

IDTECK

THE NEW PARADIGM OF SECURITY



STARWATCH **FINGERPRINT
ENROLLMENT
PRO 2006**



IDTECK

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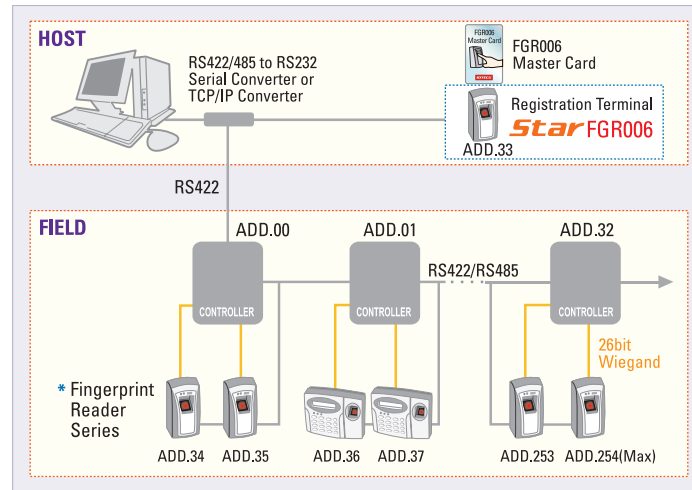
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Download FINGERPRINT ENROLLMENT PRO Software at **DOWNLOAD CENTER** from www.idteck.com !

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1. Fingerprint Reader Configuration

1-1. Connect IDTECK Controller with Fingerprint Reader

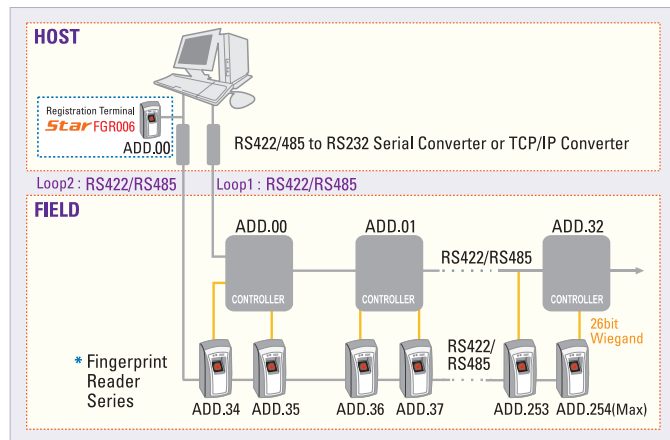


• Usable S/W : STARWATCH DUAL PRO I, II (Should be used from Fingerprint Reader Add.33)
 STARWATCH iTDC PRO I, II (Should be used from Fingerprint Reader Add.100)

* Reader Series : FGR006 / FGR006SR / FINGER006 / FINGER006SR



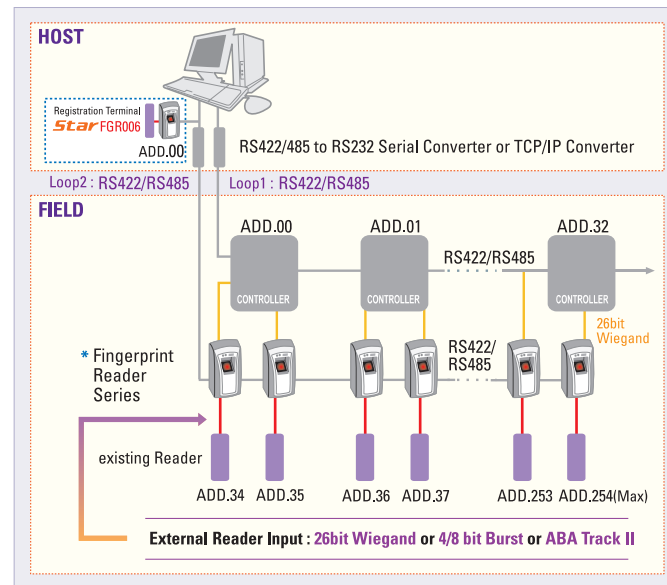
1-2. Connect Third Party Controller with Fingerprint Reader



