Installation Manual

eOn RTE-301 Biometric Ethernet Enabled Lock

Overview

The RTE-301 is a biometric lock and works in conjunction with the RTE-MS1 Management System to provide a unique access control solution. The RTE-301 supports up to 1,000 users with timed access control. The RTE-MS1 is a Windows™ based audit trail and management system and includes a USB Scanner for finger print enrollment.

The RTE-301 and RTE-MS1 are ideal for any application including residential, commercial, public safety, education, healthcare, and government.

The RTE-301 delivers uncompromising commercial-grade quality. This lock is a true workhorse, tested to over 2 million duty cycles. The RTE-301 has a 3-hour UL fire-rated latch and a free-wheeling clutch. The outdoor portion is weatherproof. The RTE-301 resides on your network via a Power over Ethernet (PoE) interface using DHCP or static IP addressing. When used with the RTE-MS1 Management System you can configure all locks on your network and manage all user information from a central system administrator's position.

The RTE-301 provides you with the versatility to manage access control using both fingerprint recognition and PIN codes. The RTE-MS1 access control and audit trail features track exactly who has been in your facility and when.

Please read all documentation carefully before installation & use. This manual details all installation procedures.

Manufacturer and/or Distributors of the RTE-301 will not be responsible for any damages caused by incorrect installation or mishandling of the lock. Any such damages will void manufacturer's warranty. Further information on the warranty terms and conditions can be found in Appendix A to this manual.

Important: The RTE-301 outside (front) unit has been designed for weather exposure. Exposure of the inside (back) unit to the elements will void manufacturer warranty. See Appendix A to this manual for further information under "Warranty Terms and Conditions"

Features
- ✓ Up to 1,000 finger print and/or PIN enrollments
- ✓ Backlit PIN keypad for easy use at night
- ✓ Industrial Grade Satin Chrome finish
- ✓ 5 second access time before door re-locks
- ✓ Heavy Duty components rated to over 2 million cycles
- ✓ UL-Listed, ANSI Grade 2 tubular latch with 3-hour UL fire-rating
- ✓ Adjustable backset (2 3/8″ and 2 3/4″)
- ✓ Commercial grade 6-pin rim cylinder (removable) with SC4 keyway (3 keys included)
- ✓ Free-wheeling clutch design
- ✓ IP56 rating ensures resistance to moisture, snow, dust, UV, or humidity
- ✓ Rated for -40°F to 150°F
- ✓ Impact Alarm
- ✓ ADA compliant handle is non-handed for right or left hand installation
- ✓ 2 rechargeable 3.2 volt batteries enable continued operation
- ✓ Timed Unlock Mode Support ("TUMS") opens and closes lock on pre-defined schedule
- ✓ Power over Ethernet
- ✓ Battery life provides minimum 1,800 openings[1]
- ✓ Low battery alert
- ✓ Non-volatile memory not lost when batteries removed or replaced
- ✓ 2 programing modes
  - At the lock using the LCD and keypad
  - Via the RTE-MS1 Management System
- ✓ Easy to Delete Individual users
- ✓ Access Control features:
  - Open Mode
  - Timed Lock Access
  - Timed User Access
  - Import Records
  - Export Records
- ✓ 2 Year Limited Warranty

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[1] May vary based on actual conditions

Specifications

Fingerprint sensor - CMOS Optical, 3rd Generation high resolution, backlit, coated

Verification Type
1 to N (PIN or fingerprint only)
1 to 1 (User ID + FP or PIN)

Scanning Time < 1 second
Recognition Time < 1 second/user
False Accept Rate (FAR) < .001%
False Reject Rate (FRR) < .01%

Power: PoE (802.3af 15w 48v) with two standby 3.2v 280 mAh rechargeable batteries, optionally powered via 12-volt DC power supply

Dimensions: 1.5" D x 3" W x 9.5" L

Weight: 9 Lbs

Door Thickness: 1 1/2" to 2" compatible with most standard wood, metal or fiber glass doors: not for use on doors that use exotic woods or glass doors

Rated: -40°F to 150°F

Network connection: 10Mpbs; DHCP or static IP addressing

RTE-MS1 Management System

This Manual describes how to program the RTE-301 manually at each lock. To take full advantage of the RTE-301 network features you must use the RTE-MS1 Management System for programming. This software enables you to program one or more locks on your network from a PC. The RTE-MS1 is sold separately and has a separate installation manual. Contact your distributor for more pricing and availability. You can also go to [Insert web address here] for more information about the RTE-MS1.

Ethernet Cable Installation

To use the RTE-MS1 the locks must be on your POE network (10Mpbs, DHCP or static IP addressing). This requires an Ethernet cable be routed from the hinge side of the door-jam, through the door, to the lock. There are multiple power-

transfer devices and hinges that enable this. These devices are sold separately by various companies.

Contents

Section 1: Parts

Please familiarize yourself with all the parts in the RTE-301 package. If any parts are missing or damaged, contact your distributor immediately.

Outdoor Unit	Indoor Unit	Universal Handles
Strike Plate & Box	Rubber Gaskets	Fixing Plate
Over-ride Keys	Tubular Latch (2 3/8" & 2 3/4" adjustable)	Spindle (or tailpiece)
Spindle Springs	Installation Template	2 x 3 1/16" screws *(for bottom fixing posts)*

2 x 2 1/2" screws *(for fixing plate)*	1 x 3 1/8" screw *(for top fixing post)*	This box intentionally empty.

Required tools:

- ✓ One Electric or battery operated Drill
- ✓ One 3/8" Diameter Drill Bit
- ✓ A pair of scissors
- ✓ One Phillips head screwdriver
- ✓ Hacksaw or handheld bolt cutters
- ✓ Tape measure
- ✓ One long, thin shafted Phillips Head Screwdriver
- ✓ "Fish Tape" for routing LAN cable through door

Section 2: Pre-installation

2.1 Mark and bore holes on the door

1) Remove existing handle set.

2) Line up the installation template to the existing hole on the door. Ensure that the template is square by observing the vertical dotted line which should line up with the edge of the door. Decide which hole pattern to use (A or B). Mark either the "A" or "B" holes on the template with a permanent marker. *For this example, the "B" holes were used.
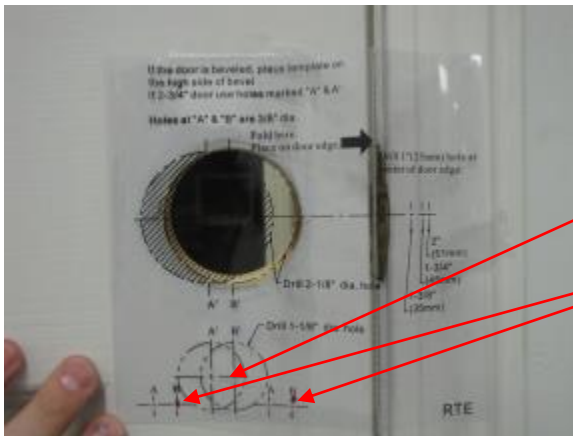
1 1/8" hole

3/8" holes

3) Now that you have the hole pattern marked on the template, use a utility knife to cut through the template so that you can mark the hole pattern onto the door.
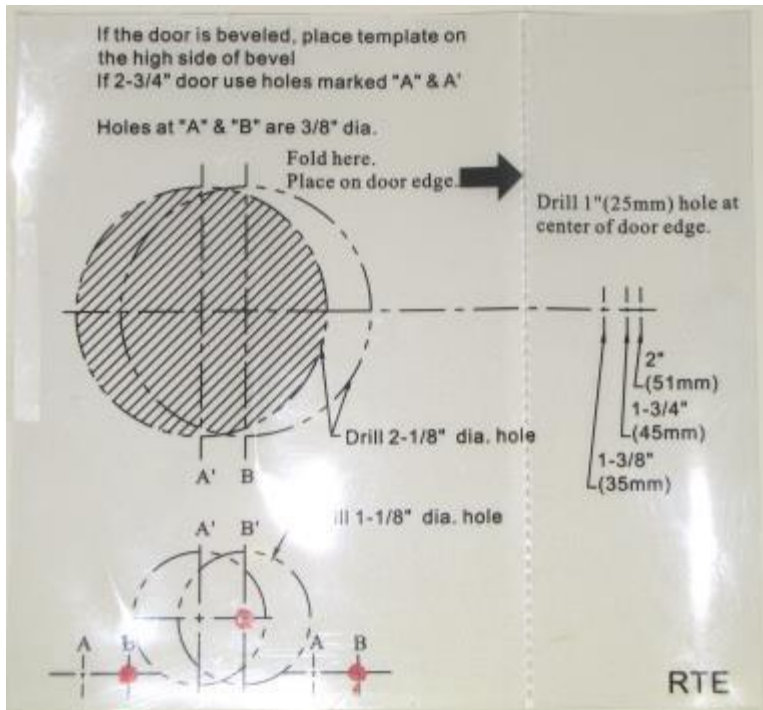
4) Move the template back to the door. Align it again and then mark the holes onto the door.

5) The door should look similar to the picture below after the holes are drilled.

2.2 Routing/Installing the LAN cable

Overview:

In order for the RTE-301 to have network functionality; a permanent, wired LAN connection is required. Doors with a pre-drilled cable channel can be purchased. However, if the lock is being installed into an existing door, then a channel must be drilled through the door so that the LAN cable can be connected to the lock. This cable will then route through the hinge side of the door and back to a network switch.

