FING€RTEC

Installation Guide

R3
Fingerprint Color Door Access & Time Attendance

Step 1
Determine the Location and Position of the Installation

- Avoid installing the terminals in locations that have contact with a strong light source (e.g direct sunlight, spotlight, fluorescent light, etc)


- Avoid installing the terminals in locations prone to high moisture or condensation levels in the air

- The recommended installation height of the terminals from the ground is 1.2 meter.

Step 2
Mounting Terminals

It is recommended that the terminals be mounted to a wall in to ease the process of enrolment and verification. In a situation whereby mounting the terminals on a wall is not an option, you can choose to use flexi kit to convert the terminals to desktop units. However, there are limited options for the flexi kit and some terminals might not be suitable to be placed on flexi kits.
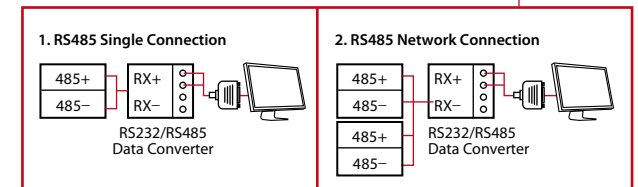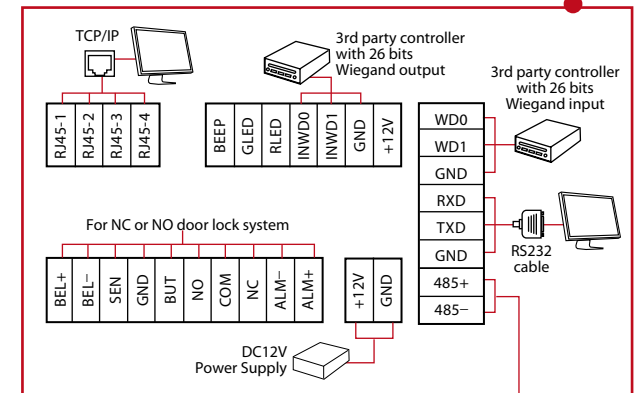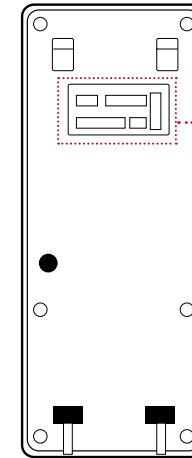
A. MOUNT ON WALL

- After measuring the height accordingly and make relevant marking on the wall, drill the screws into the wall to secure the back plate.

- Attach the terminal to the back plate and tighten the screws. Refer to Appendix I for dimensions and measurements of installation.

4 feet / 1.2 meter (recommended)
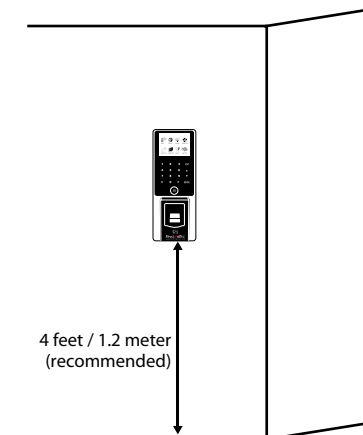
Step 3
Wiring for Power Supply

The power input ports for this model are located at the rear of the terminal. There is no adapter plug supplied with the model, you need to source for power cable (red and black cables) to connect the power from the terminal to the AdapTec.

TCP/IP

3rd party controller with 26 bits Wiegand output

3rd party controller with 26 bits Wiegand input

RJ45-1	RJ45-2	RJ45-3	RJ45-4		BEEP	GLED	RLED	INWD0	INWD1	GND	+12V		WD0

WD1
GND
RXD
TXD
GND
485+
485−

RS232 cable

For NC or NO door lock system

BEL+	BEL−	SEN	GND	BUT	NO	COM	NC	ALM−	ALM+		+12V	GND

DC12V Power Supply

1. RS485 Single Connection

485+		RX+
485−		RX−

RS232/RS485 Data Converter

2. RS485 Network Connection

485+		RX+
485−		RX−
485+		
485−		

RS232/RS485 Data Converter

Step 4
Setting Up Data Communication
(Skip this step if you are using USB flash disk to transfer data)

The data communication ports are positioned at the rear of the terminals, please refer to the diagrams shown on Step 3 to determine the wiring. Plug the communication jacks (TCP/IP, RS232 or RS485) to the corresponding ports.

