



Access Controller

Quick Start Guide

Quick Start Guide

COPYRIGHT ©2017 Hangzhou Hikvision Digital Technology Co., Ltd.

ALL RIGHTS RESERVED.

Any and all information, including, among others, wordings, pictures, graphs are the properties of Hangzhou Hikvision Digital Technology Co., Ltd. or its subsidiaries (hereinafter referred to be "Hikvision"). This user manual (hereinafter referred to be "the Manual") cannot be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior written permission of Hikvision. Unless otherwise stipulated, Hikvision does not make any warranties, guarantees or representations, express or implied, regarding to the Manual.

About this Manual

This Manual is applicable to Access Controller

Product Name	Serials
Access Controller	DS-K2601 Serials Access Controller
	DS-K2602 Serials Access Controller
	DS-K2604 Serials Access Controller

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (<u>http://overseas.hikvision.com/en/</u>).

Please use this user manual under the guidance of professionals.

Trademarks Acknowledgement

HIKVISION and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions. Other trademarks and logos mentioned below are the properties of their respective owners.

Legal Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, IS PROVIDED "AS IS", WITH ALL FAULTS AND ERRORS, AND HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD PARTY. IN NO EVENT WILL HIKVISION, ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA OR DOCUMENTATION, IN CONNECTION WITH THE USE OF THIS PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. HIKVISION SHALL NOT TAKE ANY RESPONSIBILITES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.

SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. HIKVISION SHALL NOT BE LIABLE IN THE EVENT THAT THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

0101011060901

Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: 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 Conditions

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.

2. This device must accept any interference received, including interference that may cause undesired operation.

EU Conformity Statement

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the R&TTE Directive 1999/5/EC, the EMC Directive 2014/30/EU, the LVD Directive 2014/35/EU, the RoHS Directive 2011/65/EU.



(F

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see:

www.recyclethis.info.



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For

proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.

Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

Preventive and Cautionary Tips

Before connecting and operating your device, please be advised of the following tips:

- Ensure unit is installed in a well-ventilated, dust-free environment.
- Keep all liquids away from the device.
- Ensure environmental conditions meet factory specifications.
- Ensure unit is properly secured to a rack or shelf. Major shocks or jolts to the unit as a result of dropping it may cause damage to the sensitive electronics within the unit.
- Use the device in conjunction with an UPS if possible.
- Power down the unit before connecting and disconnecting accessories and peripherals.
- A factory recommended HDD should be used for this device.
- Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the manufacturer.



Safety Information

Signs	Description	
Warning	Follow these safeguards to prevent serious injury or death.	
MNote	Follow these precautions to prevent potential injury or material damage.	
Tips	The additional information as a complimentary of the contents.	



Please adopt the power adapter from the legitimate factory which can meet the safety extra low voltage (SELV) standard.

Do not install, wiring, or uninstall when the power is still on.

To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. This installation should be made by a qualified service person and should conform to all the local codes.

If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)



Please do not drop the objects on hard surface, and keep the equipment from the magnetic field. Avoid install the equipment to the vibrated or vulnerable places.

Please do not install the device in the extreme temperature (higher than 65° C or lower than -20° C)

Keep ventilation.

Do not operate in humid environment.

Do not operate in explosive environment.

Keep the device clean and dry.

Avoid bare electrical wire.

Table of Contents

1 Product Description	3
1.1 Overview	3
1.2 Main Feature	3
2 Appearance	5
2.1 Component Description	5
2.1.1 Access Controller Component Schematic Diagram	5
3 Terminal Connection	7
3.1 Terminals Description	7
3.1.1 DS-K2601Terminal Description	7
3.1.2 DS-K2602Terminal Description	11
3.1.3 DS-K2604 Terminal Description	16
4 Card Reader Installation	22
4.1 External Terminal	22
4.1 External Terminal 4.1.1 DS-K2601 External Terminals	
	22
4.1.1 DS-K2601 External Terminals	22 22
4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals	22 22 22
4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals	22 22 22 23
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 	22 22 22 23 23
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 	22 22 22 23 23 24
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 4.2.5 RS485 Card Reader Connection 	22 22 22 23 23 23 23 24 24 25
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 4.2.5 RS485 Card Reader Connection 4.3 Installing E-Lock 	22 22 23 23 24 25 25
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 4.2.5 RS485 Card Reader Connection 4.3 Installing E-Lock 4.3.1 Installation of Cathode Lock 	22 22 23 23 23 24 25 25
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 4.2.5 RS485 Card Reader Connection 4.3 Installing E-Lock 4.3.1 Installation of Cathode Lock 4.3.2 Installation of Anode Lock 	22 22 23 23 24 25 25 25 26
 4.1.1 DS-K2601 External Terminals 4.1.2 DS-K2602 External Terminals 4.1.3 DS-K2604 External Terminals 4.2 Card Reader Installation 4.2 Card Reader Installation 4.2.4 The Connection of Wiegand Card Reader 4.2.5 RS485 Card Reader Connection 4.3 Installing E-Lock 4.3.1 Installation of Cathode Lock 4.3.2 Installation of Anode Lock 4.4 Connecting the External Alarm Device 	22 22 23 23 23 24 25 25 26 26

