SIGNWAY DM1071-T Dynamic Detection Display User Manual

Contents

SIGNWAY

SIGNWAY DM1071-T Dynamic Detection Display

Product Overview

Introduction

This dynamic detection display uses professional dynamic detection algorithms, with strong dynamic detection performance, fast recognition speed, long distance, non-contact, Supports the advantages of wearing mask recognition, supports 1: 1 and 1: N face comparison and search, supports reminders without wearing masks , supports ID card readers, fingerprint readers, IC card readers, QR code readers. The expansion of various peripheral devices such as card readers, gate heads, and door magnets.It can truly realize efficient and fully automatic non-inductive recognition and passage in crowded places, and can be widely used in office buildings, communities, schools, factories, etc. related scenarios.

Dynamic detection and check- in without a mask

Dynamic detection and check- in with a mask

Application scenario

Face recognition access control

Face attendance

Face recognition barrier

Office building

Community

School

Multi-mode selection

Mode 1: Dynamic Detection and permission verification

Enter personnel information in the management platform (access control point) dynamic detection to verify the

identity judge access control authority.
If the dynamic detection authentication fails, there is no access control; the management platform records access control data corresponding to the personnel.

Mode 2: Mask reminder mode
In mode one , click on the “mask detection attribute” in the management platform, you can realize the voice reminder for the person without the mask, without affecting dynamic detection and check in.
It is suitable for the entry and exit of designated personnel , such as factories, schools, office buildings, residential areas, etc., Satisfy the internal personnel dynamic detection requirements for entry ban.

Features

Strong dynamic detection performance

This dynamic detection display is built with dynamic detection algorithms, with high accuracy and fast speed. It also supports accurate recognition in the case of side faces, semi-occlusion, and blur. Especially in epidemic situations, it can detect whether to wear a mask first, send out a voice reminder for not wearing a mask, and then perform dynamic detection for the person who has worn a mask.
The relevant parameters are as follows:

Dynamic detection:

- Dynamic detection accuracy: 99.99% (1: 1, FRR 1%)
- Living body detection accuracy: 0.01% (false recognition rate)
- Living detection distance: 0.5-1.2 meters
- Recognition speed: <300ms (20000 face database)
- Intelligent recognition: support 1: 1 face comparison, support 1: N face search

Mask recognition:

- Dynamic detection rate:> 92% (20000 human database)
- Reminder: Without mask reminder

Maximum 50000 face database
Based on the 20000 face database, the recognition speed of this dynamic detection display is less than 300 MS, and supports expansion to 50000 face database, which fully meets the needs of dynamic detection passage scenarios.

120DB ultra wide dynamic
This dynamic detection display adopts 2 million pixels living body recognition binocular camera, built-in fill light, 120DB ultra-wide dynamic, no fear of backlight and dark light environment.

Online / offline mode can be switched
The device terminal supports both online and offline modes, and the device administrator can switch the identification mode according to the actual situation. In offline mode, dynamic detection can be achieved without internet connection.

Support multiple peripheral expansion
Support various peripheral expansion such as ID card reader, fingerprint reader, IC card reader, QR code reader, gate, door sensor, etc.

Built-in high-performance ISP

The built-in high-performance ISP can restore the scene details under different optical conditions and ensure the image quality.

Rich interface, worry-free installation
It has a full specification tail wire to meet the needs of most scenarios. It has a relay to control the door opening, including power supply, USB, RJ45, lock control and RS232 /UART (multiple interfaces, optional)

Exquisite appearance, three bases are optional

7-inch aluminum alloy shell, exquisite atmosphere, wear-resistant and anti-corrosion, provides three types of bases, wall-mounted, upright and desktop, and the device supports an adjustable angle of 60 degrees to meet the installation needs of different scenarios.

Network background management system

Equipped with a powerful network management system Ezface, real-time recording whether to wear a mask,identification time and other information, built-in real-time monitoring, personnel management, equipment

management, attendance management, data statistics and access rules and other functional modules to help managers quickly master data for unified remote management.