In addition to the cable installation, a special door hinge will be required to allow the LAN connection cable to pass through. An example of this type of hinge is the McKinney Concealed Circuit Hinge seen below.

Concealed Circuit Electric Hinge

With so many different types of doors available, each installation must be evaluated individually. The following example shows a basic interior door. Most doors of this type have a mixture of solid and hollow sections. The red section is solid. The blue lines show where drilling was needed. Note that the middle hinge was slightly higher than the handle on the opposite side of the door. This required the drill channel to be angled down at roughly 45 degrees.
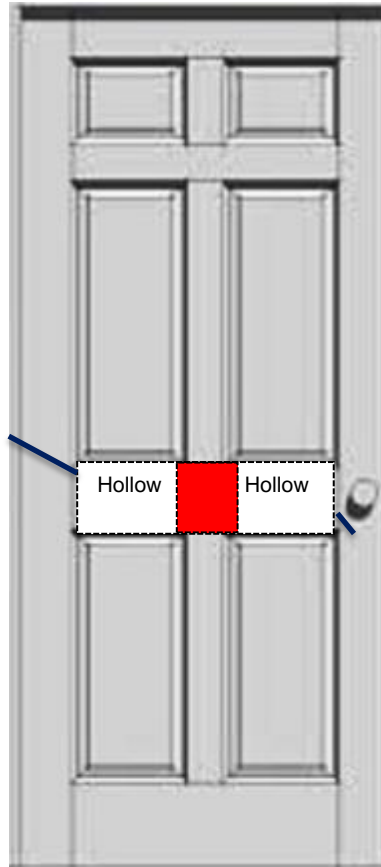
1) Use a 3/8" bit to drill hole from the latch opening into the hollow section of the door.

2) Remove the middle hinge. Use a 3/8" bit to drill a hole from the hinge cutout *down* into the hollow section of the door. Extra material was removed here to make it easier to route the cable and/or find the fish tape.

3) Now use a fish tape or some other rigid material to pull the cable from the hinge side of the door to the lock opening.
<Insert pics here>

<Insert info on rear door hinge here>
Note: LAN cable should be installed and terminated before continuing the installation.

2.3 Setting/Installing the latch and strike plate

1) The latch that is included with the RTE-301® is adjustable for doors that have 2 3/8" or 2 3/4" backsets. Adjust the backset by sliding the spindle hole under the correct setting for your door.

2) Insert the latch into the hole in the edge of the door and screw it into place, making sure that the center of the latch's spindle hole is in the center of the drilled 2 1/8" hole.

3) Screw the included strike plate into the doorjamb.

2.4 Removing handles and re-installing for Right/Left handed configuration

The RTE-301 is a non-handed lock, meaning that it can be installed on either a right handed or left handed door. Use the following steps to install the handles:

1) The outside and inside sections of the lock are shipped with a small piece of paper inside the lock's handle spindle hole. Under the paper will be a screw that holds the handle onto the lock. Remove this piece of paper before continuing.

Note (VERY IMPORTANT): There is a small spring in the spindle hole on the inside section of the lock. Set this aside as it will be used at a later point in the installation.

Paper
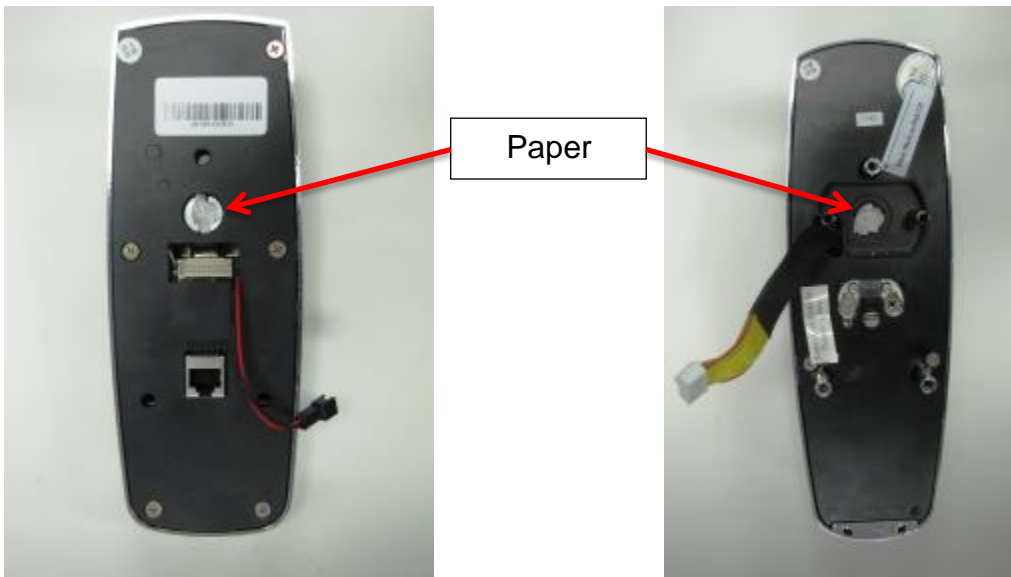
2) Insert outside unit's handle onto the front of the lock based on your right/left handed configuration.

3) Turn the outside unit over, insert the handle screw into the spindle hole.

4) Tighten the handle screw using a Phillips screwdriver.

5) Repeat the above steps for the inside section of the lock.

Section 3: Installation

3.1 Fixing Post Screws

Measure the exact thickness of the door. You will need to trim (cut) the fixing post screws to ensure a proper fit to the door. The trimmed screws will be needed in step 4 below.

Top Fixing Post Screw:

Trim to appropriate length for door   1 3/8"   1 3/4"   2 3/8"

Bottom Fixing Post Screws:

Trim to appropriate length for door   1 3/8"   1 1/4"

3.2 Impact Alarm Information

Overview:

The impact alarm will sound in the event an impact to the lock causes the RTE-301 outside unit to dislodge from the door.

The Impact Alarm Actuator is located on the back plate of the outside unit underneath the rubber cover.
The alarm will also sound if the outside unit's wire set is not firmly seated into the inside unit.

Impact Alarm Actuator
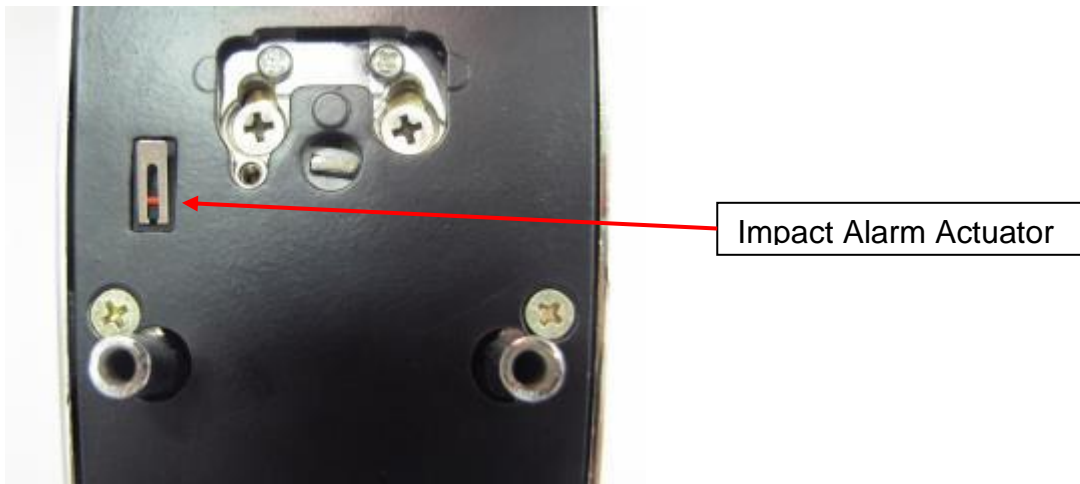
Note: If the actuator is not firmly depressed, the alarm will sound.

If the alarm is triggered, check the door and the lock immediately. If there is no emergency, remove the batteries to stop the alarm and then check the connections.

Note: Do not install batteries until installation is completed and lock is installed securely on the door.

3.3 Installing the Outside Unit

1) Attach the rubber gasket to the back of the outdoor unit.

2) Turn the outside unit over. Be sure that the spindle hole is perfectly square and not angled.

Note: The pictures in the following steps were made using a clear display stand to show the lock connections more clearly.

3) Close-up view of latch.
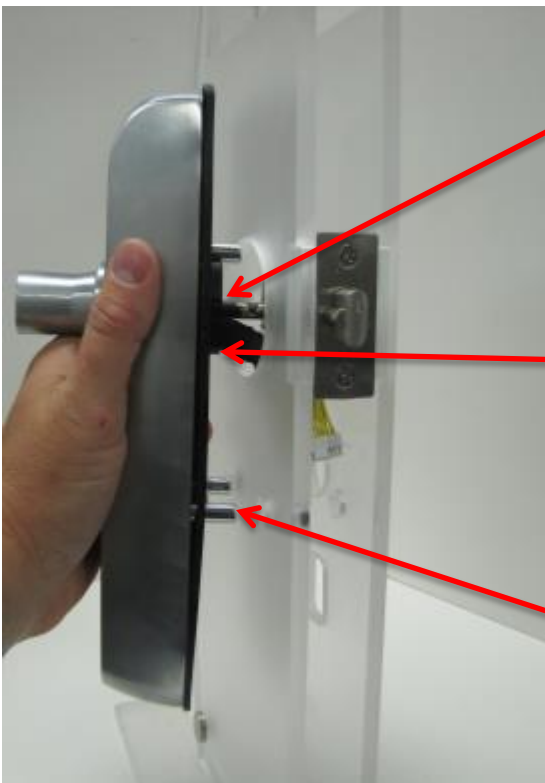
4) Align the two middle fixing posts with the two corresponding holes in the latch.