4.8 Arming Region Input Terminal	28
4.8.1 Connecting Normally Open Detector	28
4.8.2 Connecting Normally Closed Detector	28
4.9 Fire Alarm Module Wiring	29
5 Settings	30
5.1 Initializing the Hardware	30
5.2 Relay Input NO/NC	30
5.2.1 Lock Relay Output	
5.2.2 Alarm Relay Output Status	
6 Activating Device	37
6.1 Activation via SADP Software	37
6.2 Activation via Client Software	39

1 Product Description

1.1 Overview

DS-K2600 is a powerful and stable access controller, using the logical architecture design. DS-K2600 is designed with TCP/IP network interface and its signal processed with special encryption and can be run offline. Anti-tampering function is also supported.

1.2 Main Feature

- The access controller is equipped with 32-bit high-speed processor
- Supports TCP/IP and GPRS network communication, Ehome accessing. The communication data is specially encrypted to relieve the concern of privacy leak
- Support recognition and storage of card number with maximum length of 20
- The access controller can store 100 thousand legal cards (97 thousand normal cards and 3 thousand visitor cards) and 300 thousand card swiping records
- Supports multi-door interlock function, anti-passback function, multi-card function, first card open function, super card and super password function, M1 card encryption, online upgrade function and remote control of the doors
- Supports tamper-proof alarm for card reader, alarm for door not secured, force
 opening door alarm, alarm for door opening timeout, duress card and code alarm,
 blacklist alarm and alarm for illegal card swiping attempts reaching the limit
- The alarm input of controller supports short circuit protection function and cut-proof function
- Multiple event upload methods: channel, center group, and listening
- 50 event and card linkages
- IP address conflict detection
- Cross-controller anti-passing back function (For cross-controller anti-passing back based on card, wire the card reader with RS-485. For cross-controller anti-passing back based on network, connect the server and device properly. Up to 5000 cards'

3

swiping records can be stored in the selected server.) and inner-device anti-pass-back function

- Supports RS485 interface and Wiegand interface for accessing card reader. RS485 interface adopts dual-interface design and supports loop breakpoint detection and redundancy function; Wiegand interface supports W26, W34 and is seamlessly compatible with third-party card reader with Wiegand interface
- Supports various card types as normal/ disabled/ blacklist/ patrol/ guest/ duress/ super card, etc.
- Various indicators to show different status
- Supports time synchronization via NTP, manual or automatic method
- Supports record storage function when it is offline and insufficient storage space storage alarm function
- The access controller has backup battery design, watchdog design and tamper-proof function
- Data can be permanently saved after the access controller is powered off.
- Supports I/O linkage, and event linkage
- Supports Ehome protocol, and inter-network communication
- 500 groups of password under the authentication mode of card and password

2 Appearance

2.1 Component Description

2.1.1 Access Controller Component Schematic Diagram

Take DS-K2604 as an example, the component schematic diagram is shown below.



