino scanners.
- **Cino scanner API Manual**
API information for developers wishing to integrate Cino scanners into their systems.

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1 Getting Started

This chapter helps users get acquainted with their presentation scanners. It contains information on the product package and details on the standard kit's contents. It also introduces the types of interface cables that users can choose from.

Product Package Information

Upon receipt of the product, please verify the information on the package label to ensure that it matches your order. When unpacking, please:

1. Check if the product package contents are complete according to the Contents list below and that no parts are missing.
2. Check if any product parts are damaged during shipment.
3. If anything is missing or damaged during shipment, please report it immediately to your vendor. Retain the packaging materials for use when returning the product.

Contents of the Standard Kit

Contents of the standard kit are listed below.

Standard Kit

- Scanner unit
- Interface cable (RS232 or USB)
- Quick Start Guide

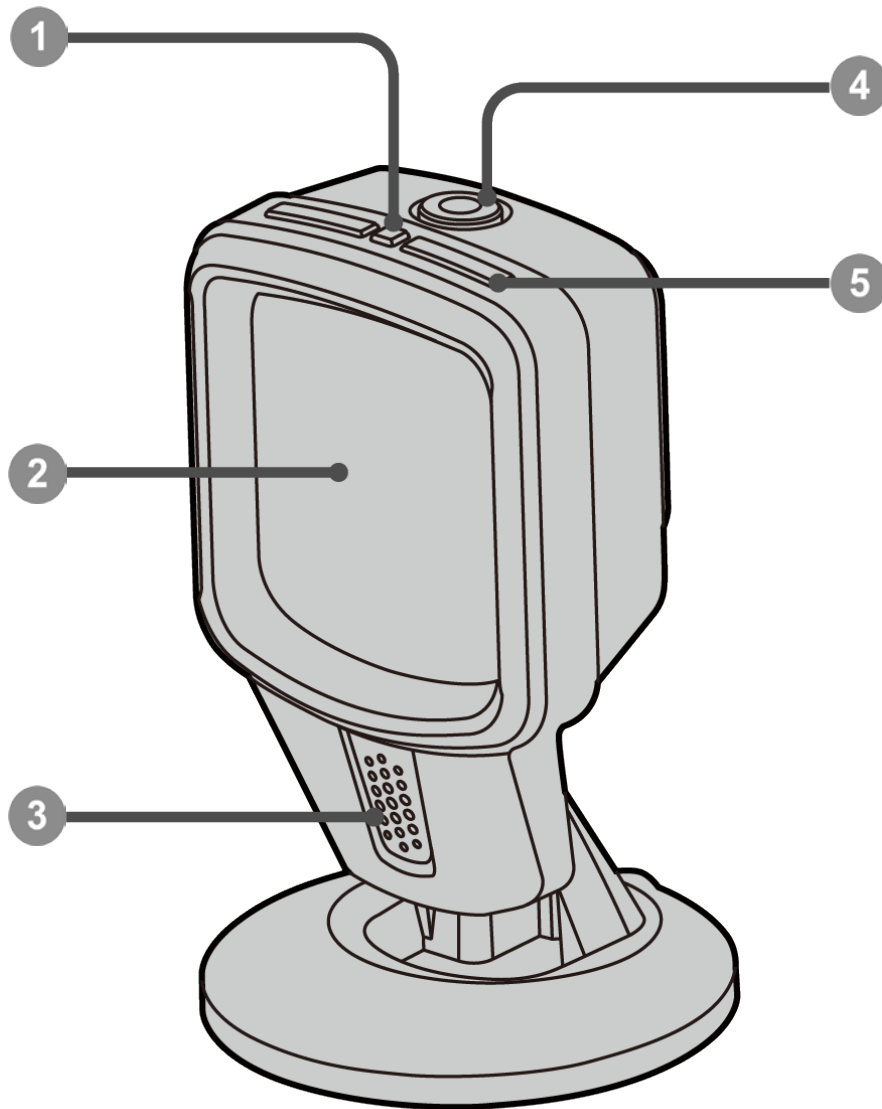
Getting Acquainted with Your Scanner

Thank you for choosing Cino scanners. Powered by our FuzzyScan imaging technology, our presentation scanners are designed to serve on the counters of supermarkets, retail stores, hospitals, and other establishments where barcodes are used. Their exceptional reading performance, durability, and ergonomic design make them the number one choice for a multitude of scanning applications.

For users who would like to integrate the presentation scanner with Checkpoint EAS (Electronic Article Surveillance), please contact your sales representative for more information.

