

Face Self-Check Access System

KEDACOM

Quick Start Guide

I. Preface

Thank you for purchasing our product. If there is any question, please do not hesitate to contact us.

These instructions are intended to ensure that the user can use the product correctly to avoid danger or property loss. Please read this Guide carefully before using the product, and keep it properly for future reference. If the product cannot work normally or is damaged because the user does not follow the safety instructions, we shall not assume any responsibility. Thanks for your cooperation.

II. Safety Instruction

1. Power Supply

- During installing and using the device, please follow local electrical safety regulations strictly.
- Please use power supply in the safe voltage range of our product. Make sure if the power supply is correct before running the device.

2. Working Environment

- Please transport, use and store the device within defined humidity and temperature ranges.
- Do not expose it in damp, dusty, extremely hot or cold places or places with intense electromagnetic radiation or with unstable lighting.
- Keep the camera away from water or any liquid to avoid damage to internal components.
- While shipping the camera, pack it in the factory packing or use materials with equivalent quality.
- When shipping, storing and installing the device, try to prevent it from damages caused by pressure, violent vibration and soaking.

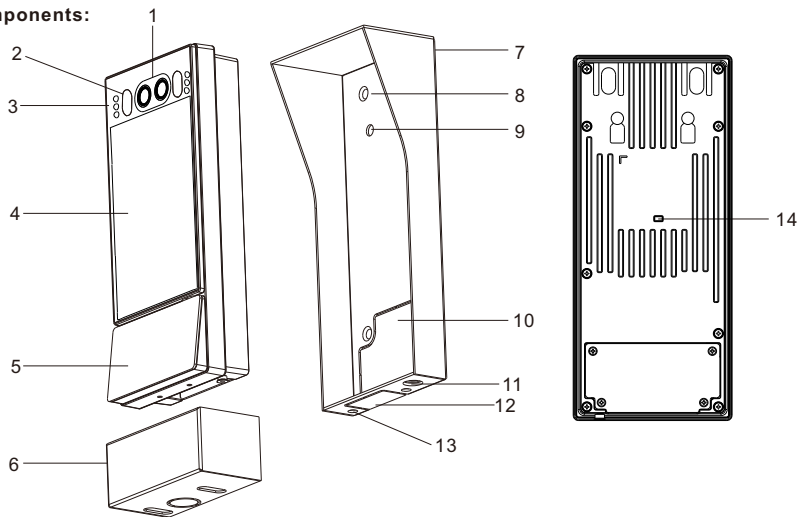
Working Environment	
Voltage	DC12V±10%, Power: 25W max
Temp.	-40°C~+60°C
Humidity	10%~95% (non-condensing)
Altitude	-60m~3000m
Pressure	86kPa~106kPa

3. Special Statement

- The product appearance is subject to the actual device and picture in this Guide is for reference only..
- Every effort has been made to ensure the accuracy and validity of this Guide. Any update of this Guide caused by version upgrade is subject to change without notice.
- This Guide is made for multiple models but it will not illustrate one by one. Please refer to it according to the actual products you are using.
- This device can be used after being activated through IPCSearch with a valid email address for claiming the password.
- To ensure the safety of device on internet, it is strongly recommended that you set a strong password which is composed of at least 2 kinds of the following, digits, case-sensitive letters or specific symbols, and whose length ranges from 8 to 16 bits. Please modify the password periodically and once every 3 months is recommended. If the device is used in highly risky environment, suggest modifying the password monthly or weekly. Please keep your user name and password safe.
- Accessing this device to the internet is at user's own risk, including but not limited to the possible network attack, hacker attack, virus infection and etc. This company will not assume any responsibility for problems of product abnormality and information disclosure caused thereof. We shall provide technical support relating to the products in time.
- For the latest documents, please download at our website www.kedacom.com.

III. Appearance and Interface

Components:

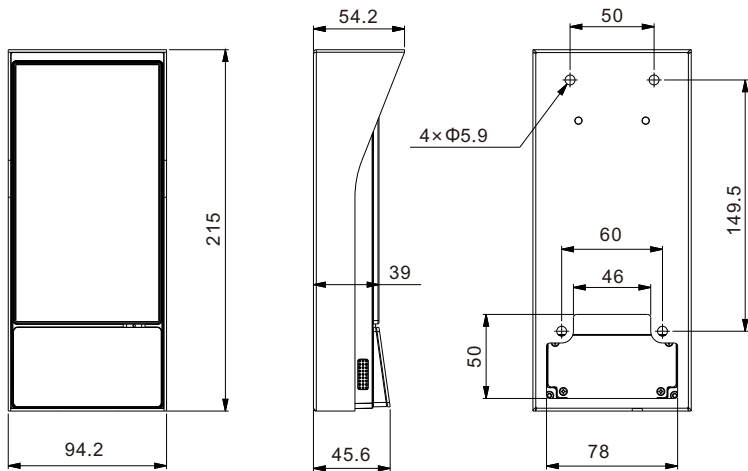


No.	Name	No.	Name
1	Lens	8	4xScrew Holes (fix wall)
2	White Fill Light	9	2xStaple Bolt
3	IR Light	10	Flange Plate
4	Screen	11	Locking Screw
5	Card Reader	12	Wire Hole
6	Junction Box	13	2x Screw Holes (fix junction box)
7	Shield	14	Tamper Button

[Note]

When install with the 86 box, the "Flange Plate" should be pinched off with a plier so that the buttcock line can be threaded out; when install without the 86 box, the "Wire Hole" should be pinched off with a plier so that the buttcock line can be threaded out.