Figure 2-1 DS-K2604 Component Schematic Diagram

No.	Component Description			
NO.	DS-K2601	DS-K2602	DS-K2604	
1	Alarm Relay O	utput Status (NC/	NO)	
2	Network Data	Indicator		
3	RS-485 Comm	unication Indicate	or	
4	Network Statu	is Indicator		
5	Door Relay Output Status (NC/NO) Choice			
6	Battery Charging Indicator			
7	Power Indicator			
8	Charging Completing Indicator			
9	Running Indicator			
	Hardware Initialization and Normal Working			
10	Choice			
11	Main board di	al-up switch/ Res	erved	

3 Terminal Connection

3.1 Terminals Description

3.1.1 DS-K2601Terminal Description



Figure 3-1 DS-K2601 Terminals

No.	DS-K2601		
A1		GND	Grounding
A2	Lock Power	+12V	Power Output of the Lock
A3	Card Reader	GND	Grounding
A4	Power	+12V	Power Output of the Head Read
A5		GND	Grounding
A6		W0	Wiegand Head Read Data Input Data0
A7		W1	Wiegand Head Read Data Input Data1
A8	Wiegand Card Reader	BZ	Card Reader Buzzer Control Output
A9	2	ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A10		ОК	Indicator of Card Reader Control Output (Valid Card Output)
A11		GND	Grounding
A12		W0	Wiegand Head Read Data Input Data0
A13		W1	Wiegand Head Read Data Input Data1
A14	Wiegand Card Reader	BZ	Card Reader Buzzer Control Output
A15	1	ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A16		ОК	Indicator of Card Reader Control Output (Valid Card Output)
B1	Arming Region	Z1	Arming Region Access Terminal 1 (Only for Linkage of Alarm Relay Output)
B2	Input	GND	Grounding

Table 3-1 DS-K2601 Terminal Description

No.	DS-K2601		
В3		Z2	Arming Region Access Terminal 2 (Only for Linkage of Alarm Relay Output)
B4		Z3	Arming Region Access Terminal 3 (Only for Linkage of Alarm Relay Output)
B5		GND	Grounding
B6		Z4	Arming Region Access Terminal 4 (Only for Linkage of Alarm Relay Output)
Β7	E-Lock	D1+	Door 1 Door Bolow Japant (Dry Contact)
B8	E-LOCK	D1-	Door 1 Door Relay Input (Dry Contact)
В9	Door	S1	Door 1 Door Contact Detector Input
B10	Contact Input	GND	Grounding
B11	Door Open	B1	Door 1 Door Open Button Input
B12	Button	GND	Grounding
C1	Power	+12V	DC12V Cathode
C2	Power	GND	DC12V Grounding Input
C3	Batton	BAT+	DC12V Battery Cathode
C4	Battery	BAT-	DC12V Battery Anode
C5		RS 485A+	Card Reader RS485+ Access
C6	485 Card Reader	RS 485A-	Card Reader RS485- Access
C7		GND	Grounding
C8		RS 485B+	Card Reader RS485+
C9		RS 485B-	Card Reader RS485-

No.	DS-K2601		
C10		GND	Grounding
C11		RS 485C+	Uplink RS485+Communication
C12	Access	RS 485C-	Uplink RS485-Communication
C13	Controller	GND	Grounding
C14	RS485 Interface	RS 485D+	
C15		RS 485D-	Reserved
C16		GND	
C17		NO/NC1	Alarm Palay 1 Output (Dry Contact)
C18	Alarm	COM1	Alarm Relay 1 Output (Dry Contact)
C19	Output	NO/NC2	Alarm Balay 2 Output (Dry Cantact)
C20		COM2	Alarm Relay 2 Output (Dry Contact)
D1		C2	Event Alarm Input 2
D2	Event Input	GND	Grounding
D3		C1	Event Alarm Input 1



3.1.2 DS-K2602Terminal Description

Figure 3-2 DS-K2602 Terminal Description

No.	DS-K2602		
A1	Power for	GND	Grounding
A2	E-Lock	+12V	Power Output of the Lock
A3	Power for	GND	Grounding
A4	Card Reader	+12V	Power Output of the Head Read
A5		GND	Grounding
A6		W0	Wiegand Head Read Data Input Data0
A7	Wingond	W1	Wiegand Head Read Data Input Data1
A8	Wiegand Card Reader	BZ	Card Reader Buzzer Control Output
A9	4	ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A10		ОК	Indicator of Card Reader Control Output (Valid Card Output)
A11		GND	Grounding
A12		W0	Wiegand Head Read Data Input Data0
A13	Wingond	W1	Wiegand Head Read Data Input Data1
A14	Wiegand Card Reader	BZ	Card Reader Buzzer Control Output
A15	3	ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A16		ОК	Indicator of Card Reader Control Output (Valid Card Output)
A17	Wiegand	GND	Grounding
A18	Card Reader	W0	Wiegand Head Read Data Input Data0

