U160
Time & Attendance Terminal

User Guide

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Basic Concepts

This section explains and describes the functions and options of enrolling the users;

- User Enrollment/Verification
- Match Threshold Levels
- User ID Numbers
- Authority (Status) Levels

The two most important functions are user enrollment and user verification.

User Enrollment/Verification

Enrollment is the process of associating an ID number to the user's finger/s to create a template. This template is stored in the memory of U160 for future verification.

During user verification, the stored template is compared to the current fingerprint scan to confirm the user's identity.

The enrollment process takes approximately 2-4 seconds.

Up to ten fingers can be enrolled for the same ID number, so the user may have more verification options.

Ideally, we recommend enrolling one finger from each hand so that in case of injury to one hand, the user can use the finger from the other hand as a backup. It is recommended to enroll either index fingers and/or middle fingers.

For users with extremely thin fingers, we recommend to enroll the thumb. For users whose fingers are difficult to enroll or cannot be enrolled, we recommend to enroll the password along with fingerprint.

Match Threshold Levels

The Match Threshold is the degree to which a verification is performed to ensure that the user is who he/she claims to be.

The Match Threshold Levels establishes a balance between False Acceptance Rate (FAR) and False Rejection Rate (FRR). FAR measures how often a non-authorized user is falsely recognized and granted access to the system. FRR measures how often an enrolled and authorized user, who should be granted access to the system, is denied on the basis that the system did not recognize him/her.

Note that you **<u>cannot</u>** set match threshold levels on a **<u>per user</u>** basis. The **threshold-setting is universal**, for the ENTIRE user-population.

If too many users are experiencing difficulty having his/her fingerprint(s) read, we recommend using 1:1 matching (i.e. User first enters his/her User ID, and then places his/her finger on the sensor for verification).

Raising the threshold increases security, while lowering it increases throughput. Based on the quality of the fingerprints of the users, you need to strike a correct balance.

So if too many users have fingerprint(s) having difficulty being read, the match threshold level can (and should) be reduced.

Table **1—1** Suggested Match Threshold Settings

FRR	FAR	One-to-many	One-to-one
High	Low	45	25
Middle	Middle	35	15
Low	High	25	10

User ID Numbers

Each fingerprint is assigned a unique User ID Number. This ID number is used to call up the fingerprint template from the U160 database, each time the verification is requested. ID numbers can also be called up via the keypad or RF card

Authority (status) Levels

The U160 has four authority or status levels;

1. **Users**

    People whose identity must be verified prior to having his/her attendance recorded.   Users have no administrative privileges.

2. **Enrollers**

    People who are authorized **ONLY** to **enroll** new users or delete users from the system.

    .

3. **Administrator**

    People who can perform other operations, except set advanced options and enroll administrators.

4. **Supervisors**

    People who have access to **ALL** functions.

Note:

    Until an actual Administrator is enrolled in the system, any user can access the Menu System.

Start-up window

Plug the power adaptor to the main power supply or hit the Power button on the keypad and the following "startup window" appears on the U160.

```
  Welcome    Check-In
     HH:MM
  MM/DD/YY   DAY
```

Note:
   The actual current date/time will appear.

Enrollment and Verification Procedures

This section describes how to enroll and verify users on the
U160.

Note:
    You normally must have Enroller, Administrator, or Supervisor
    status to enroll users. But until an Admin is enrolled, all users have
    access to all the menu functions.

Enrolling Users

The first "enroller" with a new U160 will have the capability of enrolling
other users.   If you will be the administrator of the
U160, be sure to select "Administrator" when enrolling your
fingerprint(s)".

There are three modes of enrollment;

1. Fingerprint enrollment
2. Password enrollment
3. Fingerprint & password enrollment

The type of enrollment to be selected depends on the environment and
how easily the users' fingerprints can be read by the U160.

Fingerprint enrollment should be used when the majority of users'
fingerprints can be read.   This is typical of most office environments.

Password enrollment should be used for users who <u>cannot</u> be enrolled
nor verified by his/her fingerprint.   It is not uncommon to have some
users whose fingerprints are simply too difficult for the U160 to read.

Fingerprint & Password enrollment allows users' fingerprint(s) AND password to be registered together, at the same time.   Otherwise, these are normally 2 separate operations.

User Management

The User Management menu allows you to enroll and delete users and his/her respective fingerprint(s) and password. Some U160 models can also enroll/verify Prox, HID and Mifare cards (aka PIN/FP cards);

Enroll User
>   Enroll fingerprint
>   Enroll Password
>   Enroll Fingerprint and Password

FPCard Management
>   Create PINCard
>   Enroll FPCard
>   Create FPCard
>   Register FPCard
>   Unregister FPCard
>   Empty FPCard
>   Dump FPCard
>   Move To FPCard

Enroll Admin
>   Enroll fingerprint
>   Enroll Password
>   Enroll Fingerprint and Password

Delete

Enroll Users

Users (not including Admins, Supervisors or Enrollers) have
NO "administrative" access to the U160.

Note:
> Until an actual "Administrator" is enrolled in the U160, ALL
> "users" enrolled on the U160 DO "temporarily" have administrative
> access.   Therefore it is important to enroll an
> "administrator" on the U160 soon after initial installation.

"Users" can enroll with three methods;

- **Fingerprints**
- **Passwords**
- **Fingerprints and Passwords**

Enroll Fingerprint (for Users)

To start Fingerprint enrollment, press the **MENU** key on

the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside User Manage

```
Menu                    ▼
 ►User Manage
  Options
  PenDrive Mng
```

Press the OK key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Enroll User.

```
User Manage             ▼
 ►Enroll User
  FPCard Mng
  Enroll Admin
```

Press the OK key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Enroll FP.

```
Enroll User             ▼
 ►Enroll FP
  Enroll Pwd
  FP & Pwd
```

Press the **OK** key.

The U160 will prompt you;

```
Enroll FP
    New Enroll?

 ESC                    OK
```
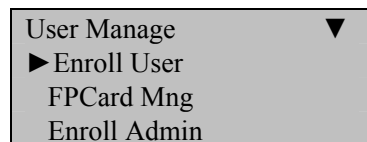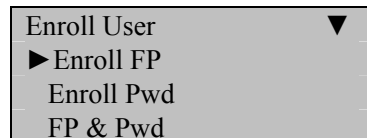
If this is a NEW User, then press **OK**.

If you are enrolling an additional fingerprint to an existing user on the U160, then press the **ESC** key, instead.

Note:
    If you press **ESC**, the U160 will prompt you for the existing User's ID number;

```
        Backup Enroll


        UserID 00001
 ESC                    OK
```

Note:
The U160 allows you to add up to 9 "backup" fingers for any of the users.

In this first example we'll assume we're enrolling a fingerprint for a NEW user to the U160.

```
Enroll FP
    New Enroll?


ESC              OK
```

Since we are enrolling a New User, press **OK**

The U160 will then prompt you with the next available User ID;

```
        New Enroll


    UserID 00001-0
    ESC              OK
```

In this example, no user has yet been enrolled on the U160.   So the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired.

The U160 will then prompt;

```
        New Enroll
         00001-0
     Place Finger . . .
         ESC/Exit
```

Remember the rules for proper finger placement;

The user's finger should completely cover the sensor.   The finger should be placed flat and in the center of the sensor.   The finger should cover at least 80% of the sensor as shown below:


### *The finger should NOT be placed in the following positions:*

**Not flat**   **Not centered**

Not flat   **Not centered**

Place your finger on the sensor for a full 2 seconds.

After the U160 scans your fingerprint successfully, it will "beep"
and then prompt you <u>briefly</u> with;

```
          New Enroll
           00001-1
        Remove Finger
          ESC/Exit
```

Then you'll be prompted;

```
          New Enroll
           00001-1
        Second Press
          ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 2nd time.
Again, you'll be prompted briefly;

```
          New Enroll
           00001-1
        Remove Finger
          ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 3rd and final time.   You'll then be prompted;

```
New Enroll
        00001-0


ESC             OK (Save)
```

Press the **OK** key to accept the newly enrolled

finger. The U160 will then prompt you with;

```
New Enroll
        Continue?


ESC                   OK
```

UserID 0001 has now been successfully enrolled with one fingerprint.

If you wish to continue enrolling additional users, press the **OK** key and follow the same procedures.

If you're finished enrolling additional users, press the **ESC**

key. When pressing **ESC** the U160 will prompt you;

```
Backup Enroll
        Continue?
        UserID 0001
 ESC                  OK
```

If you wish to add a "backup finger" for UserID 00001 press the **OK** key.

Note:
 Ideally, we recommend enrolling one finger from each hand so that in case of injury to one hand, the user can use the finger from the other hand as a backup. It is recommended to enroll either index fingers and/or middle fingers.

After enrolling one or more fingerprints for UserID 00001 press the **ESC** key.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User            ▼
 ►Enroll FP
  Enroll Pwd
  FP & Pwd
```

Press **ESC**

```
User Manage            ▼
 ►Enroll User
  FPCard Mng
  Enroll Admin
```

Press **ESC**

```
Menu                   ▼
 ►User Manage
  Options
  PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
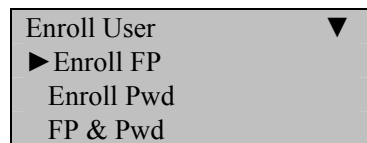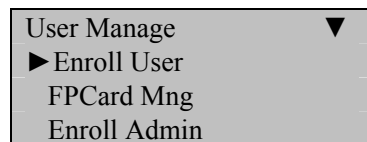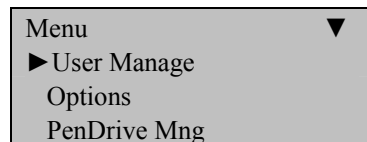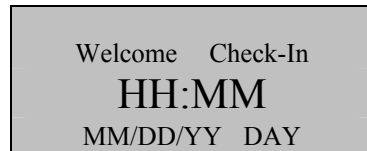
Note:
  The actual current date/time will appear.

Test the newly enrolled fingerprint by having UserID 0001 place his/her finger on the sensor.

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
 Verify


    Pin: 00001
    Verified.
```

Note:
  The U160 will make a note in its transaction log that User ID 0001 accessed the U160.   This information can be used for Time & Attendance software applications.

Enroll Password (for Users)

Password Enrollment should be used for those few users whose fingerprints cannot be read by the U160's fingerprint sensor.

To start Password enrollment, press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User Manage

```
Menu                    ▼
 ▶User Manage
  Options
  PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll User.

```
User Manage             ▼
 ▶Enroll User
  FPCard Mng
```

```
    Enroll Admin
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Enroll Pwd.

```
Enroll User              ▼
   Enroll FP
  ►Enroll Pwd
   FP & Pwd
```
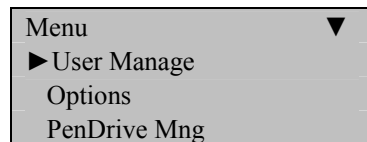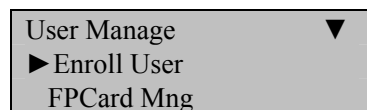
Press the **OK** key.

The U160 will prompt you;

```
Enroll Pwd
         New Enroll?


ESC                    OK
```

If this is a NEW User, then press **OK**

If you are adding/changing a password for an existing user on

the U160, then press the **ESC** key.

Note:

If you press **ESC**, the U160 will prompt you for the existing User's ID number;

```
        Chg Password

        UserID 00001
 ESC               OK
```

In this first example we'll assume we're enrolling a password for a NEW user.

```
 Enroll FP
          New Enroll?


 ESC                    OK
```

Since we are enrolling a New User, press **OK**

The U160 will then prompt you with the next available User ID;

```
         New Enroll

         UserID 00001-0
 ESC                    OK
```

In this example, no user has yet been enrolled on the U160. So the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired.

The U160 will then prompt;

```
          New Enroll

     Input Pwd ▮▮▮▮
  ESC                OK
```

Enter a 4-digit password and then press the **OK**

key. The U160 will prompt you;

```
          New Enroll


     Input Pwd ****
     Pwd Affirm ▮▮▮▮
```

Enter your chosen 4-digit password again.

Then press the **OK** key.   The U160 will then prompt you;

```
  New Enroll
          00001-P


  ESC            OK (Save)
```

Press the **OK** key.   The U160 will then prompt you;

```
  New Enroll
     Continue?


  ESC            OK
```

If you'd like to enroll a password for a <u>new</u> user, then press **OK**.

If you'd like to change a password for an <u>existing</u> user, then press **ESC**

Follow the same procedure described above for adding/changing passwords.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User            ▼
    Enroll FP
  ►Enroll Pwd
    FP & Pwd
```

Press **ESC**

```
User Manage            ▼
  ►Enroll User
    FPCard Mng
    Enroll Admin
```

Press **ESC**

```
Menu                   ▼
  ►User Manage
    Options
    PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```
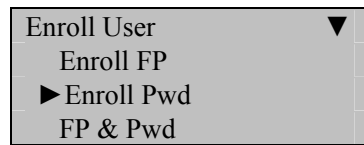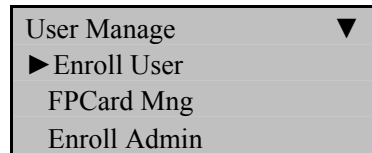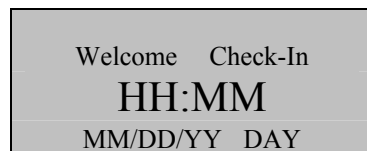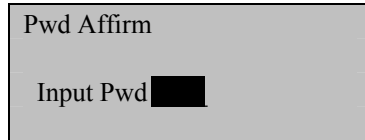
Note:
    The actual current date/time will appear.

Test the newly enrolled password;

At the start-up window, have User ID <u>0001</u> **FIRST** enter his/her User ID number and **THEN** press the **OK** key.

After entering <u>1</u> and pressing **OK** the U160 will prompt;

```
Pwd Affirm

  Input Pwd ▮▮
```
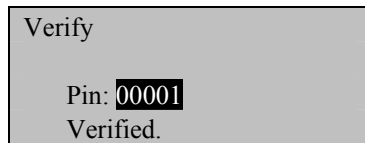
Now enter the password created by User ID <u>0001</u> and then press **OK**

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
Verify

   Pin: 00001
   Verified.
```

Note:

The U160 will make a note in its transaction log that User ID <u>0001</u> accessed the U160. This information can be used for Time & Attendance software applications.

