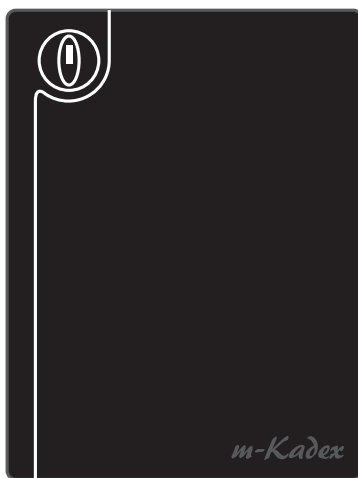


FINGERTEC



m-Kadex

Simple Card Reader for Door Access &
Time Attendance System

User Guide

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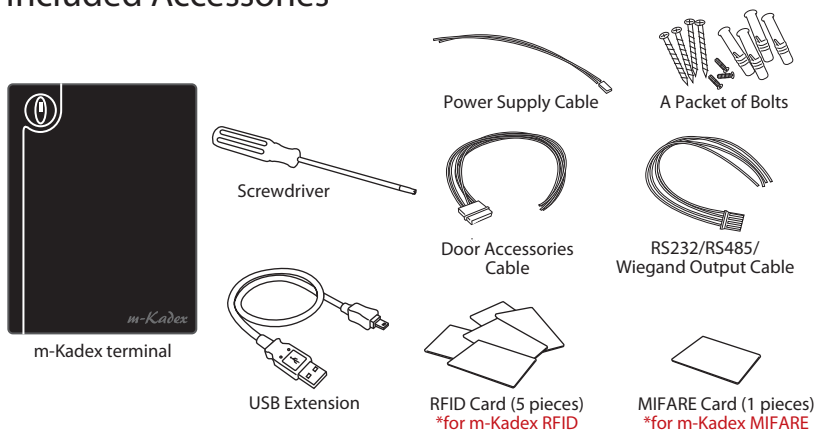
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1 • GETTING STARTED

Viewing the User Guide in the Internet

The User Guide is available in the package when you purchase FingerTec m-Kadex. The user guide is also published online at fingertec.com and user.fingertec.com. Choose the language you prefer to view the User Guide.

Included Accessories



Included Printed Materials

- FingerTec Comprehensive DVD (with Product Code and Activation Key)
- Quick Start Guide
- Pamphlet
- User Enrollment Template Form
- Warranty Card

Activating m-Kadex

Connect all the cables correctly at their specific points and turn on the power supply. M-Kadex terminal does not have its on/off button.

Registering m-Kadex

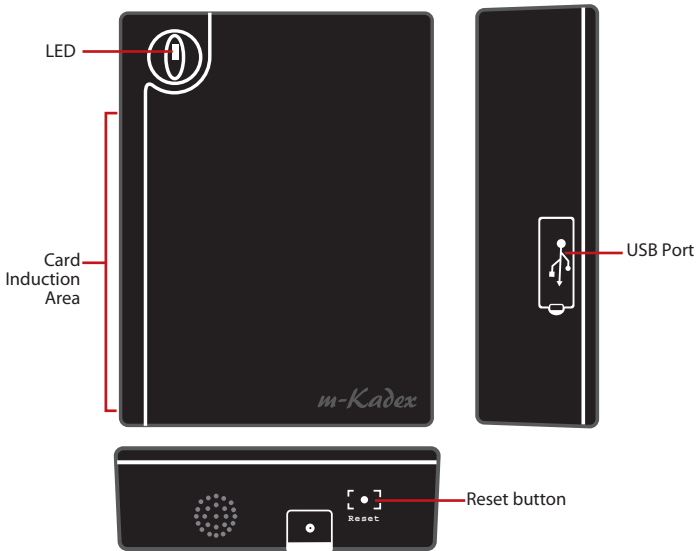
Make sure that you register your m-Kadex's warranty with us at www.fingertec.com/ver2/english/e_main.html#

2 • BASICS

Introduction to m-Kadex

m-Kadex is a simpler version of Kadex. The terminal is designed without any keypads or LCD. m-Kadex functions similarly like Kadex but management of the terminals have to be done from the software. The m-Kadex can enrol new cards and delete cards at the terminal only if the administrator card is available. Absence of administrator card would not allow any operations to be carried out at the terminal.

m-Kadex Overview



Item	What Is It For
LED	Indicating status of terminal and result of verification Green – Terminal is in standby mode, terminal has verified card successfully Red – Terminal has failed to verify card
Card Induction Area	Area to read card
USB Port	Connecting USB extension for data download into a USB flash disk (pen drive)
Reset button	Restarting the terminal

Security Features

Security features help protecting the information from m-Kadex from being accessed by unauthorized individual(s).