Table 3-2 DS-K2602	Terminal Description
--------------------	----------------------

No.	DS-K2602		
A19	2	W1	Wiegand Head Read Data Input Data1
A20		BZ	Card Reader Buzzer Control Output
A21		ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A22		ОК	Indicator of Card Reader Control Output (Valid Card Output)
A23		GND	Grounding
A24		W0	Wiegand Head Read Data Input Data0
A25) A (is so used	W1	Wiegand Head Read Data Input Data1
A26	Wiegand Card Reader	BZ	Card Reader Buzzer Control Output
A27	1	ERR	Indicator of Card Reader Control Output (Invalid Card Output)
A28		ОК	Indicator of Card Reader Control Output (Valid Card Output)
B1		Z1	Arming Region Access Terminal 1 (Only for Linkage of Alarm Relay Output)
B2		GND	Grounding
В3	Arming Region	Z2	Arming Region Access Terminal 2 (Only for Linkage of Alarm Relay Output)
B4		Z3	Arming Region Access Terminal 3 (Only for Linkage of Alarm Relay Output)
B5		GND	Grounding
B6		Z4	Arming Region Access Terminal 4 (Only for Linkage of Alarm Relay Output)
B7	E-Lock1	D1+	Door 1 Door Relay Input (Dry Contact)

No.	DS-K2602					
B8		D1-				
В9	E Laska	D2+				
B10	E-Lock2	D2-	Door 2 Door Relay Input (Dry Contact)			
B11	Door	S1	Door 1 Magnetic Detector Input			
B12	Magnetics	GND	Signal Grounding			
B13	Detector	S2	Door 2 Magnetic Detector Input			
B14		B1	Door 1 Door Button Input			
B15	Door Button	GND	Signal Grounding			
B16	Buttom	B2	Door 2 Door Button Input			
C1	Daviar	+12V	DC12V Cathode			
C2	Power	GND	Grounding			
C3	Dattan	BAT+	DC12V Battery Cathode			
C4	Battery	BAT-	DC12V Battery Anode			
C5		RS 485A+	Card Reader RS485+ Access			
C6		RS 485A-	Card Reader RS485- Access			
C7	Card Reader	GND	Grounding			
C8	485 Interface	RS 485B+	Card Reader RS485+			
C9		RS 485B-	Card Reader RS485-			
C10		GND	Grounding			
C11	RS-485	RS 485C+	Uplink RS485+Communication			
C12	Interface	RS 485C-	Uplink RS485-Communication			

No.	DS-K2602					
C13		GND	Grounding			
C14		RS 485D+				
C15		485D+	Reserved			
C16		GND				
C17		NO/NC1				
C18		COM1	Alarm Relay 1 Output (Dry Contact)			
C19		NO/NC2	Alarm Relay 2 Output (Dry Contact)			
C20	Alarm	COM2	Alarin Kelay 2 Output (Dry Contact)			
C21	Output	NO/NC3	Alarm Relay 3 Output (Dry Contact)			
C22		COM3				
C23		NO/NC4	Alarm Relay 4 Output (Dry Contact)			
C24		COM4	Alann Kelay 4 Output (Dry Contact)			
D1		C4	Event Alarm Input 4			
D2		GND	Grounding			
D3	Event Input	C3	Event Alarm Input3			
D4		C2	Event Alarm Input 2			
D5		GND	Grounding			
D6		C1	Event Alarm Input 1			



3.1.3 DS-K2604 Terminal Description

Figure 3-3 DS-K2604 Access Controller Terminals

Table 3-3	DS-K2604	Port	Description
-----------	----------	------	-------------

No.	DS-K2604						
A1	Power	GND	Grounding				
A2	Supply of E-Lock	+12V	Power Supply of E-Lock Output				
A3	Power	GND	Grounding				
A4	Supply of Card Reader	+12V	Power Supply of Card Reader Output				