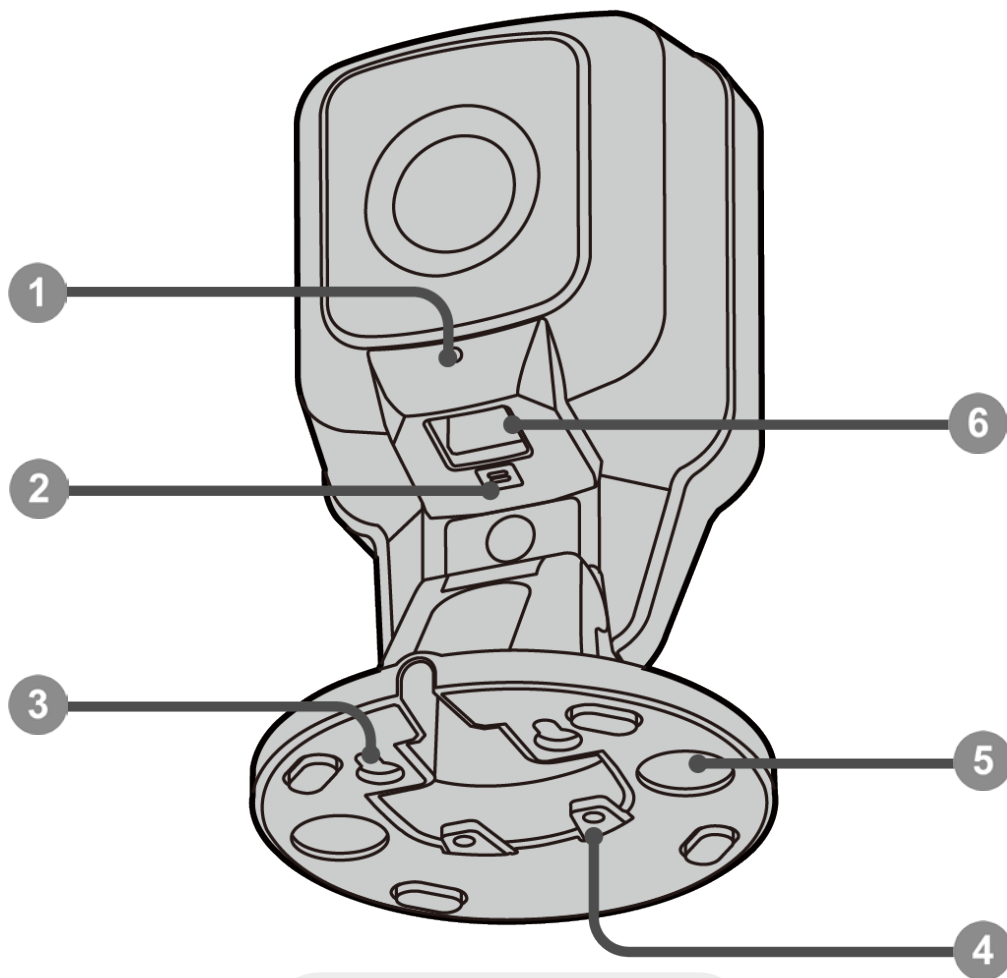
Device Overview

S680 Front view



1. Power Indicator
2. Scan Window
3. Speaker
4. Trigger Button
5. Status Indicator

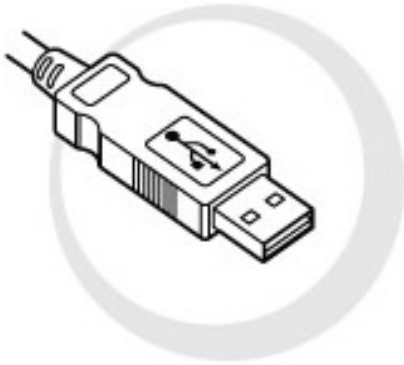
S680 Rear view



1. Cable Release Hole
2. EAS Port (optional)
3. Hanging Hole
4. Screw Mounting Hole
5. Affixing Magnet Cavity
6. Host Interface Port

Connecting to the Host Equipment

Cino's standard Presentation scanner package contains either a USB or RS232 cable, depending on the user's selection. Your scanner can be connected to a USB or RS-232 port by using the appropriate cable.



