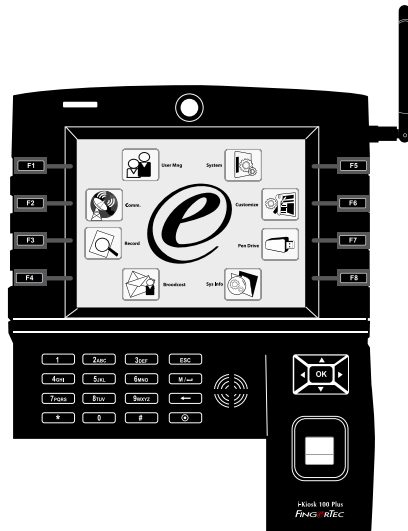# FINGERTEC
We Make Things Easy

Installation Guide

i-Kiosk 100 Plus
Fingerprint Color Multimedia for Time Attendance & Door Access Control System

Step 1
Determine the Location and Positioning of the Installation

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

- Avoid installing the terminals in locations with high moisture or condensation levels in the air
- The recommended installation height of the terminal from the ground is 1.2 meter.

Step 2
Mounting of Terminals on a Wall
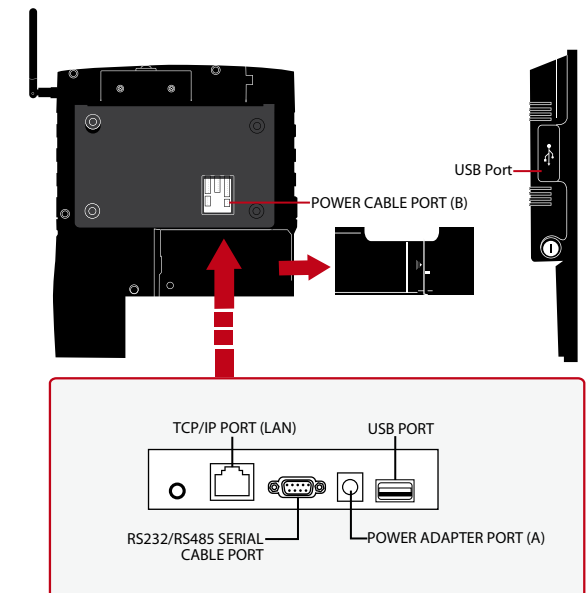

Back Plate

4 feet / 1.2 meter (recommended)
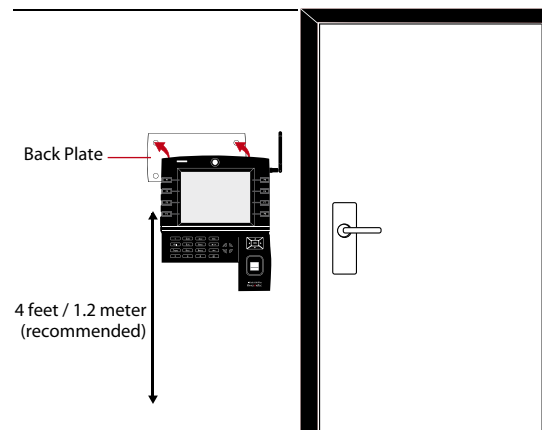
- After determining the height of the terminal from the ground level and have made the relevant marks on the wall, drill the screws into the wall to hang the back plate.
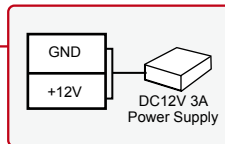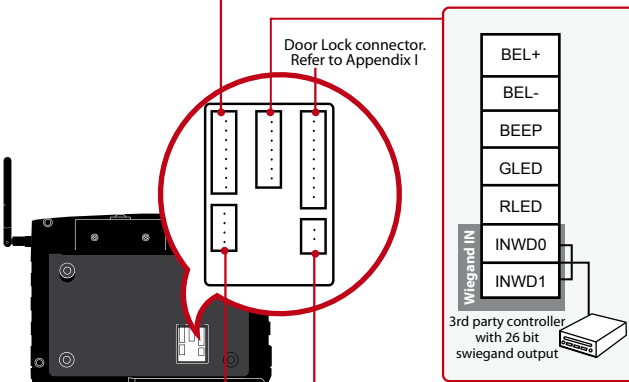
  Refer to Appendix II for dimensions and measurements of installation.

Step 3
Wiring for Power Supply

i-Kiosk 100 Plus comes with a special key to unlock ports to power and door access as shown in the diagram marked B. There are two ways to connect the power to i-Kiosk 100 Plus.