5) Feed the wire set from the outside section of the lock underneath the latch.

6) Align two bottom fixing posts with the two 3/8" holes that were drilled in the door.

Rear view of the inside section of the lock and latch.

3.4 Installing the Fixing Plate

Overview:

The purpose of the fixing plate is to securely fasten the outside unit onto the door and make installation of the inside section of the lock easier (requiring only one person).

1) Place the fixing plate over the 2 1/8" hole on the inside of the door.

2) Align the center hole of the fixing plate with the spindle hole of the latch.
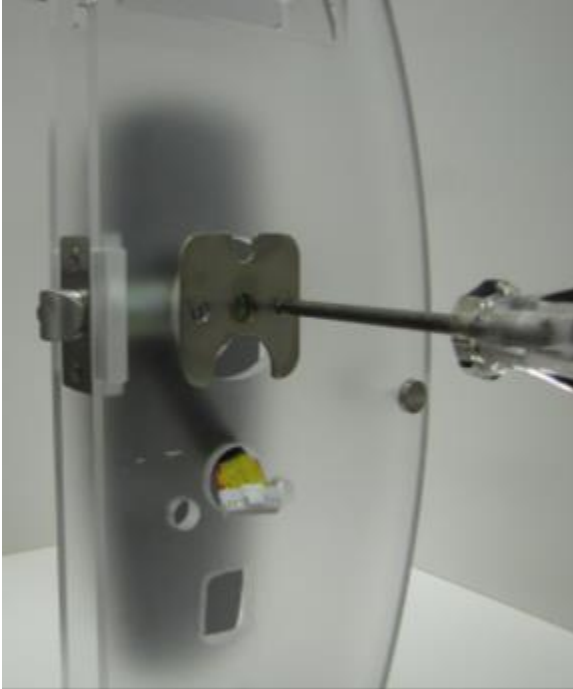
3) Screw the fixing plate onto the door with the provided 1 1/2" screws.
DO NOT over tighten the screws. Be sure that the rounded half circle is facing down and the indented screw holes are facing outward.

3.5 Installing the Inside Unit

1) Insert the Spindle though the fixing plate and into the inside section of the lock's spindle hole.

2) Place the rubber gasket onto the inside section of the lock.

3) Insert the spindle spring into the lock handle hole.
Note: Very Important

4) Feed the cable from the inside lock through the opening in the bottom side of the fixing plate.

5) Connect wire set.
Note: Be sure that the connector is fully seated.

6) Push the excess cable into the hole under the fixing plate.
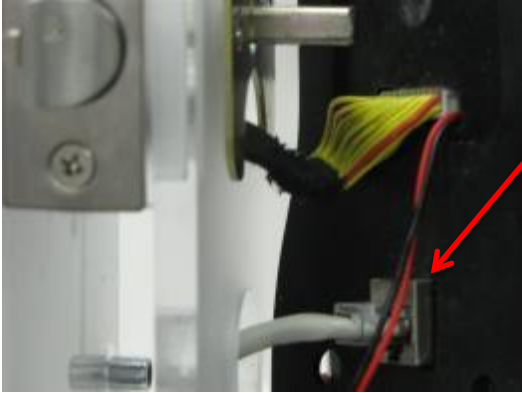
7) Feed the Ethernet cable through the 1 1/8" hole.

8) Plug the RJ45 connector into the network jack on interior side of lock.

9) Place inside unit onto door.
Note: Be sure the spring does not fall out when unit is placed onto the spindle.
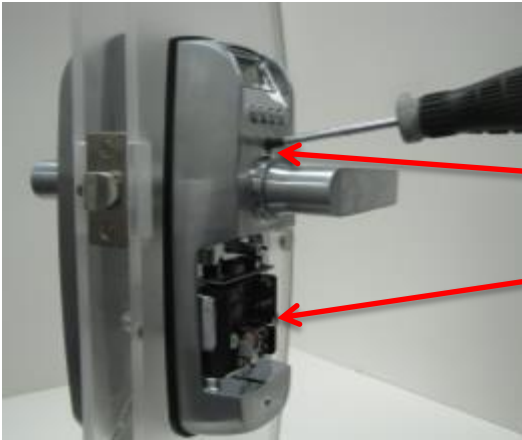
10) Affix lock to the door with the three screws that match the thickness of the door See note in beginning of Section 4.
The longer screw is for the top fixing post.
The two shorter screws are for the bottom fixing posts.

11) Outside unit should be completely flush on the face of the door.

Section 4: Power Options

Overview:

The RTE-301 is powered via PoE and contains a set of uninterruptable, rechargeable batteries. If PoE power is lost for any reason, the rechargeable batteries will supply power to the lock and the lock will operate normally. The batteries will be charged when not in use.

Note: It requires 6-12 hours to achieve a full charge via PoE. eOn will not be held liable for faulty or improperly installed wiring.

4.1 Installing the Batteries

1) Remove battery cover

2) Insert the 2 included rechargeable batteries into the battery pack located on the inside unit.
Note: Do not use standard AA 1.5v batteries. Use only 3.2v batteries that are identical to those that are included with your RTE-301.
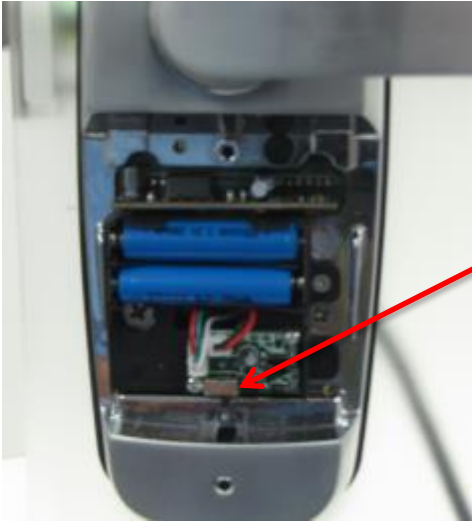
3) Slide the switch from OFF to ON.
Note: Set the switch to **OFF** whenever the lock is not in service to avoid battery drain.

4) Reinstall the lock cover


```
Apr/28/2014
Mon 12:01:43
Lock ID:0001
Cell volt:6.41
```

5) Press **M** on the inner keypad of your RTE-301 to initialize the lock and display the current battery voltage.

When power is applied to the lock either by installing batteries or connecting a PoE cable, it will beep twice to indicate that it is ready to be programmed.

Section 5. Comm Setting

Overview:

Each lock must have a unique IP address. Static IP addresses can be manually assigned using the buttons on the lock or an IP address can be obtained via DHCP if a server is available.

5.1 IP Address Obtained from DHCP Server

1) From the main menu, scroll to 3 "Comm Setting".
Press **M**.

2) Select "Acquired by DHCP".
Press **M**.

"Acquired by DHCP Please wait…" will momentarily display on the LCD.
If an address is obtained, the LCD will show "Success!

In this example 192.168.250.129 was assigned to the lock by the DHCP server.
Make a note of the IP address. If the display times out, the assigned IP address can be viewed by scrolling to Comm INFO from the main menu.

5.2 Static IP Address

1) From the main menu, scroll to option 3 "Comm Setting".
Press **M**.

2) Scroll to "Manually Enter".
Press **M**.

3) Select 1 "Lock IP" by pressing **M**.

4) The first digit of the IP address is now highlighted.

Use the numeric keypad to enter the IP address. Press "#" after entering the last digit. Enter 3 digits for each segment of the IP address.

5) Scroll to 2 "Subnet Mask". Press **M**.

6) The first digit of the subnet mask is now highlighted.

Use the numeric keypad to enter the Subnet Mask. Press "#" after entering the last digit.

7) Scroll to 3 "Gateway". Press **M**.

8) The first digit of the Gateway address is now highlighted.

Use the numeric keypad to enter the Gateway address. Press the "#" key after entering the last digit.

Section 6. Comm Info

Overview: The Comm INFO menu can be used to view the lock's IP address and MAC address. This is a read only menu.

1) From the main menu, scroll down to 6 "Comm INFO"
Press **M**.

2) The lock's IP address and Subnet Mask will be shown.

Use the Down arrow button to view the next screen.
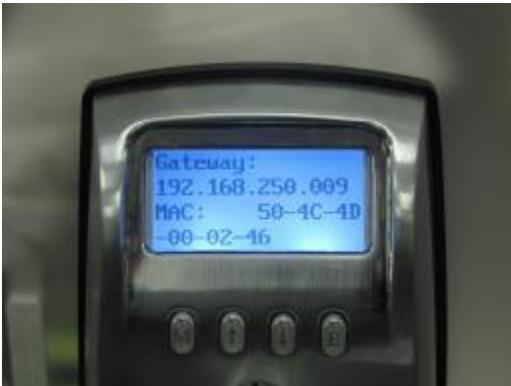
3) The lock's Gateway address and MAC ID will be shown.