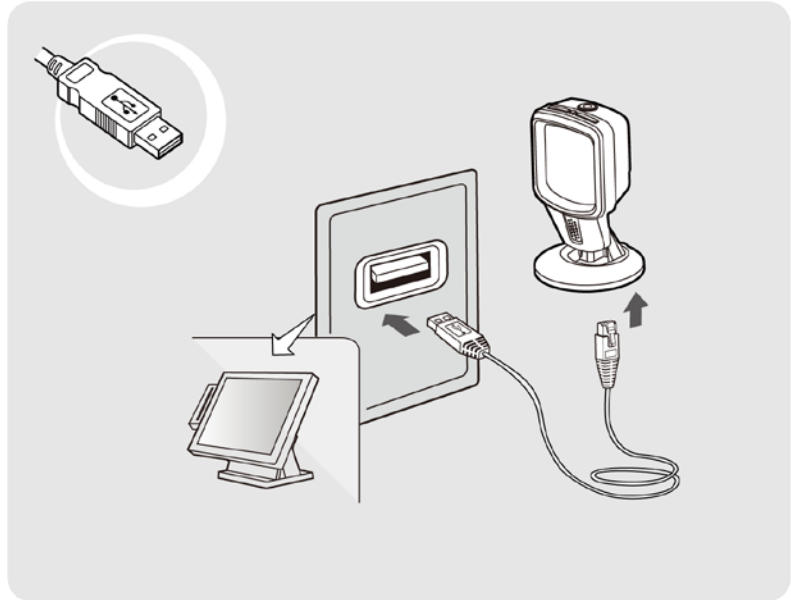
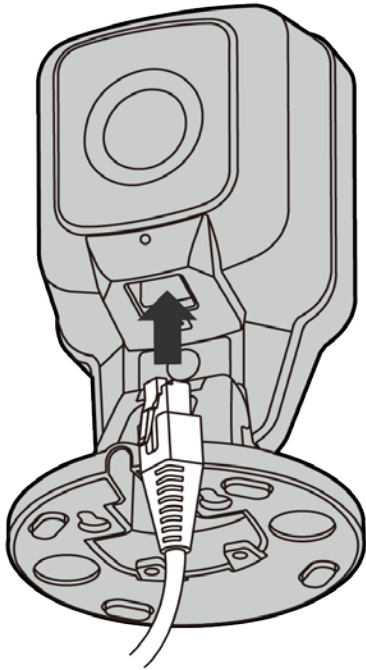
USB cable



RS232 cable

Connecting to a USB port

1. Using the USB cable provided, connect the scanner to the USB port on your host equipment.



2. Configure your scanner's interface setting by scanning the applicable barcode below.



USB HID Standard Mode ▲



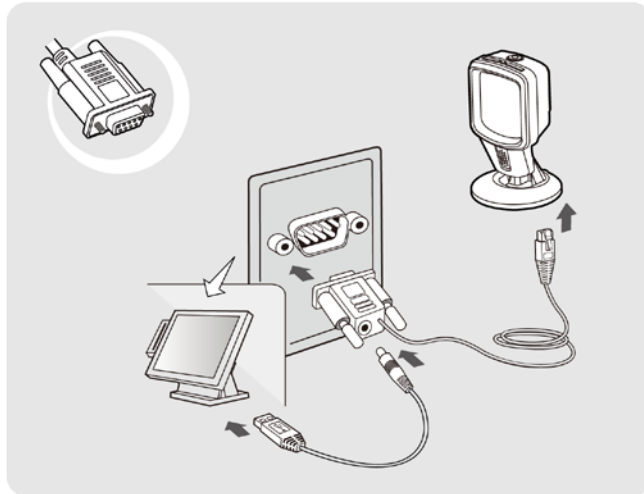
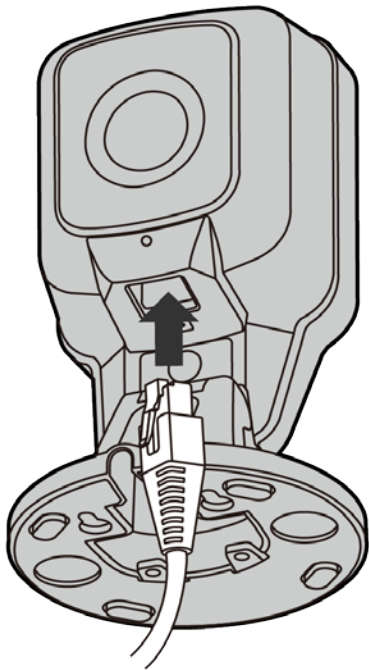
USB Com Port Emulation



USB HID Turbo Mode

Connecting to a RS232 Serial Port

1. Using the RS232 cable provided, connect the scanner to your host device's RS232 port.



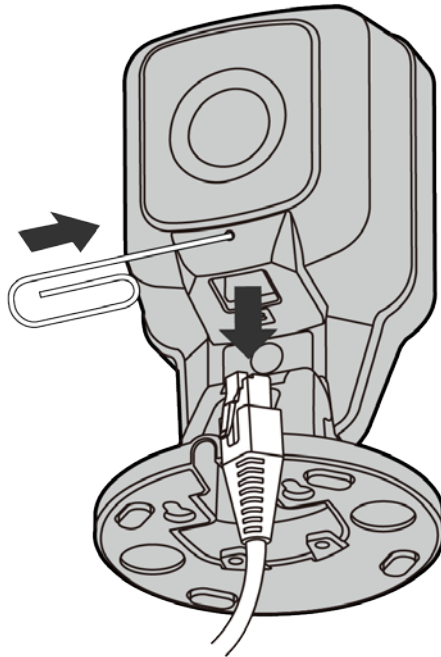
2. Configure your scanner's interface setting by scanning the barcode below.