No.	DS-K2604				
A5		GND	Grounding		
A6		W0	Wiegand Card Reader Data Input Data0		
A7		W1	Wiegand Card Reader Data Input Data1		
A8	Wiegand Card Reader	ΒZ	Buzzer of Card Reader Control Output		
A9	4	ERR	Cresset of Card Reader Control Output (Invalid Card Output)		
A10		ОК	Cresset of Card Reader Control Output (Valid Card Output)		
A11		GND	Grounding		
A12		W0	Wiegand Card Reader Data Input Data0		
A13)))(is sound	W1	Wiegand Card Reader Data Input Data1		
A14	Wiegand Card Reader	BZ	Buzzer of Card Reader Control Output		
A15	3	ERR	Cresset of Card Reader Control Output (Invalid Card Output)		
A16		ОК	Cresset of Card Reader Control Output (Valid Card Output)		
A17		GND	Grounding		
A18		W0	Wiegand Card Reader Data Input Data0		
A19	Wiegend	W1	Wiegand Card Reader Data Input Data1		
A20	Wiegand Card Reader	BZ	Buzzer of Card Reader Control Output		
A21	2	ERR	Cresset of Card Reader Control Output (Invalid Card Output)		
A22		ОК	Cresset of Card Reader Control Output (Valid Card Output)		

No.	DS-K2604					
A23		GND	Grounding			
A24		W0	Wiegand Card Reader Data Input Data0			
A25		W1	Wiegand Card Reader Data Input Data1			
A26	Wiegand	BZ	Buzzer of Card Reader Control Output			
A27	Card Reader 1	ERR	Cresset of Card Reader Control Output (Invalid Card Output)			
A28		ОК	Cresset of Card Reader Control Output (Valid Card Output)			
B1		Z1	Arming Region Access Terminal 1 (Only for Linkage of Alarm Relay Output)			
B2		GND	Grounding			
B3	Arming	Z2	Arming Region Access Terminal 2 (Only for Linkage of Alarm Relay Output)			
B4	Region Input	Z3	Arming Region Access Terminal 3 (Only for Linkage of Alarm Relay Output)			
B5		GND	Grounding			
B6		Z4	Arming Region Access Terminal 4 (Only for Linkage of Alarm Relay Output)			
B7	E Look 1	D1+	Door 1 Door Bolow Insuit (Dry Contact)			
B8	E-Lock 1	D1-	Door 1 Door Relay Input (Dry Contact)			
В9	E-Lock 2	D2+	Door 2 Door Relay Input (Dry Contact)			
B10	L-LUUK Z	D2-	2001 2 2001 neiay iliput (Dry Collact)			
B11	E-Lock 3	D3+	Door 3 Door Relay Input (Dry Contact)			

No.	DS-K2604						
B12		D3-					
B13	5 1 1	D4+	Deer 4 Deer Peleu land (Dee Center 1)				
B14	E-Lock 4	D4-	Door 4 Door Relay Input (Dry Contact)				
B15		S1	Door 1 Magnetic Detector Input				
B16		GND	Signal Grounding				
B17	Door	S2	Door 2 Magnetic Detector Input				
B18	Magnetics Input	\$3	Door 3 Magnetic Detector Input				
B19		GND	Signal Grounding				
B20		S4	Door 4 Magnetic Detector Input				
B21		B1	Door 1 Door Button Input				
B22		GND	Signal Grounding				
B23	Door Button	B2	Door 2 Door Button Input				
B24	DOOF BULLON	В3	Door 3 Door Button Input				
B25		GND	Signal Grounding				
B26		B4	Door 4 Door Button Input				
C1	Power	+12V	DC12V Cathode				
C2	Power	GND	Grounding				
C3	Dattan	BAT+	DC12V Battery Cathode				
C4	Battery	BAT-	DC12V Battery Anode				
C5	Card Reader	RS 485A+	Card Reader RS485A+				
C6	RS485	RS 485A-	Card Reader RS485A-				
C7		GND	Grounding				