- **Usable S/W :**
 - ① When both Controller S/W and Fingerprint S/W are used by **Integrate S/W** (Development using SDK)
 - a. STAR BIOREADER SDK for FINGERPRINT READER
 - b. Hamster SDK (Please refer to 2-2. SDK Configuration)
 - ② When both Controller S/W and Fingerprint S/W are used by **Separate S/W**
 - a. Access Controller S/W of Third Party Controller
 - b. STARWATCH FINGERPRINT ENROLLMENT PRO S/W for FINGERPRINT READER

* **Reader Series :** FGR006/ FGR006SR/ FINGER006/ FINGER006SR

1-3. FGR006EX with Existing Readers

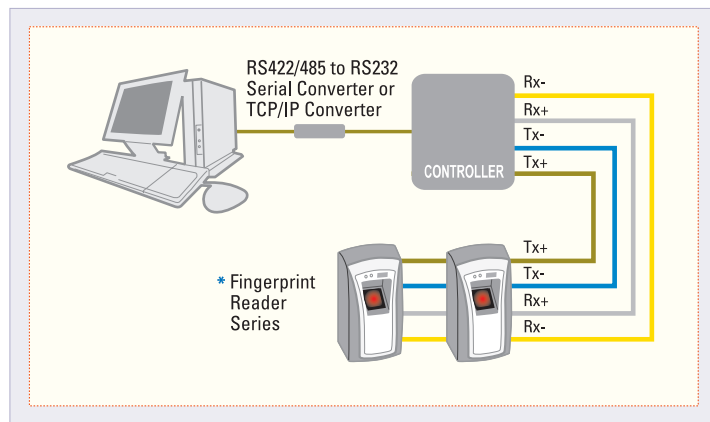


• **Controller :** Please refer to 1-2. Third Party Controller.

* **Reader Series :** FGR006EX/ FINGER006EX



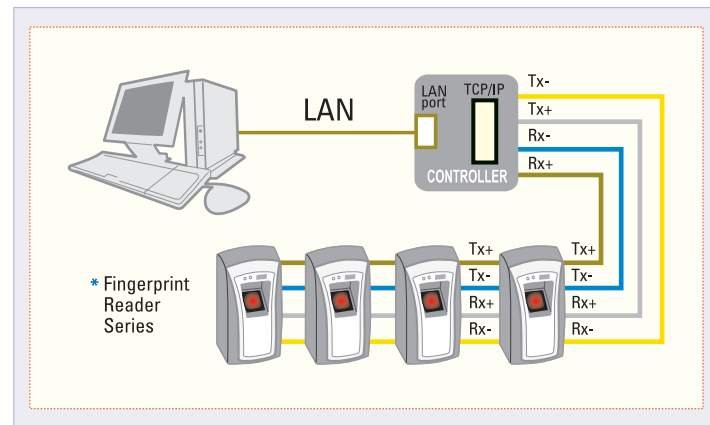
1-4. External Converter Configuration



• **Controller :** 505R, FINGER007, iCON100, iTDC

* **Reader Series :** FGR006/ FGR006SR/ FGR006EX/
FINGER006/ FINGER006SR/ FINGER006EX

1-5. Internal LAN Module(IIM7100A) on iTDC Configuration



• **Controller :** iTDC

* **Reader Series :** FGR006/ FGR006SR/ FGR006EX/
FINGER006/ FINGER006SR/ FINGER006EX



2. S/W Overview

2-1. In case of using an integrated software

If you are currently using another access control software and are trying to integrate with IDTECK's fingerprint reader system, the following SDK may be used.

① STARBIOREADER SDK

Communication library using OCX file in the SDK for Fingerprint Reader Series(FGR006, FGR006SR, FGR006EX, FINGER006, FINGER006SR, FINGER006EX)

Sample Source(Visual Basic)	Supporting Development Tool
a. Sample Program shows how to use STARBIOREADER.OCX	a. Microsoft Visual Basic 6.0 b. Microsoft Visual C++ c. Borland Delphi
Supported Operation System	
a. Microsoft Windows 2000 rofessional b. Microsoft Windows 2000 Server	c. Microsoft Windows XP Home Edition d. Microsoft Windows XP Professional

② Hamster SDK

Library for developing finger registration system using Hamster (USB Type fingerprint scanner)

* Able to save and view the fingerprint image using Hamster.