RS232 serial

Disconnecting the Scanner

To remove the cable from your scanner, insert a paper clip into the cable release hole to depress the locking tab of the interface cable. While keeping it depressed, remove the cable.



Connecting to an EAS System

For connecting models supporting the optional EAS (electronic article surveillance) function, please refer to the EAS supplemental document available on Cino's website at www.cino.com.tw.

2 Operations

This chapter provides basic instructions on how to use the presentation scanner. This includes scanning operations, mounting methods, and available accessories.

Scanning Operations

FuzzyScan presentation scanners are preset for hands-free scanning, with the ability to easily switch to handheld scanning. This section provides instructions about both hands-free and handheld scanning operations, as well as their most important control parameters. For a complete parameter list, please refer to the “FuzzyScan Barcode Programming Manual”.

Hands-free Scanning

This is the factory default operation of the FuzzyScan presentation scanners.

Under hands-free scanning, the scanner keeps detecting approaching objects using either its proximity sensor or image sensor. Once it detects an approaching object, the scanner automatically turns its LED illumination on and reads the barcode.

If the trigger button is pressed during hands-free scanning, the scanner will shift into **handheld scanning** mode immediately. The scanner will return to hands-free scanning after a period of inactivity (the duration of which can be adjusted through the **Hands-free Time-Out** parameter).

Object Detection Control

The FuzzyScan presentation scanner utilizes a proximity sensor as its primary means of determining whether any object is coming into the scanner’s field of view and thus to trigger the scan session. With Object Detection Control, You can choose the image sensor instead to provide the object detection function if a longer effective detection range or a wider effective detection area is required.



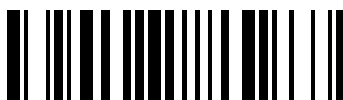
Proximity Sensing ▲



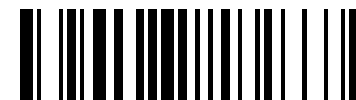
Image Sensing

Background Lighting

Under hands-free scanning, you can enable or disable the background light of the scanner when it is in standby state. Under Image Sensing mode, the presentation scanner relies on its image sensor to detect approaching objects. If the ambient lighting is insufficient, disabling the background light may hinder the ability of the image sensor to work properly.



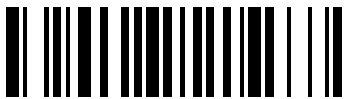
Background Lighting
On ▲



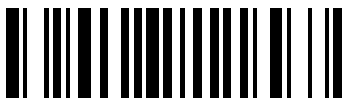
Background Lighting
Off

Image Sensing Sensitivity

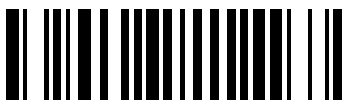
Under Image Sensing mode you may choose different levels of **Image Sensing Sensitivity** to adjust the effective range of motion detection. The higher the level you choose, the longer the effective range will be.



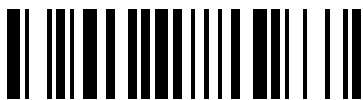
Level 1



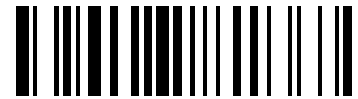
Level 2



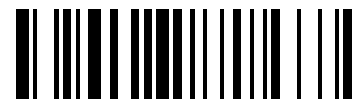
Level 3



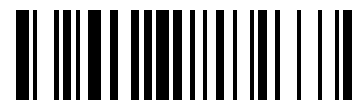
Level 4



Level 5 ▲



Level 6



Level 7

Handheld Scanning

By pressing the Trigger Button, the presentation scanner will switch to Handheld Scanning immediately. Under this operation, the scanner will turn on its aiming dot to help target the desired barcode. With its trigger button pressed, the presentation scanner will turn its LED illumination on and begin to scan the barcode. Once it decodes a barcode successfully (having a “good read”), the presentation scanner transmits the decoding result, turns off its LEDs, and goes back to standby status waiting for the next triggering.