Dimensions:



Unit: mm

Buttcock Line:

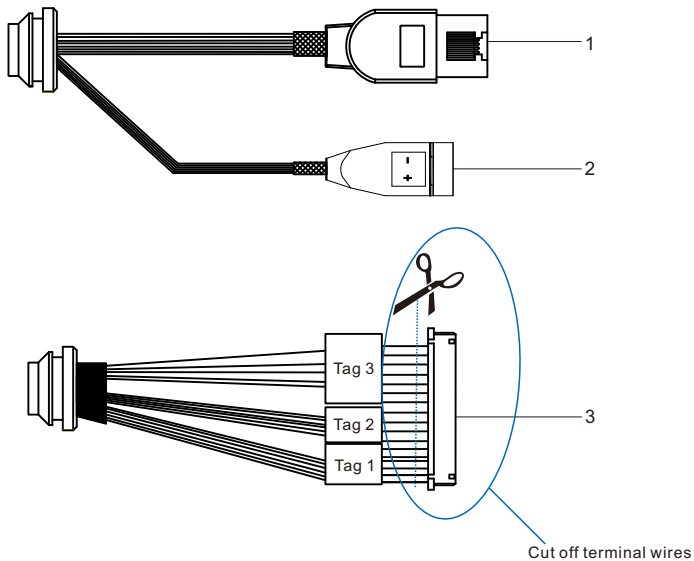


Table 1 Wire Interface

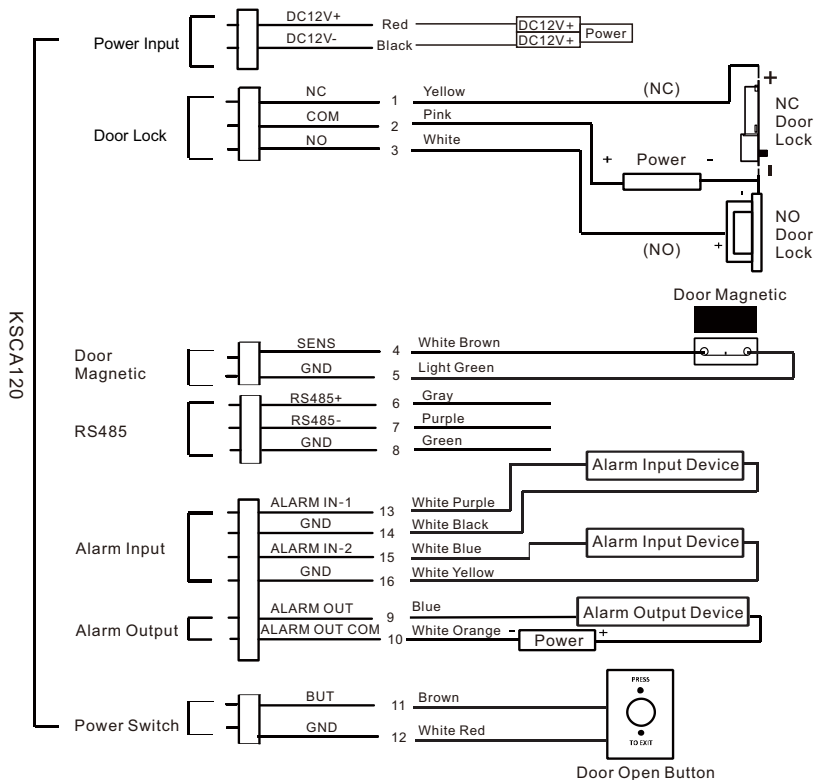
No.	Interface Name	Function Description
1	Network	Connect to network access devices like a switch
2	Power supply	Connect to power supply of DC12V
3	User cable group	Including alarm in /out, RS-485 serial port and etc.

Table 2 User Cable Group Interface

Interface	No.	Color	Port Name	Function Description
User Cable Group	1	Yellow	NC	Normally closed door lock port
	2	Pink	COM	Door lock port
	3	White	NO	Normally open door lock port
	4	White Brown	SENS	Door magnetic port
	5	Light Green	GND	Grounding
	6	Gray	Rs485+	RS-485 serial port, to control external devices such as third-party device
	7	Purple	RS485-	
	8	Green	GND	Grounding
	9	Blue	ALARM OUT	Alarm output port
	10	White Orange	ALARM OUT	Alarm output port
	11	Brown	BUT	Door-open button Port
	12	White Red	GND	Grounding
	13	White Purple	ALARM IN-1	Alarm input port
	14	White Black	GND	Grounding
	15	White Blue	ALARM IN-2	Alarm input port
	16	White Yellow	GND	Grounding

IV. Wire Connection

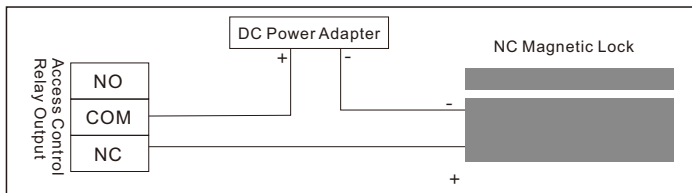
Cut off the user cable group and connect to RS-485, door lock, door-open button, door magnetic, alarm device and etc.



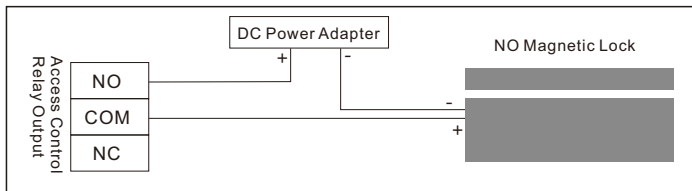
Connect to Door Lock

The device supports NO type and NC type locks, whose connection methods are different. Please refer to the following:

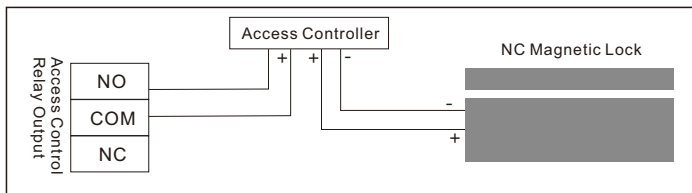
NC Magnetic Lock



NO Magnetic Lock



System with Access Controller



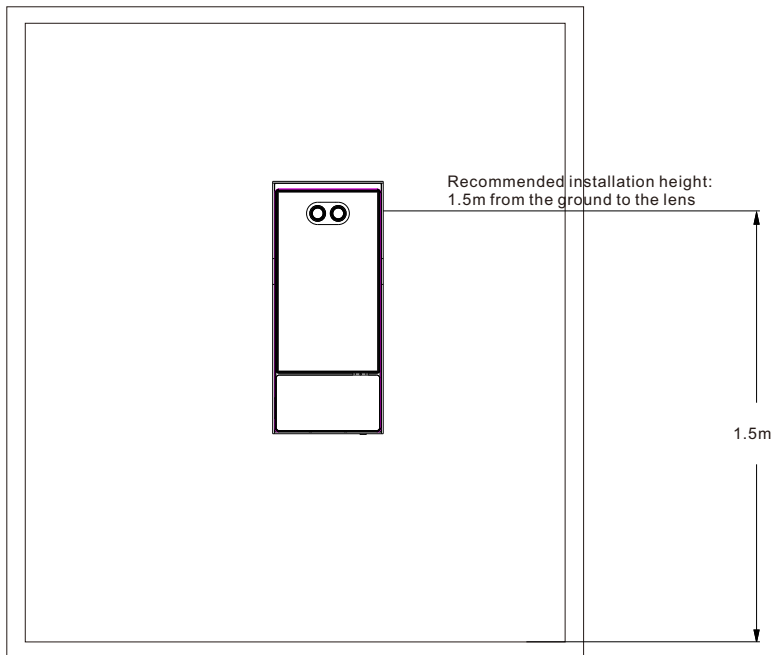
V. Installation

[Note] Please make sure the environment meets requirements before installation. For detailed instructions for the installation environment, please refer to the **Appendix**.

If install the device indoor, it should be at least 2m away from the light source and at least 3m from the window and door to avoid direct sunlight.

Please make sure the illumination of the light source in the environment is over 100 Lux.

The recommended installation height is 1.5m from the ground to the device lens, or you can adjust the height according to human height.

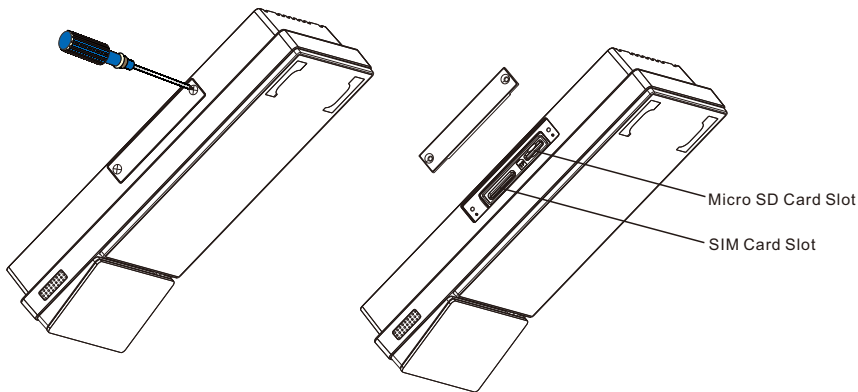


Install Micro SD Card and Nano SIM Card

[Note] Some models do not support Nano SIM card. Please subject to actual models.

The device supports Nano SIM card. Please cut the card by request.

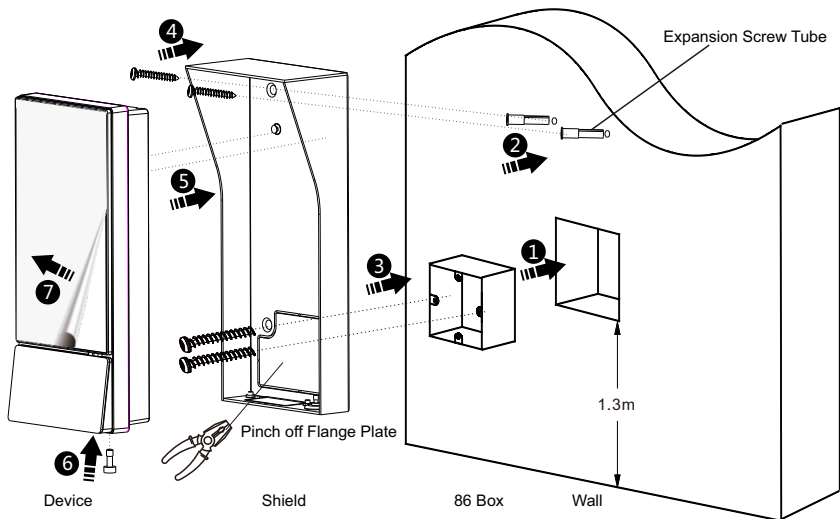
Loosen the screws to take down the card lid and then insert the Micro SD card and Nano SIM card, as shown below. After finish installation, tighten the screws and cover the card lid. The Micro SD card supports maximum 256G. After the Micro SD card is inserted, it cannot be hot-swapped and you must format the card for first time use.



[Note] After installing the Micro SD card and Nano SIM card, the card lid must be covered to avoid damages to the device caused by water leakage.

Install with 86 Box (Recommended)

For convenience and elegance sake, we recommend the installation method with 86 box.

