DIGIgarde PLUS

5002-0455
Quick Start Guide

Introduction

DIGIgarde PLUS is a combined fingerprint and smart card reader with integral backlit keypad providing User ID, fingerprint, PIN and smart card authentication modes.

This Quick Start Guide explains how to:
1. Unpack the unit and prepare for installation.
2. Mount the unit using the supplied fixing kit.
3. Connect the unit.
4. Set up an administration account.
5. Enrol a user and record their fingerprint.
6. Verify a user and scan a fingerprint.

Please read the user manual (on the accompanying CD) for detailed information about any of these steps.

The user manual can also be downloaded from the TDSi website: http://www.tdsi.co.uk

For technical assistance, contact TDSi Support on +44 (0)1202 724998 or email support@tdsi.co.uk.

1. Unpacking

This pack contains:

- A TDSi DIGIgarde PLUS fingerprint reader
- CD with operating software and manual
- Mounting template
- Cable assembly
- Ferrite ring
- Tool for security screw
- Fixing kit
- Suppression diode

Cabling Requirements

You will need to supply and install the following cables to the unit:

- **Communications (RS232 or RS485)**
  Screened cable: Belden 9729, Belden 9502, OS2P24, OS2P22, Alpha 5902, Alpha 5094 or other equivalent screened alarm cable.

- **Communications (TCP/IP)**
  Cat5 or Cat6

- **Access Controller/Power Supply**
  6-core Belden 9730, Belden 9503, Alpha 5096 or OS6C24

2. Mounting

1. Unfasten and remove the screw on the base of the DIGIgarde PLUS.
2. Remove the back cover.
3. Use the mounting template to mark out the drill holes and cable access point.
4. Drill the two 6mm holes to a depth of 35mm.
5. Push the supplied plugs into the drill holes.
6. Fasten the unit's back plate to the wall using the supplied screws. Ensure that the anti-tamper magnet is positioned correctly.
7. Feed the cable into the wall and hook the top of the DIGIgarde PLUS onto the mount.
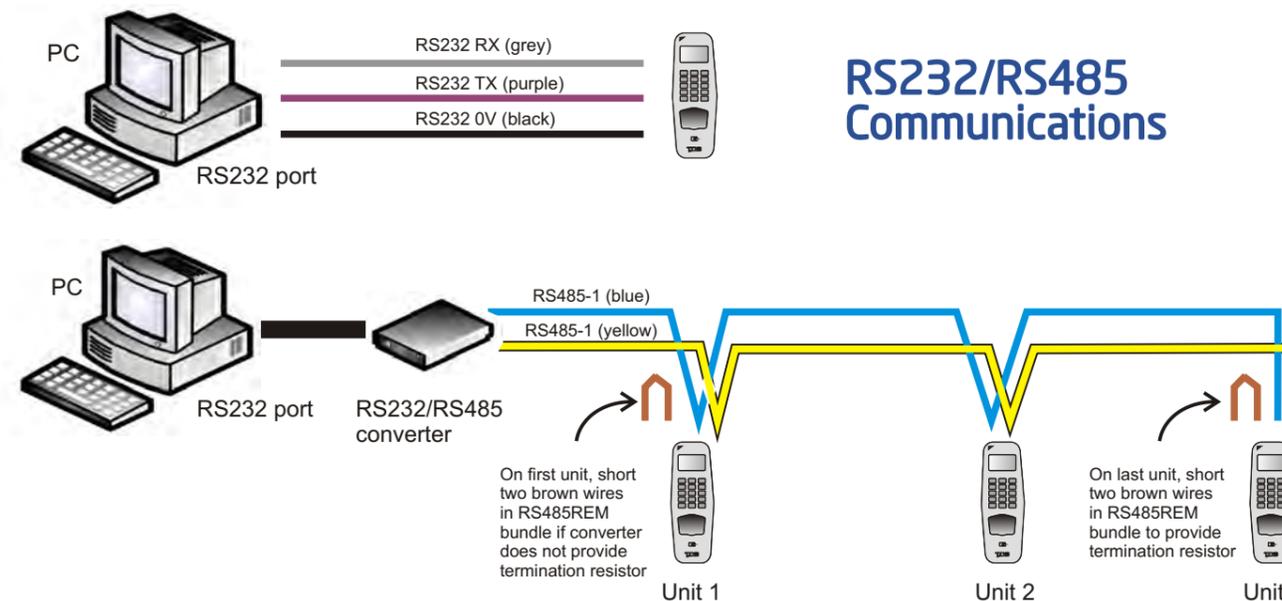8. Fit the supplied ferrite ring around the wire bundle for EMC protection.

