

User Manual

KF1000 Series

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Thank you for choosing our product. Please read the instructions carefully before operation. Follow these instructions to ensure that the product is functioning properly. The images shown in this manual are for illustrative purposes only.



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About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the operations of **KF1000 Series**.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Features and parameters with \star are not available in all devices.

Document Conventions

Conventions used in this manual are listed below:

GUI Conventions

For Device		
Convention Description		
<>	Button or key names for devices. For example, press <ok>.</ok>	
[]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window.	
1	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].	

Symbols

Convention	Description		
	This represents a note that needs to pay more attention to.		
Ÿ	The general information which helps in performing the operations faster.		
*	The information which is significant.		
۷	Care taken to avoid danger or mistakes.		
	The statement or event that warns of something or that serves as a cautionary example.		

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1 <u>Overview</u>

1.1 Introduction

KF1000 series is the innovative visible light facial recognition reader dedicated to InBio series biometric controller to adopt facial recognition technology, offering one of the fastest, most stable, most accurate facial recognition experiences in the industry.

As a new-era biometric reader, KF1000 series is equipped with a 100Mbps high-speed TCP/IP port for face templates and data synchronization. Wiegand and RS485 ports are also available to communicate with InBio Controllers for authentication use. The whole system is compiled with the ZKTeco Cyber Security Base Line (ZKCSBL) to ensure that users' data is under the finest protection that ZKTeco can offer.

1.2 Features

- Equipped with ZKTeco visible light facial recognition, offering one of the best facial recognition technologies in the industry.
- Supports up to 1,500 facial/30,000 cards/100,000 records.
- Supports multiple communication ports, TCP/IP, Wiegand output, RS485.
- User-friendly on-board web server for quick system configuration.
- Fully compatible with inBio Series controller and ZKBioAccess security platform.
- Fully complied with ZKCSBL (ZKTeco Cyber Security Base Line). Standard to provide advance protection.

1.3 Appearance

KF1100



Back Plate



Figure 1-1 KF1100 & KF1200 Appearance Table 1-1 Description

No.	Description		
1	Flash		
2	Camera		
3	Near-Infrared Flash		
4	LED Indicator		
5	Receive Antenna / Card Reading Area		
6	Speaker		
7	Tamper Switch		
8	Restart Button		
9	Reset Button		
10	Mounting Hole		
11	Wiring Hole		

Remark :

• If you forget the WebServer password, you can restore the factory settings by pressing and holding the **Reset Button** for **5** seconds, and then logging in again with the initial password. This function does not have any clear registered user data.

2 Terminal and Wiring Description

2.1 Terminal Description



Figure 1-2 Terminal Description Table 1-2 Description of Terminal and Interfaces

Name	Interface	Description
Power	GND	12V DC Input
	GND	Note:
	+12V	Minimum AC adapter: 12V, 1.5A ,
	+12V	Recommended AC adapter: 12V, 3A .
Wiegand Out	WD2	Wiegand Output2
	WD1	Wiegand Output1
	GND	Grounding

Name	Interface	Description
Веер	BEEP	Beep Input
Red LED	LED-R	Red LED Input
Alarm	ALARM	Alarm Input
	GND	Grounding
RS485	485A	RS-485 Communication Interface
		For connecting to DM10/OSDP Output.
	485B	Note:
	4030	User need to enable the DM10/OSDP Output
		function on the WebServer to access it.
Ethernet	LAN	Network Interface

2.2 Wiring Description

2.2.1 Power Wiring



Figure 1-3 Power Wiring

Notes:

- Minimum AC adapter: **12V, 1.5A**, Recommended AC adapter: **12V, 3A**.
- To share the power with other devices, use an AC adapter with higher current ratings.
- Users need to configure their own suitable power adapter according to the product power specifications.

2.2.2 InBio Wiring



Figure 1-3 InBio Wiring

Notes:

- The KF1000 series is connected to the background management system by connecting with the InBio series controller. After the controller sends the data to the KF1000 series device, the user can perform face verification on the device. It is also possible to connect the reader with the input device and output device through the controller to form a complete control system to achieve high security level access control and intelligent management of entrances and exits.
- For more details, please refer to the InBio User Manual and ZKBioAccess IVS User Manual.