2-2. In case of using as a separated software

If you are currently using another access control software and are trying to integrate with IDTECK's fingerprint reader system as a separate software, the following software may be used.

① STARWATCH FINGERPRINT ENROLLMENT PRO

- This is the software that controls IDTECK's Fingerprint Reader Series such as FGR006, FGR006SR, FGR006EX, FINGER006, FINGER006SR and FINGER006EX.
- Software is able to register and transmit fingerprint data.
- Supports Hamster unit. In this case, you may verify fingerprint position through fingerprint image.
- Easy to register fingerprint and transmit.
- With Export (ASCII, EXCEL) function, it is able to interface with database of a third party system.
- Fingerprint quality check
- Server / Client support
- Automatic program upgrade by Internet

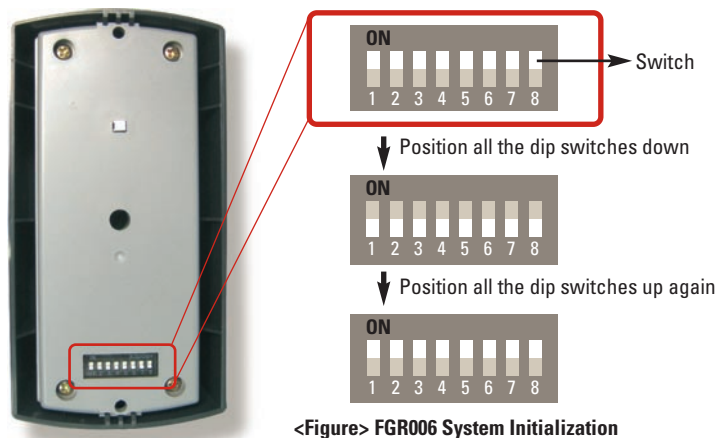
Installation Environment	Supported Operation System
a. CPU: Pentium 4 or higher b. Memory: 256MB or higher c. HDD: 1GB or higher	a. Microsoft Windows 2000 Professional b. Microsoft Windows 2000 Server c. Microsoft Windows XP Home Edition d. Microsoft Windows XP Professional e. Microsoft Windows 2003 Server



3. H/W Overview

3-1. FGR006

① System Initialization



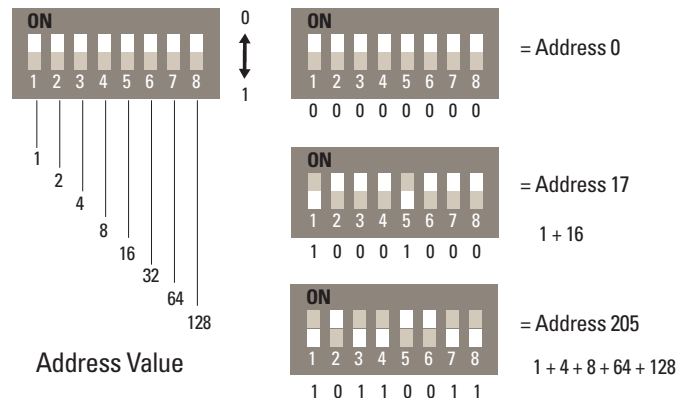
You can initialize the Reader using the DIP switches.
 Firstly, turn the power on and then position all the DIP switches down.
 Finally, reposition all the DIP switches back up to complete the system initialization.

* DIP Switch is used as the communication address.

② Address setting for Communication

Set the board ID using the 8 DIP switches located at the back of the unit.
 The 8 DIP Switches make up an 8-bit binary code. The address is calculated based on the sum value of each bit when it is set to "1".

Example





3-2. FINGER006

③ External RS232C Stereo Jack

RS232C Stereo Jack is used to upload and download fingerprints using Notebook. It's connected with FGR006 and RS232 port of PC or Notebook



Make it uncover TOP CASE in FGR006.
Extract after you pull TOP CASE bottom of FGR006.



It connect a d-sub connector with RS232 port of PC (or notebook).