Enroll Fingerprint & Password (for Users)

Note:

> **You can enroll users with both a fingerprint AND a password in the same step.**

To start Fingerprint AND Password enrollment, press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User Manage

```
Menu                           ▼
 ▶User Manage
  Options
  PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll User.

```
User Manage               ▼
 ►Enroll User
   FPCard Mng
   Enroll Admin
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside FP & Pwd.

```
Enroll User               ▼
   Enroll FP
   Enroll Pwd
 ►FP & Pwd
```
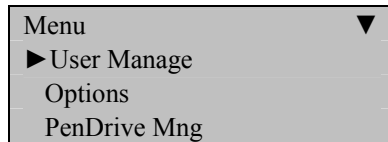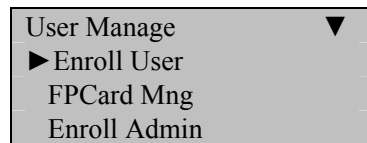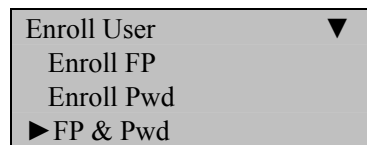
Press the **OK** key.

The U160 will prompt you;

```
FP & Pwd
        New Enroll?


ESC                    OK
```

If this is a NEW User, then press **OK**

If you are enrolling an additional fingerprint to an existing user on

the U160, then press the **ESC** key.

Note:
>   If you press **ESC**, the U160 will prompt you for the existing
>   User's ID number;

```
        Backup Enroll


        UserID 00001
    ESC             OK
```

Note:

The U160 allows you to add up to 9 "backup" fingers for any of the users.

In this first example we'll assume we're enrolling a fingerprint AND password for a NEW user to the U160.

```
FP & Pwd
        New Enroll?


ESC                    OK
```

Since we are enrolling a New User, press **OK**

The U160 will then prompt you with the next available User ID;

```
        New Enroll


    UserID 00001-0
    ESC              OK
```

In this example, no user has yet been enrolled on the U160, so the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired.

The U160 will then prompt;

```
        New Enroll
          00001-0
      Place Finger . . .
          ESC/Exit
```

Remember the rules for proper finger placement;

The user's finger should completely cover the sensor.   The finger should be placed flat and in the center of the sensor.   The finger should cover at least 80% of the sensor as shown below:


The finger should NOT be placed in the following positions:

Not flat   **Not centered**

**Not flat**   **Not centered**

Place your finger on the sensor for a full 2 seconds.

After the U160 scans your fingerprint successfully, it will "beep"
and then prompt you briefly with;

```
New Enroll
00001-1
Remove Finger
ESC/Exit
```

Then you'll be prompted;

```
New Enroll
00001-1
Second Press
ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 2nd time.
Again, you'll be prompted briefly;

```
New Enroll
00001-1
Remove Finger
ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 3rd and final time.   You'll then be prompted;

```
            New Enroll

       Input Pwd ████
     ESC              OK
```

Enter a 4-digit password and then press the **OK**

key. The U160 will prompt you;

```
            New Enroll

       Input Pwd ****
       Pwd Affirm ███
```

Enter your chosen 4-digit password again.

Press the **OK** key.   The U160 will then prompt you;
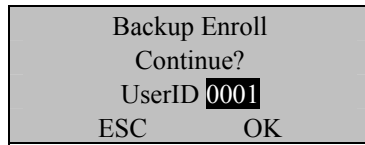
```
 New Enroll
          00001-P

 ESC              OK (Save)
```

Press the **OK** key.   The U160 will then prompt you;

```
 New Enroll
     Continue?

 ESC              OK
```

If you'd like to enroll an additional new user, then press **OK**.

If you're finished enrolling additional users, press the **ESC** key.

When pressing **ESC**, the U160 will prompt you;

```
        Backup Enroll
          Continue?
        UserID 0001
     ESC          OK
```

If you wish to add a "backup finger" for UserID 00001 press the **OK** key.

Note:
    Ideally, we recommend enrolling one finger from each hand so that in case of injury to one hand, the user can use the finger from the other hand as a backup. It is recommended to enroll either index fingers and/or middle fingers.

After enrolling one or more fingerprints to UserID 00001 press the **ESC** key.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User           ▼
   Enroll FP
   Enroll Pwd
 ►FP & Pwd
```

Press **ESC**

```
User Manage           ▼
 ►Enroll User
   FPCard Mng
   Enroll Admin
```

Press **ESC**

```
Menu                    ▼
►User Manage
  Options
  PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
  Welcome    Check-In
     HH:MM
  MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Test the newly enrolled fingerprint by having UserID 00001 place his/her finger on the sensor.

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
 Verify

   Pin: 00001
   Verified.
```

Also test the newly enrolled password;

```
  Welcome    Check-In
    HH:MM
  MM/DD/YY   DAY
```

At the start-up window, have User ID <u>00001</u> **FIRST** enter his/her User ID number and **THEN** press the **OK** key.

After entering <u>1</u> and pressing **OK** the U160 will prompt;

```
Pwd Affirm

  Input Pwd  ████
```

Now enter the password created by User ID <u>00001</u> and then press **OK**

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
Verify

   Pin: 00001
   Verified.
```

Note:

    The U160 will make a note in its transaction log that User ID <u>00001</u> accessed the U160. This information can be used for Time & Attendance software applications.

Enrolling Admins

"Admins" (non-Users) fall into 3 categories;

Enrollers:
People who are authorized **ONLY** to **enroll** new users or delete users from the system.   No other U160 "system" functions are accessible.
.
Administrator:
People who can perform other operations, except set advanced options and enroll administrators.

Supervisors:
People who have access to **ALL** functions.

Note:
Until an actual "Administrator" is enrolled in the system, ALL "users" enrolled on the U160 "temporarily" have administrative access.   Therefore it is important to enroll an administrator on the U160 soon after initial installation.

Admins can enroll with three methods;

- **Fingerprints**
- **Passwords**
- **Fingerprints and Passwords**

Enroll Fingerprint (for Admins)

To start Fingerprint enrollment, press the **MENU** key on
the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User
Manage

```
Menu                          ▼
▶ User Manage
   Options
   PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll Admin.

```
User Manage            ▼
   Enroll User
   FPCard Mng
 ▶Enroll Admin
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll FP.

```
Enroll User            ▼
 ▶Enroll FP
   Enroll Pwd
   FP & Pwd
```

Press the **OK** key.

The U160 will prompt you;

```
      Admin Accredit
          Admin
    ESC           OK
```
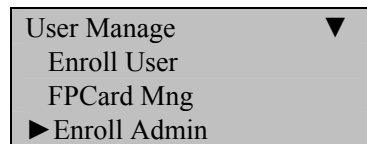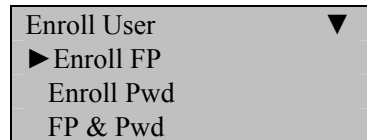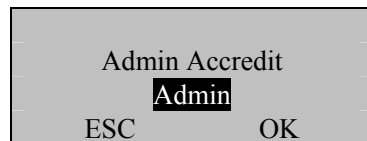
Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling.

3 types of "Admins" to choose from;

Enrollers:
> People who are authorized **ONLY** to **enroll** new users or delete users from the system.   No other U160 "system" functions are accessible.
> .

Administrator:
> People who can perform other operations, except set advanced options and enroll administrators.

Supervisors:
> People who have access to **ALL** functions.

Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling (i.e. Enroller, Admin or Supervisor).

```
        Admin Accredit
            Admin
    ESC             OK
```
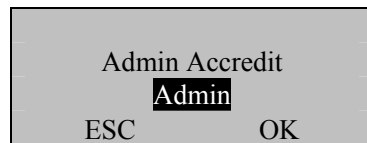
Press the **OK** key after selecting "Admin

type". The U160 will prompt you;
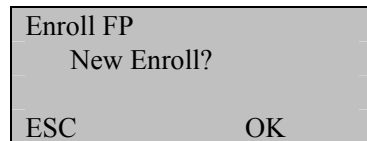
```
Enroll FP
    New Enroll?

ESC             OK
```

If this is a NEW "Admin", then press **OK**

If you are enrolling an <u>additional</u> fingerprint to an <u>existing</u> Admin on the U160, then press the **ESC** key

Note:
If you press **ESC**, the U160 will prompt you for the existing Admin's ID number;

```
        Backup Enroll


    UserID 00001
ESC              OK
```
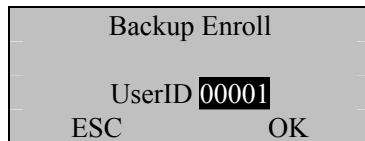
Note:
The U160 allows you to add up to 9 "backup" fingers.

In this first example we'll assume we're enrolling a fingerprint for a NEW Admin.

```
Enroll FP
    New Enroll?


ESC              OK
```

Since we are enrolling a New Admin, press **OK**

The U160 will then prompt you with the next available User ID number;

```
        New Enroll


     UserID 00001-0
     ESC              OK
```

In this example, no Admin has yet been enrolled on the U160, so the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired.

The U160 will then prompt;

```
        New Enroll
          00001-0
      Place Finger . . .
          ESC/Exit
```

Remember the rules for proper finger placement;

The user's finger should completely cover the sensor.   The finger should be placed flat and in the center of the sensor.   The finger should cover at least 80% of the sensor as shown below:

The finger should NOT be placed in the following positions:

Not flat   **Not centered**

Not flat   **Not centered**

Place your finger on the sensor for a full 2 seconds.

After the U160 scans your fingerprint successfully, it will "beep"
and then prompt you <u>briefly</u> with;

```
        New Enroll
         00001-1
       Remove Finger
        ESC/Exit
```

Then you'll be prompted;

```
        New Enroll
         00001-1
       Second Press
        ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 2nd time.
Again, you'll be prompted briefly;

```
        New Enroll
         00001-1
       Remove Finger
        ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 3rd and final time.   You'll then be prompted;

```
New Enroll
     00001-0


ESC              OK (Save)
```

Press the **OK** key to accept the newly enrolled

finger. The U160 will then prompt you with;

```
New Enroll
    Continue?


ESC                OK
```

UserID 00001 has now been successfully enrolled with one fingerprint.

If you wish to continue enrolling additional Admins, press the **OK** key and follow the same procedures.

If you're finished enrolling additional Admins, press the **ESC**

key. When pressing **ESC**, the U160 will prompt you;

```
    Backup Enroll
      Continue?
    UserID 0001
  ESC        OK
```

If you wish to add a "backup finger" for UserID 00001 press the **OK** key.

Note:

Ideally, we recommend enrolling one finger from each hand so that in case of injury to one hand, the user can use the finger from the other hand as a backup. It is recommended to enroll either index fingers and/or middle fingers.

After enrolling one or more fingerprints to UserID 00001 press the **ESC** key.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User           ▼
 ►Enroll FP
   Enroll Pwd
   FP & Pwd
```

Press **ESC**

```
User Manage           ▼
   Enroll User
   FPCard Mng
 ►Enroll Admin
```

Press **ESC**

```
Menu                  ▼
 ►User Manage
   Options
   PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
      Welcome    Check-In
        HH:MM
      MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Test the newly enrolled fingerprint by having UserID 00001 place his/her finger on the sensor.

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
 Verify


   Pin: 00001
   Verified.
```

Note:
    The U160 will make a note in its transaction log that User ID 00001 accessed the U160.   This information can be used for Time & Attendance software applications.

Enroll Password (for Admins)

Password Enrollment should be used for those few Admins whose fingerprints cannot be read by the U160's fingerprint sensor.

To start Password enrollment, press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User Manage

```
Menu                    ▼
 ►User Manage
   Options
   PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll Admin.

```
User Manage             ▼
   Enroll User
   FPCard Mng
 ►Enroll Admin
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Enroll Pwd.

```
 Enroll User              ▼
    Enroll FP
  ►Enroll Pwd
    FP & Pwd
```

Press the **OK** key.

The U160 will prompt you;

```
       Admin Accredit
            Admin
     ESC           OK
```
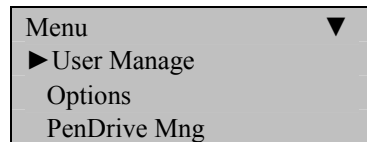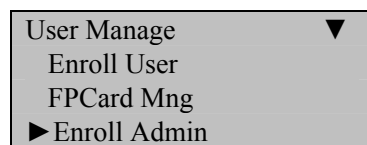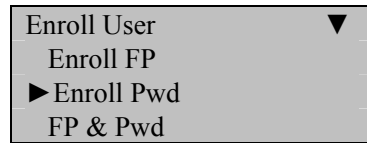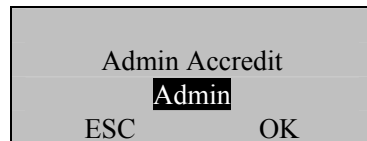
Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling.

There are 3 types of "Admins" to choose from;

Enrollers

> People who are authorized **ONLY** to **enroll** new users or delete users from the system.   No other U160 "system" functions are accessible.
> .

Administrator

> People who can perform other operations, except set advanced options and enroll administrators.

Supervisors

> People who have access to **ALL** functions

Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling.