No.	DS-K2604					
C8		RS 485B+	Card Reader RS485B+			
C9		RS 485B-	Card Reader RS485B-			
C10		GND	Grounding			
C11		RS 485C+	Uplink RS485+Communication			
C12		RS 485C-	Uplink RS485-Communication			
C13	Access	GND	Grounding			
C14	Controller RS485	RS 485D+				
C15		RS 485D-	Reserved			
C16		GND				
C17		NO/NC1	Alarm Relay 1 Output (Dry Contact)			
C18		COM1				
C19		NO/NC2	Alarm Dalay 2 Output (Dry Contact)			
C20	Alarm	COM2	Alarm Relay 2 Output (Dry Contact)			
C21	Output	NO/NC3	Alarm Relay 3 Output (Dry Contact)			
C22		COM3	Aldriff Relay 5 Output (Dry Contact)			
C23		NO/NC4	Alarm Relay 4 Output (Dry Contact)			
C24		COM4	Alarini Kelay 4 Output (Dry Contact)			
D1		C8	Event Alarm Input 8			
D2		GND	Grounding			
D3	Event Input	C7	Event Alarm Input 7			
D4		C6	Event Alarm Input 6			
D5		GND	Grounding			

No.	DS-K2604					
D6	C5	Event Alarm Input 5				
D7	C4	Event Alarm Input 4				
D8	GND	Grounding				
D9	C3	Event Alarm Input3				
D10	C2	Event Alarm Input 2				
D11	GND	Grounding				
D12	C1	Event Alarm Input 1				



- The Alarm input hardware interface is normally open by default. So only the normally open signal is allowed. It can be linked to the buzzer of the card reader and access controller, and the alarm relay output and open door relay output.
- Arming region alarm input is only for the alarm relay output linkage.
- RS485 card ID should be set as 1to 8. For example, the ID of door 1 is 1 and 2 standing for in and out respectively.
- For single-door access controller, the Wiegand card reader 1 and 2 respectively correspond to the entering and exiting card readers of door 1. For two-door access controller, the Wiegand card reader 1 and 2 respectively correspond to the entering and exiting card readers of door 1, and the Wiegand card reader 3 and 4 respectively correspond to the entering and exiting card reader 1, 2, 3 and 4 respectively correspond to the entering card reader 1, 2, 3 and 4 respectively correspond to the entering card reader 1, 2, 3, and 4.

4 Card Reader Installation

4.1 External Terminal

4.1.1 DS-K2601 External Terminals



4.1.2 DS-K2602 External Terminals



Figure 4-2 DS-K2602 External Terminals

4.1.3 DS-K2604 External Terminals



Figure 4-3 DS-K2604 External Terminals

4.2 Card Reader Installation

4.2.4 The Connection of Wiegand Card Reader



Wiegand Communication Wiring

Figure 4-4 Wiring diagram of Wiegand card reader



You must connect the OK/ERR/BZ, if using access controller to control the LED and buzzer of the Wiegand card reader.

4.2.5 RS485 Card Reader Connection



RS485 Communication Wiring

Figure 4-5 Wiring diagram of RS485



If the card reader is installed too far away from the access controller, you can use an external power supply.

4.3 Installing E-Lock

4.3.1 Installation of Cathode Lock





4.3.2 Installation of Anode Lock



Figure 4-7 Wiring diagram of anode lock

4.4 Connecting the External Alarm Device



Figure 4-8 External Alarm Device Connection

4.5 Door Button Wiring Diagram





4.6 The Connection of Magnetics Detection



Figure 4-10 Magnetics Connection

4.7 Connecting Power Supply



Figure 4-11 Power Supply Connection

4.8 Arming Region Input Terminal

4.8.1 Connecting Normally Open Detector



Figure 4-12 Normally Open Status

4.8.2 Connecting Normally Closed Detector



Figure 4-13 Normally Closed Status

4.9 Fire Alarm Module Wiring



Figure 4-14 Fire Alarm Module Wiring

5 Settings

5.1 Initializing the Hardware

Option 1:

Steps:

- 1. Remove the jumper cap from the Normal terminal.
- 2. Disconnect the power and restart the access controller. The controller buzzer buzzes a long beep.

iong beep.

3. When the beep stopped, plug the jumper cap back to Normal.

Option 2:

Steps:

- 1. Jump the jumper cap from Normal to Initial.
- 2. Disconnect the power and restart the access controller. The controller buzzer buzzes a long beep.
- 3. When the beep stopped, jump the jumper cap back to Normal.



Figure 5-1 Initialization Dial-up



The initializing of the hardware will restore all the parameters to the default setting and all the device events are wiping out.