Center Alignment

The FuzzyScan presentation scanner utilizes the Center Alignment function to adjust the extent of effective decoding area. With Center Alignment function enabled, the presentation scanner will only decode the barcode that is closest to its aiming dot; while disabled, the scanner will decode any barcodes it can find within its entire view field.



**Center Alignment in
Handheld Mode
On ▲**



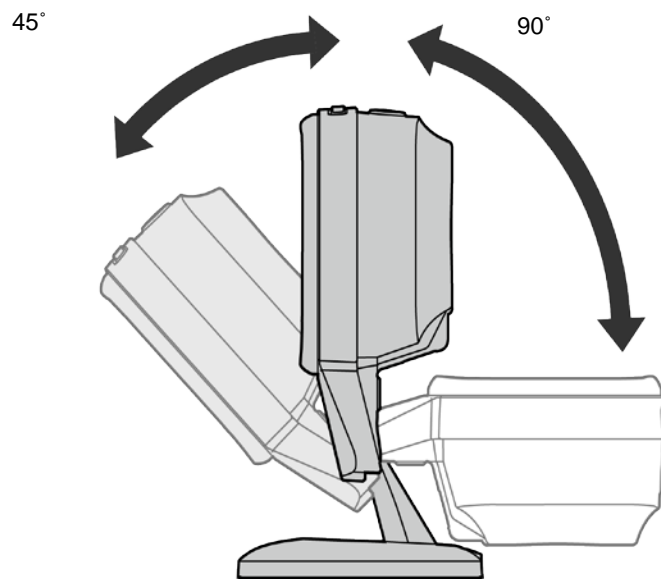
**Center Alignment in
Handheld Mode
Off**

Mounting

With a uniquely versatile stand, Cino's FuzzyScan presentation scanner can be used for a variety of application requirements.