```
   Admin Accredit
        Admin
   ESC         OK
```

Press the **OK** key after selecting "Admin type".

```
 Enroll Pwd
    New Enroll?


 ESC              OK
```

If this is a NEW Admin, then press **OK**

If you are adding/changing a password for an existing Admin on

the U160, then press the ESC k

Note:

If you press **ESC**, the U160 will prompt you for the existing Admin's ID number;

```
        Chg Password

        UserID 00001
    ESC              OK
```

In this first example we'll assume we're enrolling a password for a NEW Admin.

```
 Enroll FP
      New Enroll?


 ESC              OK
```

Since we are enrolling a New User, press **OK**

The U160 will then prompt you with the next available User ID;

```
        New Enroll

        UserID 00001-0
    ESC              OK
```

In this example, no user has yet been enrolled on the U160, so the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired and then press **OK**

The U160 will then prompt;

```
        New Enroll

      Input Pwd ▮▮▮▮▮
    ESC              OK
```

Enter a 4-digit password and then press the **OK**

key. The U160 will prompt you;

```
          New Enroll

       Input Pwd ****
       Pwd Affirm  ▓▓
```

Re-enter the very same 4-digit password and then press the **OK** key.
The U160 will then prompt you;

```
 New Enroll
          00001-P


 ESC            OK (Save)
```

Press the **OK** key.   The U160 will then prompt you;

```
 New Enroll
     Continue?


 ESC              OK
```

If you'd like to enroll a password for a new or existing Admin, then press
OK.

If you'd like to change a password for an existing Admin, then press **ESC**

Follow the same procedure described above for adding/changing
passwords.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User              ▼
    Enroll FP
   ►Enroll Pwd
    FP & Pwd
```

Press **ESC**

```
User Manage              ▼
    Enroll User
    FPCard Mng
   ►Enroll Admin
```

Press **ESC**

```
Menu                     ▼
   ►User Manage
    Options
    PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
    Welcome    Check-In

      HH:MM

   MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Test the newly enrolled password;

At the start-up window, have User ID <u>00001</u> **FIRST** enter his/her User ID number and **THEN** press the ■ key.

After entering <u>1</u> and pressing **OK** the U160 will prompt;

```
Pwd Affirm

  Input Pwd ■
```

Now enter the password created by User ID <u>00001</u> and then press **OK**

If successful, the U160 will respond with an audible "*Thank you*",

and the screen will display;

```
Verify

   Pin: 00001
   Verified.
```

Note:

> The U160 will make a note in its transaction log that User ID 0001 accessed the U160.   This information can be used for Time & Attendance software applications.

Enroll Fingerprint & Password (for Admins)

Note:
> **You can enroll Admins with both a fingerprint AND a password in the same step.**

To start Fingerprint AND Password enrollment, press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User Manage

```
Menu                        ▼
 ▶User Manage
  Options
  PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Enroll Admin.

```
User Manage              ▼
   Enroll User
   FPCard Mng
 ►Enroll Admin
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside FP & Pwd.

```
Enroll User              ▼
   Enroll FP
   Enroll Pwd
 ►FP & Pwd
```

Press the **OK** key.

The U160 will prompt you;

```
Admin Accredit
      Admin
ESC           OK
```
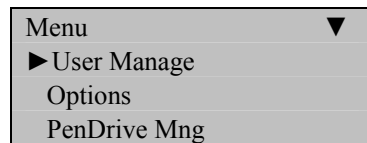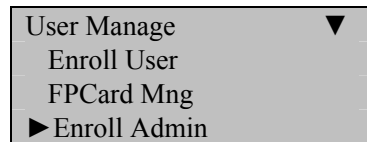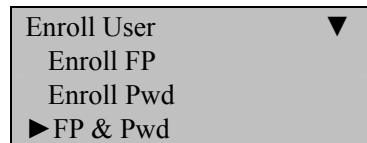
Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling.

Recall, there are 3 types of "Admins" to choose from;

Enrollers
> People who are authorized **ONLY** to **enroll** new users or delete users from the system.   No other U160 "system" functions are accessible.
> .

Administrator
> People who can perform other operations, except set advanced option and enroll administrators.

Supervisors
> People who have access to **ALL** functions

Scroll with the ▲/▼ keys to choose the "authority status" of the Admin you are enrolling.

```
Admin Accredit
      Admin
ESC           OK
```
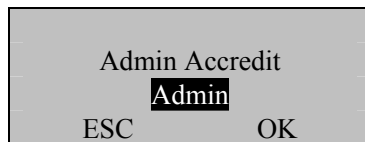
Press the **OK** key after selecting "Admin type" (i.e. Enroller, Admin or Supervisor)

```
FP & Pwd
    New Enroll?


ESC                 OK
```

If this is a NEW Admin, then press **OK**

If you are enrolling an <u>additional</u> fingerprint to an <u>existing</u> Admin, then press the **ESC** key.

Note:
    If you press **ESC**, the U160 will prompt you for the existing
    User's ID number;

```
        Backup Enroll

        UserID 00001
ESC                 OK
```

Note:
    The U160 allows you to add up to 9 "backup" fingers for any of
    the users.

In this first example we'll assume we're enrolling a fingerprint AND password for a NEW Admin to the U160.

```
FP & Pwd
    New Enroll?


ESC              OK
```

Since we are enrolling a New Admin, press **OK**

The U160 will then prompt you with the next available User ID number.

```
        New Enroll


    UserID 00001-0
    ESC              OK
```

In this example, no user has yet been enrolled on the U160, so the next available User ID# is 00001.

Press the **OK** key to accept 00001, or manually key in a different number if desired.

The U160 will then prompt;

```
        New Enroll
        00001-0
    Place Finger . . .
        ESC/Exit
```

Remember the rules for proper finger placement;

The user's finger should completely cover the sensor.   The finger should be placed flat and in the center of the sensor.   The finger should cover at least 80% of the sensor as shown below:

The finger should NOT be placed in the following positions:

Not flat   **Not centered**

Not flat   **Not centered**

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Place your finger on the sensor for a full 2 seconds.

After the U160 scans your fingerprint successfully, it will "beep"
and then prompt you <u>briefly</u> with;

```
New Enroll
00001-1
Remove Finger
ESC/Exit
```

Then you'll be prompted;

```
New Enroll
00001-1
Second Press
ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 2nd time.
Again, you'll be prompted briefly;

```
New Enroll
00001-1
Remove Finger
ESC/Exit
```

Remove your finger, and then place your finger on the sensor a 3rd and
final time.   You'll then be prompted;

```
            New Enroll


        Input Pwd  ████
        ESC              OK
```

Enter a 4-digit password and then press the **OK**

key. The U160 will prompt you;

```
            New Enroll


        Input Pwd ****
        Pwd Affirm  ████
```

Re-enter the very same 4-digit password and then press the **OK** key.
The U160 will then prompt you;

```
New Enroll
         00001-P


ESC              OK (Save)
```

Press the **OK** key.   The U160 will then prompt you;

```
New Enroll
    Continue?


ESC              OK
```

If you'd like to enroll an additional new Admin, then press **OK**.

If you're finished enrolling additional Admins, press the **ESC** key. When pres███, the U160 will prompt you;

```
          Backup Enroll
           Continue?
          UserID 0001
      ESC          OK
```

If you wish to add a "backup finger" for UserID <u>00001</u> press the **OK** key.

Note:
> Ideally, we recommend enrolling one finger from each hand so that in case of injury to one hand, the user can use the finger from the other hand as a backup. It is recommended to enroll either index fingers and/or middle fingers.

After enrolling one or more fingerprints to UserID <u>00001</u> press the **ESC** key.

You'll note pressing the **ESC** key takes you back to the previous menu;

```
Enroll User              ▼
   Enroll FP
   Enroll Pwd
  ►FP & Pwd
```

Press **ESC**

```
User Manage              ▼
   Enroll User
   FPCard Mng
  ►Enroll Admin
```

Press **ESC**

```
Menu                        ▼
  ►User Manage
    Options
    PenDrive Mng
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Test the newly enrolled fingerprint by having UserID <u>00001</u> place his/her finger on the sensor.

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
Verify

    Pin: 00001
    Verified.
```

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Also test the newly enrolled password;

```
Welcome    Check-In
     HH:MM
MM/DD/YY   DAY
```

At the start-up window, have User ID 00001 **FIRST** enter his/her User ID number and **THEN** press the **OK** key.

After entering 1 and pressing **OK** the U160 will prompt;

```
Pwd Affirm

  Input Pwd
```

Now enter the password created by User ID 00001 and then press **OK**

If successful, the U160 will respond with an audible "*Thank you*", and the screen will display;

```
Verify

   Pin: 00001
   Verified.
```

Note:
>   The U160 will make a note in its transaction log that User ID 00001 accessed the U160.   This information can be used for Time & Attendance software applications.

Card Enrollment

Note:

Some U160 models have an internal card reader, in addition to a fingerprint sensor.

The U160 has the option of having an internal proximity card reader, HID reader or Mifare reader.

Card readers are helpful for users whose fingerprints cannot be read by the fingerprint sensor.

Mifare readers are helpful for customers who prefer not storing fingerprint templates on the reader.   Instead, the templates are stored on the cards.

Proximity/PIN Card Enrollment

To start Proximity/PIN Card Enrollment", press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside User Manage

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```
Menu                          ▼
 ►User Manage
   Options
   PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside FPCard Mng.

```
User Manage                   ▼
   Enroll User
 ►FPCard Mng
   Enroll Admin
```

Press the **OK** key.

The U160 will prompt you with;

```
FPCard Mng                    ▼
  ►Create PINCard
    Enroll FPCard
    Create FPCard
```

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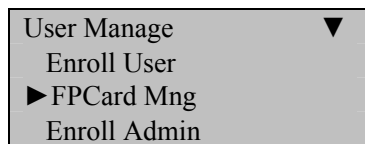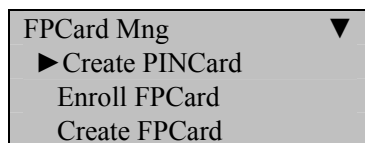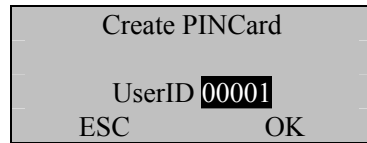
Scroll with the ▲/▼ keys and place the cursor (►) alongside Create PINCard and press **OK**.

The U160 will prompt you with;

```
       Create PINCard

       UserID 00001
   ESC              OK
```

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Deleting Users

Note:

You can delete fingerprints, passwords or an entire user.

Deleting old/unused fingerprint templates makes room for new fingerprint templates.

Deleting may be necessary when:

- A user's fingerprint is no longer recognized (possibly caused by injury) or his/her password has been forgotten.

- The user is no longer employed and his/her fingerprint(s)/password and user information need to be deleted from the S900 for security purposes.

To perform Deletion, press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside User Manage

```
Menu                    ▼
►User Manage
 Options
 PenDrive Mng
```

Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Delete.
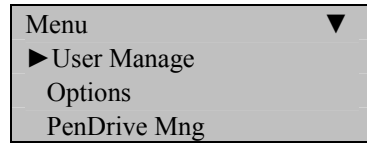
```
User Manage            ▲
                       ▼

 FPCard Mng
 Enroll Admin
►Delete
```
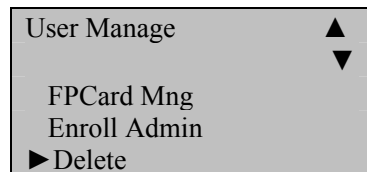
Press the **OK** key.

The U160 will prompt you with the Delete menu;

```
           Delete

        UserID 00001
      ESC          OK
```

Enter the User ID whose information you'd like to delete.   Then press
OK.

The U160 will then prompt;

```
        Del Fingerprint
           00001-0
        UserID 00001
      ESC          OK
```

Press **OK** to delete fingerprint 00001-0.

If the user has additional fingerprints enrolled, the U160 will prompt you
with the choice of deleting each individual fingerprint enrolled by the user
(i.e. 00001-1, 00001-2, etc).

If the user also has a password enrolled, after deleting all the
fingerprints for that particular user, the U160 will then prompt you
with;

```
        Del Password
           00001-P
        UserID 00001
      ESC          OK
```

Press **OK** to delete the password.

The U160 will then prompt with;

```
           Del User
            00001


     ESC          OK
```

If you're 100% positive you wish to delete this user, then press **OK**

If you change your mind, press the **ESC** key.

Pressing either the **OK** key or **ESC** key returns you to the previous menu;
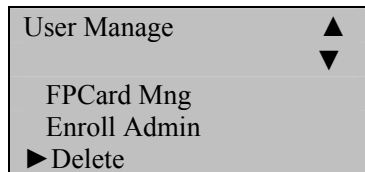
```
User Manage            ▲
                       ▼
  FPCard Mng
  Enroll Admin
 ►Delete
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                   ▼
 ►User Manage
  Options
  PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
       HH:MM
     MM/DD/YY   DAY
```

Note:
     The actual current date/time will appear.