1. Use the power adapter provided in the package and insert the power adapter to the port marked A in the diagram.
2. Use power cables (black and red) to connect to a linear power supply with specifications of 12VDC 3A. (Marked B)

USB Port

POWER CABLE PORT (B)

TCP/IP PORT (LAN)   USB PORT

RS232/RS485 SERIAL CABLE PORT   POWER ADAPTER PORT (A)

1. RS485 Single Connection

| 485B | RX+ |
| 485A | RX- |

RS232/RS485 Data Converter

2. RS485 Network Connection

485B	RX+
485A	RX-
485B	
485A	

RS232/RS485 Data Converter

RS485: 485B, 485A

RS232: GND, TXD, RXD — RS232 cable

Wiegand OUT: GND, WD1, WD2 — 3rd party controller with 26 bits wiegand input

Door Lock connector. Refer to Appendix I

Wiegand IN:
BEL+
BEL-
BEEP
GLED
RLED
INWD0
INWD1

3rd party controller with 26 bit swiegand output

GND
+12V — DC12V 3A Power Supply

* Use either power input

TCP / IP:
RJ-6
RJ-3
RJ-2
RJ-1

TCP/IP

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

TCP/IP – LAN Connection
For TCP/IP connection, plug the special RJ45 jack into the LAN/ TCP/ IP 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).
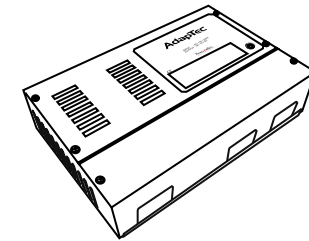
Step 5
Finalizing the installation

1. Check that all cable connections are done correctly.

2. Attach the terminal to the corresponding back plates, 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
Note: *All Accessories are offered at http://accessory.fingertec.com*

AdapTec

AdapTec AC
The AdapTec AC 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 AC also prevents a secured door from being opened if it has been tampered with.
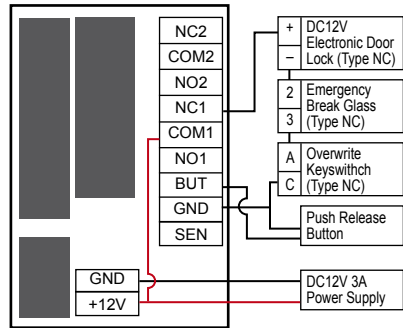
Enclosures
FingerTec offers enclosures to protect the terminals from being meddled with by unauthorized persons.
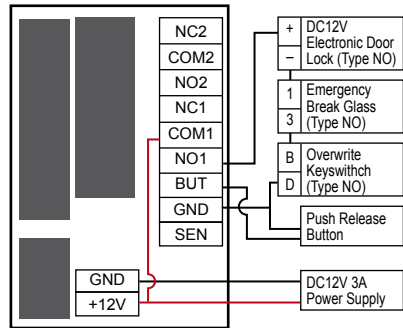
Door Lock Accessories
FingerTec offers various door locks accessories to complement FingerTec door access product range.

Appendix I
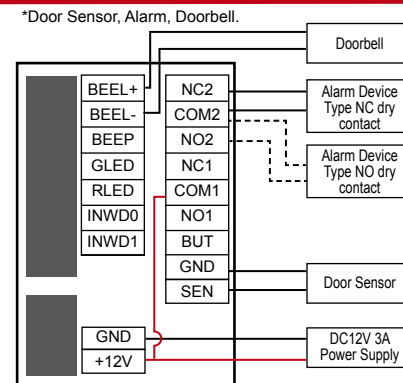## Power Supply & Door Lock System Wiring Diagrams

▶ Diagram 1 • Normally Close (NC)

NC2	
COM2	+ DC12V Electronic Door Lock (Type NC) −
NO2	
NC1	2 Emergency Break Glass (Type NC) 3
COM1	
NO1	A Overwrite Keyswithch (Type NC) C
BUT	
GND	Push Release Button
SEN	
GND	DC12V 3A Power Supply
+12V	

▶ Diagram 2 • Normally Open (NO)

NC2	
COM2	+ DC12V Electronic Door Lock (Type NO) −
NO2	
NC1	1 Emergency Break Glass (Type NO) 3
COM1	
NO1	B Overwrite Keyswithch (Type NO) D
BUT	
GND	Push Release Button
SEN	
GND	DC12V 3A Power Supply
+12V	

▶ Diagram 3 • Other Accessories

*Door Sensor, Alarm, Doorbell.

BEEL+		Doorbell
BEEL-	NC2	Alarm Device Type NC dry contact
BEEP	COM2	
GLED	NO2	Alarm Device Type NO dry contact
RLED	NC1	
INWD0	COM1	
INWD1	NO1	
	BUT	
	GND	Door Sensor
	SEN	
GND		DC12V 3A Power Supply
+12V		

Use either Type NO or Type NC alarm device.