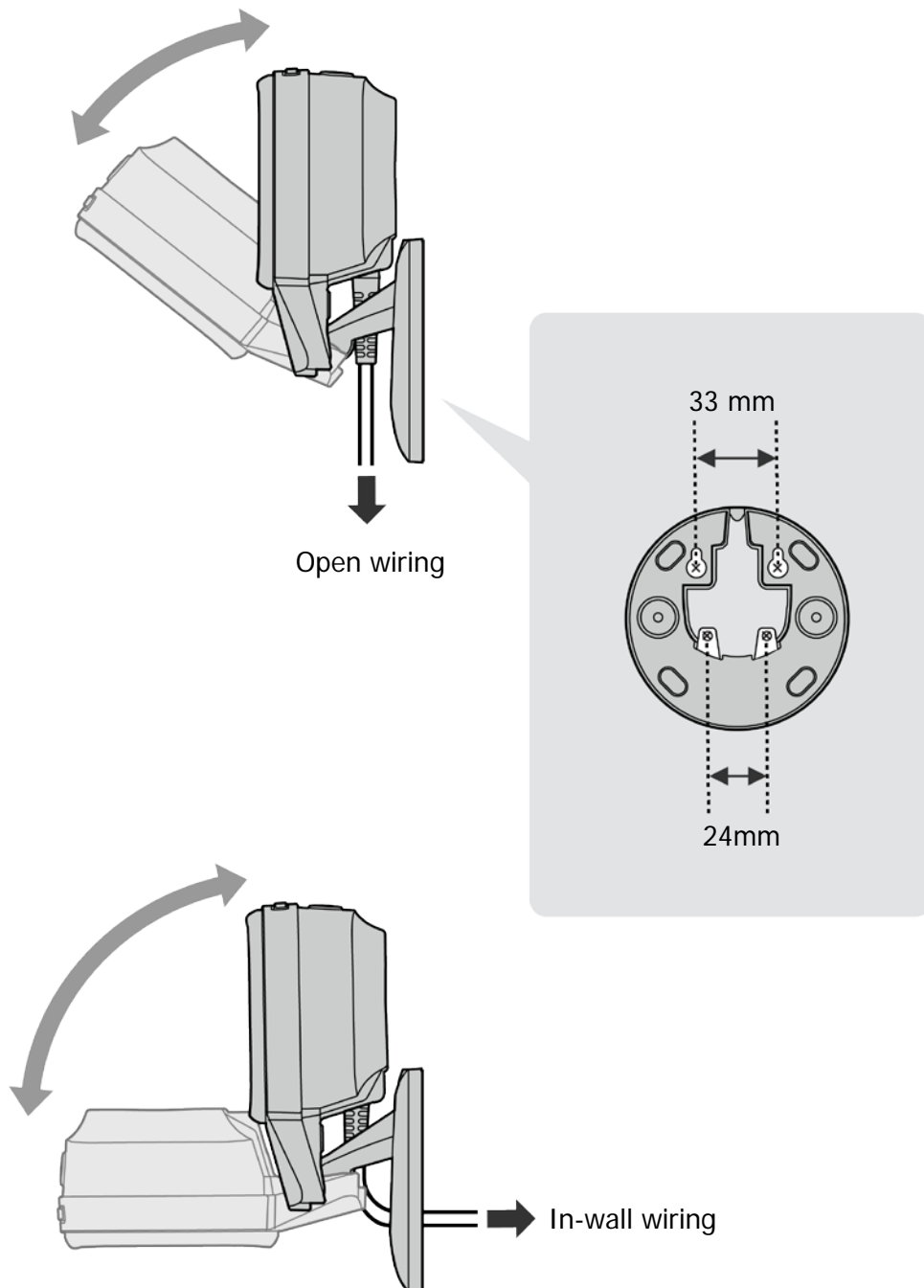
Desktop Application

The presentation scanner can provide an ultrawide adjustable tilt angle from 90° backwards to 45° forwards, enabling maximum flexibility in scanning positions.



Wall Mounting Application

The presentation scanner adapts a mounting kit-free design. You can mount the presentation scanner onto a wall or any vertical surface and adjust it to your desired scanning position easily. Its base also allows for flexible cabling for various installation requirements.

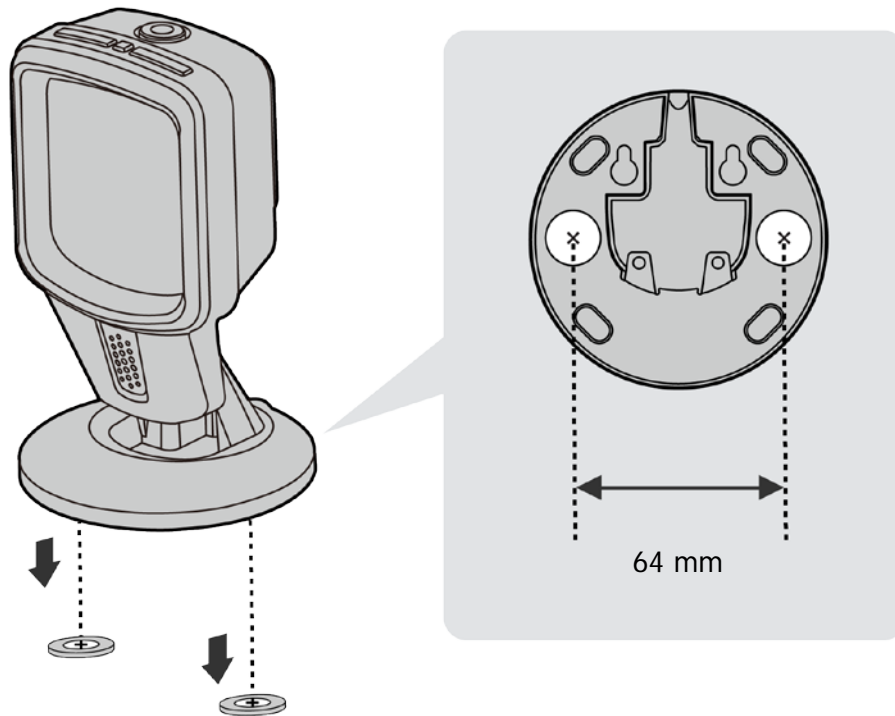


Accessories

Improve the convenience of using your scanner with accessories that are specially made to facilitate scanning operation.

Affixing Magnets Kit

The optional affixing magnets help affix the presentation scanner firmly at a set location, and also allow lifting of the presentation scanner for handheld scanning.



Contents:

1. Magnets (2 per set ordered)
2. Phillips Screws (0.6 mm X 19 mm, 2 per set ordered)
3. Magnet Installation Footprint Sheet (2 footprints provided per sheet)

Installation

1. Place the Magnet Installation Footprint Sheet at your desired location on the table or surface on which you would like to install the scanner. Point the "Rear" direction on the sheet to the direction where you would like the interface cable to point to.
2. Drill a screw hole at each "X" on the Footprint Sheet.
3. Place a magnet on the Footprint Sheet and center its hole with the drilled hole.
4. Place a screw in the magnet hole, then use a Phillips screwdriver to tighten.
5. Repeat Steps 2-4 for the other magnet.

Placing and Lifting the Scanner

1. Place the scanner onto the magnets by aligning the scanner's base with the two magnet cavities. The scanner would be firmly affixed to that location.
2. When handheld operation is desired, lift the scanner by tilting the scanner towards one side of the scanner, then lift the scanner for handheld scanning.