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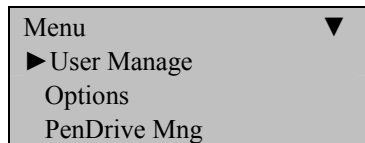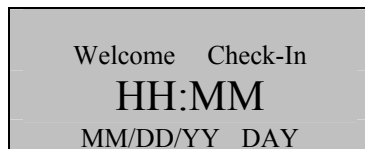
Options

The Options Menu allows access to the following functions & settings;

System Options

Setting Date Time

Date format (i.e. YY-MM-DD)

<u>Advanced Options</u>

- Reset

- Delete Attendance/audit logs

- Clear All Data (templates and logs)

- Clear Admin privileges

- Show Score

- Match Threshold

- Must Input ID

- 1:1 Threshold (35)

- Voice

- Card Only

- FPCard key

- Update Firmware

- Button Beep

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- Volume Adjustment

Power Management

Communications Options

- Ethernet

- RS 232/485

Logging Options

Auto Test

- LCD test

- Voice test

- FP reader

- Key test

- RTC test

Changing Date and Time

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Options"

```
Menu                         ▼
  User Manage
►Options
  PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt;

Press the **OK** key.

The following screen appears;

```
System Opt
►Date Time
  Fmt     YY-MM-DD
  Adv Option
```
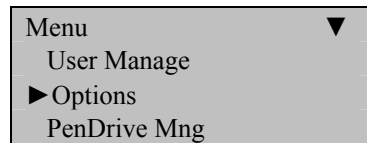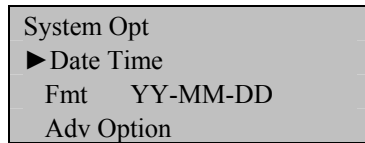
Scroll with the ▲/▼ keys and place the cursor (►) alongside Date Time.

Press the **OK** key.

The following screen appears;

```
   YYYY-MM-DD    24H
       2008- 4 – 1
        20:26:  4
  ESC           OK
```
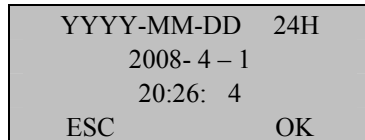
Scroll with the ▲/▼ keys to change either the year, month, day or time.

Use the keypad to change the current value(s).

Note:
   Time is in military (24-hour) format.

Press the **OK** key to accept changes, or the **ESC** key to cancel and return to the previous menu.

Continue pressing the **ESC** key until you return to the Start-Up window;

```
System Opt
►Date Time
  Fmt          YY-MM-DD
  Adv Option
```

Press **ESC**

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

Press **ESC**

```
Menu                  ▼
►User Manage
  Options
  PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```
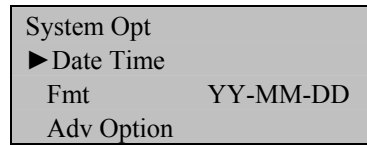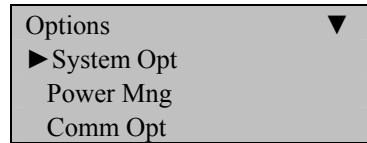
Note:
   The actual current date/time will appear.

Changing Date Format

The following "date formats" are available;

YY.MM.DD	MM-DD-YY	MM/DD/YY
MM.DD.YY	DD-MM-YY	DD/MM/YY
DD.MM.YY	YYYYMMDD	

Press the **MENU** key on the U160.
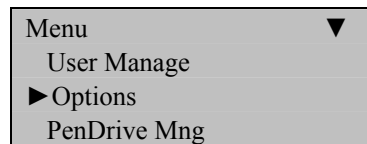
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt
   Date Time
  ►Fmt          YY-MM-DD
   Adv Option
```
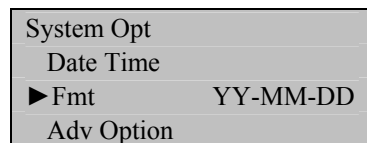
Scroll with the ▲/▼ keys and place the cursor (►) alongside Fmt.
Press the **OK** key.

Notice **YY-MM-DD** becomes highlighted.   The screen now allows you to change the "format" of the date;

```
System Opt
   Date Time
 ► Fmt          YY-MM-DD
   Adv Option
```

Use the scroll ▲/▼ keys to change the date format.

Press the **OK** key to accept changes.

Notice the date format YY-MM-DD will no longer be highlighted and you're free again to scroll through the menu.

```
System Opt
   Date Time
 ►Fmt           YY-MM-DD
   Adv Option
```

Press the **ESC** key when finished.

You'll then be prompted;

```
System Opt
           Save?


 ESC              OK (Save)
```

Press the **OK** key to accept changes, or the **ESC** key to cancel and return to the previous menu.

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                       ▼
►User Manage
  Options
  PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Advanced Settings

The following Advanced Settings are available;

Reset Opts:
> Restores all default factory settings .
> Does NOT delete user fingerprints/passwords or transactions/audit logs.

Del Att Logs:
> Clears attendance/transaction log but NOT user fingerprints/passwords.

Clear all Data:
> Deletes BOTH user data and tattendance/audit log.

Clr Admin Pri:
> Change the rights of ALL administrator(s) to a normal user.

Show Score:
> Display the score of the quality of the fingerprint match.

1:N Fingerprint Match Threshold:
> Changes fingerprint-matching "sensitivity"

Must Input ID:
> Disable 1:N matching (users MUST first enter user ID number prior
> to placing finger on sensor)

1:1 Fingerprint Match Threshold
> Changes fingerprint-matching "sensitivity"

Voice
> Option to turn voice prompts "on" or "off"

Card Only
> Users clock-in ONLY with cards

FPCard Key
> Enter Mifare card key

Update Firmware
> Allows updating of U160 firmware **Button**

Beep
> Option to turn audio beep "on" or "off"

Adjust Volume

Resetting U160

Note:

Resetting will erase system changes, but will NOT erase users'
fingerprints/passwords nor attendance/audit logs.

Press the **MENU** key on the U160.
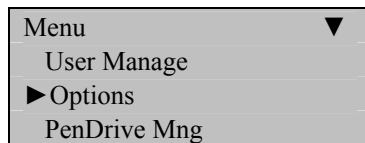
Scroll with the ▲/▼ keys and place the cursor (►) alongside Options

Menu	▼
User Manage	
►Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
  Date Time
  Fmt          YY-MM-DD
 ►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option              ▲
►Reset Opts.            ▼
  Del Attlogs
  Clear All Data
```
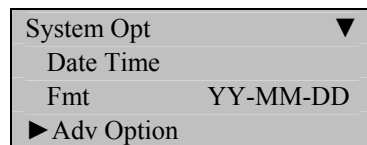
Scroll with the ▲/▼ keys and place the cursor (►) alongside Reset Opts.

Note:

You will NOT be prompted whether you wish to proceed or cancel!

Once you press **OK**, all system changes will be erased and the U160's original factory settings will replace any changes you may have made.

However, all user data and attendance/audit logs will remain unchanged.

Press the **OK** key if you wish to erase all system

changes. The U160 will prompt;

```
Reset Opts.
    Finished!


```

The Advanced Options menu will return;
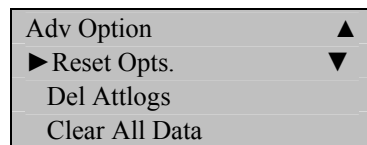
```
Adv Option              ▲
►Reset Opts.            ▼
  Del Attlogs
  Clear All Data
```

Continue pressing the ESC key until you return to the Start-Up window;

```
System Opt              ▼
  Date Time
  Fmt       YY-MM-DD
►Adv Option
```

Press ESC

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

Press ESC

```
Menu                    ▼
  User Manage
►Options
  PenDrive Mng
```

Press ESC

```
Welcome    Check-In
       HH:MM
MM/DD/YY   DAY
```
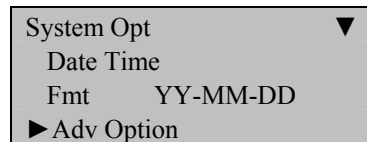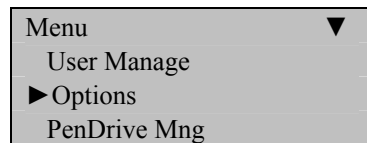
Note:
The actual current date/time will appear.

Deleting Attendance/Audit Logs:

Note:
Although ALL the attendance/audit logs will be deleted, users'
fingerprints and passwords are NOT deleted during this operation.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
   Date Time
   Fmt           YY-MM-DD
 ►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will returns;

```
Adv Option            ▲
  Reset Opts.         ▼
►Del Attlogs
  Clear All Data
```
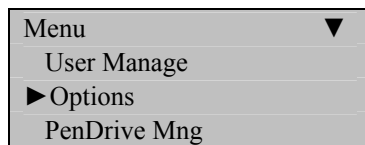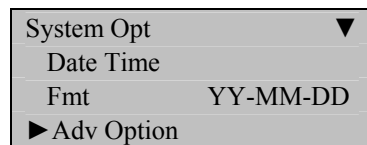
Scroll with the ▲/▼ keys and place the cursor (►) alongside Del Attlogs.

Press the **OK** key if you wish to erase all the attendance/audit logs.

The U160 will prompt;

```
Del Attlogs.
           Delete?


  ESC               OK
```
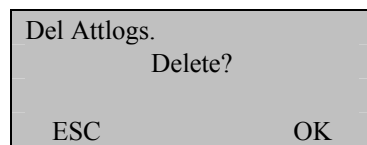
Press the **OK** key to accept or **ESC** to cancel.
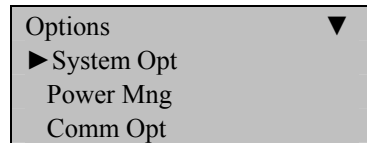
The Advanced Options menu returns;

```
Adv Option            ▲
  Reset Opts.         ▼
►Del Attlogs
  Clear All Data
```

Continue pressing the ESC key until you return to the Start-Up window;

```
System Opt              ▼
    Date Time
    Fmt        YY-MM-DD
  ►Adv Option
```

Press ESC

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

Press ESC

```
Menu                    ▼
    User Manage
  ►Options
    PenDrive Mng
```

Press ESC

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```
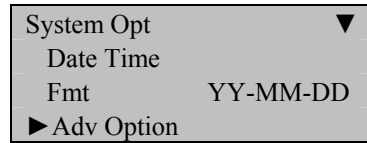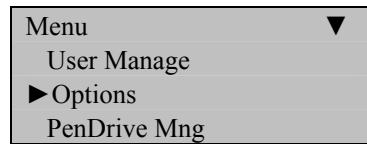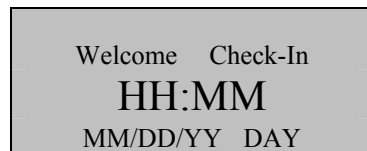
Note:
    The actual current date/time will appear.

Clear all Data

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options

```
Menu                        ▼
  User Manage
▶ Options
  PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
   Date Time
   Fmt            YY-MM-DD
►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option                ▲
    Reset Opts.           ▼
    Del Attlogs
►Clear All Data
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Clear All Data.

Press the **OK** key if you wish to erase all users' fingerprints, passwords and attendance/audit logs.
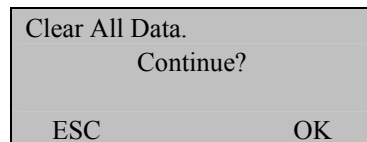
The U160 will prompt;

```
Clear All Data.
            Continue?


  ESC               OK
```

Press the **OK** key to accept or **ESC** to cancel.

The Advanced Options menu will return;

```
Adv Option                ▲
    Reset Opts.           ▼
    Del Attlogs
►Clear All Data
```

Continue pressing the ESC key until you return to the Start-Up window;

```
System Opt                  ▼
    Date Time
    Fmt            YY-MM-DD
  ►Adv Option
```

Press ESC

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

Press ESC

```
Menu                        ▼
    User Manage
  ►Options
    PenDrive Mng
```

Press ESC

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```
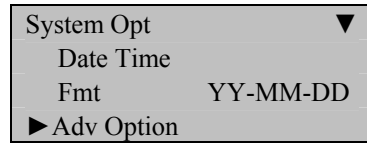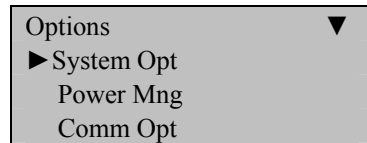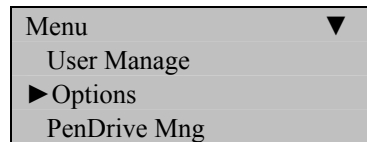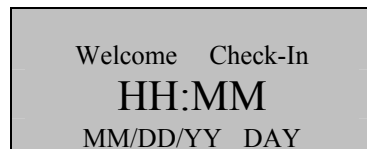
Note:
    The actual current date/time will appear.

Clear Administrators' Privileges

Note:

> This option will revoke all "Administrative authority" from Admins and convert them to "normal users".

This function gives ALL "users" unrestricted access to the U160's menu system.   Therefore we strongly suggest converting a previously enrolled Admin BACK to an Admin as soon as possible".

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                        ▼
   User Manage
►Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
   Date Time
   Fmt           YY-MM-DD
 ►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option               ▲
                         ▼

  Del Attlogs
  Clear All Data
►Clear Admin Pri
```
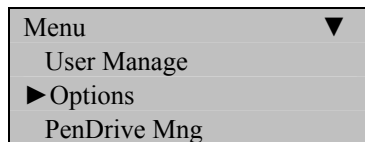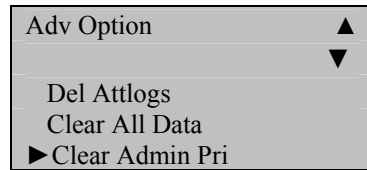
Scroll with the ▲/▼ keys and place the cursor (►) alongside Clear Admin Pri.