Section 7: Hard Reset

Overview:

The Hard Reset option allows administrators to restore the lock's settings to a factory default state. All settings will be defaulted except for Time/Date.

1) Scroll to 5 "Hard Reset".
Press **M**.
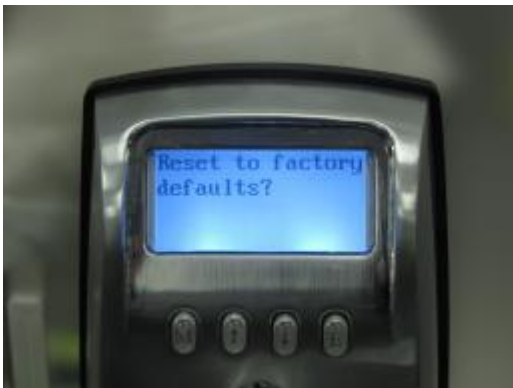
2) "Reset to factory defaults?" will display on the LCD.
Press **M** to reset.
Press **E** to exit without resetting.

"Initializing" is shown while the lock is being reset.
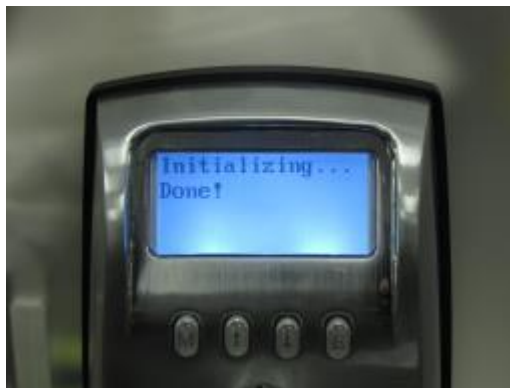
"Initializing Done!" is shown when the reset is complete.

Section 8: Unlocking the RTE-301

Overview:

This section will outline how to unlock the door using the FP scanner and/or PIN codes.

SECURITY WARNING: With no fingerprints enrolled for Users 1,2, or 3, the RTE-301 will unlock when the # button is pressed on the keypad.

8.1 1:N Mode (Enrolled user with an enrolled fingerprint)

1) Press the "#" key.

2) A single short beep will be heard and the fingerprint sensor will flash once.

3) After the fingerprint sensor illuminates, place a finger on the sensor window.

4) If fingerprint verification is successful two short beeps will be heard, the green LED will flash and the RTE-301 will unlock. It will remain unlocked for approximately four seconds.

RED LED → ← **Green** LED

If verification of the enrolled fingerprint is not successful, the LED will flash red and no beeps will be heard. If this happens, re-position the finger on the sensor. The sensor will try two more times to verify the enrolled fingerprint. If all three attempts fail, the LED will flash red three times and three short beeps will be heard. Remove the enrolled finger and begin again. If the second attempt fails, make sure that the finger being used has been enrolled.

If the LED flashes red three times and three short beeps are heard after * or # button was pressed, this indicates that the matching mode is set to 1:1.

If the LED flashes red once, and one single beep is heard after a successful verification, this indicates one of the following:
- User ID is outside of Timed Access settings.
- User ID is set to Invalid.
- LOCK is set to Invalid.

8.2 1:N Mode (User with a registered PIN Code)

1) Enter the PIN Code on the keypad of the outside unit and press **.

2) If PIN Code verification was successful, two short beeps will be heard, the green LED will flash and the RTE-301 will unlock and remain unlocked for approximately four seconds.

If verification of the registered PIN Code was not successful, the LED will flash three times, three short beeps will be heard and the RTE-301 will power off.

If a second attempt with a PIN code fails, verify that the PIN Code has been registered and confirm that the matching mode is set to 1:N.

If the LED flashes red once, and one single beep is heard after the PIN code was successfully entered, this indicates one of the following:
- User ID is outside of Timed Access settings.
- User ID is set to Invalid.

- LOCK is set to Invalid.

8.3 1:1 Mode with an enrolled fingerprint

1) Enter the User ID on the key-pad of the outside unit. Then press the # button. The sensor will illuminate.
Example: User 50 would press "50#"

2) After the fingerprint sensor illuminates, rest the enrolled finger on the sensor window to verify.

3) If fingerprint verification is successful, a single short beep will be heard, the green LED will flash and the RTE-301 will unlock. It will remain unlocked for approximately four seconds.

If verification of the enrolled fingerprint is not successful, the LED will flash red and no beeps will be heard. If this happens, re-position the finger on the sensor. The sensor will try two more times to verify the enrolled fingerprint. If all three attempts fail, the LED will flash red three times and three short beeps will be heard. Remove the enrolled finger and begin again. If the second attempt fails, make sure that the finger being used has been enrolled.

If the LED flashes red three times and three short beeps are heard after * or # button was pressed, this indicates that the matching mode is set to 1:1.

If the LED flashes red once, and one single beep is heard after a successful verification, this indicates one of the following:
- User ID is outside of Timed Access settings.
- User ID is set to Invalid.
- LOCK is set to Invalid.

8.4 1:1 Mode with a registered PIN Code

1) Enter the specific User ID on the keypad of the outside unit, Press *. Enter the Registered PIN Code and then press *.
Example: User 50 with a PIN of 1234 would press 50 * 1234 *

2) If PIN Code verification was successful, three short beeps will be heard, the green LED will flash and the RTE-301 will unlock and remain unlocked for approximately four seconds.

If verification of the registered PIN Code was not successful, the red LED will flash three times, three short beeps will be heard and the RTE-301 will power off.

If a second attempt to unlock the door with a PIN code fails, verify that the PIN Code has been registered. Also verify that the matching mode is set to 1:1.

If the LED flashes red once, and one single beep is heard after the PIN code was successfully entered, this indicates one of the following:
- User ID is outside of Timed Access settings.
- User ID is set to Invalid.
- LOCK is set to Invalid.

8.5 With the override keys

1) Insert key into the keyway.

2) Turn the key in a clockwise direction to horizontal level (90 degrees).

3) Pull up on the handle.

4) Turn the key back in the opposite direction and pull key out of the keyway.

Section 9. Support Information

Contact your eOn RTE Series distributor or contact us at or 800-288-3132 Option 5 for additional support.

All RMA and Repair requests are handled on the RMA support page at www…………

eOn website at: TBD

If your RTE-301 experiences a mechanical or electronic failure caused by defects in material or manufacturing workmanship during the 2-year warranty period eOn will repair or replace the unit at our expense.

In addition, during the first 30 days after purchase, eOn offers a FREE advance replacement of your RTE-301 with a new RTE-301 at our expense. The original RTE-301 must be returned within 14 days from the date the replacement is received or you will be liable for the full retail price of the replacement . Advance replacements after the first 30 days are available for a fee (what is the fee?). The returned RTE-301 must include all items that were originally included in the package or additional fees will apply.

LIMITED WARANTY

If you purchased this product new in the U.S. or Puerto Rico, eOn warrants it against defects in material and workmanship for a period of two years from the date of original purchase. This warranty is in lieu of all other express warranties. During the warranty period, eOn agrees to repair or, at its option, replace the defective product, or any part of it without charge for parts or labor. This is your exclusive remedy. This warranty does not cover damage resulting from accident, misuse, abuse, improper installation or operation, lack of reasonable care, the

affixing of any attachment not provided by eOn with the product and loss of parts. The warranty is voided in the event any unauthorized person alters or repairs the unit.

eOn DISCLAIMS ANY IMPLIED WARRANTY, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AS OF THE DATE TWO YEARS FROM THE ORIGINAL PURCHASE OF THE PRODUCT. eOn ASSUMES NO RESPONSIBILITY FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

If failure occurs and your RTE-301 is in warranty, service shall be provided by returning it to **EON - Repair Center, 1703 Sawyer Road, Corinth, Mississippi 38834, shipping prepaid**. The product will be repaired or replaced if examination by us determines the product to be defective. Units received damaged as a result of shipping will require you to file a claim with the carrier.

Appendix A: Lock Programming Instructions

Note: To take full advantage of the RTE-301 network features you must use the RTE-MS1 Management System for programming. Any information entered directly into the RTE-301 will be lost when it is synced with the RTE-MS1 software.

Section A1: LCD Menu

SECURITY WARNING: With no fingerprints enrolled for Users 1,2, or 3, the RTE-301 will unlock when the # button is pressed on the keypad.

It is strongly recommended that ALL Fingerprints and PIN Codes be deleted by an Administrator prior to programming the RTE-301. This ensures that any users that were added prior to installation or programming are removed.

Definitions of Indication Beeps:

1) Single, Short Beep
  - A button has been pressed.
  - An operational sequence has begun.
  - A fingerprint user has been added successfully.

2) Two, Short Beeps:
  - Door has been successfully unlocked.

3) Three Short Beeps
  - Unsuccessful Fingerprint/PIN verification attempt.
  - New PIN code entry is already allocated to another User

4) Six, Short Beeps
  - Low battery alert (change batteries)
  - Lock has been reset

5) LED indications
  - Red LED – Indicates any unsuccessful fingerprint/PIN verification attempt.
  - Green LED – Indicates any successful fingerprint/PIN verification attempt.

6) Illuminating the eOn RTE SERIES Exterior Unit Keypad
  - Press and Hold any of the numbers on the keypad (0 thru 9) for two to three seconds.
  - Keypad will illuminate for 5 seconds.