TCP/IP – LAN Connection
For TCP/IP connection, plug the special RJ45 jack into the TCP/IP (LAN) Port of the terminal. Connect the other end (normal RJ45 jack) to the local area network hub or a PC. Configure the device ID, IP address, subnet mask and Gateway in the terminal (refer to the hardware user manual for details).

RS232 – Serial Port Connection
Plug the communication jack that is provided in the package to connect to the communication port of the terminal. Select wires with label RX, TX and GND, and connect the other end of these wires to a DB9 female connector. Configure the device ID and baudrate of the terminal (refer to the hardware user manual for details). Use the normal RS232 cable to plug into the RS232 port of the terminal.

### RS485 – Serial Port Connection
Plug the communication jack that is provided in the package to connect to the communication port of the terminal. Select wires with label RS485+, RS485- and GND, and connect the other end of these wires to an RS232/485 data converter. Connect the other end of the data converter to a DB9 female connector. Configure the device ID and baudrate of the terminal (refer to the hardware user manual for details).

Step 5
Finalizing the Installation

1. Check that all cable connections are done correctly.
2. Attach the terminal to the corresponding back plates and tighten the screws to secure the terminal on the wall.
3. Switch on the power to the terminal.
4. Start using the terminal.

Other Accessories

FingerTec offers complementing accessories which can be used with your terminals. These optional accessories are available at
http://accessory.fingertec.com
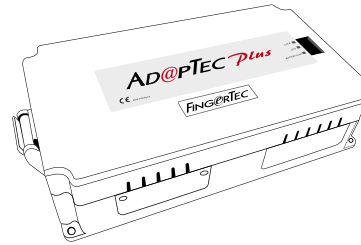
AdapTec Plus
The AdapTec Plus is a 12VDC power supply inclusive of a 110~240VAC switching linear power. The AdapTec supplies 12VDC power to the FingerTec terminal and door lock system as well as charges a 12VDC 7.0Ah backup battery simultaneously.

During an event of a power failure, the back up battery automatically provides power to the terminal and maintains the door lock system. The AdapTec Plus also prevents a secured door from being opened if it has been tampered with.

Enclosures
An acrylic-made enclosure that protects your terminal from the risk of meddling by unauthorized individuals. Our custom made enclosure are specially designed to fit your terminal perfectly with specific openings for fingerprint scanner and buttons. Our enclosure can be used to mitigate surrounding mild environmental hazards and help lengthen the lifespan of the terminals. However, do note that the enclosure is not dust-resistant and waterproof if subjected to extreme weather conditions.

Door Lock Accessories
FingerTec offers various door locks accessories to complement FingerTec door access product range.