Press the **OK** key if you wish to revoke "Administrative privilege" to all Admins and convert them to normal "users".

The U160 will prompt;
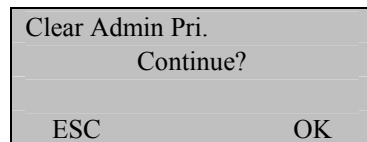
```
Clear Admin Pri.
          Continue?


  ESC                  OK
```

Press the **OK** key to accept or **ESC** to cancel.

The Advanced Options menu will return;

```
Adv Option               ▲
                         ▼

  Del Attlogs
  Clear All Data
►Clear Admin Pri
```

Continue pressing the **ESC** key until you return to the Start-Up window;

```
System Opt               ▼
    Date Time
    Fmt        YY-MM-DD
  ►Adv Option
```

Press **ESC**

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

Press **ESC**

```
Menu                     ▼
    User Manage
  ►Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
      HH:MM
    MM/DD/YY   DAY
```
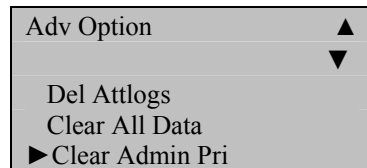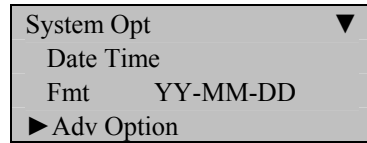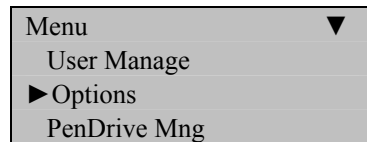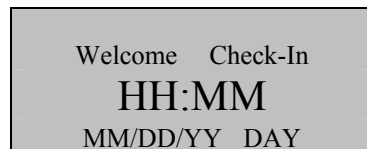
Note:
    The actual current date/time will appear.

Show Score

Note:
   Display the score of the quality of the fingerprint match.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                        ▼
   User Manage
▶ Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
   Date Time
   Fmt          YY-MM-DD
 ►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option          ▲
        .           ▼
  Clear All Data
  Clear Admin Pri
►Show Score         N
```
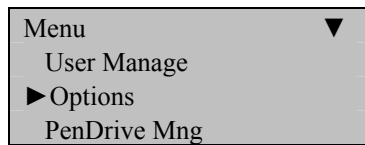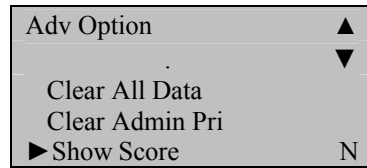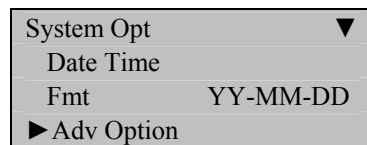
Scroll with the ▲/▼ keys and place the cursor (►) alongside Show Score.

Press the **OK** key.

Notice the **Y** / **N** in Show Score becomes highlighted;

Use the scroll ▲/▼ keys to enter either **Y**es or **N**o.

Press the **OK** key after making the necessary change.

Notice, **Y** / **N** will no longer be highlighted and you're free again to scroll through the menu;

```
Adv Option          ▲
  Clear All Data    ▼
  Clear Admin Pri
►Show Score         N
```

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Press **OK** again.

The U160 will prompt;

```
System Opt.
            Save ?


ESC                  OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The System Options menu will return;

```
System Opt              ▼
   Date Time
   Fmt          YY-MM-DD
►Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                    ▼
   User Manage
►Options
   PenDrive Mng
```

```
 ┌─────────────────────────────┐
 │                             │
 │   Welcome    Check-In       │
 │      HH:MM                  │
 │   MM/DD/YY   DAY            │
 │                             │
 └─────────────────────────────┘
```

Note:

The actual current date/time will appear.

1:N Fingerprint Match Threshold

Note:

This feature allows you to change the sensitivity of the fingerprint sensor when performing 1:N (many) fingerprint matching.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
►Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt               ▼
  Date Time
  Fmt        YY-MM-DD
►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

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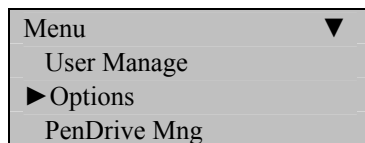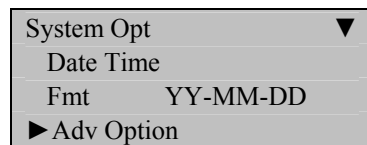
Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option              ▲
                        ▼
    Clear Admin Pri
    Show Score          N
 ► Match Thr            45
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Match Thr.

Press the **OK** key.

Notice the **45** in Match Thr becomes highlighted;

```
Adv Option              ▲
                        ▼
    Clear Admin Pri
    Show Score          N
 ►Match Thr             45
```

Use the keypad or scroll ▲/▼ keys to change the threshold setting.

Lessening the threshold lessens the sensitivity of the sensor when reading "difficult" fingerprints.

If the U160 is having difficulty reading most users' fingerprints, then consider lessening the threshold in 5-unit increments until the vast majority of users' fingerprints can be read consistently.

If lessening the threshold doesn't help improve "fingerprint reads", consider issuing PIN numbers or cards for those users having difficulty having his/her fingerprints read by the U160.

Table **1—1** Suggested Match Threshold Settings

FRR	FAR	1:N (Many)	1:1
High	Low	45	25
Middle	Middle	35	15
Low	High	25	10

After changing the threshold, press the **OK** key.

Notice, the Match Threshold Number **45** will no longer be highlighted and you're free again to scroll through the menu;
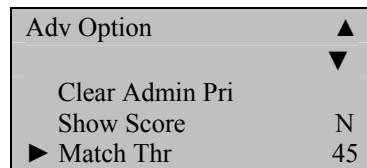
```
Adv Option              ▲
                        ▼
   Clear Admin Pri
   Show Score          N
► Match Thr            45
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
            Save ?

ESC             OK(Save)
```

Press **OK** again.

The System Options menu will return;

```
System Opt
   Date Time
   Fmt       YY-MM-DD
► Adv Option
```

Continue pressing the ESC key until you return to the Start-Up window;

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

Press ESC

```
Menu                       ▼
   User Manage
 ►Options
   PenDrive Mng
```

Press ESC

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
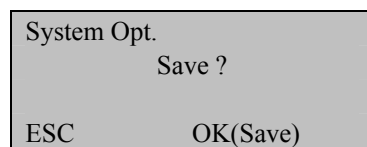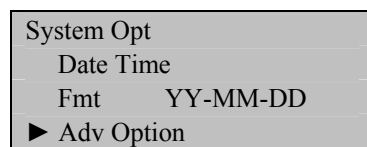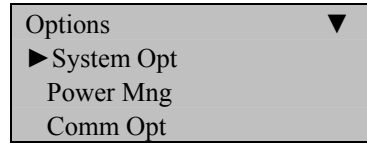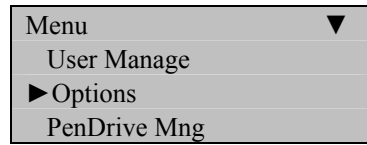
Note:
      The actual current date/time will appear.

Must Input ID

Note:

This feature disables <u>1:N</u> Fingerprint Matching and places the U160 in **1:1** Fingerprint Matching mode.

Although **1:1** Fingerprint Matching requires the extra step of FIRST entering a user's ID number prior to scanning his/her finger, **1:1** Fingerprint Matching is more consistent than 1:N (many) fingerprint matching.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

```
Menu                          ▼
   User Manage
▶ Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
  Date Time
  Fmt        YY-MM-DD
►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

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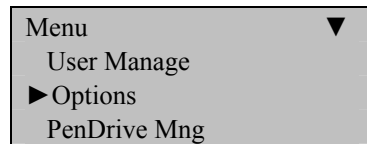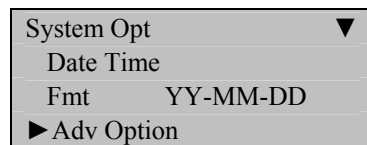
Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option              ▲
                        ▼
  Show Score            N
  Match Thr             45
▶ Mst Input ID          Y
```

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Mst Input ID.

Press the **OK** key.

Notice the **Y** or **N** for Mst Input ID becomes highlighted;

```
Adv Option              ▲
                        ▼
  Show Score            N
  Match Thr             45
▶ Mst Input ID          Y
```

Use the scroll ▲/▼ keys to enter either **Y**es or **N**o.

Press the **OK** key after making the necessary change.

Notice, **Y** or **N** will no longer be highlighted and you're free again to scroll through the menu;

```
Adv Option                ▲
                          ▼
   Show Score             N
   Match Thr              45
 ► Mst Input ID           Y
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
            Save ?


ESC                OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The System Options menu will return;

```
System Opt              ▼
   Date Time
   Fmt          YY-MM-DD
 ►Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                       ▼
    User Manage
  ►Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

1:1 Fingerprint Match Threshold

Note:

This feature allows you to change the sensitivity of the fingerprint sensor when performing **1:1 fingerprint matching**.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                 ▼
    Date Time
    Fmt          YY-MM-DD
  ►Adv Option
```
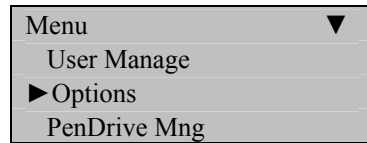
Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option            ▲
                      ▼
  Match Thr          45
  Mst Input ID        Y
► 1:1 Thr            35
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside 1:1 Thr.

Press the **OK** key.

Notice the **35** in Match Thr becomes highlighted;

```
Adv Option            ▲
                      ▼
  Match Thr          45
  Mst Input ID        Y
► 1:1 Thr            35
```

Use the keypad or scroll ▲/▼ keys to change the threshold setting.

Note:

Lessening the threshold lessens the sensitivity of the fingerprint sensor.

If the U160 is having difficulty reading most users' fingerprints, then consider lessening the threshold in 5-unit increments until the vast majority of users' fingerprints can be read consistently.

If lessening the threshold doesn't help improve "fingerprint reads", consider issuing PIN numbers or cards for those users having difficulty having his/her fingerprints read by the U160.

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Table **1—1** Suggested Match Threshold Settings

FRR	FAR	1:N (many)	1:1
High	Low	45	25
Middle	Middle	35	15
Low	High	25	10

After changing the threshold, press the **OK** key.

Notice, the Match Thr number **35** will no longer be highlighted and you're free again to scroll through the menu;

```
Adv Option                ▲
                          ▼
  Match Thr              45
  Mst Input ID            Y
► 1:1 Thr                35
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
        Save ?

ESC             OK (Save)
```

Press **OK** again.

The System Options menu will return;

```
System Opt              ▼
   Date Time
   Fmt          YY-MM-DD
►Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                    ▼
   User Manage
►Options
    PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```

Note:
   The actual current date/time will appear.

Voice

Note:
    This option allows you to turn voice prompts "on" or "off".

Press the **MENU** key on the U160.
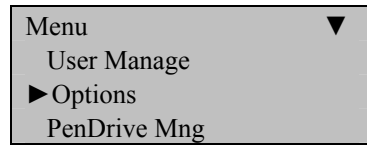
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt                   ▼
    Date Time
    Fmt          YY-MM-DD
  ► Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

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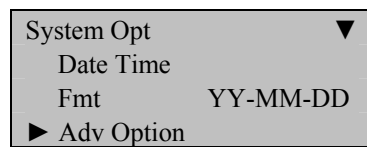
Press the **OK** key.

The Advanced Options menu will appear;

```
┌─────────────────────────────┐
│ Adv Option            ▲     │
│          .            ▼     │
│   Mst Input ID        Y     │
│   1:1 Thr             35    │
│ ►Voice                Y     │
└─────────────────────────────┘
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Voice.

Press the **OK** key.

Notice the **Y** or **N** for Voice becomes highlighted;

```
┌─────────────────────────────┐
│ Adv Option            ▲     │
│          .            ▼     │
│   Mst Input ID        Y     │
│   1:1 Thr             35    │
│ ►Voice                Y     │
└─────────────────────────────┘
```

Use the scroll ▲/▼ keys to enter either **Y**es or **N**o.

Press the **OK** key after making the necessary change.

Notice, Voice **Y** or **N** will no longer be highlighted and you're free again
to scroll through the menu;

```
Adv Option              ▲
              .         ▼
   Mst Input ID         Y
   1:1 Thr              35
►Voice                  Y
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
          Save ?


ESC                OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The System Options menu will return;

```
System Opt
   Date Time
   Fmt        YY-MM-DD
► Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                       ▼
    User Manage
 ► Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```
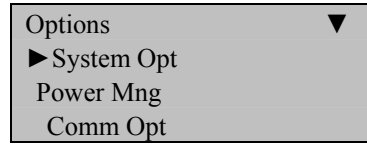
Note:
   The actual current date/time will appear.

Card Only

Note:

Users can clock-in ONLY with his/her issued card.

All fingerprints and passwords will be disabled (but not deleted).

Press the **MENU** key on the U160.
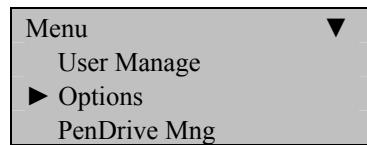
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶ Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt
    Date Time
    Fmt          YY-MM-DD
  ► Adv Option
```
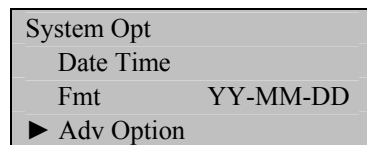
Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option           ▲
               .     ▼
   1:1 Thr          35
   Voice             Y
►  Card Only          Y
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Card Only.