2.2.3 DM10 Wiring



Figure 1-4 DM10 Wiring

Notes:

- The DM10 can only be used in software if it is connected to the KF1000 series via RS485.
- You need to manually enable the DM10 function on the Webserver to access it. It can be turned on via the following path: [Advanced Settings] > [Serial Comm] > [Serial Port] > [DM10].
- Set the 485 address of DM10 to 1.
- A KF1000 series only supports connecting one DM10.
- Each device requires a separate power supply.
- The DM10 can be extended to connect the smoke detector, Wiegand Reader, Door Sensor, Exit Button and Alarm.

3 Installation Set-up

3.1 Safety Precautions

- Make sure the device in the package is in good condition and all the assembly parts are included.
- Make sure that the operating voltage is the same one labelled on the attendance device.
- Make sure all the related equipment is power-off during the installation.
- Keep the device away from water or dampness. Prevent water or moisture from entering the chassis of the attendance device.
- Do not place the device on an unstable case or desk. The device might be damaged severely in case of a fall.
- Do not open the chassis when the attendance device is operating or when electrical hazards are present to avoid electrical shocks.

3.2 Installation Site

The device must be installed indoors adequate clearance is reserved at the air inlet/exhaust vents for heat dissipation.

3.3 Installation Steps

Make sure that the device is installed as per the installation instructions. Otherwise, you will bear any consequence resulting from your actions.

- **Step 1:** Attach the mounting template sticker to the wall, and drill holes according to the mounting paper.
- **Step 2:** Fix the back plate on the wall using wall mounting screws.

- **Step 3:** After passing the wires through the wiring hole and connecting them to the device, and then attach the device to the back plate from top to bottom.
- Step 4: Fasten the device to the back plate with a security screw.



Figure 1-5 KF1000 Series Installation

Note:

• The installation method of KF1200 is the same as that of KF1100. Only KF1100 is used as an example, and will not be repeated here again.

4 Configuration via WebServer

4.1 Login to the WebServer

After the device is powered on, connect the device using a network cable. Then open the recommended browser and input the IP address and server port in the address bar. The IP address is set as: https://device IP address: Port (for example: https://192.168.1.201:1443).

- Device IP address: 192.168.1.201 is the default. You can modify the address on the WebServer through the following path: [Advanced Settings] > [COMM.] > [IP Address].
- **Port: 1443** is the default.

Login to the WebServer

After opening the webserver login page. You may input the username which is **[Admin]** by default. And the default password for the new user is **[admin@123]**.

(a) 2K https://192.168.1.201:1443/login.html	▼ ② 近形描述 C 撤業	- □ ×
zx 192.168.1.201 x	* ¥ 200000 1000.	107 243 183 V
	A Password	
	Login	

Change the Password

After the first login, please change the password; otherwise, the webserver function will be locked.

ZKTECO		
System Info	After the first login, pleas	se change the password, otherwise, the webserver function is locked.
Change Password		
	Enter the Current Password	
	Enter a New Password	Enter a new password at least 8 characters. It must contain special characters, numbers an upper and lower case letters.
	Confirm Password	
		Canfirm

4.2 System Information

The System Information includes the device, device capacity and firmware information.

4.2.1 Device Information

The Device Information displays the Device Name, Serial Number, MCU Version, MAC Address, Face Algorithm, Platform Information, Manufacturer, and Manufacture Date.

em Info	Device Info	
vice Capacity	Device Name	KF1100
rmware info	Serial Number	7637220500017
er Mgt.	MCU Version	60
ll Users		
lvanced Settings	MAC Address	00:17:61:00:02:d9
OMM.	Face Algorithm	ZKFace VX3.5
loud Service Setup	Platform Info	ZMM510_TFT
/IFI Settings		
ate Setup	Manufacturer	ZKTECO CO., LTD.
ystem	Manufacture Date	2022-04-25 19:38:09

4.2.2 Device Capacity

The Device Capacity displays the User Capacity, Admin User, Password, the used/max capacity of Face, the used/max capacity of Card, and the used/max capacity of T&A Record.

System Info	Device Capacity	
Device Info		
Device Capacity	User (used/max)	1/30000
Firmware Info	Admin User	0
User Mgt.	Password	0
All Users	Fassword	0
Advanced Settings	Face (used/max)	1/1500
сомм.	Card (used/max)	1/30000
Cloud Service Setup	T&A Record (used/max)	23/100000
WIFI Settings	and the second second	

4.2.3 Firmware Information

Displays the firmware version and other version information of the device.