Technical Parameters

Technical parameters

Basic parameters	
Soc	High-performance AI SoC (4-core A7 + NPU + DSP)
Memory	1GB DDR3
Storage	EMMC 8GB
Identification requirements	
Recognition height	1.2~2.2m，adjustable angle
Recognition distance	0.5~1.2m
Face angle	30 degrees left and right, 30 degrees up and down
Dynamic Detection	
Dynamic detection accuracy	99.99%（1:1，FRR 1%)
Living body detection	support
Recognition speed	<300ms（20000 face library）
Face Library	default 20000, maximum 50000
1: 1 face comparison	support
1: N face search	support
Recognition distance	0.5m~1.2m
Operating temperature	-10~60℃

Screen	
Size	7 inch LCD screen
Resolution	600*1024
Camera	
Resolution	2 million pixels
Genre	120DB wide dynamic binocular camera
Fill light	built-in fill light, no fear of backlight, dark light environment
Interface	
Power supply	DC 12V
Internet	1 RJ45 10M / 100M adaptive Ethernet port
USB	1 USB 2.0 interface
Lock control	1 channel lock control signal
Optional	1 interface, optional RS232 / UART
Function	
Mask recognition	support
No mask reminder	support
ISP image processing	support
Coordination	no need to cooperate to stand still and close
UI interface settings	support
Remote device upgrade	support
Deployment method	LAN use

Electrical parameters	
Voltage	DC 12V
Electric current	500mA
Power	15W
Storage temperature	-25~60℃

Other parameters

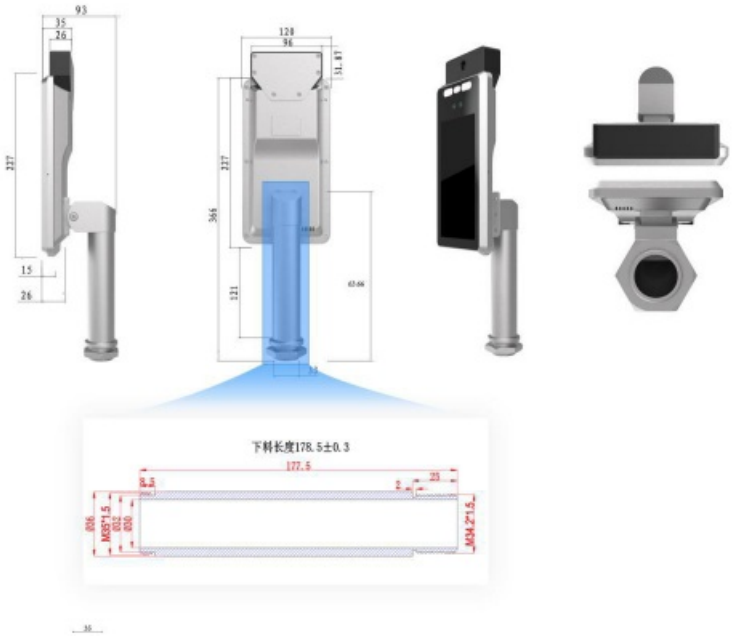
Style	Host weight	Accessories weight	Total weight (including packaging and three brackets)
Upright	900g	Column bracket: 250g	1900g
Wall-mounted		Wall bracket: 130g	
Desktop		Desktop stand: 200g	

Other parameters	
Product Size	120*259*35mm
Single package size	450*170*125mm
Outer box size	530*510*320mm
Packing situation	4 sets/box ; total weight 9.2 Kg