5.2 Relay Input NO/NC

5.2.1 Lock Relay Output

Lock Relay Normally Open Status



Figure 5-2 Normally Open Status

Lock Relay Normally Closed Status



Figure 5-3 Normally Closed Status

5.2.2 Alarm Relay Output Status

Alarm Relay Output Normally Open



Figure 5-4 Alarm Relay Output Normally Open

Alarm Relay Output Normally Closed



Figure 5-5 Normally Closed Status

Work Flow of Software

For detailed information, please see the user manual of the client software.

Refer to the following work flow:



Figure 5-6 Software Client Work Flow

6 Activating Device

Purpose:

You are required to activate the control panel first before you can use the control panel.

Activation via SADP, and Activation via client software are supported.

6.1 Activation via SADP Software

SADP software is used for detecting the online device, activating the device, and resetting the password.

Get the SADP software from the supplied disk or the official website, and install the SADP according to the prompts. Follow the steps to activate the control panel.

Steps:

- 1. Run the SADP software to search the online devices.
- 2. Check the device status from the device list, and select an inactive device.

Total numbe	r of online devices: 6					Export	Refresh	
I 1D	• Device Type	Security	IPv4 Address	Port	Software Version IPv4 Gatev	way HTTP Por	t Device Serial No.	
001		Active		8000	V1.4.0build 1609	80	201	
002		Active		8000	V1.4.2build 1608	80)16(_
003		Active		8000	V1.4.0build 1609	80	×	
004		Active		8000	V5.4.0build 1602	80	15	The device is not activated.
005		Active		8000	V2.0.1build 1605	80	'4Pk	
006	DS+K	Inactive	192.0.0.64	8000	V1.0.0build 1608 0.0.0.0	80	160	
								You can modify the network parameters aft the device activation.
								Activate Now
								New Password:
								Confirm Password:

Figure 1-1 SADP Interface

3. Create a password and input the password in the password field, and confirm the password.

STRONG PASSWORD RECOMMENDED – We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

- 4. Click **Activate** to activate the device.
- 5. Check the activated device. You can change the device IP address to the same network segment with your computer by either modifying the IP address manually or checking the checkbox of Enable DHCP.

Modify Network F	Modify Network Parameters					
Enable DHCP						
Device Serial No.:						
IP Address:						
Port:	8000					
Subnet Mask:						
Gateway:						
IPv6 Address:	::					
IPv6 Gateway:	:					
IPv6 Prefix Length:	0					
HTTP Port:	80					
S	ecurity Verification					
Admin Password:						
	Modify					
	Forgot Password					

Figure 1-2 Modify Network Parameters Interface

6. Input the password and click the **Modify** button to activate your IP address modification.

6.2 Activation via Client Software

The client software is versatile video management software for multiple kinds of devices.

Get the client software from the supplied disk or the official website, and install the software according to the prompts. Follow the steps to activate the control panel.

Steps:

1. Run the client software and the control panel of the software pops up, as shown in the figure below.



Figure 1-3 Control Panel Interface

- 2. Click the Device Management to enter the Device Management interface.
- 3. Check the device status from the device list, and select an inactive device.

Online Device (1	19)				📀 📀 Refresh Every 60s
+ Add to Clier	nt 🕂 Add All	🗹 Modify Netinfo 🛛 🦘 Reset P	assword 🏻 🌻 Act	ivate	Filter
IP	Device Type	Firmware Version	Security	Server Port	Device Serial No. Start Tir
192.0.0.64		10.433363437030	Active	8000	. 2017-01
192.168.1.64			Inactive	8000	2017-01
					•
+ (Þ

Figure 1-4 List Selecting Interface

- 4. Click the **Activate** button to pop up the Activation interface.
- 5. In the pop-up window, create a password in the password field, and confirm the password.

STRONG PASSWORD RECOMMENDED – We highly recommend you create a strong password of your own choosing (using a minimum of 8 characters, including upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you reset your password regularly, especially in the high security system, resetting the password monthly or weekly can better protect your product.

	Activation	×
User Name:	admin	
Password:		
	Valid password range [8-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained.	
Verification:		
	OK Ca	ncel

Figure 1-5 Password Interface

- 6. Click **OK** button to activate.
- Click the Modify Netinfor button to pop up the Network Parameter Modification interface.
- 8. Change the device IP address to the same network segment with your computer by either modifying the IP address manually.
- 9. Input the password and click the **OK** button to save the settings.



UD05848B

www.hikvision.com