System Info	Firmware Info	
Device Info		
Device Capacity	Firmware Version	ZMM510-NFNSA-Ver1.1.1
	Bio Service	Ver 2.1.12-20220411
User Mgt.	Push Service	Ver 2.0.33S-20211012
All Users Advanced Settings	System Version	zmm500 v3.7.5 commit.669e1020c Mar 10 2022 10:49:05 CST
сомм.	Standalone Service	Ver 2.1.6-20211012
Cloud Service Setup	Dev Service	Ver 2.0.1-20220411
WIFI Settings Date Setup	Web Service	Ver 2.0.1.001-20220509
System	Licdm Service	Ver 1.13-20220301
Serial Comm	Mginit Service	Ver 1.13-20220301
Face Autotest	Libopts Service	Ver 1.06-20210201

4.3 User Management

You can manage the basic information of the registered users, including User ID, Name, Rights, Card Number, and Verification Mode in the User Management.

ZKTECO							1
System Info	User Mgt.						
Device Capacity	New User D	kelete User		Q O			
Firmware Info	0	User ID	Name	Rights	CardNumber	Verification Method	Operation
Jser Mgt.		User D	rung	rigits	Cardivander		Operation
	0	1	Mick	Normal User	7228074	200	Change User Info Delete User
dvanced Settings							14 C 1/1 5
сомм.							
WIFI Settings							
Date Setup							
lystem							
System Serial Comm Face Autotest							

4.3.1 Add User

1. Click [User Mgt.] > [All Users] > [New User] to register a new user.

ZKTECO				
System Info	Basic Info			
Device Info				
Device Capacity	User ID	2		
Firmware Info	Name	Lucy		
User Mgt.				
All Users	Rights	Normal User	~	
Advanced Settings	Password	•••••		
сомм.	Card Number	7228074		Register
Cloud Service Setup	Access Control Role	1	~	
WIFI Settings				
Date Setup		Confirm	Back	
System				
Serial Comm				
Face	Online Registration			
Autotest				
Wiegand Setup	Face		Register	
Device Management				
Device Management				
Update Firmware				

- 2. Enter the User ID, Name, Password, Card, setting user role and access control role.
- 3. Click [**Register**] on the card number bar and then place the card in the card induction area to register. After successful registration, the card number will be displayed on the input field.
- 4. After entering the basic information, click [**Confirm**] to save and then the interface will pop up a "**Enrolled Successfully!**" prompt.
- 5. Select **Face** on the **Online Registration** window and click [**Register**] to enter the face registration mode. Then users need to face the camera and adjust the position of the face according to the prompt of the LED indicator of the device, so that all the important features of the face can be captured by the camera. Then stay still for a while during face registration until registration is successful and the LED indicator turns green.

4.3.2 Search for Users

Select the **All Users** option in the **User Mgt.** Then enter the retrieval keyword in the search bar of the user list (keyword may be an ID, surname, or full name). The system will search for the users related to the entered information.

4.3.3 Edit User

Choose a user from the list and select **Change User Info** to enter the edit user interface.

Note:

• The operation of editing a user is the same as that of adding a user, except that the user ID cannot be modified when editing a user's detail.

4.3.4 Deleting Users

Choose a user from the list and select **Delete User**, all information of the user will be deleted.

4.4 Advanced Settings

On the advanced setting interface to set the relevant parameters as required. It includes options like Communication Settings, Cloud Server Setup, Wireless Network, Data Setup, System Settings, Serial Comm, Face Setting, Autotest, and Wiegand Setup.

4.4.1 Communication Settings

When the device needs to communicate with a PC over the Ethernet, you need to configure network settings and ensure that the device and the PC are connecting to the same network segment.

ZKTECO		
System Info	IP Setup	
Device Info		
Device Capacity	Automatic Acquisition	\bigcirc
Firmware Info	IP Address	192.168.1.201
User Mgt.	Subnet Mask	255.255.255.0
All Users	Gateway	192.168.1.1
Advanced Settings		192.106.1.1
сомм.	DNS	114.114.114.114
Cloud Service Setup		Confirm
WIFI Settings		
Date Setup		
System		
Serial Comm		

- **IP Address:** The default value is 192.168.1.201, it can be modified according to the available network parameters.
- **Subnet Mask:** The default value is 255.255.255.0, it can be modified according to the available network parameters.
- Gateway: The default value is 0.0.0.0, it can be modified according to

the available network parameters.

 DNS: The default value is 0.0.0.0. Please set them according to the actual network situation.