ADMINISTRATOR CARD

Registration of an administrator card to the system is important to control access into m-Kadex. After registration of the administration card is done, nobody can do enrollment, deletion or reset on m-Kadex without the administration card.

TAMPER SWITCH

m-Kadex comes with a tamper switch located at the rear of the terminal. During installation, the tamper switch is compressed against a wall. Any attempt to dismantle m-Kadex will trigger alarm

Restarting and Resetting m-Kadex

If something isn't working right, try to restart or reset m-Kadex.

RESTARTING m-Kadex

Use a thin probe to push the reset button hidden at the bottom of the terminal. The terminal will restart by itself and all the memory is retained during this operation.

RESETTING TO DEFAULT FACTORY SETTINGS BY ADMINISTRATOR CARD

Green LED blinks > Wave Administrator card 5 times at the induction area > The terminal beeps 3 times > Red LED blinks > Wave Administrator card 1 time at the induction area to confirm > Green LED blinks > The terminal beeps continuously for 7 seconds > Green LED blinks

Remarks: All contents of the terminal will be deleted including the contents in administrator card. The IP address of the terminal returns to default 192.168.1.201 after this process. The Terminal ID returns to 1 after this process.

RESETTING TO DEFAULT FACTORY SETTINGS WITHOUT ADMINISTRATOR CARD

Green LED blinks > Detach terminal from a wall > Release security button > Wait for 35 seconds > Push and release the security button 3 times > Terminal would emit a long beep and it will start the terminal

Remarks: All contents of the terminal will be deleted including the contents in administrator card. The IP address of terminal returns to default 192.168.1.201 after this process. The Terminal ID returns to 1 after this process.

3 • CONNECTION – SYNCING M-KADEX

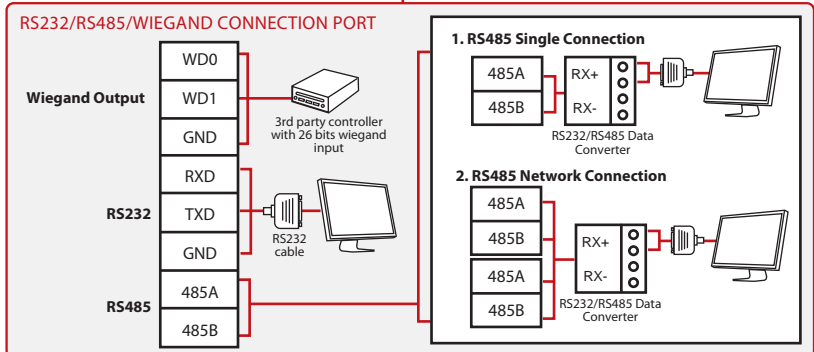
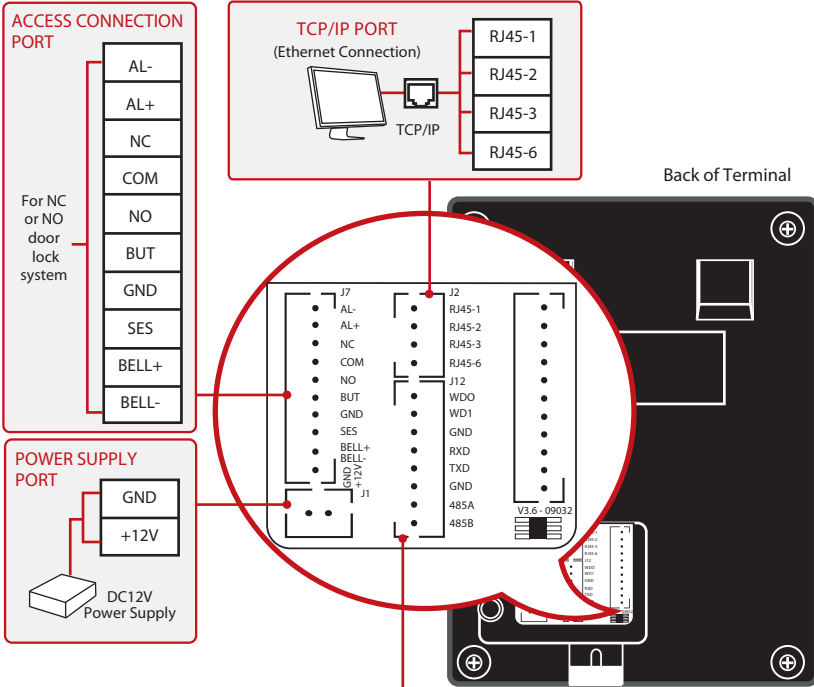
Installation Guide