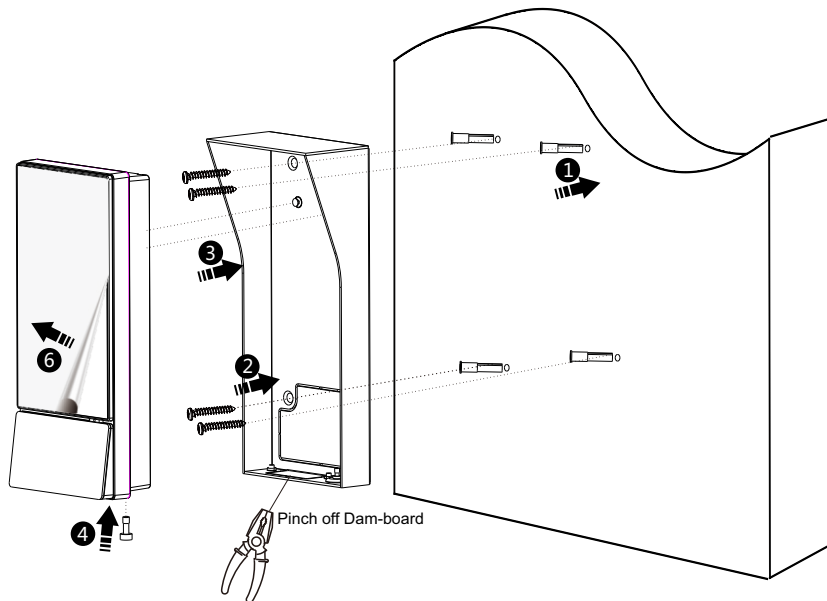


1. Install 86 box (the recommended installation height of 86 box is 1.3m from the ground);
2. Align the 2 screw holes at the bottom of the shield back to the 2 screw holes on 86 box, and use a marking pen to make marks on the wall at the 2 holes on the top, then drill holes and insert the expansion screw tubes;
3. Pinch off the flange plate on the shield with pliers, and then fix the shield onto the 86 box with two cross recessed countersunk head screws M4*50 (factory accessories);
4. Fix the shield onto the wall with two cross countersunk head stainless steel tapping screws ST3.9*25C (factory accessories);
5. Align the holes on the device back to the staple bolts on the shield, thread the staple bolts through the holes and pull down the device so that the device is hung on the shield. Thread the buttcock line of the device through the shield and place into the 86 box;
6. Tighten the fixing screws at the bottom and finish installation;
7. Peel off the protective film on the screen.

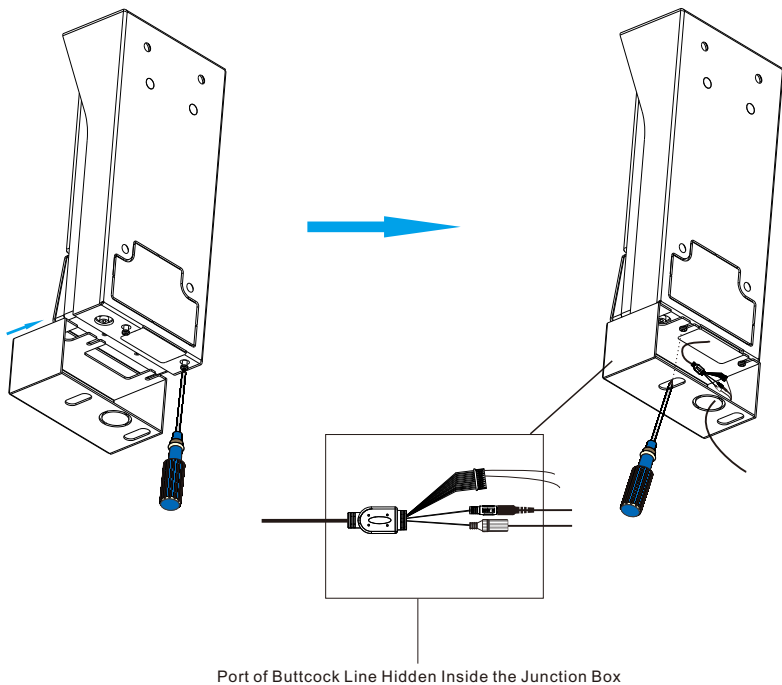
Install without 86 Box

If there isn't 86 box on the wall, the installation needs help of a junction box (factory accessories).

1. Drill holes on the wall according to the four holes on the shield and insert the expansion screw tubes;
2. Pinch off the dam-board at the wire hole on the shield with pliers, and then fix the shield onto the wall with four cross countersunk head stainless steel tapping screws ST3.9*25C (factory accessories);
3. Align the holes on the device back to the staple bolts on the shield, thread the staple bolts through the holes and pull down the device so that the device is hung on the shield. Thread the buttcock line through the wire hole;
4. Tighten the fixing screws at the bottom;



5. Twist the screws on the junction box halfway and cover the junction box as the picture indicates, then cross the screw-driver through the holes at the bottom of the junction box and tighten the screws to fix the junction box and the device. The port of the buttock line is placed inside the junction box and the buttock line is threaded out from the wire hole at the bottom of the junction box.

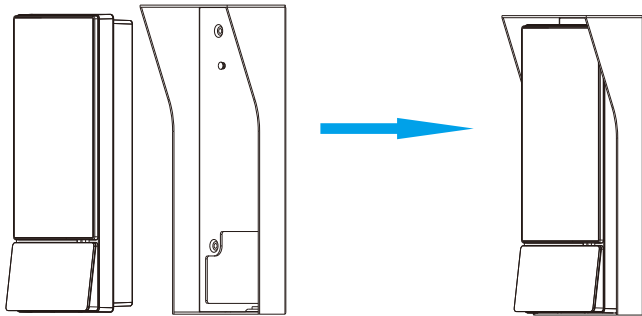


6. After finish installation, peel off the protective film on the screen.

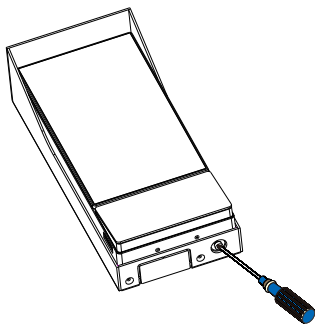
Install on No Punch Wall

[Note] When install the device on no punch wall, double-sided adhesive tape will be necessary. Before sticking the double-sided adhesive tape, please clean the back of the shield and the mounting wall surface so as to ensure the firmness of the double-sided adhesive tape.