Door Lock Connectors

WIRING PORT	USAGE
NO1	**Dry Contact** (independent power supply for door lock)
NC1	•NO type door lock (NO1-COM) •NC type door lock (NC1-COM)
	Power Contact (using power from terminal to power on door lock) •NO type door lock (NO1-GND) •NC type door lock (NC1-GND)
COM1	**Dry Contact** (independent power supply for door lock) •NO type door lock (NO1-COM) •NC type door lock (NC1-COM)
	Power Contact (using power from terminal to power on door lock) • COM1 - +12V
NO2	**Alarm System**
COM2	NO Type – NO2 – COM2 NC Type – NC2- COM2
NC2	
SEN	**Door Sensor** (SEN-GND)
GND	**Release button** (BUT-GND)
BUT	
Bell+	**Door Bell**
Bell-	

The terminal will trigger the alarm output (NO or NC) for 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 II
Terminal Dimensions and Measurements
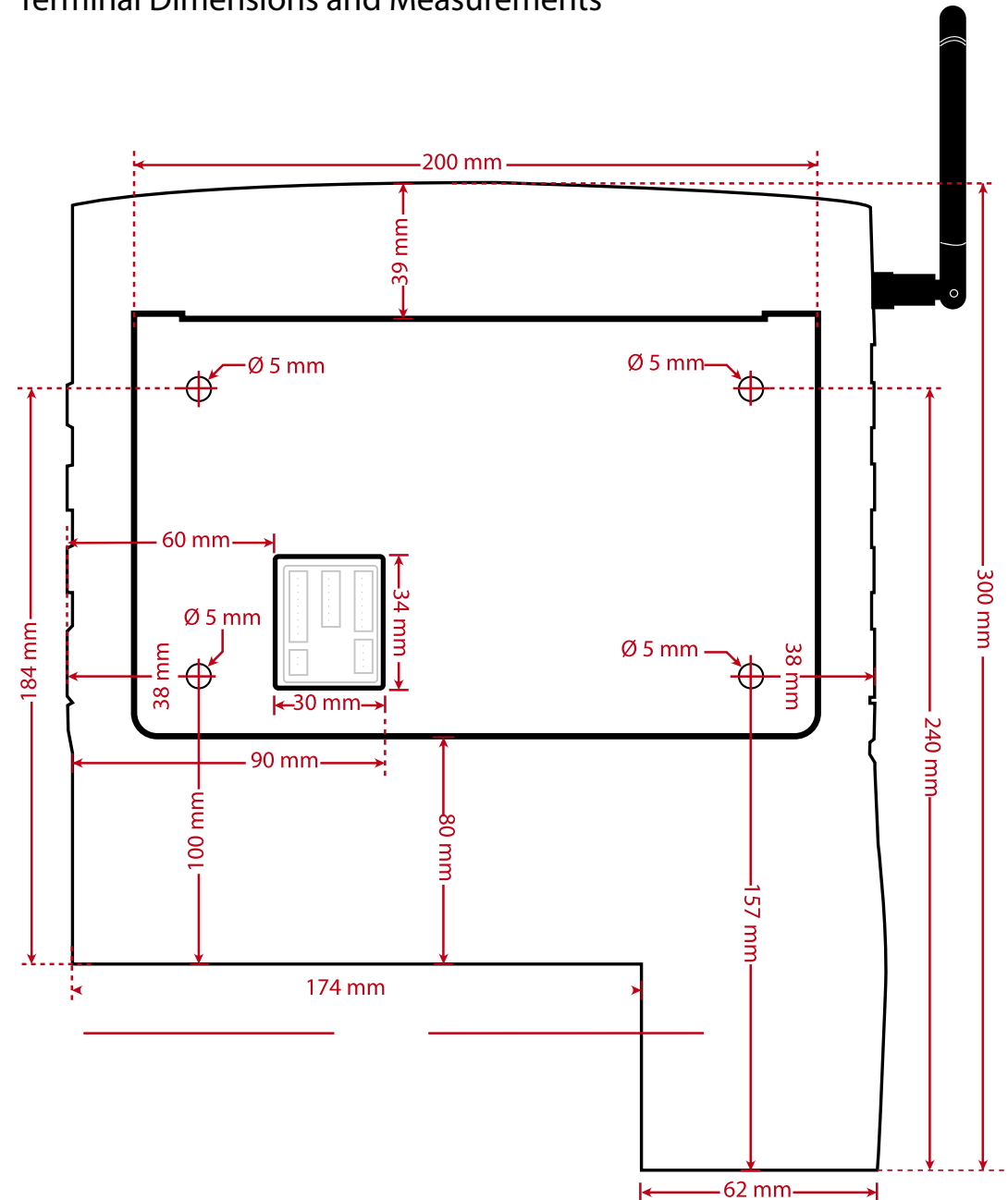
Front View of i-Kiosk 100 Plus