Press the **OK** key.

Notice the **Y** or **N** for Card Only becomes highlighted;

```
Adv Option           ▲
               .     ▼
   1:1 Thr          35
   Voice             Y
►  Card Only          Y
```

Use the scroll ▲/▼ keys to enter either **Y**es or **N**o.

Press the **OK** key after making the necessary change.

Notice, Card Only **Y** or **N** will no longer be highlighted and you're free again to scroll through the menu;

```
Adv Option              ▲
            .           ▼
    1:1 Thr            35
    Voice               Y
  ► Card Only           Y
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
            Save ?


ESC              OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The System Options menu will return;

```
System Opt
    Date Time
    Fmt        YY-MM-DD
  ► Adv Option
```

Continue pressing the ESC key until you return to the Start-Up window;

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

Press ESC

```
Menu                   ▼
     User Manage
  ► Options
     PenDrive Mng
```

Press ESC

```
   Welcome    Check-In
     HH:MM
   MM/DD/YY   DAY
```
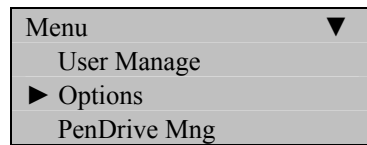
Note:
   The actual current date/time will appear.

FPCard Key

Note:
 Enter **F**inger**p**rint Card Key (also known as Mifare card key).

Press the **MENU** key on the U160.
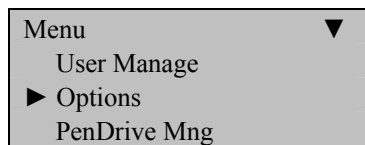
Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                           ▼
   User Manage
 ► Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt
   Date Time
   Fmt        YY-MM-DD
 ► Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option               ▲
                         ▼
    Voice                Y
    Card Only            N
  ►FPCard Key
```
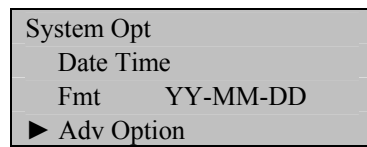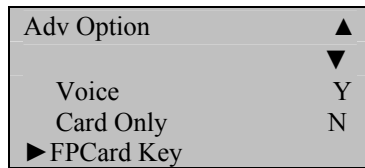
Scroll with the ▲/▼ keys and place the cursor (►) alongside FPCard Key.

Press the **OK** key.

Notice FPCard Key becomes highlighted;

```
FPCard Key

              1

   ESC              OK
```
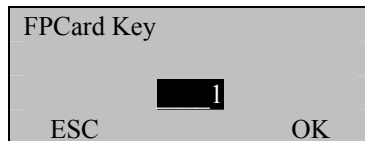
Use the keypad or scroll ▲/▼ keys to enter the FPCard Key.

After entering the Key, press **OK**.

The Adv Option menu will return;
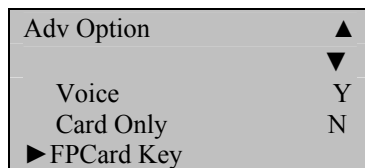
```
Adv Option               ▲
                         ▼
    Voice                Y
    Card Only            N
  ►FPCard Key
```

Continue pressing the ESC key until you return to the Start-Up window;

```
System Opt
    Date Time
    Fmt          YY-MM-DD
► Adv Option
```

Continue pressing the ESC key until you return to the Start-Up window;

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

Press ESC

```
Menu                     ▼
   User Manage
►Options
   PenDrive Mng
```

Press ESC

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

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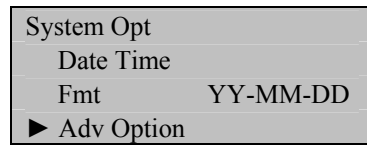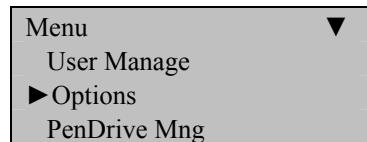
Update Firmware

Note:

Update the firmware of the U160 by utilizing the USB Pen Drive (flash drive).

Caution: Only change the firmware under the guidance of your dealer or ZK Software Tech Support.

Press the **MENU** key on the U160.
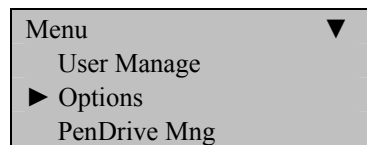
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

```
Menu                        ▼
    User Manage
 ► Options
    PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt
   Date Time
   Fmt           YY-MM-DD
 ► Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

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Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option              ▲
                        ▼
   Card Only           N
   FPCard Key
 ► Upd Firmware
```
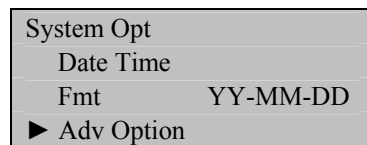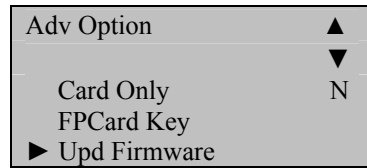
Scroll with the ▲/▼ keys and place the cursor (►) alongside Upd Firmware.

Press the **OK** key.

You'll then be prompted;

```
        Plug Pen Drive?
```
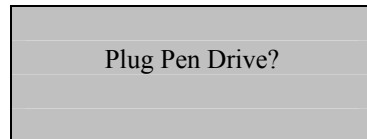
Insert the USB Pen Drive (flash drive) containing the Upgrade file into the USB port of the U160.

The U160 will automatically recognize the upgraded firmware/file and will prompt you with instructions.

When complete press the **OK** key.

The Adv Option menu will return;
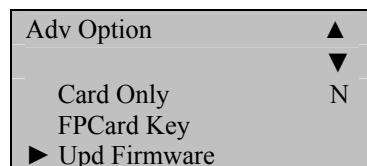
```
Adv Option              ▲
                        ▼
   Card Only           N
   FPCard Key
 ► Upd Firmware
```

Continue pressing the ESC key until you return to the Start-Up window;

```
System Opt
    Date Time
    Fmt          YY-MM-DD
  ► Adv Option
```

Continue pressing the ESC key until you return to the Start-Up window;

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

Press ESC

```
Menu                       ▼
    User Manage
  ► Options
    PenDrive Mng
```

Press ESC

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```
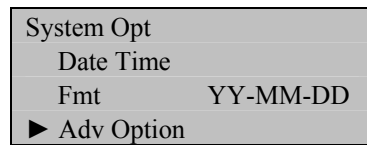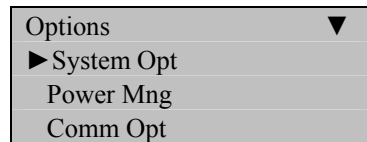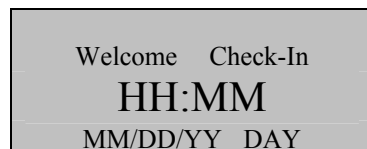
**Note**:
  The actual current date/time will appear.

Button Beep

Note:
> You can turn the audio **beep** "on" or "off" when pressing the U160 keypad.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶ Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the OK key.

The following screen appears;

```
System Opt
    Date Time
    Fmt        YY-MM-DD
  ►Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the OK key.

The Advanced Options menu will appear;

```
Adv Option                 ▲
                           ▼
    FPCard Key
    Upd Firmware
  ► Button Beep          Y
```
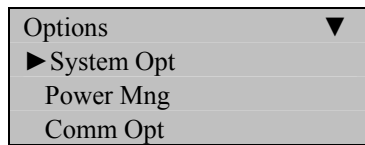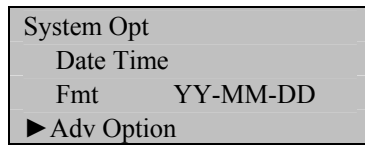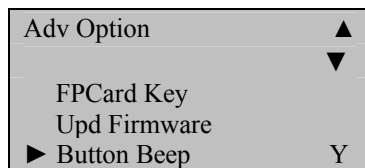
Scroll with the ▲/▼ keys and place the cursor (►) alongside Button Beep.

Press the OK key.

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Notice the **Y** or **N** for Button Beep becomes highlighted;
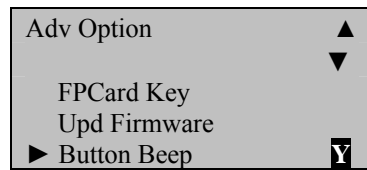
```
Adv Option                  ▲
                            ▼
   FPCard Key
   Upd Firmware
 ► Button Beep              Y
```

Use the scroll ▲/▼ keys to enter either **Y**es or **N**o.

Press the **OK** key after making the necessary change.

Notice, Button Beep **Y** or **N** will no longer be highlighted and you're free again to scroll through the menu;
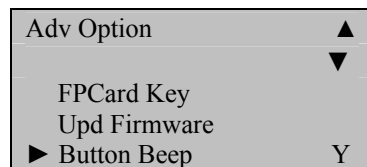
```
Adv Option                  ▲
                            ▼
   FPCard Key
   Upd Firmware
 ► Button Beep              Y
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
            Save ?


ESC              OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The System Options menu will return;

```
System Opt
   Date Time
   Fmt        YY-MM-DD
► Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu                       ▼
   User Manage
► Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
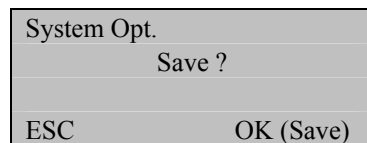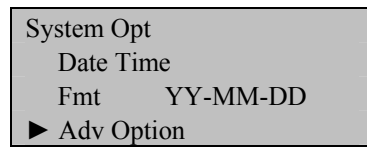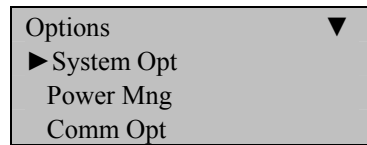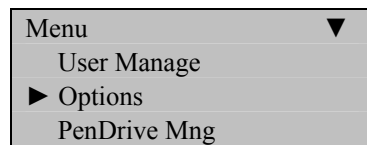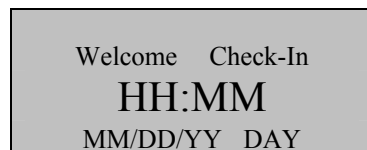
Note:
   The actual current date/time will appear.

Adjust Volume

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                           ▼
   User Manage
►  Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside System Opt.

Press the **OK** key.

The following screen appears;

```
System Opt
    Date Time
    Fmt           YY-MM-DD
 ► Adv Option
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Adv Option.

Press the **OK** key.

The Advanced Options menu will appear;

```
Adv Option                       ▲
                                 ▼
    Upd Firmware
    Button Beep        Y
 ► Adj VOL (%)         70
```
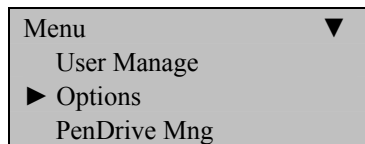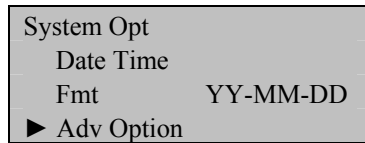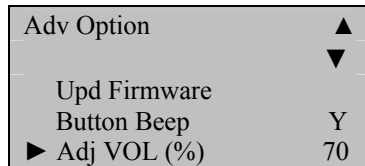
Scroll with the ▲/▼ keys and place the cursor (►) alongside Adj VOL.

Press the **OK** key.

Notice the **70** in Adj VOL becomes highlighted;

```
Adv Option              ▲
                        ▼
   Upd Firmware
   Button Beep          Y
 ► Adj VOL (%)          70
```

Use the keypad or scroll ▲/▼ keys to adjust the volume.

After changing the volume, press the **OK** key.

Notice, the Volume % **70** will no longer be highlighted and you're free again to scroll through the menu;

```
Adv Option              ▲
                        ▼
   Upd Firmware
   Button Beep          Y
 ► Adj VOL (%)          70
```

Press **OK** again.

The U160 will prompt;

```
System Opt.
           Save ?


  ESC            OK (Save)
```

Press **OK** again.

The System Options menu will return;

```
System Opt
   Date Time
   Fmt        YY-MM-DD
► Adv Option
```

Continue pressing the **ESC** key until you return to the Start-Up window;

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

Press **ESC**

```
Menu               ▼
   User Manage
► Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome   Check-In
      HH:MM
   MM/DD/YY   DAY
```

Note:
   The actual current date/time will appear.

191
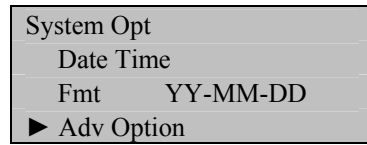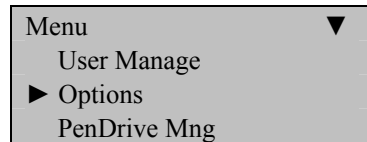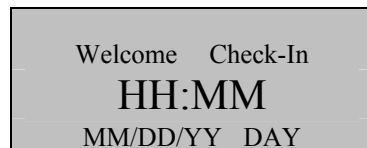
Power Management

There are various power modes which can be selected;

Shut down schedule:
> Turn off the power at pre-defined times.

Power on schedule:
> Turn on the power at pre-defined times.