4.4.2 Cloud Server Setting

The Cloud Server setting option helps to set different configurations used for connecting with the ADMS server.

ZKTECO			
System Info	Cloud Server Settings		
Device Info			
Device Capacity	Enable Domain Name	\bigcirc	
Firmware Info	Cloud Server Address	192.168.163.61	
User Mgt.	Cloud Service Port	8088	
All Users	HTTPS		
Advanced Settings	Proxy Server Setup	$\overline{\mathbf{O}}$	
сомм.		Confirm	
Cloud Service Setup			
WIFI Settings			
Date Setup			
System			

- Enable Domain Name: When this function is enabled, the domain name mode "http://..." is used, such as <u>http://www.XYZ.com</u> (XYZ denotes the domain name). When this mode is turned OFF, you need to enter the IP address and port to connect to the WebServer.
- Cloud Server Address: IP address of the ADMS server is required.
- **Cloud Server Port:** Port used by the ADMS server is required.
- **HTTPS:** It is an HTTP channel with security as its goal. Based on HTTP, transmission encryption and identity authentication ensure the security

of the data transmission process.

 Proxy Server Setup: When a proxy is enabled, you need to set the IP address and port number of the proxy server.

4.4.3 <u>Wireless Network★</u>

The device supports the Wi-Fi module, which is built-in within the hardware, to enable data transmission via Wi-Fi and establish a wireless network environment. By default, the Wi-Fi is turned off. The user needs to enable and set the related parameters on the WebServer.

ZKTECO			
System Info	Add a WIFI network		
Device Info			
Device Capacity	WIFI		
Firmware Info	SSID	KF1000 WIFI	
User Mgt.	Network mode	INFRA	~
All Users	Authentication type	WPA2PSK	~
Advanced Settings	Encryption mode	NONE	
сомм.		NONE	~
Cloud Service Setup	Password		
WIFI Settings	Connection status	Connecting	
Date Setup		Confirm	
System			
Serial Comm			

- Click the button to enable Wi-Fi function.
- When Wi-Fi is enabled, you need to enter the SSID and Password in the text box and then click [Confirm].
- After successful verification, the connection status will display "Connected".

4.4.4 Data/Time Settings

em Info	Date Setup		
ce Info			
ce Capacity	Configuration Mode	Auto O Manual	
ware Info		"Manual" means to input time manually, "Auto" means the time that will be retrieved automatically.	
Mgt.	Server Date and Time	2022-05-14 09-44:09	
lsers	Device Date and Time	2022-05-14 09:44:09 (YYYY-MM-DD ~ HH:MM:SS)	
nced Settings			
ім.		Confirm	
d Service Setup			
Settings			
Setup			
em			
em al Comm			
em al Comm	Daylight Saving Mode	Close v	
em al Comm stest	Daylight Saving Mode	Close Daylight Saving Mode 1	
em al Comm stest gand Setup			
em al Comm stest gand Setup ce Management ce Management ate Firmware	By Date/Time	Daylight Saving Mode I	
em al Comm vitest gand Setup ce Management ce Management tate Firmware nge Password	By Date/Time Daylight Saving Time	Daylight Saving Mode I 00-00 (MM-DD) - 00.00 (MM-DD) -	
em al Comm stest gand Setup ce Management ce Management ate Firmware	By Date/Time Daylight Saving Time End of Day Lightsaving	Daylight Saving Mode I 00-80 (MM-DD) - 00.80 (HEMM) 00-80 (MM-DD) - 00.00 (HEMM) Daylight Saving Mode II Daylight Saving Mode II Daylight Saving Mode II	

- Configuration Mode: To configure data and time, including automatic input and manual input. When Manual is selected, the date and time of the device can be entered manually.
- **Daylight Saving Mode:** Enable or disable the Daylight Saving Time Mode, by date/time mode and by week/day mode for selection.

Notes:

DST, which is also called **Daylight Saving Time**, is a system adjusting local time to save energy. The time adopted during the set dates is called "DST". Usually, the time will be one hour forward in summer. This enables users to sleep or get up earlier, and also reduce device's lighting to save power. In autumn, the time will resume the standard time. Regulations are different in

different countries. At present, nearly 110 countries adopt DST.

- To meet the demand of DST, a special option can be customized. Make the time one hour forward at XX (hour) XX (day) XX (month), and make the time one hour backward at XX (hour) XX (day) XX (month)
- How to set the Daylight Saving Time?