A1.1 Menu Buttons

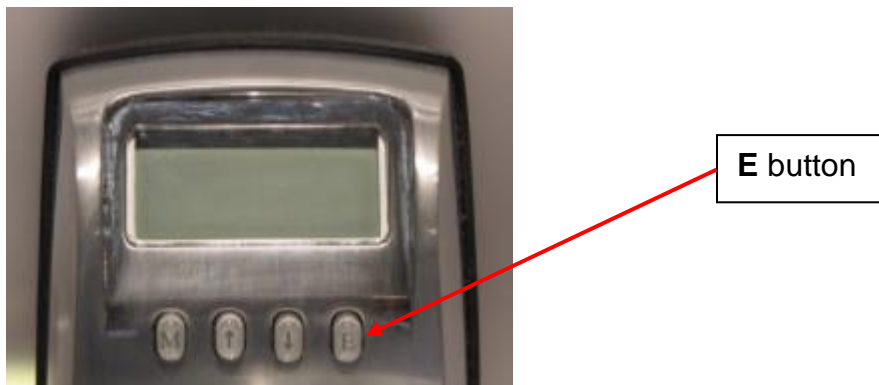1) The **M** button stands for Menu and is used to enter menu options and to save changes made to the RTE-301.
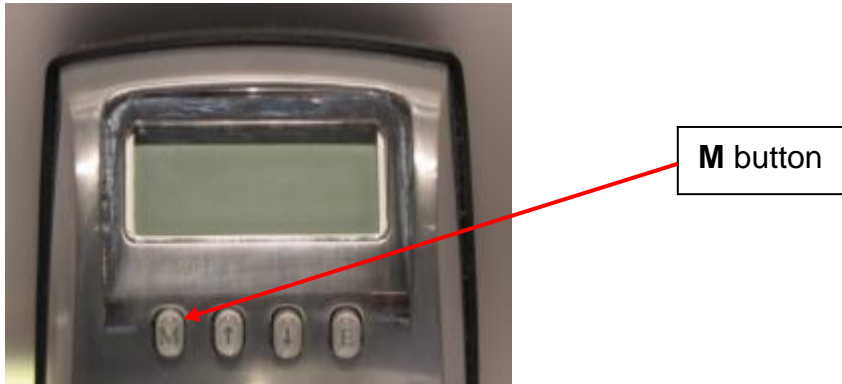
M button

2) The up and down arrows are used to scroll thru menu options.

UP & DOWN buttons
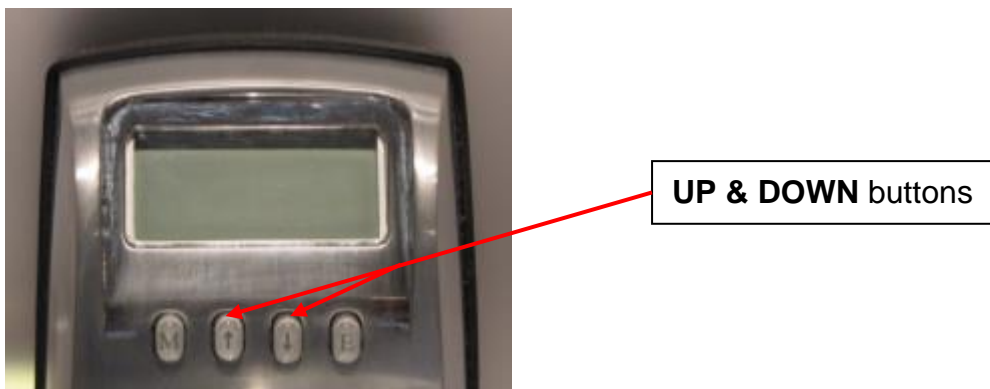
3) The **E** button stands for Exit and is used to exit individual menu options. (Exception: When setting the date ranges for Access Control, **E** is used to initiate the "Save" prompt).

E button

Note: The following instructions assume there are no fingerprints enrolled in the RTE-301. All setup functions can be done before enrolling an Administrator fingerprint or PIN code. If an Administrator fingerprint is entered before starting the lock setup, fingerprint verification will be required each time the lock is accessed for a program change. It will save time to complete the lock setup before enrolling any Administrator or User FPs and PWDs

A1.2 Date/Time

Date and Time setting of the RTE-301® is critical when using the RTE-301® MS1 to ensure accurate time/date stamps for Audit Trail and accurate time/date for Access Control.

1) Press **M**, the lock will display in succession:
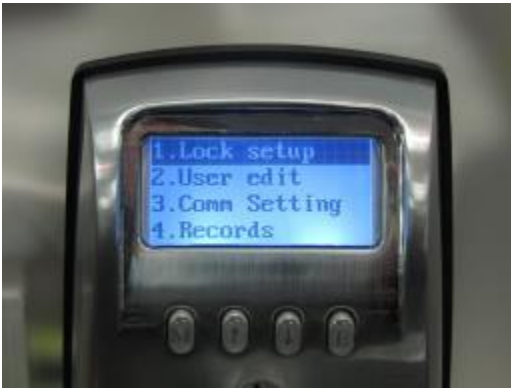

> Current Firmware Version

> Default date, time, and day of the week.
> Lock ID
> Battery voltage level

No Master! Screen indicates that no fingerprints or User PINs have been programmed into the lock.

The Lock Setup menu will then automatically display the Lock Menus:
**Note:** Lock menus 1 through 4 are displayed. Press the Down arrow button to view menus 5-6.

After the Lock Menus are displayed, if no buttons are pressed for 17 seconds an audible alert (2 beeps) will be heard and then a "timeout" message will be displayed. The lock will then shut down. The setup process can be started again by pressing any of the 4 buttons on the lock front.

2) Option 1 "Lock setup" is highlighted. Press **M**
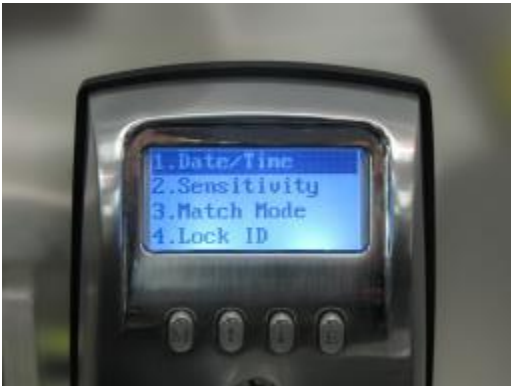
3) Option 1 "Date/Time" is highlighted. Press **M**

4) The format for the date setup is MM/DD/YYYY.

5) Choose the correct month by using the Up/Down arrows. Press **M** to save selection

6) Choose the correct day of the month by using the Up/Down arrows.
Press **M** to save selection.

7) Choose the correct year by using the Up/Down arrows.
Press **M** to save selection.

The time format for the clock is HH:MM:SS (MILITARY or 24 HOUR TIME).
Example: current time is 1:00 PM; the clock should be set as 13:00:00.

8) Choose the correct hour by using the Up/Down arrows.
Press **M** to save selection.

10) Choose the correct minute by using the Up/Down arrows.
Press **M** to save selection.

11) Choose the correct second by using the Up/Down arrows.
Press **M** to save selection.

12) Choose the correct day of the week by using the Up/Down arrows.
Press **M** to save selection.

13) With the cursor on "SAVE?", press **M** to save selection.

14) "SAVED!" indicates TIME / DATE settings have been saved. This will display momentarily and then the setup menu will be shown.

A1.3 Sensitivity

Overview:

The lock's fingerprint sensitivity level can be adjusted to meet the desired level of sensitivity. Sensitivity settings range from 1 to 9. Setting 1 is the strictest setting. The quality of fingerprint and placement of the finger or thumb must be almost perfect. Setting 9 is the least stringent setting and is the factory default. This allows a higher margin of error in placement of the finger or thumb on the sensor.

Note: If you are having problems with fingerprints being rejected, set the sensitivity level to 9.
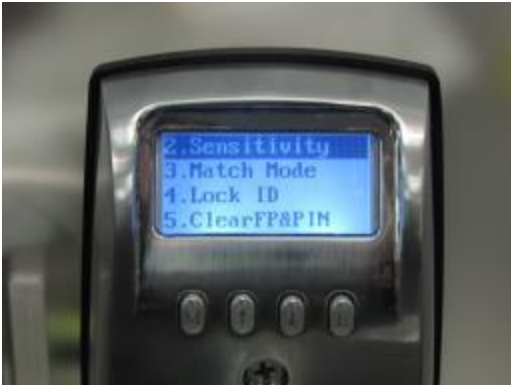
1) In the Lock setup menu, scroll to Option 2 "Sensitivity". Press **M.**

2) Use the Up/Down arrows to scroll thru the sensitivity levels until the desired level is reached. Press **M**.

3) "SAVED!" indicates the Sensitivity level settings were saved. This will display momentarily and then the setup menu will be shown.

A1.4 Match Mode

Overview: "Match Mode" controls how users are able to unlock the lock; using fingerprints, PINs, or a combination of both. There are 3 options available which are outlined below.

1) In the Lock setup menu, scroll down to "Match Mode" and then press **M**.

2) **1:N** - When this is chosen, all users enrolled at this lock only need to match their enrolled Fingerprint OR PIN Code to unlock the door.

3) **1:1** – When this is chosen, all users enrolled at this lock must enter their User ID and verify their enrolled Fingerprint or PIN Code to unlock the door.