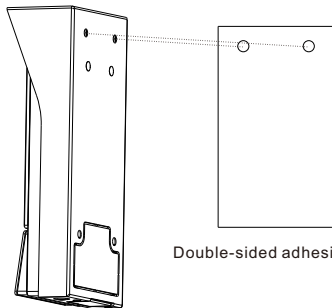
1. Pinch off the dam-board at the wire hole on the shield with pliers;
2. Align the holes on the device back to the staple bolts on the shield, thread the staple bolts through the holes and pull down the device so that the device is hung on the shield;



3. Tighten the screws at the bottom to fix the device and the shield.

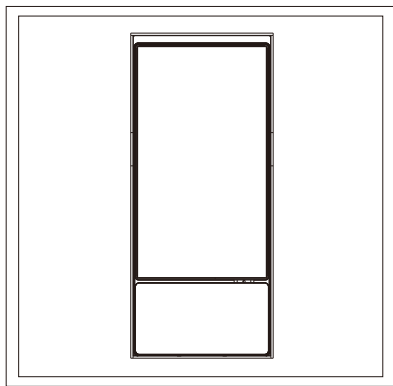


4. Clean the back of the shield and take out the double-sided adhesive tape from the attached accessories. Peel off one side of the tape and align the two round holes on it to the two screw holes on the top of the shield and press hard to stick the device onto the tape.

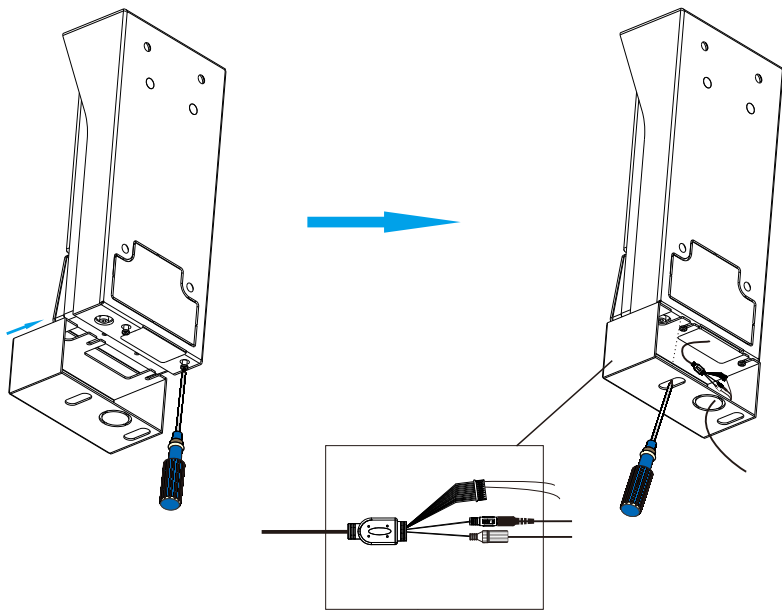


Double-sided adhesive tape for the shield

5. Confirm the installation position and clean the mount surface. Peel off another side of the tape and paste the whole device onto the wall and press it hard.

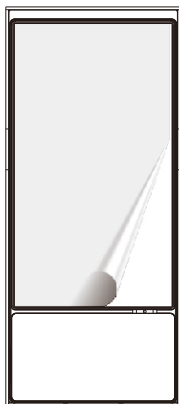


6. Twist the screws on the junction box halfway and cover the junction box as the picture indicates, then cross the screw-driver through the holes at the bottom of the junction box and tighten the screws to fix the junction box and the device. The port of the buttock line is placed inside the junction box and the buttock line is threaded out from the wire hole at the bottom of the junction box.



Port of Buttock Line Hidden Inside the Junction Box

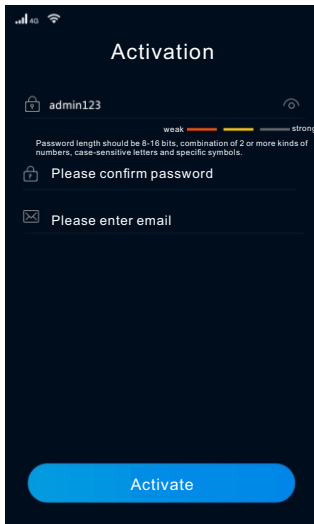
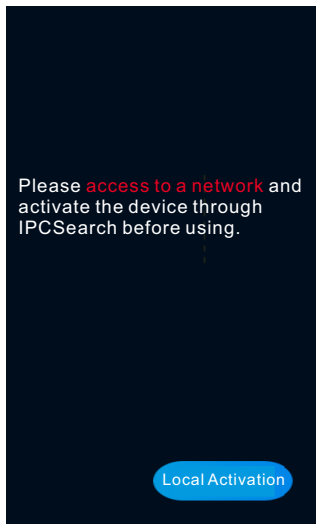
7. After finish installation, peel off the protective film on the screen.



VI. Startup

1. Activate Device.

You need to activate the device during first time of use. When the device is powered on, it will come to the activation interface, as shown below.



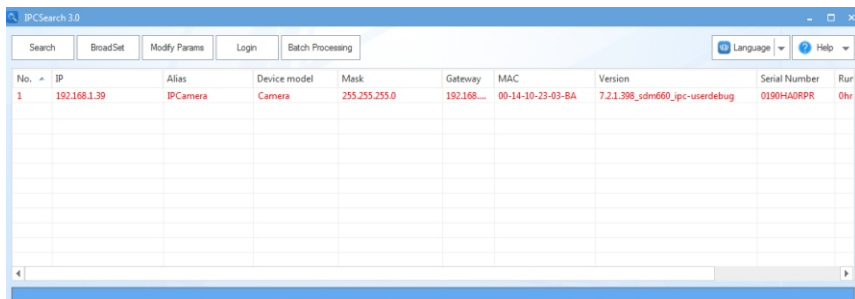
There are three methods to activate the device: activate through device, through IPCSearch and through Web client.

Activate Through Device

Click "**Local Activation**" on the interface as shown above and configure password, confirm password and email (for claiming password), and click "**Activate**" to finish.

Activate Through IPCSearch

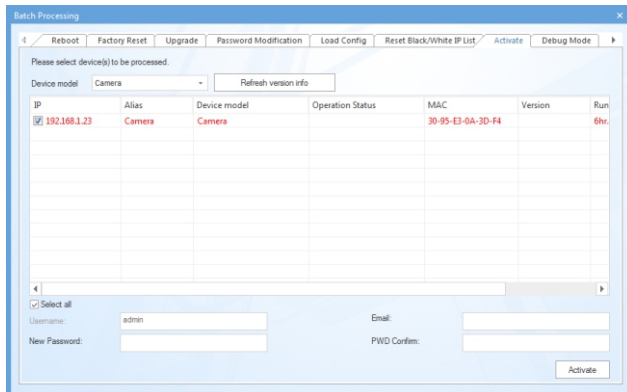
Download IPCSearch from our website. Install and run IPCSearch and it will search online devices in LAN automatically and display the list of device IP, alias, device model and etc. The device in red is non-activated one, as shown below.