Tilt the scanner towards the left or right, then lift the scanner up.

3 Configuration

This chapter introduces the various tools that are available to configure FuzzyScan presentation scanners, namely: FuzzyScan PowerTool, FuzzyScan iCode, and FuzzyScan Command Barcodes. It also discusses the factory and user default settings.

Configuring Your Scanner

Below are the various ways to configure or modify the settings on your FuzzyScan device.

FuzzyScan PowerTool

The FuzzyScan PowerTool is an intuitive, PC-based software utility that is expressly designed for the management of FuzzyScan scanners. It allows users to set or change device parameters, upgrade firmware, generate iCodes for single scan configurations, and write custom programming scripts for complex data processing via DataWizard Premium, which can then be uploaded to your scanner to modify its operations. FuzzyScan PowerTool can be downloaded from www.cino.com.tw.

FuzzyScan iCode

iCode is a macro configuration barcode that carries one or more commands. It is generated through FuzzyScan PowerTool. Simply choose your desired commands, and click on the “iCode” button to generate a comprehensive iCode that integrates all of the commands. Then, scan the iCode to apply these commands to your scanner. Instead of using multiple barcode commands to configure the devices, users can achieve the same results with a single iCode, saving time and effort.

FuzzyScan Command Barcodes

In order to help simplify configuration and parameter setting for FuzzyScan scanners, Command Barcodes for the most common settings as well as some more advanced options are provided for your convenience. These command barcodes can be found in the “**FuzzyScan Barcode Programming Manual**”, which is available for download at www.cino.com.tw.

Default Settings

Available default settings for FuzzyScan presentation scanners are **Factory Default** or **User Default**.

Factory Default

Scan the **Factory Default** barcode to erase all user-defined parameters and set the scanner back to factory default settings.



Factory Default

User Default

User-defined parameters can be saved as user defaults by scanning the **Save User Default** barcode.

If **no** user-defined parameters were saved, factory defaults will be applied on the scanner each time the **User Default** barcode is scanned.

If user-defined parameters had been saved as user defaults, they will be implemented on the scanner each time the **User Default** barcode is scanned.



Save User Default



User Default

4 DataWizard Premium

Scanned data often may need to be processed in various ways before they can be used by the host application, therefore Cino FuzzyScan Scanners provide an exclusive functionality called **DataWizard Premium** to accomplish this and much more. DataWizard Premium enables users to configure the scanner to manipulate scanned data prior to transmission, such as reformatting them to a new order, or inserting, deleting, matching, or verifying specific data.

In addition, it can also perform complex logical operations to fulfill more complicated needs, through the writing of data scripts. This enables tasks such as text string parsing to extract specific information, for example, for eligibility verification for age-restricted purchases, or parsing of data from GS1 barcodes to populate that data into the correct corresponding data fields in your host application. Moreover, through DataWizard Premium, you can even apply various user-defined scanner indicator lights and beeping feedback combinations to suit your specific application needs. This chapter presents a brief overview of this unique functionality.

Data Processing Functionalities

Cino's FuzzyScan **DataWizard Premium** can perform not only common data processing tasks such as reformatting scanned barcode data to a new order, its unique advanced features also include the ability to write data scripts to performing complex logical operations for user-specified scanner feedback and other use-specified data manipulation tasks.

For the simplest types of data editing and scanner setting operations, such as adding preamble/prefix, postamble/suffix, setting data length and formatting, datum character replacement, and data verification, etc., users can simply locate the applicable barcode then scan it, then that operation will be applied on the scanner. For all of the available data editing and scanner setting options, please refer to the "**FuzzyScan Barcode Programming Manual**" for complete details.

Another method to configure the scanner for the above-mentioned operations, as well as other more complex operations, such as insertion, deletion, or substitution of specific characters or symbols into scanned data, is through using Cino's FuzzyScan PowerTool utility. Users can easily configure the scanner for the above tasks, as well as setting data transmission and other parameters through an easy to use, Windows-based interface. FuzzyScan PowerTool utility can be downloaded from Cino's website at www.cino.com.tw.

The requirements for barcode scanning are increasingly complex and diversified. Oftentimes, typical configuration tools may lack the capability to meet enterprise-level demands. DataWizard Premium fills the gap by offering a flexible way to program Cino scanners for complex data processing and manipulation.

Custom Data manipulation and Scanner Control

DataWizard Premium also enables users to write programming scripts and load them into Cino scanners for customized data manipulation and scanner operation control. The script language used is similar to BASIC and is easy to learn for experienced programmers. DataWizard Premium also has various built-in functions to help with script development. Cino scanners can thus be instructed to perform complex data processing tasks, such as parsing captured data according to the host system's requirements. Examples include text string parsing from a PDF417 driver license to extract age information for alcohol purchase eligibility verification, or application identifiers (AI) parsing of GS1 barcodes to extract and populate the data into the correct corresponding data fields in host applications. Please refer to the **DataWizard Premium User Guide** available for download at www.cino.com.tw for details.