Ex. User ID 005 would use the keypad to unlock the lock using this sequence:
(5 + # +FP) *or (*5 + * + PIN + *)

4) **1&N** - All enrolled users can use either the **1:1** or **1:N** method to unlock the door. This is the factory default setting.

5) Use the Up/Down arrows to scroll thru the matching modes until the desired mode is reached and then press **M** to save the setting.

6) "SAVED!" indicates that the Match Mode settings were saved. This will display momentarily and then the setup menu will be shown.

A1.5 Lock ID

Overview: Lock ID is used to distinguish between locks for sites with multiple locks installed. By default, all locks are set as 0001.

Note: The Lock ID of the RTE-301 is critical when using the RTE-MS1 Management Program (*for programming and audit trail*). The Lock ID in the RTE-301 **MUST** correspond with the Lock ID in the RTE-MS1software. If the Lock IDs do not correspond, the lock records may be corrupted.

1) In the Lock Setup menu, scroll down to Option 4 "Lock ID"
Press **M**.
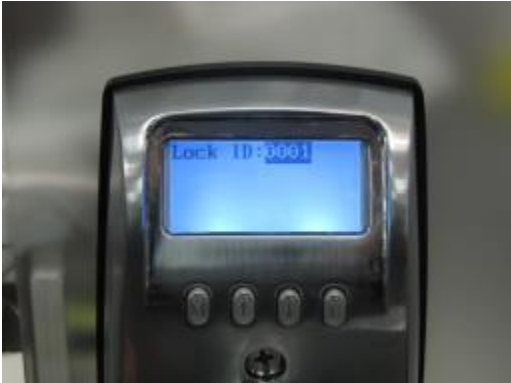
2) Use the Up/Down arrows to scroll to the desired lock ID. Press **M** to save setting.

3) "SAVED!" indicates Lock ID setting was saved. This will display momentarily and then the setup menu will be shown.

A1.6 Clear FP&PIN

Overview: This menu allows an administrator to delete all fingerprints and PINs from the lock. If Users/Administrators have a PIN code associated with their FP, the PIN codes must be cleared to reset all data.
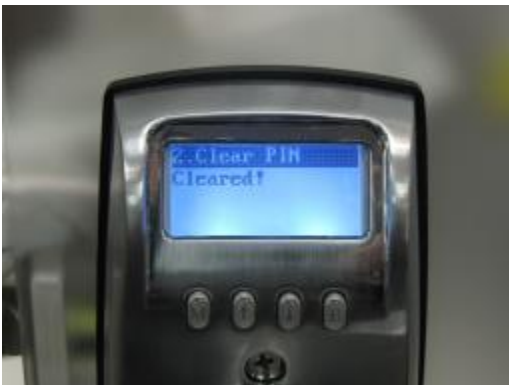
Note: Deleting FPs and PINs for specific users will be explained later in this document.

1) In the Lock setup menu, scroll down to Option 5 "Clear FP & PIN"
Press **M**.

2) To delete all fingerprints, select 1. Clear FP
Press **M**.

3) "Cleared!" indicates that all FPs have been deleted. Note that it will take 3 to 4 seconds for this to display.

4) Wait momentarily for the "Clear FP/Clear PIN" screen to be shown.

5) To delete all PIN Codes, select
2. Clear PIN
Press **M**.

6) "Cleared" will display, indicating that all PIN Codes have been deleted. Note that it will take 3 to 4 seconds for this to display.

A1.7 Access Time

Overview: Each lock has 3 different modes of operation which can be active at a given time. The 3 modes are outlined and explained below.

There are three TIME MODES that may be chosen for the lock:

1) **Invalid** -This can also be called lock down mode. When this is enabled, only Administrators for the specific lock will have access to unlock the door.

2) **Anytime** - When this is chosen, the lock allows all enrolled Users to unlock the door. The exception to this is if specific Timed Access is set up for individual Users (see Section 2: User Edit).

3) **Acc-Time** (Access Time) - This mode allows for timed access to the lock to be created for a specific date range, days of the week and time frame within the days of the week.

Note: The Acc-Time Setting chosen/created for the lock will override any specific Timed Access assigned for a specific User set in the "User Edit" menu (see Section 2: User Edit) . For example, if Acc-Time is chosen for the lock and set to Mon, Wed and Fri 9am to 5pm, Users will only have access to unlock the door during the set days and times, no matter what individual timed access was set for them in the User Edit menu.

Note: Administrators (User ID 1-3) can always unlock the RTE-301.

A1.7.1 Invalid

1) In the Lock setup menu, scroll to Option 6 "Access Time". Press **M**.

2) Press the UP arrow once. At the "Invalid" option, press **M**.

3) "SAVED!" will be shown momentarily indicating that the lock is now in "Invalid" mode.

Note: Selecting "Invalid" will allow Admin access only.
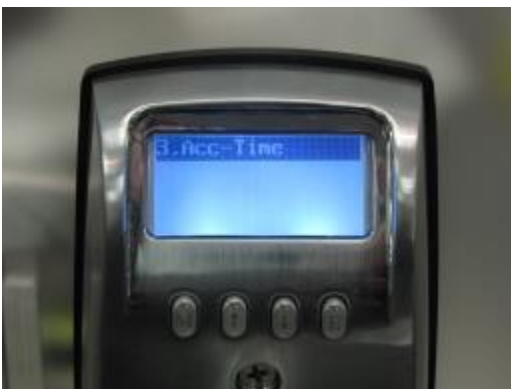
A1.7.2 Anytime

1) Scroll to Option 2 "Anytime". Press **M**.

2) "SAVED!" will be shown momentarily indicating that the lock is now in "Anytime" mode.

A1.7.3 Acc-Time:

1) Scroll to option 2 "Acc-Time". Press **M**.

2) Highlight "Date"
Press **M**.

3) The "From" and "To" Date Range options will be displayed. The format for the Date Range settings is MMM/DD/YYYY. Press **M**.

5) Use the up and down arrows to choose the appropriate MM, DD and YYYY in each section. When desired value is chosen for each section, press **M** to move on to the next date value.

Example: The desired "From" date is January 01, 2014.

In the "From" section, use the up/down arrows to select Jan.
Press **M**.
Use the up and down arrows to enter "01" (for 1st day of the month)
Press **M**.
Use the up and down arrows to enter "2014" (for the Year)
Press **M**.

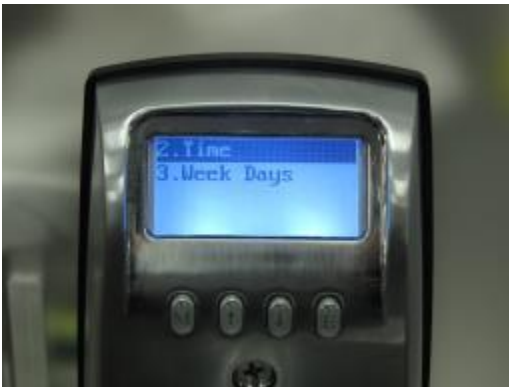Use the same steps as above for the "To" date.

6) After setting the "To" Year field, press **E**. "SAVE?" will display on the LCD.

7) Press **M** to Save

Or

Press **E** to exit without saving.

8) Scroll to "Time" and press **M**. The current setting for "From" and "To" are shown. Press **M** again.

9) With the cursor on the "From" hour, use the Up/Down arrows until desired hour is shown. Press **M** to save selection.
Repeat for the "From" minute setting.

10) With the cursor on the "To" hour, use the Up/Down arrows until desired hour is shown. Press **M** to save selection.
Repeat for the "To" minute setting.

11) After the desired Time Frame has been selected, press **M**. Message "SAVE?" will display on the LCD.


12) Press **M** to Save

Or

Press **E** to exit without saving.

A1.8 Weekday

Overview: If "Y" (Yes) is chosen for a specific day of the week, then all enrolled Users with no Acc-Times set for their specific User ID will have access to unlock the RTE-301, on that day of the week, during the selected Date Range and Time Frame. Once the Date Range or Time Frame has expired, all enrolled Users will not be able to unlock the RTE-301. Only Administrators (User ID 1-3) will have access to unlock the RTE-301.

If "N" (No) is chosen for a specific day of the week, then no enrolled Users will have access to unlock the RTE-301 for that day of the week. Only Administrators (User ID 1-3) will have access to unlock the RTE-301
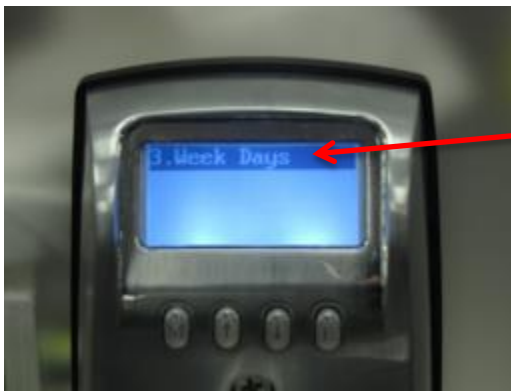
1) Scroll down to 3 "Week Days" Press **M**.