Sleep schedule:
> Enable sleep mode at pre-defined times.
> Press any key to bring the U160 out of sleep mode.

Idle
> This setting determines if the U160 should remain **idle** indefinitely
> or if it should enter "Sleep Mode" after a specified period of time.

Idle Minute:
> This setting determines how long the U160 can remain "idle"
> prior to entering "**sleep mode**".

Lock Power (Yes or No)

Set Shutdown Schedule

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                    ▼
  User Manage
▶ Options
  PenDrive Mng
```
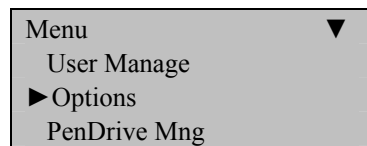
Press the **OK** key.

The Options Menu will appear;

Options	▼
System Opt	
►Power Mng	
Comm Opt	

Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

Power Mng	▼
►Shutdown	N
PowerOn	N
Sleep	N

Scroll with the ▲/▼ keys and place the cursor (►) alongside Shutdown.

194

Press the **OK** key.

You'll then be prompted;

```
Shutdown
        Set Sch. Fun?


 ESC                    OK
```

Press the **OK** key to schedule the Shutdown Function.

Notice the **23** **:** **59** in Shutdown becomes highlighted;

```
Power Mng              ▼
  ►Shutdown          23:59
   PowerOn             N
   Sleep               N
```

Use the scroll ▲/▼ keys and keypad to change the **hour** and **time** the U160 should **Shutdown**.

Press the **OK** key after making the necessary change.

Notice the **23:59** in Shutdown will no longer be highlighted and you're free again to scroll through the menu;

```
Power Mng              ▼
  ►Shutdown          23:59
   PowerOn             N
   Sleep               N
```

195

Press the **ESC** key.

The U160 will prompt;

```
Power Mng.
            Save ?


ESC                 OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                    ▼
   User Manage
  ►Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```

Note:
     The actual current date/time will appear.

# Set Power On Schedule

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                        ▼
   User Manage
 ▶Options
   PenDrive Mng
```
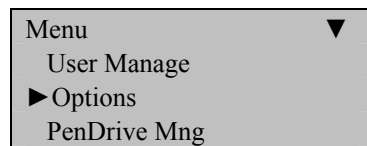
Press the **OK** key.

The Options Menu will appear;

Options	▼
System Opt	
►Power Mng	
Comm Opt	

Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

Power Mng	▼
Shutdown	N
►PowerOn	N
Sleep	N

Scroll with the ▲/▼ keys and place the cursor (►) alongside PowerOn.

Press the **OK** key.

You'll then be prompted;

```
PowerOn
        Set Sch. Fun?

 ESC                    OK
```

Press the **OK** key to schedule the PowerOn Function.

Notice the **23** **:** **59** in PowerOn becomes highlighted;

```
Power Mng               ▼
  Shutdown              N
▶PowerOn              23:59
  Sleep                 N
```

Use the scroll ▲/▼ keys and keypad to change the **hour** and **time** the U160 should **Power On**.

Press the **OK** key after making the necessary change.

Notice the **23:59** in PowerOn will no longer be highlighted and you're free again to scroll through the menu;

```
Power Mng               ▼
  Shutdown            23:59
▶PowerOn                N
  Sleep                 N
```

199

Press the **ESC** key.

The U160 will prompt;

```
Power Mng.
            Save ?


ESC                    OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                         ▼
   User Manage
  ►Options
   PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Set Sleep Schedule

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                          ▼
  User Manage
▶Options
  PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

Options	▼
System Opt	
►Power Mng	
Comm Opt	
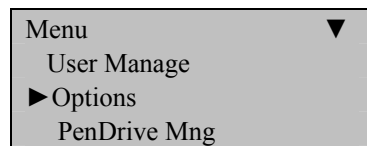
Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

Power Mng	▼
Shutdown	N
PowerOn	N
►Sleep	N
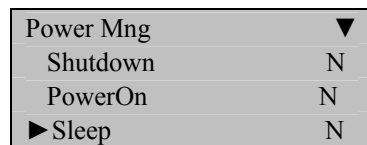
Scroll with the ▲/▼ keys and place the cursor (►) alongside Sleep.

Press the **OK** key.

You'll then be prompted;

```
Sleep
           Set Sch. Fun?


 ESC                    OK
```

Press the **OK** key to schedule the Sleep Function.

Notice the **23** **:** **59** in Sleep becomes highlighted;

```
Power Mng              ▼
  ►Shutdown            N
    PowerOn            N
    Sleep           23:59
```

Use the scroll ▲/▼ keys and keypad to change the **hour** and **time** the U160 should **Sleep**.

Press the **OK** key after making the necessary change.

Notice the **23:59** in Sleep will no longer be highlighted and you're free again to scroll through the menu;

```
Power Mng              ▼
    Shutdown           N
    PowerO             N
  ►Sleep           23:59
```

Press the **ESC** key.

The U160 will prompt;

```
Sleep.
            Save ?


ESC                 OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                     ▼
   User Manage
  ►Options
    PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
     HH:MM
   MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Set Idle to <u>Off</u> or <u>Sleep</u>

Press the **MENU** key on the U160.
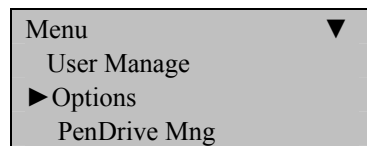
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                      ▼
  User Manage
▶Options
  PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

Options	▼
System Opt	
►Power Mng	
Comm Opt	

Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

Power Mng	▲
	▼
PowerOn	N
Sleep	N
►Idle	SLP

Scroll with the ▲/▼ keys and place the cursor (►) alongside Idle.

Press the **OK** key.

Notice the **23 : 59** in Sleep becomes highlighted;

```
Power Mng              ▲
                       ▼
  PowerOn              N
  Sleep                N
►Idle                 SLP
```
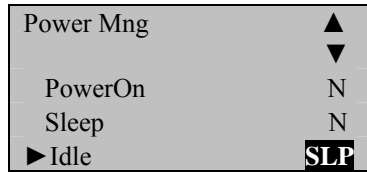
Use the scroll ▲/▼ keys to change the **Idle** mode to **Sleep** or **Off**.

Press the **OK** key after making the necessary change.

Notice the **SLP/OFF** in Idle will no longer be highlighted and you're free again to scroll through the menu;
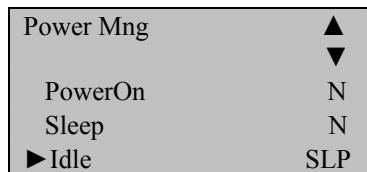
```
Power Mng              ▲
                       ▼
  PowerOn              N
  Sleep                N
►Idle                 SLP
```

Press the **ESC** key.

The U160 will prompt;

```
Power Mng
        Save ?

ESC            OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

207

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                       ▼
    User Manage
  ► Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
        HH:MM
    MM/DD/YY   DAY
```
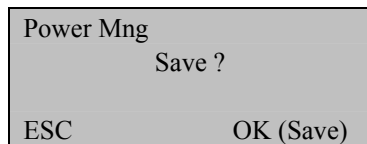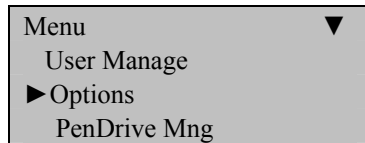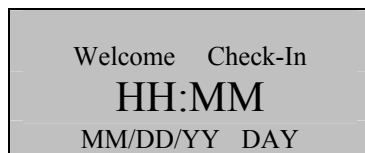
Note:
    The actual current date/time will appear.

Set Idle Minutes

Press the **MENU** key on the U160.
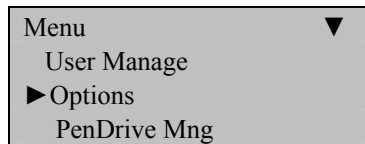
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                        ▼
   User Manage
 ►Options
   PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

```
Power Mng                  ▲
                           ▼
    Sleep           N
    Idle            SLP
 ►Idle Min          0
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Idle Min.

Press the **OK** key.

Notice the **0** in Idle Min becomes highlighted;

```
Power Mng              ▲
                       ▼
  Sleep                N
  Idle                 SLP
►Idle Min              0
```
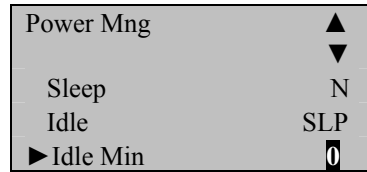
Use the scroll ▲/▼ keys to change the **Idle Minutes**.

Press the **OK** key after making the necessary change.

Notice the **0** in Idle Minutes will no longer be highlighted and you're free again to scroll through the menu;
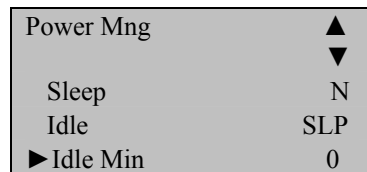
```
Power Mng              ▲
                       ▼
  Sleep                N
  Idle                 SLP
►Idle Min              0
```

Press the **ESC** key.

The U160 will prompt;

```
Power Mng
          Save ?


ESC              OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                       ▼
   User Manage
 ►Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
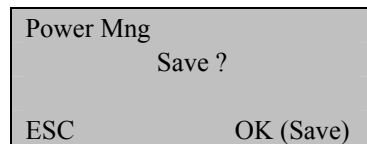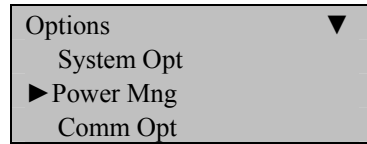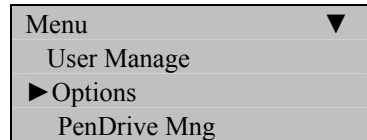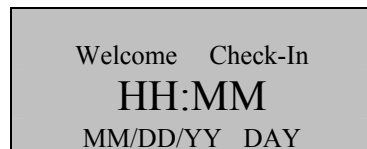
Note:
    The actual current date/time will appear.

Lock Power

Press the **MENU** key on the U160.
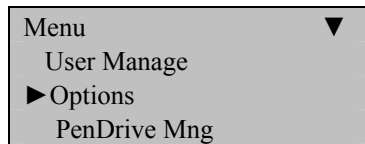
Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options;

```
Menu                        ▼
  User Manage
▶ Options
  PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

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

Scroll with the ▲/▼ keys and place the cursor (►) alongside Power Mng.

Press the **OK** key.

The following screen appears;

```
Power Mng                    ▲
                             ▼
    Idle            SLP
    Idle Min         0
  ►Lock Power        Y
```

Scroll with the ▲/▼ keys and place the cursor (►) alongside Lock Power.

Press the **OK** key.

Notice the **Y** in Lock Power becomes highlighted;

```
Power Mng               ▲
                        ▼

  Idle              SLP
  Idle Min            0
►Lock Power            Y
```

Use the scroll ▲/▼ keys to change the **Y** or **N** in **Lock Power**.

Press the **OK** key after making the necessary change.

Notice the **Y** in Lock Power will no longer be highlighted and you're free again to scroll through the menu;

```
Power Mng               ▲
                        ▼

  Idle              SLP
  Idle Min            0
►Lock Power            Y
```

Press the **ESC** key.

The U160 will prompt;

```
Power Mng
            Save ?


ESC              OK (Save)
```

Press **OK** to accept or press **ESC** to cancel.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window;

```
Menu                    ▼
  User Manage
  ►Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
      HH:MM
    MM/DD/YY   DAY
```
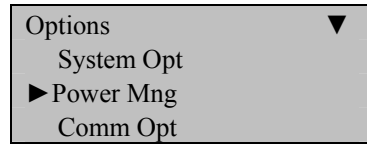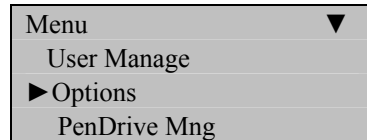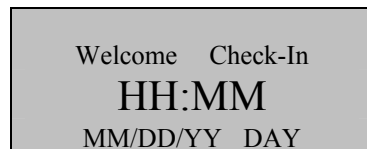
Note:
    The actual current date/time will appear.

Communication Options

Note:

The U160 can communicate via the Network (Ethernet) or RS 232/485.

Press the **MENU** key on the U160.
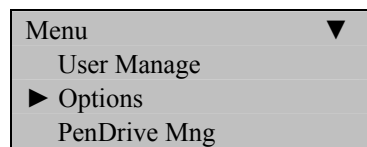
Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                        ▼
    User Manage
►   Options
    PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

Options	▼
System Opt	
Power Mng	
► Comm Opt	

Scroll with the ▲/▼ keys and place the cursor (►) alongside Comm Opt.

Press the **OK** key.

The following communication settings are available;

Comm Opt	▼
► IP Addr	
NetMask	
Gateway	
Net Speed	AUTO
BaudRate	115200
Dev Num	
RS232	Y
RS485	N
COMM Key	0
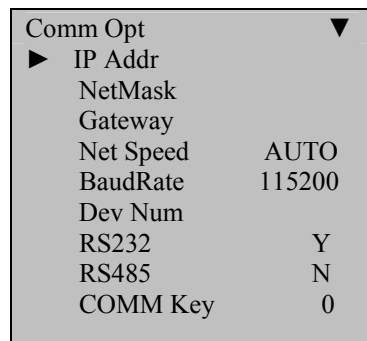
Network (Ethernet) Connectivity

The following settings are available;

Machine IP address:

    Default IP is 192.168.1.201.   This can be modified, but do NOT use an IP address already being used by another device on the same network.

