### Hardware setup

### Getting started

One of the advantages of timeQplus Biometric is the range of communications and connectivity options it supports. One of the first things you'll need to decide is how you're going to connect the terminal to your PC or local area network (LAN).

For illustrations of your configuration choices please refer to our **Terminal Connection Diagrams** (available in English, French or Spanish), available from our support website at http://support.acroprint.com/tqp-bio.asp

The system comes with a 30-foot (9-meter) RS232 cable for direct connection of your TQ100 terminal to a PC and a 6-foot (2-meter) Ethernet CAT5 cable for connection to a LAN. If you need longer cables or adapters, these are available for separate purchase from your local dealer or directly from Acroprint.



### Read this document all the way through first

IMPORTANT: We've found it helps avoid frustration to read this document all the way through to familiarize yourself with the setup process before you start. Make sure you have all the required information readily available before you begin the setup process.

#### Gather the required information

The most common installation options are direct to a PC com port (RS232/RS485) and Local Area Network/LAN (Ethernet). In order to set up either of these options, you must first gather some information that will be required during the setup process.

#### If you are connecting via Ethernet to a LAN

- You will need an IP address for the terminal and default gateway. The terminal's factory pre-set defaults may not be compatible with your network. Consult with your network administrator to obtain this information. Note: you will not be able to complete the terminal configuration without these addresses.
- You will also need to confirm the **port number** with your network administrator. The factory pre-set for the terminal is port 5005. This will not normally need to be changed, but you should verify with your network administrator before proceeding.

#### If you are connecting directly to a PC com port (RS232 / RS485)

- You must determine which COM port on the PC your terminal will be connected to. Normally it will be COM1, but it's a good idea to verify this. Consult with your computer support person if necessary.
- You must determine the Baud rate of the COM port you will be using. You can do this at the PC.
  - Locate the **My Computer** icon on your desktop or Start Menu. Right click and select *Properties* from the menu.
  - Click the *Hardware* tab and click the *Device Manager* button on that window.
  - Click the [+] next to PORTS (COM & LPT) to expand the list of available ports.
  - Locate the correct COM port, right click on it and select *Properties* from the menu.
  - Click the *Port Settings* tab and write down the *Bits per second* number. This is your Baud rate.

#### Save and record this information

Save and record this information. You will need it for both the hardware and the software setup.

When you have the necessary information in hand, proceed to the section entitled **Configure Hardware - Device ID**.

#### Configure Hardware - Device ID

1. Hint: Avoid frustration! Familiarize yourself with the terminal setup process and make sure you have all the required information handy before you proceed. This should enable you to move through the setup without long pauses between steps.

If you hesitate too long between steps the terminal will revert to the initial welcome screen, and any changes you've made to the default configuration up to that point will be lost. If that happens, you'll have to start over again setting options.

- 2. When you have the necessary configuration information handy and have reviewed the terminal setup process, connect the power cord to the TQ100 terminal and to a power outlet. **DO NOT** connect the terminal to your LAN or to a PC at this time.
- 3. Press the **Power On** button on the terminal keypad. On some terminals, this is

designated by the symbol 0 or it may be designated with a dot  $\bullet$ . The system will briefly display the word *Welcome*, then display a welcome screen similar to this:





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The system will display the Communication setup menu.

6. **Device ID:** The first option on the *Communication* menu is *Device ID*. Each TQ100 terminal on your system must have a unique Device ID number assigned. Note the terminal is configured with a default *Device ID* option setting of 1. If this is the first (or only) terminal you are configuring, there is no need to change this setting.

Each subsequent terminal you configure must be assigned a new, unique device ID number with a value between 1 and 10. In that case, press the **OK** button to select the *Device ID* option. Use the **O** through **9** buttons on the terminal keypad to assign a unique ID number to each terminal, then press the **OK** button to accept the new ID number.







Additional terminal - Device ID 5 (for example)

If you plan to connect the terminal to a LAN, continue to **Configure Hardware – Ethernet/LAN**.

If you plan to connect the terminal directly to a PC com port, jump to **Configure Hardware – COM Port**.

### Configure Hardware - Ethernet/LAN

1. Press the - scroll button on the terminal keypad twice to highlight *Port No*. The system displays the factory preset port number of 5005. If your network administrator has indicated this default port number is acceptable, no action is necessary at this step.

If your network administrator has given you a different port number to use, press the **OK** button to select the *Port No* option. Use the numeric buttons to input the desired number. Then press the **OK** button to accept and save the displayed value.





IP Address menu item



Setting the IP address

Using the numeric buttons, enter the first three digits of the IP address number provided by your network administrator. Press the **OK** button to accept your entry. The highlight will move to the next set of three digits.

Continue editing the sets of digits in this fashion until you have updated the entire IP address to the address provided by your network administrator. Press the **ESC** button to return to the *Communication* setup menu.





Default gateway menu item

Setting the gateway address

Using the numeric buttons, enter the first three digits of the gateway address number provided by your network administrator. Press the **OK** button to accept your entry. The highlight will move to the next set of three digits.

Continue editing the sets of digits in this fashion until you have updated the entire gateway address to the address provided by your network administrator. Press the **ESC** button to return to the *Communication* setup menu.

If the option setting reads YES, press the OK button to select the option.

Press the  $\checkmark$  scroll button to change the setting from YES to NO, then press the OK button to accept the new setting and return to the menu.



5. Press the **v** scroll button on the terminal keypad once to highlight *Ethernet*. If the option setting reads YES, no action is required.

If the option setting reads NO, press the OK button to select the option.

Press the  $\checkmark$  scroll button to change the setting from NO to YES, then press the OK button to accept the new setting and return to the menu.



6. Press the **ESC** button to close the *Communication* setup menu. If the terminal displays a *Save?* message as illustrated below, press **OK** to save the changes you have made.



Make a note of the IP address, gateway address and Device ID you just configured. Save this information, as you will need it when you install and configure the software.

#### Configure Hardware – COM Port

If you determined your PC's COM port has a different baud rate, press the **OK** button to select the *Baud Rate* option. Using the numeric buttons on the terminal keypad, enter the correct baud rate for your PC's COM port, then press the **OK** button to accept the new setting.



2. Press the **v** scroll button on the terminal keypad six times to highlight RS485.

If you are configuring for RS232 the option should be set to NO.

If you are configuring for RS485 the option should be set to YES.

Otherwise, press the **OK** button to select the option, then use the  $\checkmark$  scroll button to change the setting to **NO** or **YES**, as necessary. Press the **OK** button again to accept the new setting.



3. Press the **v** scroll button on the terminal keypad once to highlight *Ethernet*. If the option setting reads NO, no action is required.

If the option setting reads YES, press the OK button to select the option.

Press the  $\checkmark$  scroll button to change the setting from YES to NO, then press the OK button to accept the new setting and return to the menu.



4. Press the **ESC** button to close the *Communication* setup menu. If the terminal displays a *Save?* message as illustrated below, press **OK** to save the changes you have made.



Make a note of the baud rate and Device ID you just configured. Save this information, as you will need it when you install and configure the software.