NOTE

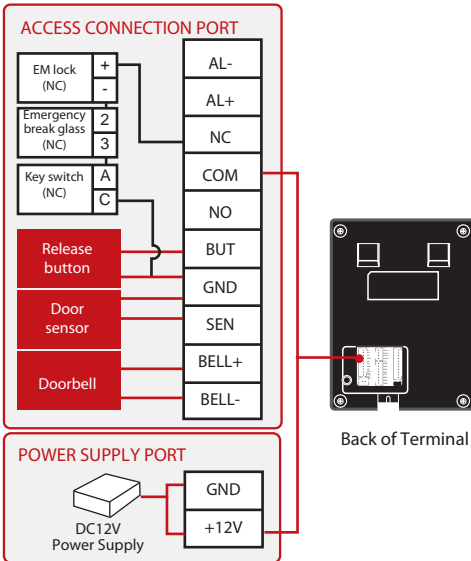
The installation guides is for installer reference only

Communication Diagrams

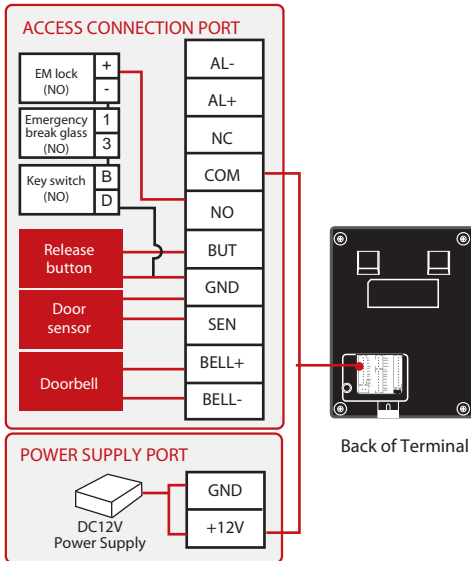
At the rear of every terminal, there are connections available for power, communication and door access. Refer to the following diagrams for the terminals you require.



For NC (normally close) door lock system



For NO (normally open) door lock system

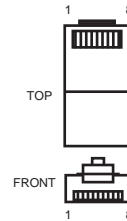


NOTE Please refer to AdapTec AC Installer Manual if you are using AdapTec AC.

Descriptions of Available Connections

USB PORT

Linking with USB flash disk for remote data transfer.



TCP/IP PORT

Connect with CAT 5 cable for LAN connection, one end to this port and another end to the computer's TCP/IP Port.

TCP/IP for Single Connection:

Linking the terminal to a single computer using TCP/IP requires Ethernet 10/100Base-T Crossover Cable. The cable can be used to cascade hubs or to connect Ethernet stations back-to-back without a hub. It works with both 10Base-T and 100Base-TX.

JOINT 1 PIN

JOINT 2 PIN

TX+	1	↔	3	RX+
TX-	2	↔	6	RX-
RX+	3	↔	1	TX+
RX-	6	↔	2	TX-

TCP/IP for Network Connection:

Linking the terminals to multiple computers using TCP/IP requires Ethernet 10/100Base-T Straight Thru Cable or "whips". The cable works with both 10Base-T and 100Base-TX, connecting a network interface card to a hub or network outlet.

CONNECTOR PIN		CABLE COLOR	CONNECTOR	
TX+	1	White/Orange	1	TX+
	2	Orange	2	
RX+	3	White/Green	3	RX+
	4	Blue	4	
	5	White/Blue	5	
RX-	6	Green	6	RX-
	7	White/Brown	7	
	8	Brown	8	

POWER SUPPLY PORT

Insert the Power Adapter point to this port for power.

RS232/RS485/WIEGAND CONNECTION PORT

RS232: Connection to a computer using RS232 cable.

RS485 Single Connection: Connection to a single computer using RS485 wire.

RS485 Network Connection: Connection to multiple computers using Daisy Chain connection.

Wiegand Output: Connecting with third party connector or terminal(s).

ACCESS CONTROL PORT

Linking the terminal to door lock system.

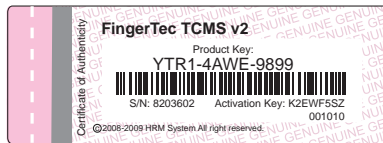
BELL PORT

Linking the terminal to doorbell.

NOTE

Link all cables to the correct connection point(s) before attempting to connect the terminals to software.

Checking the Genuine TCMS V2



TCMS V2 is genuine software by FingerTec®. Check the genuine sticker on top of TCMS V2 software manual booklet to retrieve product and activation code. The serial number of the terminal must match with the serial number printed on the booklet in order to activate the system.