For example, adjust the clock forward one hour at 08: 00 on April 1 and backward one hour at 08: 00 on October 1 (the system turns back to the original time).

4.4.5 System Settings

ZKTECO		
System Info	System	
Device Info		
Device Capacity	Volume	100
Firmware Info	Language	English
User Mgt.		Confirm
All Users		Contirm
Advanced Settings		
сомм.		
Cloud Service Setup		
WIFI Settings		
Date Setup		
System		
Serial Comm		
Face		
Autotest		

- **Volume:** Adjust the volume of device. The valid value ranges from 0 to 100.
- **Language:** To select the language of the device.

4.4.6 Serial Comm. Settings

Serial Comm function facilitates to establish communication with the device through a serial port (RS485).

ZKTECO			
System Info	Serial Comm		
Device Info	Seria comm		
Device Capacity	Serial Port	DM10	~
Firmware Info	Baudrate	115200	~
User Mgt.		115200	•
All Users		Confirm	
Advanced Settings			
сомм.			
Cloud Service Setup			
WIFI Settings			
Date Setup			
System			
Serial Comm			
Face			

- **Serial Port:** Choose whether to communicate with the device through the serial port. There are 3 modes: No Using, OSDP Output and DM10.
 - No Using: Do not communicate with the device through the serial port.
 - OSDP Output: Communicates with the OSDP Output through RS485 serial port.
 - > DM10: Communicates with the DM10 through RS485 serial port.
- Baudrate: The rate of the communication with PC; there are 5 options of baud rate: 115200 (default), 57600, 38400, 19200 and 9600. The higher is the baud rate, the faster is the communication speed, but also the less reliable. In general, a higher baud rate can be used when the communication distance is short; when the communication distance is long, choosing a lower baud rate would be more reliable.

4.4.7 Face Parameters

ZKTECO		
System Info	Face	
Device Info		
Device Capacity	1:N Threshold Value	47
Firmware Info	1:1 Threshold Value	63
User Mgt. All Users	Face Enrollment Threshold	70
Advanced Settings	Face Pitch Angle	30
сомм.	Face Rotation Angle	25
Cloud Service Setup	Image Quality	70
WIFI Settings Date Setup	Minimum Face Size	80
System	LED Light Trigger Value	80
Serial Comm	Motion Detection Sensitivity	4
Face	Anti-flicker Mode	50Hz ~
Autotest	Live Detection	
Wiegand Setup	Anti-spoofing Using NIR	\sim
Device Management	Binocular Live Detection Threshold	Please input (0-100)
Device Management	WDR	
Update Firmware		Confirm
Change Password Operation Log		

• **1:N Threshold:** Under 1:N verification mode, the verification will only be successful when the similarity between the acquired facial image and all registered facial templates is greater than the set value.

The valid value ranges from 0 to 100. The higher the thresholds, the lower the misjudgment rate and higher the rejection rate, and vice versa. The default value of 47 is recommended.

 1:1 Threshold Value: Under 1:1 verification mode, the verification will only be successful when the similarity between the acquired facial image and the facial templates enrolled in the device is greater than the set value.

The valid value ranges from 0 to 100. The higher the thresholds, the lower the misjudgment rate and higher the rejection rate, and vice versa. The default value of 63 is recommended.

• Face Enrollment Threshold: During face enrollment, 1:N comparison is

used to determine whether the user has already registered before. When the similarity between the acquired facial image and all registered facial templates is greater than the set threshold, it indicates that the face has already been registered.

- **Face Pitch Angle:** It is the pitch angle tolerance of a face for facial template registration and comparison. If a face's pitch angle exceeds the set value, it will be filtered by the algorithm, i.e., ignored by the terminal thus no registration and comparison interface will be triggered.
- Face Rotation Angle: It is the rotation angle tolerance of a face for facial template registration and comparison. If a face's rotation angle exceeds the set value, it will be filtered by the algorithm, i.e., ignored by the terminal thus no registration and comparison interface will be triggered.
- **Image Quality:** It is the image quality for facial registration and comparison. The higher the value, the clearer image is required.
- **Minimum Face Size:** It sets the minimum face size required for facial registration and comparison.

If the minimum size of the captured image is smaller than the set value, then it will be filtered off and not recognized as a face.