5 Troubleshooting

This chapter outlines basic troubleshooting procedures for Cino FuzzyScan presentation scanners. It helps you identify some of the most common issues that a user may encounter, offer their possible causes, and presents potential solutions.

Common Issues and Solutions

Below are examples of common scanner issues, as well as their possible causes and solutions.

Unable to power on the scanner. / The LED lights will not turn on

Possible Causes:

- The scanner has not been turned on or has not been plugged into the host unit.
- The scanner is not receiving adequate power.

Possible Solutions:

- Make sure your scanner's cable is properly attached to both the scanner and the host unit.
- Turn on your host device so that the scanner may receive power through its port.
- Make sure the port used delivers sufficient power voltage.

The scanner reads barcodes, but data are not being transmitted to the host device

Possible Causes:

- The scanner's host interface settings is not properly configured.
- The scanner's cable is loose on one or both ends.

Possible Solutions:

- Re-configure your scanner's host interface settings.
- Make sure your scanner's cable is properly attached on both ends.

The scanner is unable to read barcodes./The scanning rate is poor.

Possible Causes:

- The scanner has not been programmed to read the barcode's symbology.
- The barcode is physically damaged.
- The distance of the scanner to the barcode is too far or the angle is too askew.
- The scanner's window is obstructed.

Possible Solutions:

- Enable the applicable barcode symbology on your scanner.
- The barcode may be too damaged, stained, distorted, poorly printed, or small to be readable. Reflective surfaces may also impede scanning. Please obtain a replacement barcode if possible.
- Adjust your scanner's distance or angle to the barcode.
- Remove anything that may obstruct the scan window. Gently clean off any dust, grease, or liquid with a soft cloth. Be careful not to scratch or damage the scan window.

Scanned data are incorrectly displayed on host device

Possible Causes:

- The scanner's host interface setting is not properly configured.
- The scanner's keyboard layout setting is not properly configured.

Possible Solutions:

- Re-configure the scanner's host interface settings.
- Re-configure the scanner's keyboard layout setting.

Appendix

The Appendix contains explanations on the audio and visual feedbacks produced by Cino FuzzyScanscanners. It also includes command barcodes that are frequently used for device configurations, such as those pertaining to host interface, keyboard layout, system commands, etc.

Audio and Visual Indications

Audio Indications

Status	Sound
Power on	4 quick beeps
Good "read"	1 beep
Programming mode ON	None
Firmware upgrading	Short clicking sounds

Visual Indications

Status	Power Indicator	Status Indicator
Power on	Steady blue	2 red blinks
Good "read"	Off	1 green blink
Programming mode ON	Off	Steady red
Firmware upgrading	Off	Steady red

Quick Set Commands

Host Interfaces

A separate driver needs to be installed on your host device for **USB Com Port Emulation**, unless the host device is running **Windows 10**. The driver can be downloaded from www.cino.com.tw. (▲ represents the DEFAULT value in each Quick Set below.)



RS232 Serial



USB HID Standard Mode ▲



USB HID Turbo Mode



USB HID Legacy Mode



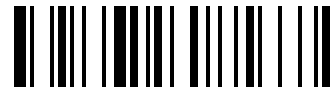
USB Com Port Emulation

Keyboard Layouts

With USB HID interface, you can scan the corresponding command barcode to select your desired keyboard layout. For more comprehensive multilingual support, please refer to the **FuzzyScan Barcode Programming Manual**. (▲ represents the DEFAULT value.)



USA ▲



Latin America



UK



France



Netherlands



Canadian French



Germany



Japan



Spain



Universal 📝

📝 Universal keyboard layout is only available in Windows OS.

System Commands

System commands are commands used for setting system-related configurations, such as restoring factory defaults or setting user-defined defaults. Scan the command barcodes below for each of the following commands:



System Information



Save User Default



PowerTool Host Link



User Default



Factory Default

Option Codes



1



0



2



3



4



5



6



7



8



9



A



B



C



D



E



F



FIN (Finish)



Abort




END (Exit)

Release Notes

<u>Version</u>	<u>Date</u>	<u>Notes</u>
A1	2021.02.03	<ul style="list-style-type: none">• Initial release

**FuzzyScan Presentation Scanner User Guide
Internationale Edition, Ver. A1**

P/N: YMAB080100A1EN1

 www.cino.com.tw

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