The screenshot shows the IPCSearch 3.0 application window. At the top, there are buttons for Search, BroadSet, Modify Params, Login, and Batch Processing. On the right, there are Language and Help dropdown menus. Below these is a table with the following columns: No., IP, Alias, Device model, Mask, Gateway, MAC, Version, Serial Number, and Run. The first row contains the following data: No. 1, IP 192.168.1.39, Alias IPCamera, Device model Camera, Mask 255.255.255.0, Gateway 192.168..., MAC 00-14-10-23-03-8A, Version 7.21.398_sdm660_ipc-userdebug, Serial Number 0190HAORPR, and Run 0hr. The text in this row is red, indicating the device is non-activated.

No.	IP	Alias	Device model	Mask	Gateway	MAC	Version	Serial Number	Run
1	192.168.1.39	IPCamera	Camera	255.255.255.0	192.168...	00-14-10-23-03-8A	7.21.398_sdm660_ipc-userdebug	0190HAORPR	0hr

Select the non-activated device and click **"Batch Processing"** or right-click and select **"Activate"** to enter the activation interface, as shown below.



The screenshot shows the Batch Processing window. At the top, there are tabs for Reboot, Factory Reset, Upgrade, Password Modification, Load Config, Reset Black/White IP List, Activate, and Debug Mode. Below the tabs, there is a prompt: "Please select device(s) to be processed." Below this is a dropdown menu showing "Camera" and a "Refresh version info" button. Below that is a table with the following columns: Device model, IP, Alias, Device model, Operation Status, MAC, Version, and Run. The first row contains the following data: Device model Camera, IP 192.168.1.23, Alias Camera, Device model Camera, Operation Status (empty), MAC 30-95-E3-0A-3D-F4, Version (empty), and Run 6hr. Below the table, there is a "Select all" checkbox which is checked. Below that are fields for Username (admin), Email, New Password, and PWD Confirm. At the bottom right, there is an "Activate" button.

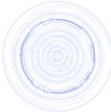
Device model	IP	Alias	Device model	Operation Status	MAC	Version	Run
Camera	192.168.1.23	Camera	Camera		30-95-E3-0A-3D-F4		6hr

Select the device(s) to be activated, enter new password, PWD confirm and email (for claiming password), and click **“Activate”** to finish. The device will reboot automatically.

Activate Through Web Client

Set the PC and the device in the same network segment and open the browser. Enter “http://device IP:8080/” to enter the web activation interface, as shown below. Enter new password, confirm new password and email (for claiming password), and click **“Activate”** to finish.

Login



WeakStrong

Please choose a password with 8-16 characters. Your password must also contain two or more combinations of upper and lowercase letters, numbers, and symbols.

When admin's password gets lost, find it back through this email. Make sure this email address is safe and valid.

2. Modify Params

Select the activated device from the IPCSearch and click **“Modify Params”** to modify network parameters on the popup interface. After finish, the device will reboot automatically.

Modify Faams

Device: Camera
 MAC: 00-14-10-0F-56-7D
 Type: Camera

Device Address

Auto-obtain device address(Open DHCP)
 Custom device address(Close DHCP)

IP Address: 10 . 255 . 236 . 51
 Subnet Mask: 255 . 255 . 248 . 0
 Gateway: 10 . 255 . 232 . 254

Modify VMS Registration Address

Enable LDAP

• IP Address: 10 . 255 . 232 . 241
 • Domain: www.example.com
 Port: 5510

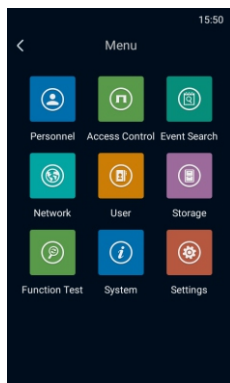
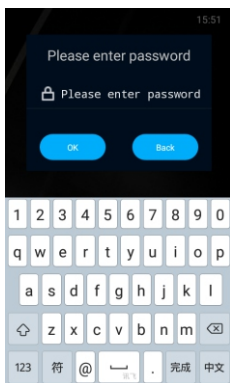
Username: admin
 Password:

Tip:
 Once the modification is saved,the device would reboot automatically and activate the settings.

OK Cancel

3. Login

Long-press on the screen for over 3 seconds and the login interface will pop up. Enter the password set during activation and login to the device. The main interface after login is as shown below:

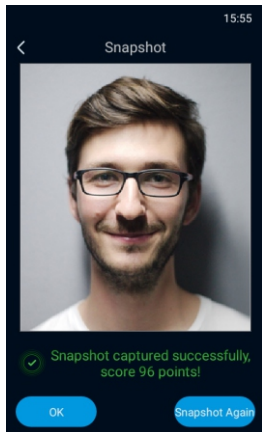
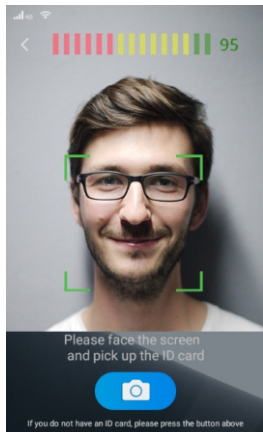


4. Personnel Registration

Tap Personnel - Personnel Registration to enter the interface.

Face toward the screen and tap the snapshot icon. There will be a voice prompt "Please face the screen and pick up the ID card". Capture a clear snapshot with proper size and tap "OK" to enter the registration interface and fill the blanks. If the snapshot fails to meet the requirements, please tap "Snapshot Again" to return to the snapshot interface.