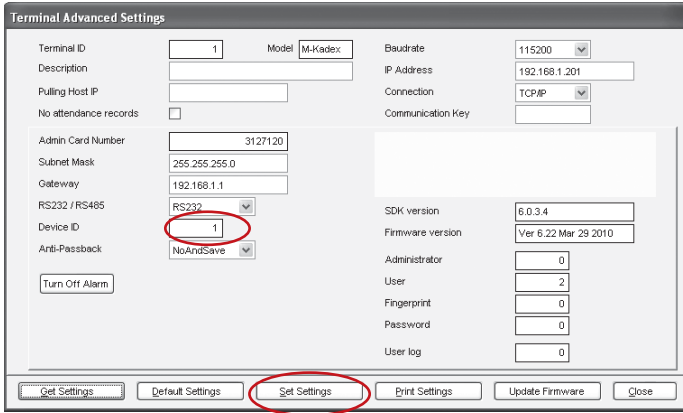
Installation and Setup of TCMS V2

Install TCMS in a PC with sufficient minimum requirements. Refer to user.fingertec.com/user-promanual.htm for TCMS V2 Manual online. Setup Wizard will require the product key and activation code to activate the system. In case you lose TCMS V2 product key and activation code, go to user.fingertec.com/retrieve_key_user.php for retrieval.

Connecting The Terminals to TCMS V2

DETERMINING TERMINAL NUMBER

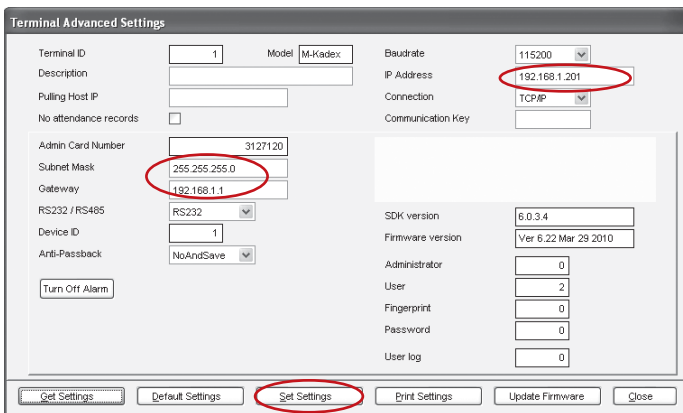
Identify the number of your terminal to differentiate between one another. One TCMS v2 can connect to 999 units of terminal. The default terminal number of m-Kadex is 1. The terminal number can only be changed after you connect it to the TCMS v2.



USING TCP/IP

Determining the IP Address

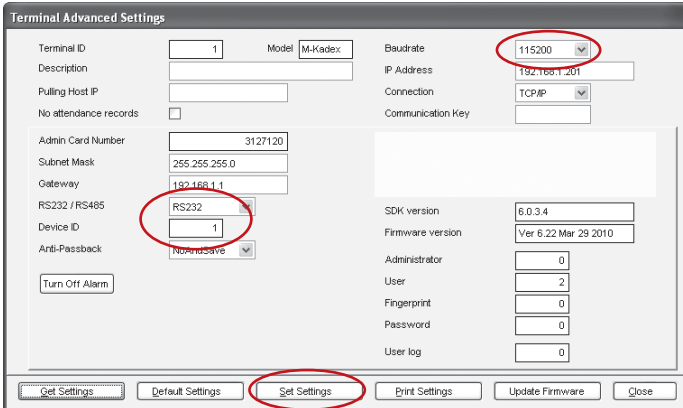
IP address is important, as it is a unique address of the terminal in LAN. Without the IP address, locating the specific terminal is not possible. The default IP address of m-Kadex is 192.168.1.201. The IP address can only be changed after you connect it in TCMS V2. Change the Subnet mask and Gateway accordingly.



USING RS232 OR RS485

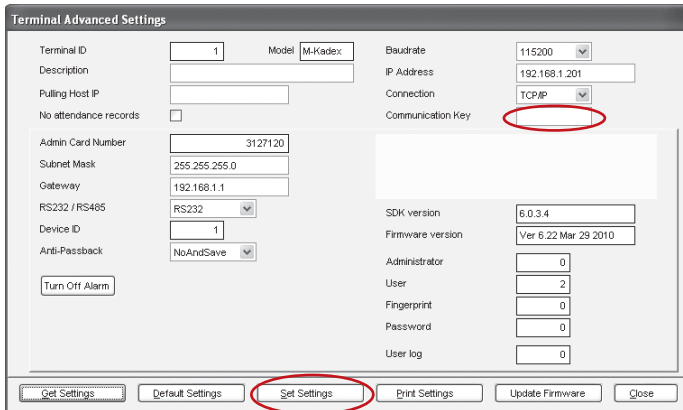
For connection via RS232 or 485, terminal number is the most important issue. The default terminal number is 1, and you can change it in TCMS v2. Baudrate is the de-

terminant of communication speed between the terminal and the software. The higher the baudrate, the faster the speed is. Changes can be done in TCMS v2.