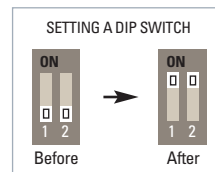
+



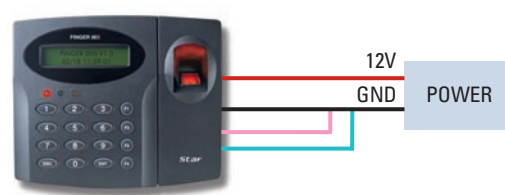
Insert RS232C Stereo Jack at bottom of FGR006

① System Initialization

a. Please check the back panel of the device if the back-up battery's DIP Switches are ON as shown below. If not so, please set them ON.



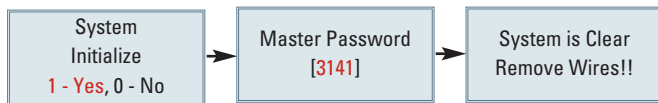
b. Connect those three wires (Pink, Cyan, and Black) together, and then turn the power on.





c. The message "System Initialize" will be shown on the LCD

d. Press "1" to choose "Yes" and enter the initial master password ("3141") then the message "System is Clear Remove Wires!!" will be shown on the LCD.



e. Disconnect those two wires (Pink, Cyan) and wire them as normal connection diagram as before.

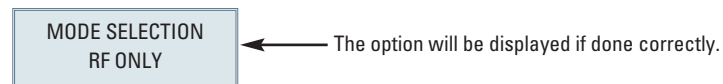


② Address setting for Communication

a. Press '0' 8 times("00000000") followed by the 'ENT' key to enter programming mode.

※ In the case of FINGER006SR, Press <0> key
(Default setting "0000000000"/"3141") 10 times to enter the SETUP MENU.

b. Enter "3141" for the master password.



c. Press the '6' Key twice to get to the address setting screen and hit the 'ENT' key.



d. Press ENT again and enter the address No (000~255) for communication address.

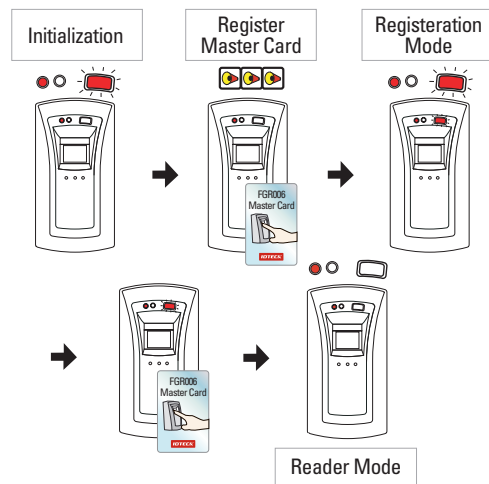
e. To exit, press the 'ESC' button.



4. Fingerprint Registration & Deletion using Reader

4-1. FGR006

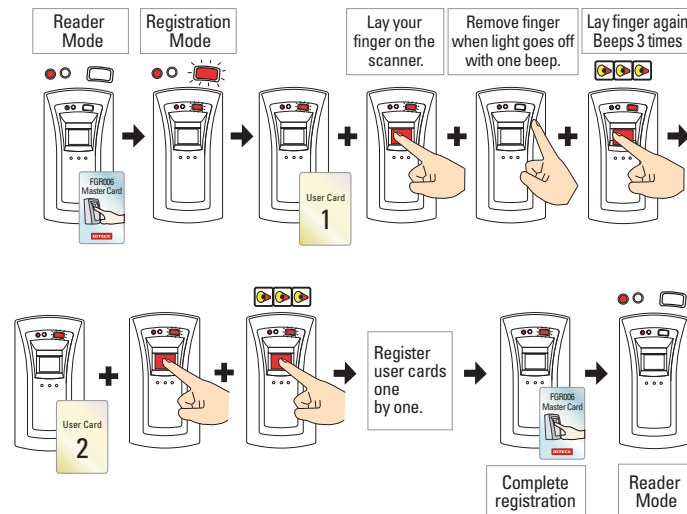
① Master card Registration



After initialization, the first card registered will become the Master card.