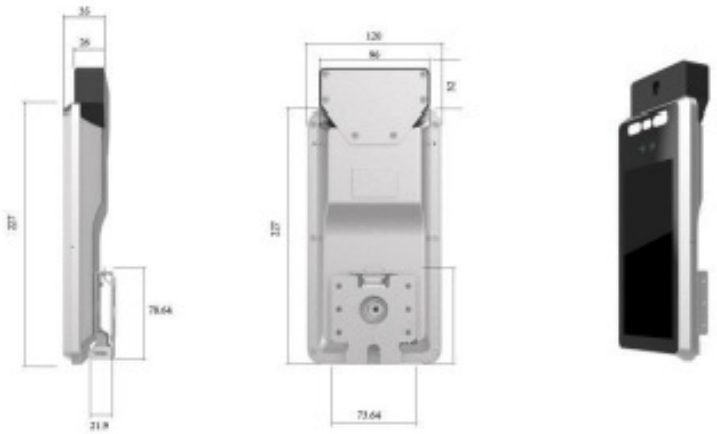
Physical Dimension

Product size chart

Upright

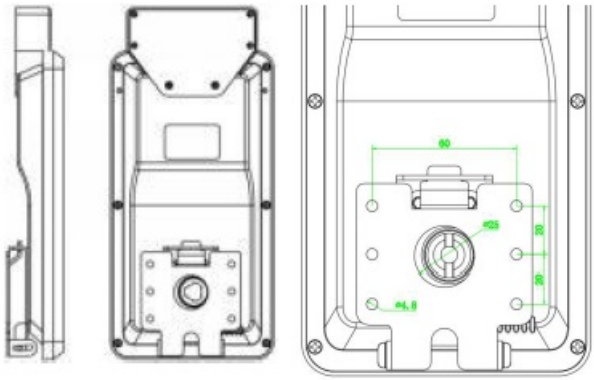
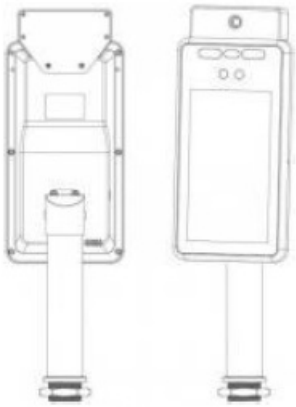
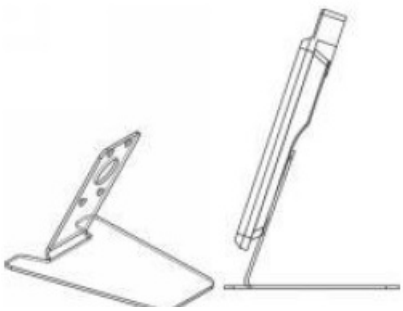