When inputting personal information on the registration interface, if it fails to abstract personal features, the system will report errors and you need to return to the snapshot interface to re-capture a suitable snapshot.

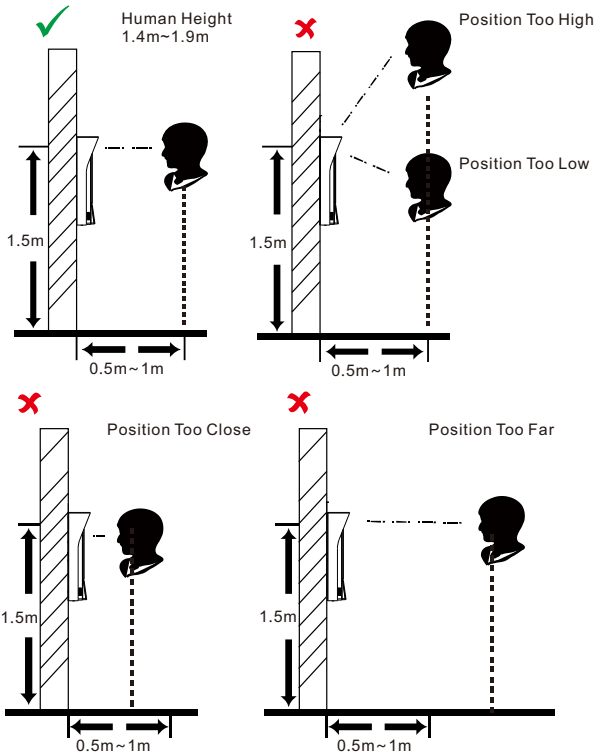


[Note] For more operations, please refer to the *User Manual*.

Appendix A: Instructions for Face Recognition

1. Position for Face Input/Comparison

Diagram of position for face input/comparison (e.g. standing 0.5m to 1m away from it).



2. Gesture for Face Input/Comparison

Facial Expression:

To ensure the face input quality and comparison sharpness, please maintain natural expressions during the input/comparison (as shown below).

During face input, please do NOT wear decorations such as hats or sunglasses which may affect face collection; please do NOT veil your face with the fringe hair; please do NOT wear a heavy makeup.



Natural Facial Expression

Facial Gesture:

To ensure the face input quality and comparison sharpness, please make sure your face is dead against the face input window during input/comparison.

Diagram of gesture for face input/comparison is shown below:

Normal ✓



Slanted ✗



Profile ✗



Raised ✗



Lowered ✗



Diagram of Gesture for Face Input/Comparison

Adjustment of Face Size:

During registration, please try to place your face at the center of the window. Diagram of face size adjustment is shown below:

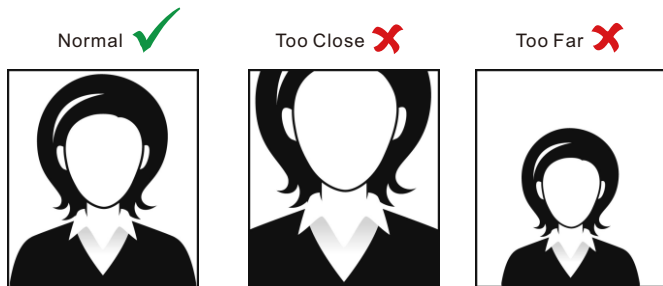


Diagram of Face Size Adjustment

Appendix B: Instructions for Installation Environment

1. Light Source Reference for Installation



Candle: 10 Lux



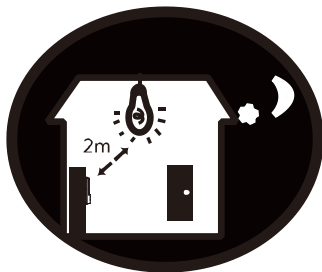
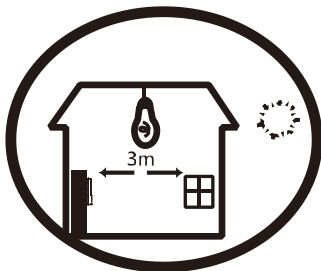
Bulb: 100~850 Lux



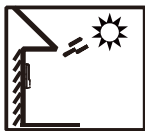
Sunlight: over 1200 Lux

2. The minimum light source 0.5m away from the device should not be less than 100 Lux.

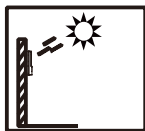
3. If install the device indoor, please keep a distance of at least 2m from the light source and at least 3m from the window and door.



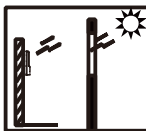
4. Avoid backlight, direct sunlight, direct sunlight through window, slanted sunlight through window or short distance irradiation of lamplight.



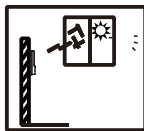
X Backlight



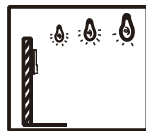
X Direct Sunlight



X Direct Sunlight
Through Window



X Slanted Sunlight
Through Window



X Short Distance
Irradiation of
Lamplight

Appendix C: DC12V Wire Diameter VS. Transmission Distance

The recommended max transmission distance when the wire diameter is certain and the DC12V voltage loss rate is less than 10% (For DC12V powered devices, the maximum allowed voltage loss rate is 10%. All the wires in the following table are cooper wires, whose electrical resistivity is $\rho = 0.0175\Omega \cdot \text{mm}^2/\text{m}$)