Subnet mask:

    Default mask 255.255.255.0.   This can be modified.

Gateway address:

    Default gateway address is 0.0.0.0.   This can be modified.

Network speed:

    Notice three available options (Automatic, 10M and 100M).

```
Comm Opt              ▼
  ►   IP Addr
      NetMask
      Gateway
      Net Speed
```
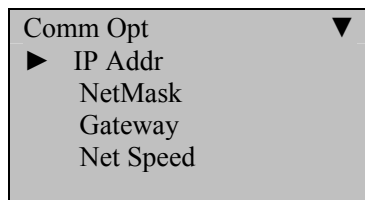
To change Network settings begin at start-up and press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶ Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

```
Options                    ▼
    System Opt
    Power Mng
►  Comm Opt
```
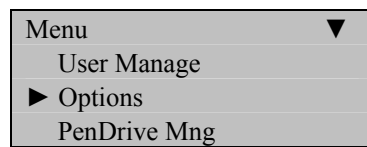
Scroll with the ▲/▼ keys and place the cursor (►) alongside Comm Opt.

Press the **OK** key.

The following Network Communication settings are available;
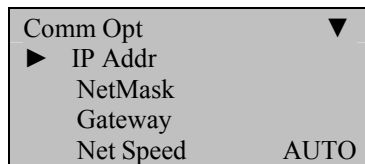
```
Comm Opt                   ▼
►    IP Addr
     NetMask
     Gateway
     Net Speed      AUTO
```

Scroll with the ▲/▼keys to place the cursor in the desired field and
change the communication setting as desired.

Press **OK** after modifying the desired communication settings.
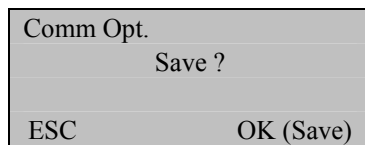
When finished, press the **ESC** key.

You'll be prompted;

```
Comm Opt.
           Save ?


ESC                OK (Save)
```

221

Press **OK** again.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window.

```
Menu                 ▼
   User Manage
 ► Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
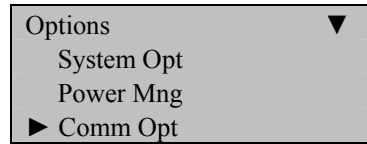
Note:
    The actual current date/time will appear.

RS232/485 Serial Connectivity

The following settings are available;

Baud rate:
Choose either 9600, 19200, 38400, 57600, 115200.

RS232:
Enable or disable RS **232** communication.

RS485:
Enable or disable RS **485** communication.

COMM Key:
Secure the Serial connection with a Key (password).   The default value is set to 0.

Dev Num:
Assign each U160 a unique Device Number ranging from 1-255.
This device number is also the **site code** if the
 U160 is using a Wiegand communication protocol with a 3rd party access control panel.

Comm Opt	▼
► BaudRate	115200
Dev Num	
RS232	Y
RS485	N
COMM Key	0

223

To change RS 232/485 settings begin at start-up and press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside Options.

Menu	▼
User Manage	
▶ Options	
PenDrive Mng	

Press the **OK** key.

The Options Menu will appear;

```
Options                    ▼
    System Opt
    Power Mng
► Comm Opt
```
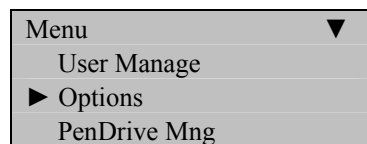
Scroll with the ▲/▼ keys and place the cursor (►) alongside Comm Opt.

Press the **OK** key.

The following RS 232/485 Communication settings are available;
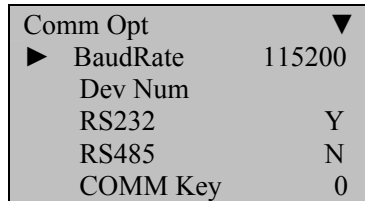
```
Comm Opt               ▼
►    BaudRate      115200
     Dev Num
     RS232             Y
     RS485             N
     COMM Key          0
```

Scroll with the ▲/▼ keys to place the cursor in the desired field and change the communication setting as desired.

Press **OK** after modifying desired communication settings.

When finished, press the **ESC** key.

You'll be prompted;

```
Comm Opt.
          Save ?


ESC              OK (Save)
```

Press **OK** again.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window

```
Menu                   ▼
    User Manage
 ► Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

Log Options

The U160 has 3 logging options:

Alarm Superlog:

Alarm Attendance Log:
When the number of transactions reaches a set value a warning alarm
will be sounded to clear the memory,

Recheck Minute:
This can be set to avoid record duplicate punches. For eg. If this value is set
as 2, then it will not record the transaction of the same user ID within 2
minutes of the first punch.

Press the **MENU** key on the U160.

Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                        ▼
    User Manage
 ► Options
    PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

```
Options                     ▼
    Power Mng
    Comm Opt
 ► Log Opt
```
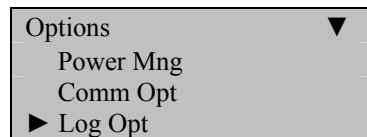
Scroll with the ▲/▼ keys and place the cursor (►) alongside Log Opt.

228

Press the **OK** key.

The following screen appears;

Log Opt	▼
► Alm SupperLog	10

Alm SupperLog	▼
► Alm AttLog	10

Alm AttLog	▲
► Recheck Min	0

Scroll with the ▲/▼ keys to place the cursor in the desired field.

Press **OK** and modify your desired settings.

Enter your preferred Serial communication settings.

When finished, press the **ESC** key

You'll be prompted;

Comm Opt.	
Save ?	
ESC	OK (Save)

Press **OK** again.

The Options menu will return;

229

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

Continue pressing the **ESC** key until you return to the Start-Up window.

```
Menu                    ▼
    User Manage
►  Options
    PenDrive Mng
```

Press **ESC**

```
    Welcome    Check-In
       HH:MM
    MM/DD/YY   DAY
```
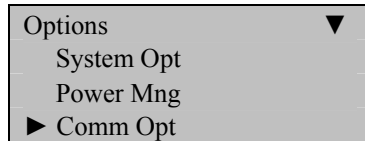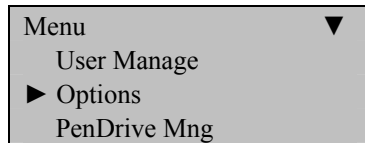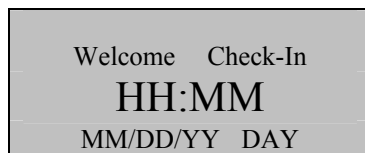
Note:
      The actual current date/time will appear.

Auto Test

This menu allows you to test various components of the U160;

Run ALL Tests

>**LCD Test**
>>Does the display appear normal?

>**Voice Test**
>>Scroll through and listen to pre-recorded voice prompts by pressing the **OK** key.

>**Fingerprint Reader**
>>Does the display indicate the fingerprint reader is OK?

>**Key Test**
>>Does each key pressed on the keypad correctly coincide with the key displayed on the screen?

>**Real Time Clock (RTC) Test**
>>Does the display indicate the RTC is OK?

Press the **MENU** key on the U160.

231

Scroll with the ▲/▼ keys and place the cursor (►) alongside Options.

```
Menu                          ▼
    User Manage
 ► Options
    PenDrive Mng
```

Press the **OK** key.

The Options Menu will appear;

```
Options                       ▲
                              ▼
    Log Opt
    Access Options
 ► Auto Test
```
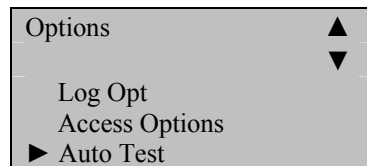
Scroll with the ▲/▼ keys and place the cursor (►) alongside Auto Test.

Press the **OK** key.

The following screen appears;

```
Auto Test              ▼
  ► Run ALL Test
    LCD Test
    Voice Test
    FR Reader
    Key test
    RTC Test
```
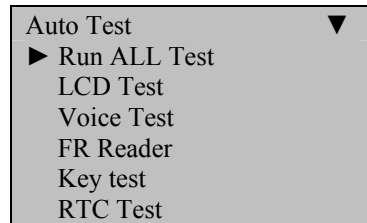
Scroll with the ▲/▼ keys and place the cursor (►) alongside the feature
you'd like to test and press the **OK** key.

After testing, press the **ESC** key.

The Options menu will return;


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

Continue pressing the **ESC** key until you return to the Start-Up window.

```
Menu                        ▼
    User Manage
  ► Options
    PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```
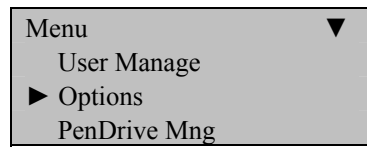
Note:
    The actual current date/time will appear.

PenDrive (Flash Drive) Management

Note:
> This feature allows you to manually upload and download data (i.e. templates, attendance records/transaction logs and pictures/ images) between the U160 and the USB PenDrive/flash drive.

Download Attlog/Record

> Copies attendance records/audit logs <u>from</u> the U160 <u>to</u> the PenDrive.

Download User

> Copies users' info (inc. templates) <u>from</u> the U160 <u>to</u> the PenDrive.

Upload User

> Copies users' info <u>from</u> the PenDrive <u>to</u> the U160.

Press the **MENU** key on the U160.

235

Scroll with the ▲/▼ keys and place the cursor (►) alongside PenDrive Mng

```
Menu                        ▼
    User Manage
    Options
  ► PenDrive Mng
```
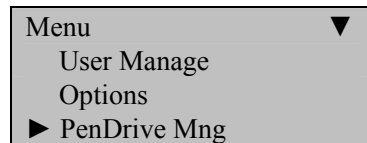
Press the **OK** key.

The PenDrive Mng Menu will appear;

```
PenDrive Mng
  ► DwnLoad AttLog
    DwnLoad User
```
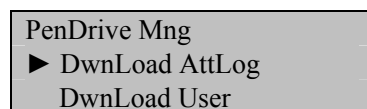
Upload User

Scroll with the ▲/▼ keys and place the cursor (▶) alongside the desired PenDrive option.

Be sure the USB PenDrive (flash drive) is inserted in the USB port of the U160.

237

Press the **OK** key.

The U160 will prompt;

```
Plug Pen Drive?
```

Follow the prompts to upload/download data.

The following files are copied to the PenDrive:

- **X_attlog.dat** (attendance log)
- **X_oplog.dat** (management log)
- **X_user** (User info including templates**)**

Note:

The "x" represents the machine number of the U160 where
the data originated.

System Information

This menu allows you to review various systems on the U160;

- Number of users enrolled
- Number of fingerprints enrolled
- Number of entries in the attendance/audit log
- Number of Admins (inc Enrollers & Supervisors) enrolled
- Number of passwords enrolled
- Number of S Logs
- Amount of free space available;
    - Available fingerprint entries
    - Available attendance log entries
    - Available S Log entries
- Device Info

Press the **MENU** key on the U160.

239

Scroll with the ▲/▼ keys and place the cursor (►) alongside Sys Info.

```
Menu                              ▼
    User Manage
    Options
    PenDrive Mng
 ► Sys Info
```
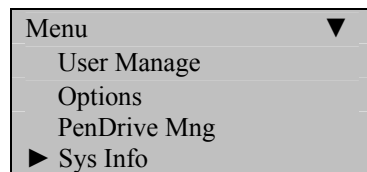
Press the **OK** key.

The Sys Info screen will appear;

```
Sys Info                          ▲
                                  ▼
 ► User Cnt              1
    FP Cnt               1
    Att Log             12
    Admin Cnt            1
    Pwd Usr              1
    S Logs             116
    Free Space Info
    Dev info
```
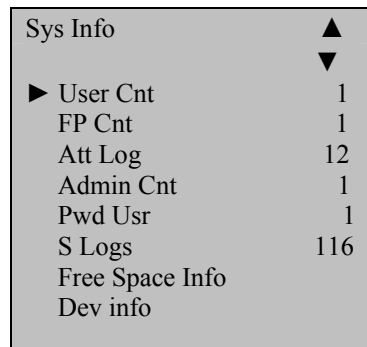
Scroll with the ▲/▼ keys and place the cursor (►) alongside the system information you'd like to review, and then press the **OK** key.

After reviewing, press the **ESC** key.

The Options menu will return;

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

Continue pressing the **ESC** key until you return to the Start-Up window.

```
Menu                    ▼
   User Manage
 ► Options
   PenDrive Mng
```

Press **ESC**

```
   Welcome    Check-In
      HH:MM
   MM/DD/YY   DAY
```

Note:
    The actual current date/time will appear.

241
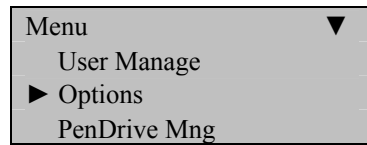
Maintenance

Cleaning

From time to time, the optical platen, the keypad and display
window require cleaning. Since working environments differ, it is not
possible to define when exactly cleaning should be performed.

The following is a suggested guide:

Item	Cleaning Frequency
Keypad and display window	Clean when visibly dirty and hard to read.
Optical platen	Do not over clean. The platen is designed to work under greasy or dirty conditions. However, do clean if the platen is obscured or if users report deteriorating performance. See cleaning the Optical Platen below.

Cleaning the Keypad and Display

To clean the keypad and display, use a soft paper tissue which should
be slightly damp.

Cleaning the Optical Platen

- If dusty, blow air on the platen to clean any dust particles.

- If the sensor is greasy, wipe it with a mild window cleaner or other similar neutral detergent.

Warning:

Do not use any other cleaner or the platen may be damaged. Be careful not to scratch the platen.