2) Days of the week will be shown. Use the Up/Down arrows to scroll to the desired day.
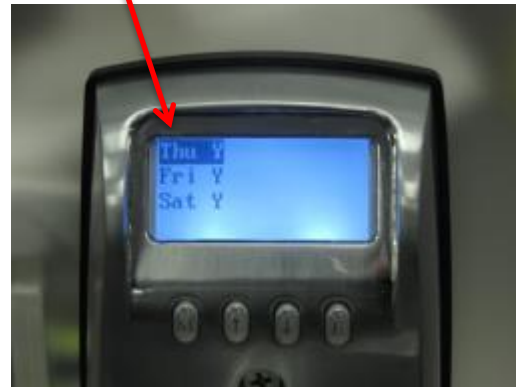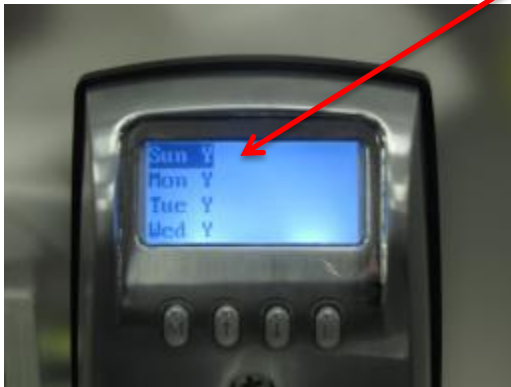
3) For each day of the week, Press **M** to select Y/N. Then, press **M** again to change the setting from Y to N.

4) Press **E** to exit the selected day. Then, use the Up/Down arrows to move to the next day.

5) When finished, Press **E.**

"SAVE?" will be displayed. Press **M** to save or **E** to exit without saving.

6) "SAVED!" indicates that the Access Time settings were saved.

A1.9 Timed TUM

Temporary Unlock Mode (TUM): Timed (or Automatic) TUM allows an Administrator to set the RTE-301 to unlock automatically at preset days and times upon the confirmation of a registered user (see FUA below) and then automatically revert to locked (or normal) mode at time expiry.

The Administrator may also preset holiday dates so that TUM will not be armed or active on those days.

Example: If TUM has been set to operate Monday to Friday from 09:00 to 17:00 (9AM to 5PM) and a preset holiday falls on a Tuesday, the TUM feature will not activate on Tuesday even if a registered User accesses the lock.

First User Authentication (FUA): The Administrator will arm the open time and the LCD will show "Armed!" once set. However, TUM will only activate and unlock the door upon the verification of a registered User's FP or PIN. Door will remain unlocked until preset time expiry.

The TUM feature is especially useful for doors that require frequent access (e.g. a shop front during business hours).

5.9.1 Timed TUM - Setup Menu

1) In the Lock setup menu, scroll down to Option 7 "Timed TUM" Press **M**.

2) Press **M** again to select "Setup".

A1.9.2 Cancel TUM

The Cancel TUM function will void all previous preset data. **Note:** Holiday data will **NOT** be reset.

Press **M** to reset ALL data fields. All TUM data fields are reset to dashes in both the "ALL" and "Daily" sub menus as shown below.

"Thank you!" is shown momentarily indicating that all TUM settings have been deleted.

Tip: There are 2 ways to cancel TUM. The above method will void ALL data fields in the TUM menu and is recommended for a complete reset. Individual day resets may be carried out in their respective sub menu and are detailed in the relevant sections below.

A1.9.3 Setup Days

Most businesses will operate the Timed TUM mode during business days (e.g. Monday to Friday, 09:00 to 17:00 and Saturday from 09:00 to 12:00). To create TUM settings for this type operation, it is recommended to set TUM times in the "ALL" (days) menu and then edit individual days in which TUM should not be armed.

Please read the Important Tips below before setting the time fields.

- On initial setup, the system will display "dashes" (-- : --) in all fields

- Pressing **M** will highlight the first "- -" field. Using the Up/Down arrow keys will insert your desired time.

- Pressing **M** will highlight the next "- -". Use the Up/Down arrow keys to enter a time. Repeat this procedure for the remaining fields. If a time is not inserted and **M** is pressed again, ALL data fields will revert to "- -". You will be prompted to save this entry and start again. This is an intentional design and is the second way to cancel/void TUM for a particular day.

- Once all time fields have been entered, pressing **M** when the "ARM?" icon has been highlighted will change the text to "ARMED!" and the system will automatically return to the previous menu. Do not go back to the previous menu unless you intend to change a data field. If you go back into the previous menu, the "ARM?" prompt will appear again. Press **E** to exit and all previous data will be retained.

- If you press **M**, the first data field will revert to "- -" To exit this menu with no changes to the data, press **E.** All data will be retained.

- If **M** is pressed again, ALL data fields will revert to "- -". You will be prompted to "SAVE" this entry and required to start again. This is an intentional design.

Note: If a registered user uses their FP or PIN while in Timed TUM, the RTE-301 will re-enter a locked state. Simply re-enter FP or PIN to regain Timed TUM status.

A1.9.3.1 Example – Setup Days

Example 1. Lock will be programmed for TUM mode on ALL days from 07:15 to 16:15 except Sunday. We will program ALL days at once and then program Sunday as a separate day.

1) In the Lock Setup menu scroll down to Option 7 Timed TUM. Press **M**.

2) Scroll to Option 1 Setup. Press **M**.

3) Scroll to Option 2 "Setup Days". Press **M**.

4) Press **M** to select 1. ALL

5) Press **M** to highlight the first data field.

6) Use Up/Down arrow keys to insert desired time, press **M** after each field. Complete all fields in the "Fr" and "To" sections.
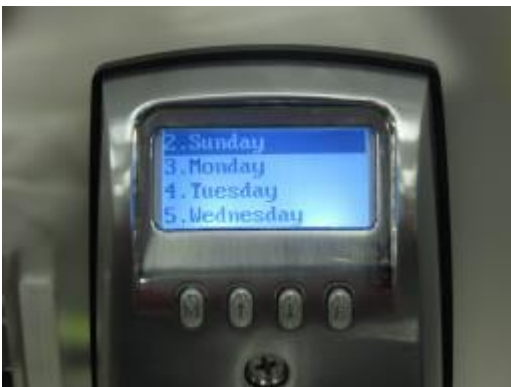
7) Press **M** when "ARM?" is high-lighted. This will activate TUM.

Timed TUM is now armed and ready for the first registered User to activate on or after 07:15 on any day of the week.

The Lock should now be displaying the "Setup Days" screen as shown below.
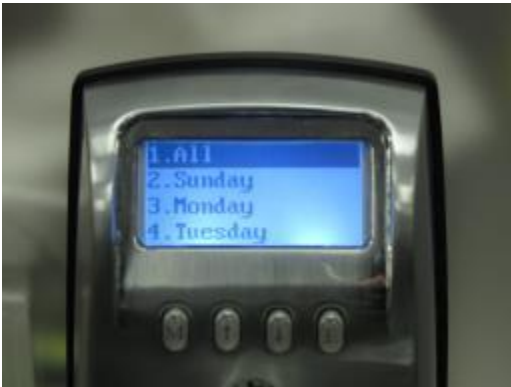
Finally, TUM should be deactivated for Sunday.

8) Use the Up/Down arrow keys to navigate to "Sunday"
Press **M.**

7) Display will show "ARM?" Press **M.**

8) The first data field will change to "- -".

9) Press **M** again to clear all fields.

10) After all fields are blank and "SAVE?" is shown, Press **M** to save the changes.

11) "SAVED!" indicates that the TUM settings for Sunday were deleted successfully.

The lock is now armed for TUM operation.

Tip: As soon as an individual day has been "ARMED!", the data fields in the "ALL" menu will revert to "- -" (if set) to indicate that the data is no longer valid.

A1.9.4 View TUM Settings

1) To confirm the selections, press **E** to return to the "Timed TUM" main menu, select 2 View by pressing **M**.

2) Select 1 "View Days" by pressing **M**.
You can now scroll through each day using the Up/Down arrow keys.

Note: The alternative method is to edit each individual day. However, that can be time consuming and the above method is recommended.

A1.9.5 Setup Holidays

Overview:

This menu has been designed for use in conjunction with the Timed TUM mode. Setting dates in this menu that coincide with public holidays, alleviates the need to cancel TUM manually prior to each holiday event. When a date has been set in this menu, Timed TUM will not be armed and therefore will not activate, even with recognition of a registered User.

- Twelve Holiday events may be entered into the system.
- The menu may be setup for the holiday to occur every year (e.g. Dec 25) or a "one off holiday" for a particular year. Holidays set in this mode will repeat until 2099.
- The "Cancel TUM" command in the main menu **will not** cancel holiday dates, they must be deleted individually.

Please read the Important Tips below prior to setting the time fields.

- On initial setup, the system will display dashes (-- : --) in all fields

- Pressing **M** will highlight the first "- -" field. Using the Up/Down arrow keys will insert your desired time

- Pressing **M** to the next field will highlight the next "- -". Use the Up/Down arrow keys to enter a time. Repeat this for all the remaining fields. If a time is not inserted and **M** is pressed again, ALL data fields will revert to "- -". You will then be prompted to "SAVE" this entry and required to start again. This is an intentional design and is the second way to cancel/void TUM for a particular day.

- Once all time fields have been entered, pressing **M** when the "ARM?" icon has been highlighted will change the text to "ARMED!" and the system will automatically return to the previous menu. Do not go back into the previous menu unless you intend to change a data field. If you go back into the previous menu, the "ARM?" prompt will appear again. Press **E** to exit and all previous data will be retained.

- If you press **M**, the first data field will revert to "- -". To exit this menu with no changes to the data, press **E.** All data will be retained.