Distance (m) Power (W)	Diameter (mm)	0.8 (20AWG)	1.0(18AWG)	1.25(16AWG)	2.0(12AWG)
	5		38 (125)	61 (199)	96 (315)
10		19 (63)	30 (99)	48 (157)	122 (400)
15		13 (42)	20 (66)	32 (105)	81 (267)
20		10 (31)	15 (50)	24 (79)	61 (200)
25		8 (25)	12 (40)	19 (63)	49 (160)
30		6 (21)	10 (33)	16 (52)	41 (133)
35		5 (18)	9 (28)	14 (45)	35 (114)
40		5 (16)	8 (25)	12 (39)	31 (100)
45		4 (14)	7 (22)	11 (35)	27 (89)
50		4 (13)	6 (20)	10 (31)	24 (80)
55		3 (11)	6 (18)	9 (29)	22 (73)
60		3 (10)	5 (17)	8 (26)	20 (67)
65		Note 1	5 (15)	7 (24)	19 (62)
70		Note 1	4 (14)	7 (22)	17 (57)
75		Note 1	4 (13)	6 (21)	16 (53)
80		Note 1	4 (12)	6 (20)	15 (50)
85		Note 1	4 (12)	6 (19)	14 (47)
90		Note 1	3 (11)	5 (17)	14 (44)
95		Note 1	3 (10)	5 (17)	13 (42)
100		Note 1	3 (10)	5 (16)	12 (40)

[Note]:

1. When the transmission power is over 60W, you must use wires with diameter of 1.0 (18AWG) or above;
2. The requirements of diameter apply to single, solid and round cooper wire. The AWG value of multi-stranded wires is dependent on the total CSA (Cross Sectional Area) of all wires.

Kedacom Two (2) Year Limited Hardware Warranty

WHAT IS COVERED BY THIS WARRANTY?

Kedacom warrants the Kedacom-branded hardware product and accessories contained in the original packaging (hereinafter referred to as "Kedacom Product") against defects in materials and workmanship when used normally in accordance with Kedacom's published guidelines for a period of TWO (2) YEARS from the date of original retail purchase in areas other than mainland China by the end-user purchaser (hereinafter referred to as "Warranty Period"). For the Kedacom Product purchased in mainland China, see the simplified Chinese version of this warranty for details. Kedacom's published guidelines include but are not limited to information contained in technical specifications, user guides, and service communications. The preceding applies unless otherwise agreed in the contract.

WHAT IS NOT COVERED BY THIS WARRANTY?

This warranty does not apply to any non-Kedacom branded hardware products or any software, even if packaged or sold with Kedacom hardware. Manufacturers, suppliers, or publishers, other than Kedacom, may provide their own warranties to you but Kedacom, in so far as permitted by law, provides their products "AS IS". Software distributed by Kedacom with or without the Kedacom brand (including, but not limited to system software) is not covered by this warranty. Please refer to the licensing agreement accompanying the software for details of your rights with respect to its use. Kedacom does not warrant that the operation of the Kedacom Product will be uninterrupted or error-free. Kedacom is not responsible for damage arising from failures to follow instructions relating to the Kedacom Product's use.

This warranty does not apply: (a) to consumable parts, such as batteries, unless failure has occurred due to a defect in materials or workmanship; (b) to cosmetic damage, including but not limited to scratches, dents, and broken plastic on ports; (c) to damage caused by use with another product; (d) to damage caused by acts outside the control of Kedacom, including without limitation acts of God, accidents, abuse, misuse, fire, storms, earthquakes, flood, or other external cause; (e) to damage caused by exposure of the product to heat, bright light, sun, liquids, sand, or other contaminants; (f) to damage caused by operating the Kedacom Product outside Kedacom's published guidelines; (g) to damage caused by service (including upgrades and expansions) performed by anyone other than a representative of Kedacom, Kedacom employee, or authorized Kedacom agent; (h) to an Kedacom Product that has been modified to alter functionality or capability without the written permission of Kedacom; (i) to defects caused by normal wear and tear or otherwise due to the normal aging of the Kedacom Product, or (j) if any serial number has been removed or defaced from the Kedacom Product.

YOUR RESPONSIBILITIES

If your Kedacom product is capable of storing data and other information, you should make periodic backup copies of the information contained on the storage media to protect the contents and as a precaution against possible operational failures.

Before receiving warranty service, Kedacom or its authorized agents may require that you furnish proof of purchase details, respond to questions designed to assist with diagnosing potential issues, and follow Kedacom's procedures for obtaining warranty service. Before submitting your Kedacom Product for warranty service, you should maintain a separate backup copy of the contents of its storage media, remove all personal information that you want to protect, and disable all security passwords.

During warranty service, it is possible that the contents of the Kedacom product's storage media will be lost, replaced or reformatted. In such an event, Kedacom and its authorized agents are not responsible for any loss of data or other information contained on the storage media or any other part of the Kedacom product serviced.

Following warranty service, your Kedacom Product or a replacement product will be returned to you as your Kedacom Product was configured when originally purchased, subject to applicable updates. You will be responsible for reinstalling all other data and information. Recovery and reinstallation of other data and information are not covered under this warranty.

WHAT WILL KEDACOM DO IF THE WARRANTY IS BREACHED?

If during the Warranty Period, you submit a valid claim to Kedacom or an authorized Kedacom agent, Kedacom will, at its option, (i) repair the Kedacom Product using new or previously used parts that are equivalent to new in performance and reliability, or (ii) exchange the Kedacom Product for a refund of your purchase price.

A Kedacom replacement part or product, including a user-installable Kedacom part that has been installed in accordance with instructions provided by Kedacom, assumes the remaining warranty of the Kedacom Product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage for you. When a product or part is replaced or a refund provided, any replacement item becomes your property and the replaced or refunded item becomes Kedacom's property.

Kedacom reserves the right to refund the purchase price as its exclusive warranty remedy.

HOW TO OBTAIN WARRANTY SERVICE?

To seek warranty service, please contact a local authorized Kedacom agent. When contacting the agent via telephone, other charges may apply depending on your location.

User Information

Complete the form below and keep for ready reference.

User Name:	
Address:	Postal Code:
Tel:	Mobile:
Fax:	E-Mail:
Product Name:	Product Model:
Date of Purchase:	

KEDACOM

Suzhou Keda Technology Co.,Ltd.

China: 131, Jinshan Road, New District, Suzhou 215011, P.R.China Tel: +86-512-6841-8188 Fax: +86-512-6841-2699 Http: //www.kedacom.com

Singapore: 627A Ajunied Road, #09-07, BizTech Centre, Singapore 389842 Tel: +65-6842-5700 Fax: +65-6842-5900 Email: info@kedacom.com

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