※ **Note : Master card registration mode does not require any fingerprint.**

② User card Registration

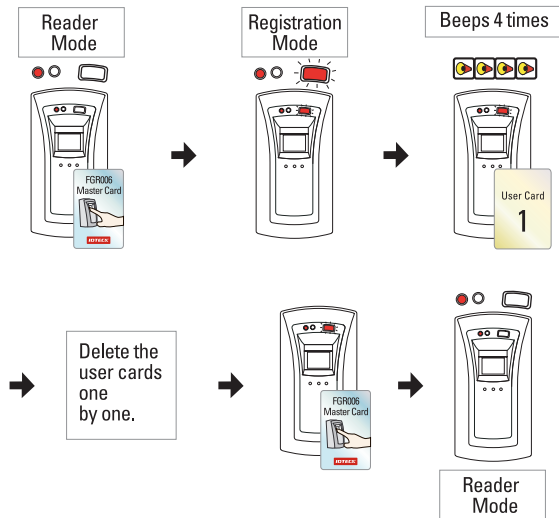


※ **Note : Users who wish to use an RF card only can register in registration mode.**
(When the scanner light blinks after registering the RF card, do not put your finger on the scanner.)



4-2. FINGER006

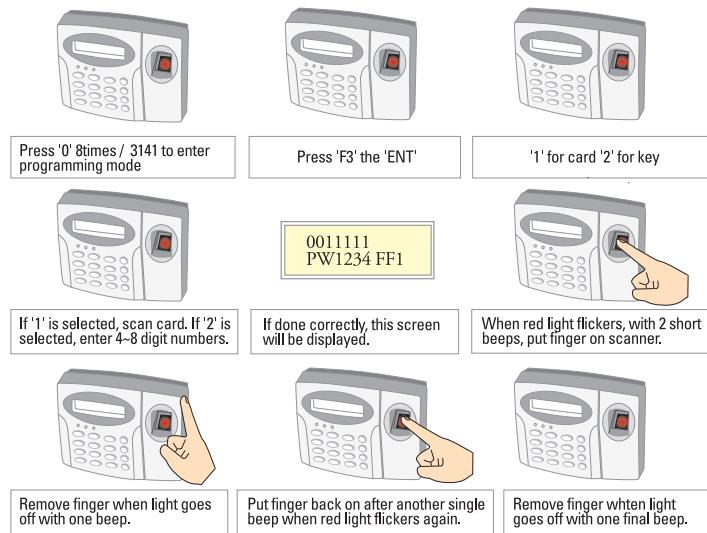
③ User card Deletion



※ **Note :** If a Card ID is successfully deleted, it will beep 4 times.

If an error occurred in the deletion process, it will beep twice. After the deletion process by Master card, the unit will be back to Reader mode again.

① Fingerprint Registration



* To register another user input the next card or ID numbers and repeat registering process. Otherwise press 'ESC' button twice to return to operation mode.



5. Fingerprint Registration using Software

② User card Deletion



Press '0' 8times / 3141 to enter programming mode



Press 'F3' then 'ENT'



Press '6' and 'ENT'



Present card or input ID numbers.
4-7 digit ID's must be followed by 'ENT' key.
8 digit ID's does not need to put 'ENT'

* To delete another user, continue by scanning another card or inputting another ID.
Otherwise press 'ESC' button twice to return to operation mode.

① In case of using FGR006/EX

- Run the Wizard. Then select "ID Registration Wizard" from the System menu.
- Select FGR006EX, and click "Next" to proceed.

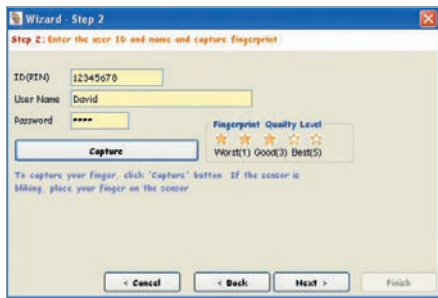


※ **Note :** When using the FINGER006, you can only use the keypad to register fingerprint. However, this software can receive the templates from the FINGER006 and batch transmit to other readers from the software.



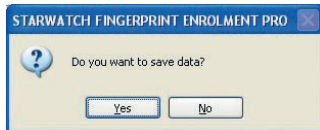
- c After Enter ID(PIN), User Name and Password as shown click "Capture" button.