This value can also be interpreted as the face comparison distance. The farther the individual is, the smaller the face, and the smaller number of pixels of the face obtained by the algorithm. Therefore, adjusting this parameter can adjust the farthest comparison distance of faces. When the value is 0, the face comparison distance is not limited.

 LED Light Trigger Threshold: This value controls the turning on and off of the LED light. The larger the value, the LED light will turn on or off more frequently. Motion Detection Sensitivity: It sets the value for the amount of change in a camera's field of view known as potential motion detection that wakes up the terminal from standby to the comparison interface.

The larger the value, the more sensitive the system would be, i.e., if a larger value is set, the comparison interface activates with much ease, and the motion detection is frequently triggered.

- Anti-flicker Mode: It is used when WDR is turned off. It helps to reduce flicker when the device's screen flashes at the same frequency as the light.
- **Live Detection:** It detects the spoof attempt using visible light images to determine if the provided biometric source sample is of a real person (a live human being) or a false representation.
- **Live Detection Threshold:** It facilitates judging whether the captured visible image is a real person (a live human being). The larger the value, the better the anti-spoofing performance using visible light.
- **Anti-spoofing Using NIR:** Using near-infrared spectra imaging to identify and prevent fake photos and videos attack.
- Binocular Live Detection Threshold: It is convenient to judge whether the near-infrared spectral imaging is fake photo and video. The larger the value, the better the anti-spoofing performance of near-infrared spectral imaging.
- **WDR:** Wide Dynamic Range (WDR), which balances light and extends image visibility for surveillance videos under high contrast lighting scenes and improves object identification under bright and dark environment.

4.4.8 Autotest

ZKTECO	
System Info	Autotest
Device Info Device Capacity Firmware Info	Test Face
User Mgt. All Users	
Advanced Settings	
COMM. Cloud Service Setup	
WIFI Settings	
Date Setup System	
Serial Comm	
Face	
Wiegand Setup	

• **Test Face:** To test if the camera functions properly by checking the pictures taken to see if they are clear enough.

4.4.9 Wiegand Setup

ZKTECO			
System Info	Wiegand Setup		
Device Info	Commence of the second		
Device Capacity	Wiegand Input Wiegand Output		
Firmware Info	Wiegand Format		
User Mgt.	26	Wiegand26	~
All Users	34		
Advanced Settings		No Using	~
сомм.	36	No Using	~
Cloud Service Setup	37	No Using	~
WIFI Settings	50	No Using	~
Date Setup	Wiegand Bits	26	~
System	ID Type		
Serial Comm	ib type	User ID	~
Face		Confirm	
Autotest			
Wiegand Setup			
Device Management			

It is used to set the Wiegand input and output parameters.

- Wiegand Format: Its value can be 26 bits, 34 bits, 36 bits, 37 bits, and 50 bits.
- Wiegand Bits: The number of bits of the Wiegand data.
- **ID Type:** Select between the User ID and card number.
- Various Common Wiegand Format Description:

Wiegand Format	Description
	ECCCCCCCCCCCCCCCCCO
Wiegand 26	It consists of 26 bits of binary code. The 1 st bit is the even parity bit of the 2 nd to 13 th bits, while the 26 th bit is the odd parity bit of the 14 th to 25 th bits. The 2 nd to 25 th bits are the card numbers.
Wiegand26a	ESSSSSSSCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Wiegand34	ECCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Wiegand 34a	ESSSSSSSCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Wiegand 36	OFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
Wiegand36a	EFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
Wiegand 37	OMMMMSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS

Wiegand37a	EMMMFFFFFFFFFFSSSSSSCCCCCCCCCCCCCCCCCCCC
Wiegand50	ESSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
" C " denotes the ca	odd parity bit of the 26 th to 49 th bits. The 2 nd to 17 th bits are the site codes, and the 18 th to 49 th bits are the card numbers. rd number; "E" denotes the even parity bit; "O" denotes

"C" denotes the card number; "E" denotes the even parity bit; "O" denotes the odd parity bit; "F" denotes the facility code; "M" denotes the manufacturer code; "P" denotes the parity bit; and "S" denotes the site code.

4.5 Device Management

It helps to set related system parameters to optimize the performance and usability of the device.