Wall-mounted



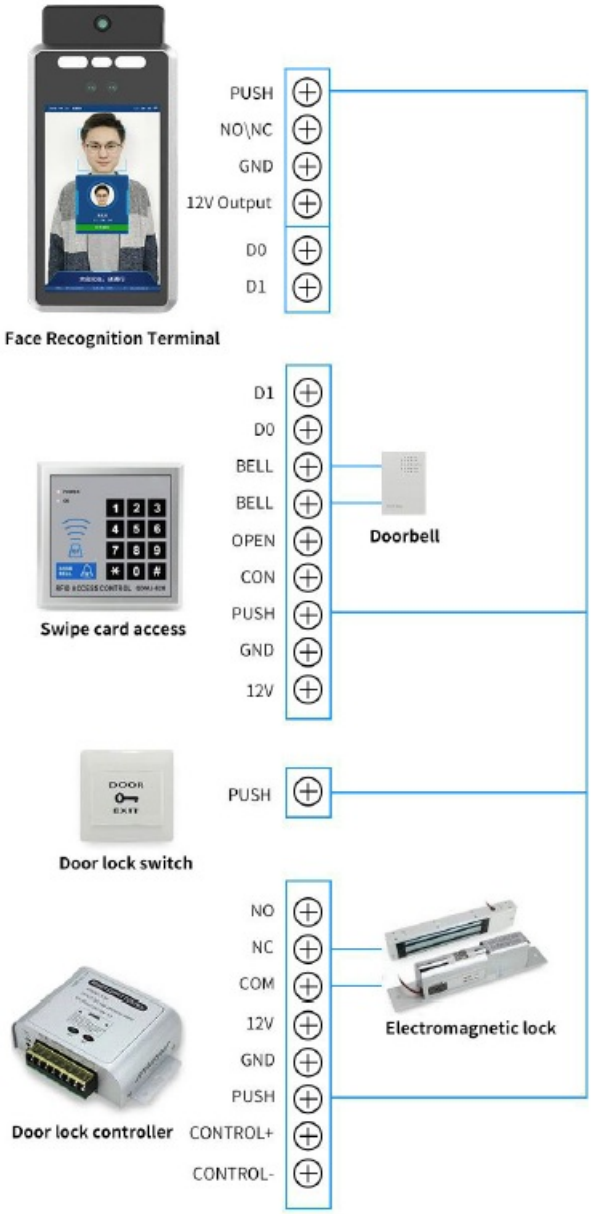
Desktop

Installation method

Installation Method	Picture Display	Remarks
Wall-mounted		Wall-mounted installation, can be fixed on the wall by installing the back plate
Upright		Upright installation, suitable for fixed equipment such as channel gate
Desktop		Desktop placement, can be moved at will, the scope of application is wider

Device installation

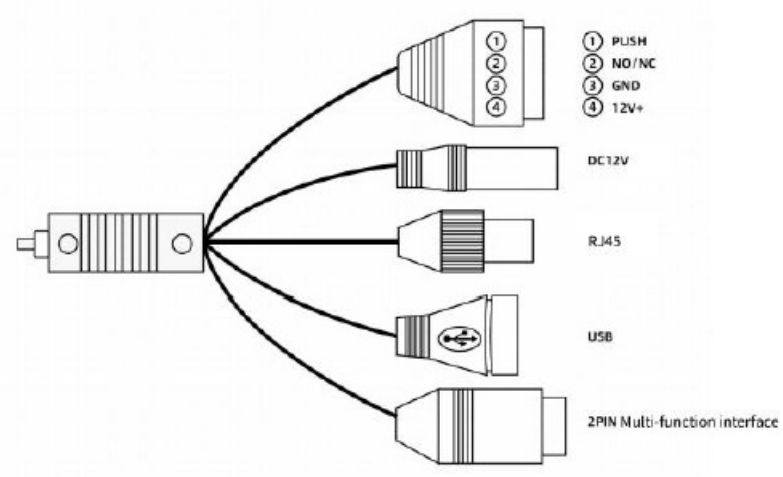
Note: The power controller needs to be connected to 220V, and other accessories can be connected with a network cable.



Interface Definition

The full-spec tail cable meets the needs of most scenarios,with relay control to open the door, including power supply, USB, RJ45, lock control,RS232 / UART (*)

* RS232 / UART multiplex an interface, optional



Line group		Function group	Line sequence	Terminal name
A	4 pin	Lock control signal	1	PUSH_OUT
			2	LOCK_NONC_12V
			3	GND
			4	12V OUT
B	5.5mm Round socket	power supply	1	12V in
			2	GND
C	RJ45	Ethernet	1	Ethernet
D	TypeA USB socket	USB Host	1	5V
			2	DN
			3	DP
			4	GND
E	2 pin	Optional RS232 / UART	1	D0 / TX
			2	D1 / RX

Electrical Performance

Project Definition		**Minimal**	**Typical**	**Maximum**
Power Parameters	Voltage	—	12V	—
	Electric Current	—	—	2000mA
	Total Power	—	—	15W
Electrical Parameters	Lock Control Signal Current	—	—	500mA
Environment	Relative Humidity	—	—	80%
	Operating Temperature	+20℃	—	+35℃
	Storage temperature	-25℃	—	+60℃

Precautions

1. After the machine is turned on, it takes about 15 minutes to heat up the machine to reach the thermal equilibrium state before use;
2. Do not use the machine outdoors, the machine does not have waterproof function;
3. During the installation and use of the machine, please strictly abide by the electrical safety regulations in the area of use;
4. Do not disassemble and repair the machine by yourself, otherwise it will affect the equipment warranty;
5. Avoid extreme environments such as extreme high temperature (or low temperature), high humidity, vibration, radiation, chemical corrosion, etc. during installation and use.

FCC STATEMENT

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.
   Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20cm between the radiator & your body.

Documents / Resources

	SIGNWAY DM1071-T Dynamic Detection Display [pdf] User Manual DM1071T, 2AW88-DM1071T, 2AW88DM1071T, DM1071-T, Dynamic Detection Display, Detection Display, DM1071-T, Dynamic Detection

References

Manuals+,