COMMUNICATION KEY

Since the software is controlled by an activation code and a product key, set the COMM key to zero.



Using USB Flask Disk

USB flash disk is useful in cases where the terminal is installed far from a PC or there is a connection problem. To determine the type of USB compatible by the terminal, please refer to this link at fingertec.com/newsletter/HL_74.html.

To Download Attendance Logs Only

Plug the USB flash disk to m-Kadex and terminal save all transaction logs into the USB flash disk automatically.

To Download User Data and Attendance Logs into USB Flash Disk

Plug in compatible USB flash disk into m-Kadex's USB port > Wave an administrator card 9 times at the induction area > LED will lit up in green ito indicating that the download process is running > The LED will blinks in green once to signal that the > Process is completed > Unplug the USB flash disk from the m-Kadex once the process is done.

To Upload User Data from USB Flash Disk to m-Kadex

Make sure that the user data already has been loaded into the USB flash disk before doing this operation.

Plug in a USB flash disk into m-Kadex's USB port > Wave the administrator card 11 times at the induction area > LED will lit up in green to iindicate that the upload process is running > The LED will blinks in green once > the process is completed > Unplug the USB flash disk from the m-kadex after the upload process is done.

4 • MANAGING USER

Enrolling Administrator Card

Administrator card is the first card to be enrolled into the terminal. Administrator card cannot be used to report attendance or gain access. System administrator must maintain 2 cards, an administrator card to operate terminal, and a normal card for attendance and access.

The administrator card is the key card to operate the terminal. To start or end an operation such as enrolment of new card enrollment, deletion of card, and restoration of terminal back to default factory settings, administrator card is required.

Registration of Administrator Card

Power up terminal > Green LED blinks continuously > Wave the card at the induction area > Terminal beeps once > Green LED blinks > Terminal is ready

Remark: If the Green LED blinks continuously when you turn on the power, it means that the terminal has already been enrolled with an Administrator card

Enrolling User Cards

Green LED blinks > Wave Administrator card twice at the induction area > Green LED blinks > Wave the new user card at the induction area > Terminal beeps once and the Green LED blinks > Repeat the steps to enroll next new user card > Wave the administrator card to induction area to end process > Green LED blinks

Remark: If the terminal beeps twice and red LED blinks after reading your card, the card has already been registered to the terminal. You can't re-enroll with this card. Please use another card.

Verifying Card for Attendance or Access

Green LED blinks > Wave your card at the induction area > Terminal beeps once > Green LED blinks > If the card is verified successfully, the LED blinks in green

Remark: If the terminal beeps twice and the LED blinks in red after having read your card, your card has not been registered into the terminal. Register your card first before trying to verify it at the terminal.

Deleting User Card

LED blinks in green > Wave Administrator card 3 times at the induction area > LED blinks in red > Wave the user card at the induction area > Terminal beeps once > LED blinks green once > LED blinks in red > Repeat to wave next user card to delete > Wave the administrator card to induction area to end process > LED blinks in green

Remark: If the terminal beeps twice and LED blinks in red after read your card, your card is not registered yet to the terminal. You can use this card to register with the terminal.

Deleting attendance logs in m-Kadex

In standby mode, the m-Kadex's LED blinks in green > Wave the administrator card 7 times at the induction area > The LED will lit up in green to indicate that the deletion process is running > The LED will blinks in green once > the process is completed

Resetting to Default Factory Settings using Administrator Card

Green LED blinks > Wave Administrator card 5 times at the induction area > The terminal beeps 3 times > Red LED blinks > Wave the Administrator card once at the induction area to confirm > Green LED blinks > Terminal beeps continuously for 7 seconds> Green LED blinks

Remark: All contents in the terminal will be deleted including the content in administrator card. The IP address of the terminal returns to default 192.168.1.201 after this process. The Terminal ID returns to 1 after this process.

Resetting to Default Factory Settings Without Administrator Card

Green LED blinks > Detach the terminal from its location on a wall > Release the security button > Wait for 30 sec > Push and release the security button 3 times > Terminal produces a long beep > restart the terminal