4.5.1 Device Management

System Info	Device Management		
Device Info	-		
Device Capacity	Clear Administrator	Confirm	
Firmware Info			
User Mgt.	Restart	Confirm	
All Users			
Advanced Settings	Reset	Confirm	
сомм.			
Cloud Service Setup	Delete All Data	Confirm	
WIFI Settings			
Date Setup			
System			
Serial Comm			
Face			
Autotest			
Wiegand Setup			
Device Management			
Device Management			
Update Firmware			

- Clear Administrator: To delete all the administrator.
- **Restart:** To restart the device.
- **Reset:** The Factory Reset function restores the device settings such as communication settings and system settings, to the default factory settings (this function does not clear registered user data).
- Delete All Data: To delete information and access records of all registered users.

4.5.2 Update Firmware



• Click [**Uploading...**] to upload the upgrade file in emfw.cfg format. And then click [**Confirm**] to upgrade firmware.

Note:

- Make sure the size of the upgrade file is less than 200M.
- If an upgrade file is needed, please contact our technical support. Deny firmware upgrade under normal circumstances.
- Do not power off during the upgrade process.

4.5.3 Change Password

ZKTECO		
System Info	Change Password	
Device Info		
Device Capacity	Enter the Current Password	
Firmware Info		Enter a new password at least 8 characters. It must contain special characters, numbers an upper and lower case letters.
User Mgt.	Enter a New Password	
All Users		
Advanced Settings	Confirm Password	
сомм.		
Cloud Service Setup		Confirm
WIFI Settings		
Date Setup		
System		
Serial Comm		
Face		
Autotest		
Wiegand Setup		
Device Management	Reset Password	
Device Management		
Update Firmware	Enter the Current Password	
Change Password		Reset Password
Operation Log		
Download Firmware Logs		

- When the user needs to change the password, he can set it on the Change Password window.
- The user can enter the current password in the Reset Password window and click [**Reset Password**] to restore the device to the factory password.

Note:

• The password must be no less than 8 characters, and must contain special characters, numbers an upper and lower case letters.

4.5.4 Operation Log

n Info	and a second						
e Info	Operation Log						
Capacity							
are info	Start Time	(YYYY/MM-OO) End Time	(YYYY-MM-DD)	Download			
lgt.	Operator	Operation	Time	Object	Original Value	New Value	Result
ced Settings	192.168.1.220	WEB Operation	2022-05-14T14-22-24	download operation log	D	٥	0
	192.168.1.220	WEB Operation	2022-05-14T13-38:54	Login	D	0	0
Service Setup	192.168.1.220	Reset	2022-05-14T11:52:26	D	D	0	0
attings	192.168.1.220	Face Parameters	2022-05-14T10:49:45	~FaceMThr	1000	0	-1
	182.168.1.220	Change Time (WEB)	2022-05-14T09:31:26	NTPService	D	1.	0
l	182.168.1.220	WEB Operation	2022-05-14T09-23:41	Login	D	ō	0
	0	Power On	2022-05-14109-04:58	D	D	0	0
	192.168.1.220	Change Parameters	2022-05-13719:39:32	WasternSSD		1	0
id Setup Management	192.168.1.220	Change Parameters	2022-05-13T19:39:32	WiselessAuth	D	WPA2PSK	0
Management	192.168.1.220	Change Parameters	2022-06-13T19:39:32	WinissaEnc	2	NONE	0
	192.168.1.220	Change Parameters	2022-05-13719-39.32	WielessKey		admin123@	0
Password	192.168.1.220	Comm Settings (WEB)	2022-05-13719:11:03	DNS	0.0.0.0	114.114.114.114	0
ion Log ad Firmware Logs	192.168.1.220	Comm Settings (WEB)	2022-05-13719:11:02	GATE IPAddress	0.0.0.0	192.168.1.1	0
ou rinning cogs	192.101.1.220	Register User	2022-05-13118-43-48	1	D	ō	0

 After entering the start time and end time, the user can view the Operation Logs on the page and click [Download] to download the operation logs.

4.5.5 Download Firmware Logs



 Users can download firmware logs here, including main.log, biometric.log and devs.log.

5 Connect to ZKBioAccess IVS Software

5.1 Set the Communication Address

Click [Advanced Settings] > [COMM.] > [IP Address] to set the IP address and then click [Advanced Settings] > [Cloud Service Setup] to set cloud service address on the WebServer. As shown in the figure below.