Appendix
Power Supply & Door Lock System Wiring Diagram
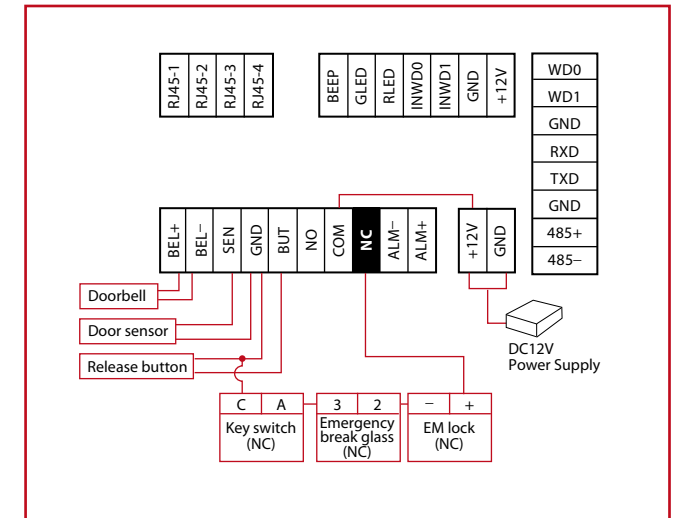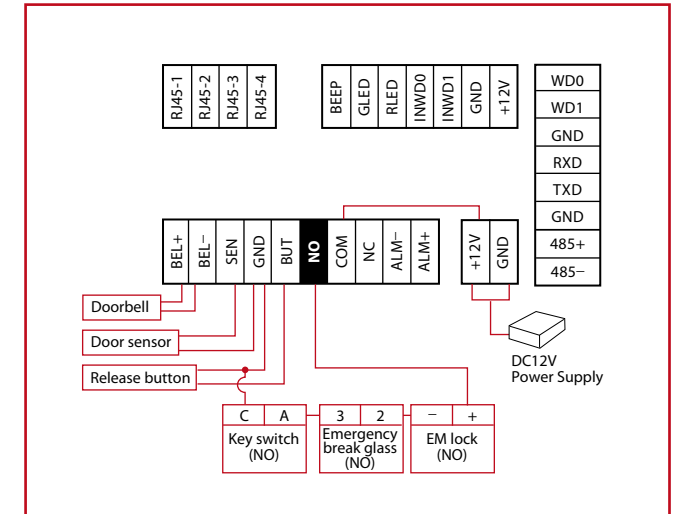
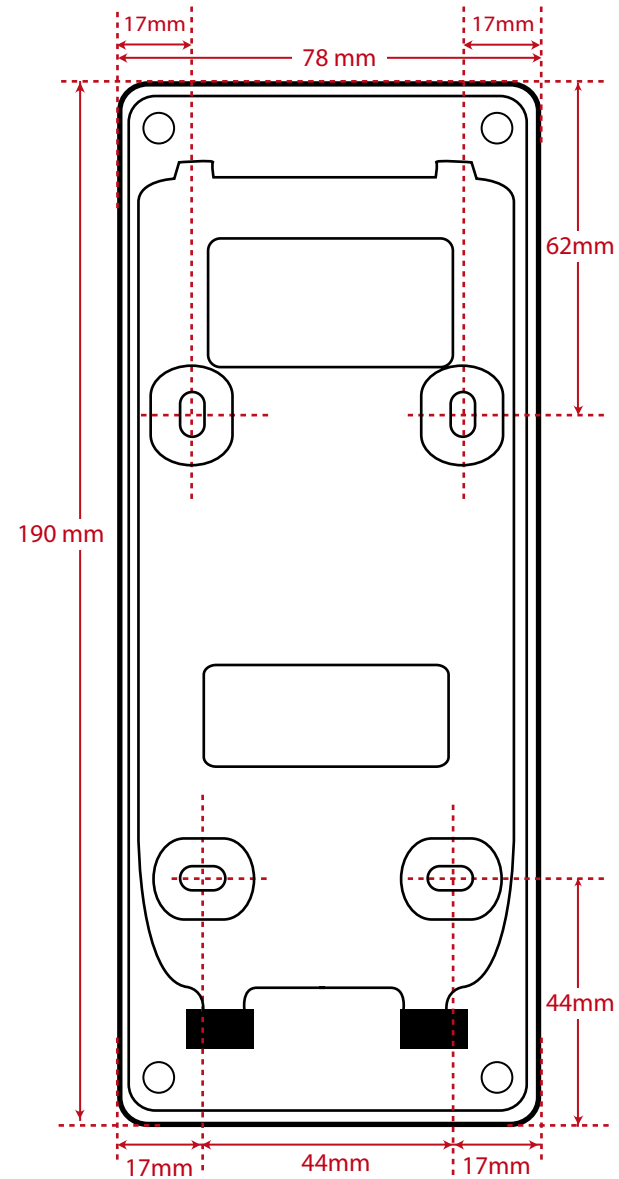**Diagram1** • Normally Close (NC)

Diagram2 • Normally Open (NO)

Door Lock Connectors

WIRING	USAGE
NO	**Dry Contact** (independ-ent power supply for door lock) • NO type door lock (NO-COM) • NC type door lock (NC-COM)
NC	**Power Contact** (using power from terminal to power on door lock) • NO type door lock (NO-GND) • NC type door lock (NC-GND)
COM	**Dry Contact** (independ-ent power supply for door lock) • NO type door lock (NO-COM) • NC type door lock (NC-COM) **Power Contact** (using power from terminal to power on door lock) • COM1 - +12V
SEN	**Door Sensor** (SEN-GND)
GND	**Release Button** (BUT-GND)
BUT	
Bell+	**Door Bell**
Bell-	
AL+	**Alarm System** **NO or NC Type – Check in** **Advance Options**
AL-	

The terminal will trigger the alarm output (NO or NC) in the following situations:

• Door forced open (A door sensor must first be installed)
• Door open time out (A door sensor must first be installed)
• Terminal has been illegally dismantled.

Appendix I
Terminal Dimensions and Measurements

Front View of Back Plate