※ Able to check fingerprint quality



- d When the FGR006EX's scanner blinks, place your finger on the scanner twice.

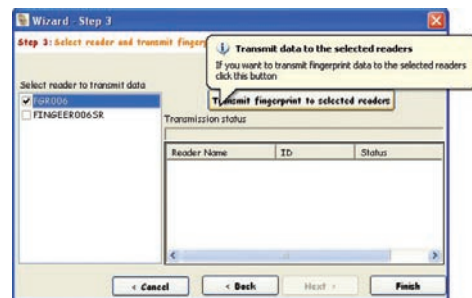
- e Click "Yes" to save your data.



- f Click "OK" to acknowledge the successful fingerprint capture.



- g Click "Next" to proceed to the next step. After selecting the appropriate reader, click "Transmit fingerprint to selected readers" to transfer your data.



- h Click "Finish" to complete the process.



② In case of using Hamster

- a Execute Wizard. Then select the "ID Registration Wizard" from the System menu.

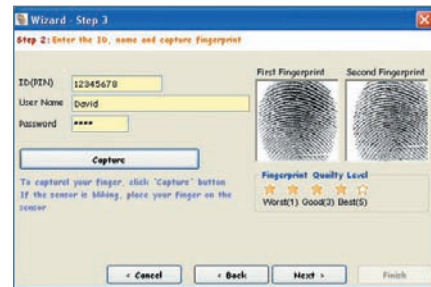


- b Select Hamster, and then click "Next".



- ※ **Note** : If the fingerprint quality is low, RF card only mode can be used. Please refer IDTECK manual for further information.

- c Input ID (PIN), User Name and Password as shown. Select fingerprint module type of FGR006(EX, SR) and FINGER006(EX, SR) that you're using now.



- ※ **Able to check fingerprint quality**

- d After clicking the Capture button, the Hamster will blink. When it's blinking, place your finger on the scanner twice.

- e Click "Yes" to save your data



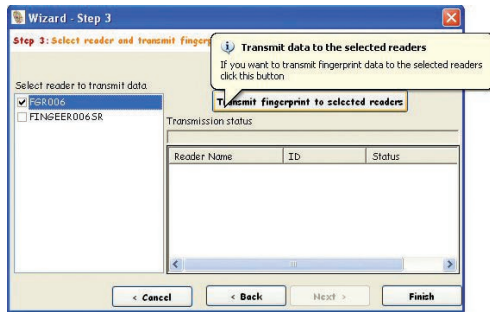


6. Recommended Finger and Position

- f Click "OK" to acknowledge the successful fingerprint capture.



- g Click "Next" to proceed to the next step. After selecting the appropriate reader, click "Transmit fingerprint to selected readers" to transfer your data.



- h Click "Finish" to complete the process.

If you place your fingerprint on scanner of the reader as follows, most often than not, the scanning process will be successful.



- **Correct Position :**
You should place your finger on the central position of scanner for fingerprint registration.

Completely covering the entire area of the scanner with the fingerprint will provide the best performance.

- **Recommended Fingers :** Index, middle or ring finger.

- **Incorrect Position :**
Avoid using the thumb or the little finger since they are typically awkward to position consistently on the scanner.



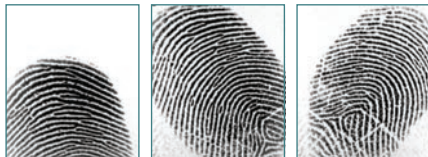


6-1. Fingerprint Pattern

① Correct fingerprint



② Incorrect position fingerprint



※ Fingerprint usage

Place the finger on the center of scanner

Avoid sliding it off the scanner, and avoid moving your finger up, down, or sideways while the scan is in progress.

Always keep your finger upright.

Use index, middle or ring finger.

③ Dry or Moist fingerprint



※ Recommended Fingerprint usage

If your fingerprint is too dry, please put a proper amount of moisture before registering.

If your fingerprint is too moist, please wipe of the access moisture before registering.

Use index, middle or ring finger.

④ Incorrect pressing fingerprint



※ Recommended Fingerprint usage

Gently place your finger on the scanner. Avoid pressing on the scanner too heavily or softly.

Use index, middle or ring finger