ZKTECO		(IJ
System Info	IP Setup		Î
Device Info			-
Device Capacity	Automatic Acquisition		
Firmware Info	IP Address 192	.168.163.58	
User Mgt.	Subnet Mask 255.2	2	
All Users	Gateway 102	.168.163.1	
Advanced Settings			
сомм.	DNS 114	.114.114.114	
Cloud Service Setup	Conf	irm	
WIFI Settings	E		
Date Setup			
			-
ZKTECO		(ט
System Info	Cloud Server Settin		ں î
	Cloud Server Settin		ڻ Î
System Info	Cloud Server Settin		ڻ Î
System Info Device Info		gs	ڻ Î
System Info Device Info Device Capacity	Enable Domain Name	gs	Î
System Info Device Info Device Capacity Firmware Info	Enable Domain Name Cloud Server Address	gs	Î
System Info Device Info Device Capacity Firmware Info User Mgt.	Enable Domain Name Cloud Server Address Cloud Service Port	gs	Î
System Info Device Info Device Capacity Firmware Info User Mgt. All Users	Enable Domain Name Cloud Server Address Cloud Service Port HTTPS	gs	Î
System Info Device Info Device Capacity Firmware Info User Mgt. All Users Advanced Settings	Enable Domain Name Cloud Server Address Cloud Service Port HTTPS	gs 2 192.168.163.61 8088 Enter the Sever Info	Î

- Cloud Server Address: This is the IP address after the software installation.
- Cloud Service Port: Default is 8088.

5.2 Add Device on the Software

Add the device by searching. The process is as follows:

 Click [Access] > [Device] > [Device] > [Search] to search the device on the software. When an appropriate server address and port is set on the device, the searched devices are then displayed automatically.

亘	Device Na	ame		Sen	al Number			IP Addre	ss		More	- Q (\otimes		
	Search Cri	teria None				3									
	C+ Refres	h 🕑 New	v 👔 De	elete 📑 Expo	n Q s	iearch 🚊 Contri	ol ~ {8	Set up -	Q View / Ge	et - 🔍	Communic	ation =			
Device 2	De	vice Name		Serial Number	Area N	ame Commun Type	C	letwork Connection fode	IP Address		485 rameter	Status	Device Model	Register Device	Firms
	6						25	Search							
	Sea	arch N	lo device fi	ound? Download	Search To	cols to Local Disk									
	Total Prog	ress		1005			Searched	d devices cou	int 1						- 11
	IP Addre	-		Device	Туре		Sen	al Number			*				
	IP Addre	ss N	AC Addres	ss Subnet	Mask	Gateway Address	Seria	al Number	Device Type	Set Serve	вr	Operat	tions		
Daylight Saving Time	192.168.1	163.58		255.255	255.0	192 168 163 1	76372	20500017	KF1100			Add	6		
								Add				×			
				Dev	ice Name			192	168.163.58	-	í				
				Icor	Type*			Doc	or						
				Are	a*			Are	a Name						
				Add	to Level										
				Clea	ar Data in	the Device when	Adding								
				A	[Clear D record),	ata in the Device please use with	when A caution!	dding] will d	elete data in t	he device	(except ev	ent			- 1
	A The	e current sys	tem comm	unication											
							6								
							ОК		Cancel						
						8									

2. Click [**Add**] in an operation column, a new window will pop-up. Select Icon Type and Area from each dropdown and then click [**OK**] to add the device.

5.3 Add Personnel on the Software

 Click [Personnel] > [Person] > [New] and fill in all the required fields to register new users in the software.

Personnel ID* 11806 Department* Department Name First Name Lee Last Name Mick Gender Image: State St	rowse Capture
Gender Mobile Phone 15912346868 Certificate Type Certificate Number Image: Certificate Number Birthday Email Image: Certificate Number Device Verification Password Card Number 7228074 Birthday Image: Certificate Number Image: Certificate Number	rowse Capture
Certificate Type Certificate Number Email Card Number Email Card Number 7228074 Binder Email Card Number 7228074 Binder Stype State	rowse Capture
Birthday Email Email Device Verification Password Card Number 7228074	rowse Capture
Device Verification Password Card Number 7228074	rowse Capture
Biometrics Type	rowse Capture
Slometrics Type	rowse Capture
Access Control Time Attendance Personnel Detail	
Access Control Time Attendance Personnel Detail	
evels Settings Add Superuser Yes	
Disabled	
Set Valid Time	

Note:

- The card number must be entered for use with the inBio series controllers.
- Click [Access] > [Device] > [Device] > [Control] > [Synchronize All Data to Devices] to synchronize all the data to the device including the new users.

For more details, please refer to the ZKBioAccess IVS User Manual.

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