3. Connections

DIGIgarde PLUS can be connected to other devices (access control units, lock, door sensor, alarm, host PC etc) through the colour-coded and labelled connection cables. In addition to the connections described in the table opposite, there is also a pre-configured POI-capable, RJ-45 connector.

⚠️ **CAUTION! Lock strike suppression devices MUST be fitted directly across all inductive loads such as lock strikes, secondary relays and automatic door openers). Failure to adhere to this notice will invalidate the warranty of this product and may result in irreparable damage to it and other connected equipment.**

DIGIgarde PLUS Wiring

⚠️ **CAUTION!** Ensure that the supplied ferrite ring is fitted to the unit's cable bundle for EMC protection.

Label	Wire Colour		Signal	Description
Power	Black		0V	Power GND
	Red		+12V	Power Input
WG IN	Black		GND	GND
	White		WD0-IN	Wiegand Input, Data 0
	Green		WD1-IN	Wiegand Input, Data 1
WG OUT	Yellow		WD0-OUT	Wiegand Output, Data 0
	White		WD1-OUT	Wiegand Output, Data 1
	Black		GND	Wiegand GND
	Blue		LED	LED
Lock	White		SENSOR	Door Sensor power
	Black		GND	Door Sensor ground
	Grey		BUTTON	Egress button
	Blue		NO1	Normally Open
	Red		COM1	Common
	Yellow		NC1	Normally Closed
Alarm	Orange		ALARM NO2	Alarm (Normally Open)
	Green		ALARM COM2	Alarm (Common)
RS485-2	Blue		RS-485A-2	RX+, RS-485-2 level
	Yellow		RS-485B-2	RX-, RS-485-2 level
RS232	Black		RS-232 0V	RS-232 0V
	Grey		RS-232 RX	Receive Data, RS-232C level
	Purple		RS-232 TX	Transmit Data, RS-232C level
RS485-1	Blue		RS-485A-1	RX+, RS-485-1 level
	Yellow		RS-485B-1	RX-, RS-485-1 level
	Black		GND	RS-485 GND
RS485RES	Brown		RS-485RES	Link wires to provide termination resistor for this unit (see below)
	Brown		RS-485RES	

RS232/RS485 Communications

PC — RS232 port
RS232 RX (grey)
RS232 TX (purple)
RS232 0V (black)

PC — RS232 port — RS232/RS485 converter
RS485-1 (blue)
RS485-1 (yellow)

On first unit, short two brown wires in RS485REM bundle if converter does not provide termination resistor

On last unit, short two brown wires in RS485REM bundle to provide termination resistor

Unit 1   Unit 2   Unit 3

4. Standalone Use

(a) Enrolment

To enrol a user, press the **Menu** button.

If you have registered an *Administrator*, *Manager* or *Enroller* account, you are prompted to verify your identity (see Step c). After you have done this, press the **Menu** button again.

Press the **OK** button to select the *User Manage* menu option. Select *Enrol User* and follow the on-screen prompts to:

1. Select a user ID.
2. Choose the enrolment method: fingerprint (**FP**), password (**Pwd**) or both (**FP & Pwd**).
3. Scan a finger three times and/or enter a 5-digit password or PIN.
4. Repeat the procedure to provide the user with a backup fingerprint.
5. Save the template.

```
Menu                    ↓
 ►User Manage
  Options
  Sys Info
```

```
User Manage             ↓
 ►Enrol User
  FP Card Mng
  Enrol Admin
```

```
Enrol User
 ►Enrol FP
  Enrol Pwd
  FP & Pwd
```

(b) Setting up Admin Accounts

The first time the DIGIgarde PLUS is powered up, there are no user accounts. Your first step should be to create one or more protected administrator accounts.

DIGIgarde PLUS recognises three admin levels:
- Enroller
- Manager
- Admin

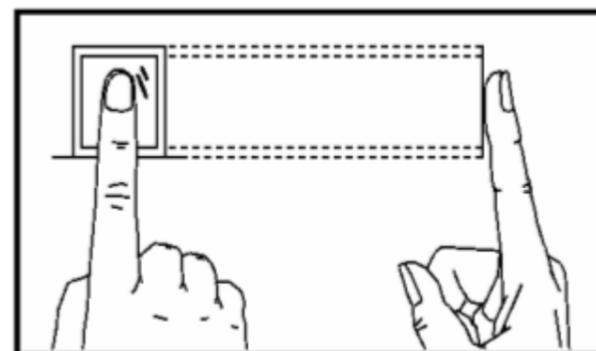To set up an Admin, Manager or Enroller account:

1. Press the **Menu** button.
2. Press the **OK** button to select the *User Manage* menu option.
3. In the *User Manage* menu, use the ▲▼ keys to select the *Enrol Admin* option.
4. Use the ▲▼ keys to select the enrolment method: fingerprint (FP), password (PWD) or both (FP & Pwd). Press the **OK** button.
5. The *Admin Accredit* screen is displayed. Use the ▲▼ keys to choose the management role.
6. Follow the on-screen prompts to scan a finger three times and/or enter a password.

```
Menu                    ↓
 ►User Manage
  Options
  Sys Info
```
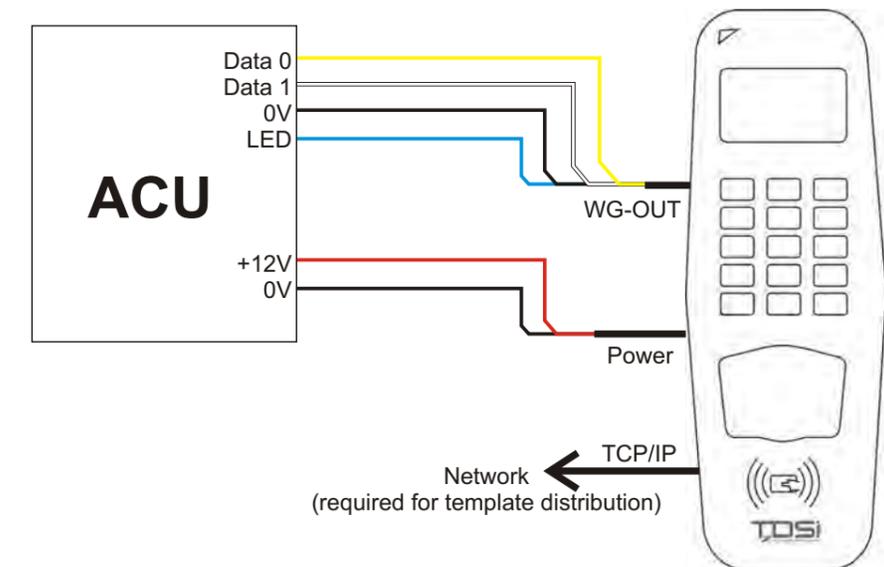
(c) Verification

The verification process involves one or more of the following steps:

- Keying in your user ID
- Scanning the fingerprint recorded during enrolment
- Entering your password
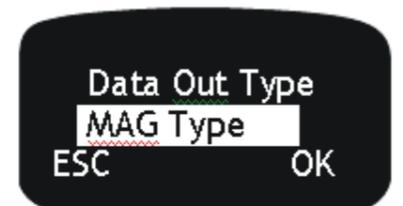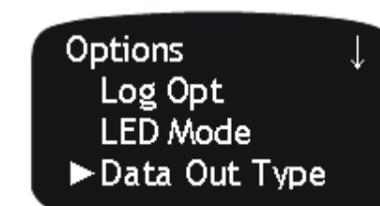- Reading of a smart card

5. Connecting to an ACU

(a) Connections

ACU — Data 0, Data 1, 0V, LED, WG-OUT, +12V, 0V, Power, TCP/IP, Network (required for template distribution)

(b) Configure Reader Format

Choose whether you want to use Wiegand format or Magnetic Clock and Data Format.

1. Press the Menu button.
2. Use the ▼ to select *Options* and press the **OK** button.
3. Press the ▼ key to select *Data Out Type* and then press the **OK** button.
4. Use the ▲▼ keys to select either *WG Type* (Wiegand) or *MAG Type* (Magnetic) mode.

```
Menu                    ↓
  User Manage
 ►Options
  Sys Info
```

```
Options                 ↓
  Log Opt
  LED Mode
 ►Data Out Type
```

```
Data Out Type
  MAG Type
ESC              OK
```

(c) Configure Wiegand Mode

If you are using Wiegand mode, you will need to set up the Wiegand data format.

1. Press the **Menu** button.
2. Press the ▼ key to select *Options* and press the **OK** button.
3. Press the **OK** button to select *System Opt.*
4. Use the ▼ key to select *Wiegand* and press the **OK** button.

```
Menu                    ↓
  User Manage
 ►Options
  Sys Info
```

```
Options                 ↓
 ►System Opt
  Power Mng
  Comm Opt
```

```
System Opt              ↑
  DLST
 ►Wiegand
  Adn Options
```

5. Use the ▼ key to select *Output Setting* and press the **OK** button.
6. Select *Output Format* and press the **OK** button.
7. Use the ▲▼ keys to select the required format, for example: *WG26 without ID*.

```
Wiegand
  Input Setting
 ►Output Setting
```

```
Output Setting          ↓
 ►Output Format
  Output       User
  Site Code    256
```

```
Output Setting
  Output Format
  WG26 without ID
ESC              OK
```