- If **M** is pressed again, ALL data fields will revert to "- -". You will be prompted to "SAVE" this entry and required to start again. This is an intentional design.

Note: if a registered user uses their FP or PIN while in Timed TUM, the RTE-301 will re-enter a locked state. Simply re-enter FP or PIN to regain Timed TUM status.

A1.9.5.1 Holiday Example 1 – Repeating Holiday

In this example we will program December 25 to be a holiday every year.

1) From the Lock Setup menu, select Option 7 "Timed TUM" by pressing **M.**

2) Select 1 "Setup" by pressing **M**

3) Scroll to Option 3 "Setup Holidays". Press **M.**

4) Holiday #01 will be shown. Press **M** to highlight the "Year" field:

3) Use the Down Arrow key to highlight "Every Year". Press **M.**

4) Use the Down Arrow key to highlight "Dec". Press **M.**

4) Continue to enter the Month / Day as previously described until prompted to "SAVE?" Note that Dec. 25 is entered both as the beginning and end date.

5) Press **M** again and the system will momentarily display "SAVED!" It will then revert to "SAVE?"

6) Press **E**

Note: After "SAVED!" is displayed, do not re-enter the menu unless you need to make corrections. Doing so may delete data.

A1.9.5.5 Holiday Example 2 – Non-repeating Holiday

In this example we program May 28, 2014 as a non-repeating holiday.

1) After Holiday #1 setup, "#1" is highlighted. Use Down Arrow key to highlight #2.
Press **M**.

2) Use the Up/Down Arrow keys to scroll until 2014 is highlighted. Press **M**.

3) Enter the month and day fields. When the "SAVE?" prompt is displayed, press **M** to store the data. "Saved" will be momentarily displayed before the display reverts to "SAVE?"

4) Press **E**

A1.9.5.3 Holiday Example 3 – Deleting a Holiday

Example: In this example we will delete Holiday #2: May 28, 2014.

1) From the Setup Holiday Menu Use Down Arrow key to navigate to position #2.

2) Press **M**: "Year" field will change to "- - - -".

3) Press **M** again. All fields will change to "- - - -".

4) When "SAVE?" prompt is highlighted, Press **M**.

5) "SAVED!" will be shown momentarily

6) Press **E**

Note: All Holidays must be deleted individually if using this method.
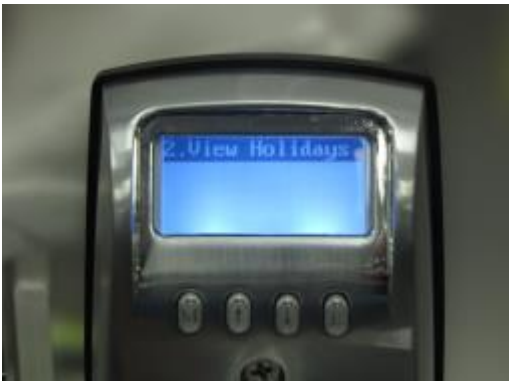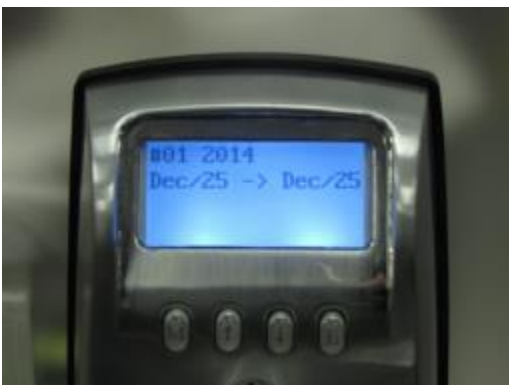
A1.9.5.4 View Holidays

1) From Timed TUM menu, press **M**.

2) Scroll to 2. View. Press **M**.

3) Scroll to 2 "View Holidays". Press **M**.

4) Use the Down Arrow key to view all programmed holidays.

5) Press **E** to exit.

Section A2: Finger Print Management

Overview:

User IDs 1-3 (and their associated fingerprints) are "Administrators." They have complete access to program the RTE-301and to unlock the door at any time.

User IDs 4-7 (and their associated fingerprints) are "Managers." They have limited access to program the RTE-301. Managers can delete User IDs, edit the Timed TUM menu, and unlock the door at any time

User IDs 8-999 (and their associated fingerprints) are "General Users." They have access to unlock the door at times set up by one of the Administrators. **General Users and have no programming rights on the RTE-301.**

After an administrator fingerprint has been enrolled, it must be verified by the lock before the menu options can be accessed.
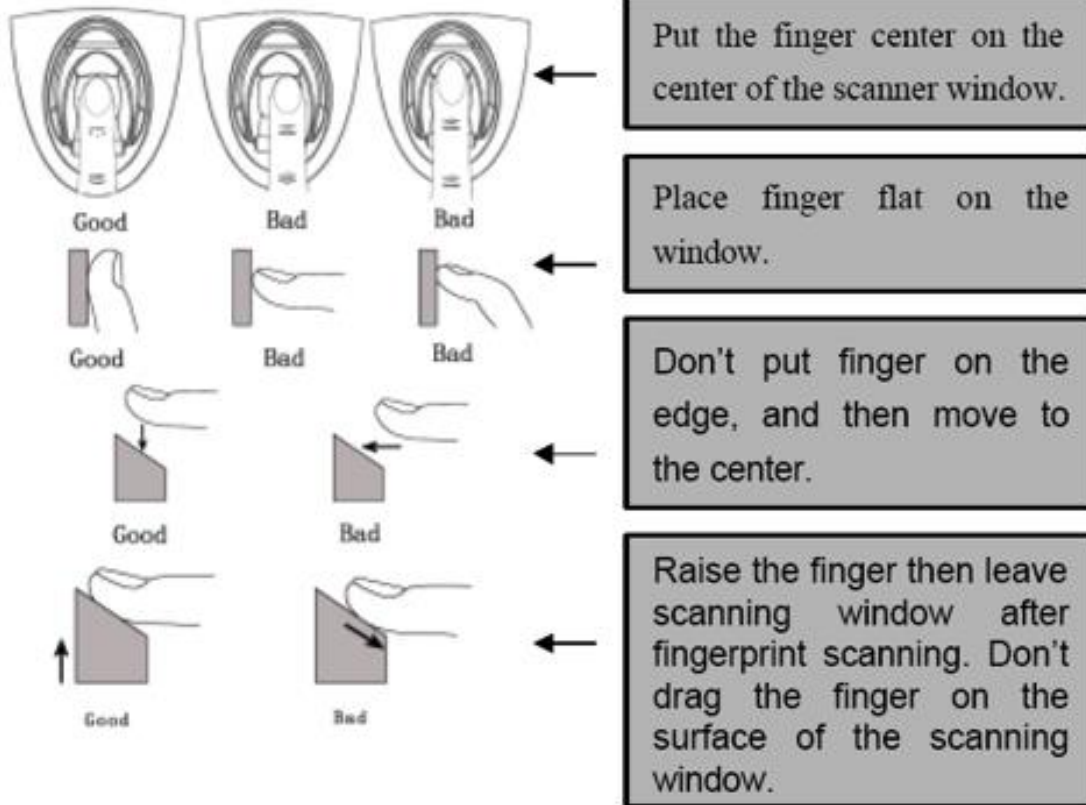
The term "fingerprint" is used as a general term to describe fingers or thumbs used for enrollment/verification. Also, the term "finger" can refer to a finger or thumb.

Before enrolling and verifying fingerprints, please read the following helpful hints for Fingerprint Enrollment and Verification:

Tips on Enrolling Fingerprints

- The center of the vortex (swirl) of the fingerprint pattern is the key data point. It should be placed in the center of the sensor's glass window in a consistent way. The fingerprint should be well defined with the peaks and valleys of the vortex ridge pattern clearly visible.
- Light pressure when placing the finger or thumb on the scanner gives the best image. The finger should be held flat and must not move during scanning.
- Adjust Fingerprint Sensitivity settings per Section 5.3
- Moist fingers and thumbs give better images than dry ones. On cold, dry days it may be helpful to moisten the finger by breathing on it or applying a small amount of lotion.
- Dry, dirty fingerprints or prints with cracks or scars are not recommended.
- Wait until the fingerprint scanner activates to place the finger on the scanning window. This is true for both fingerprint enrollment and verification.
- Shade the sensor when trying to enroll or verify fingerprints in direct sunlight. This will prevent sunlight from reflecting off the sensor mirror.

Put the finger center on the center of the scanner window.

Place finger flat on the window.

Don't put finger on the edge, and then move to the center.

Raise the finger then leave scanning window after fingerprint scanning. Don't drag the finger on the surface of the scanning window.
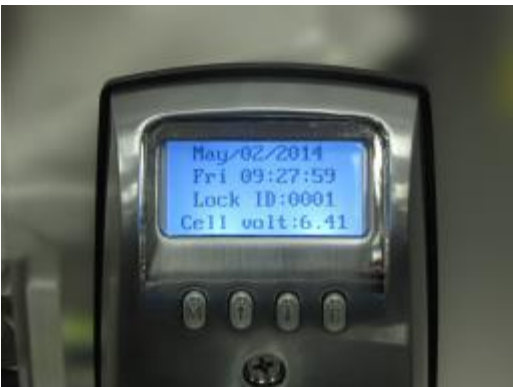
A2.1 Enrolling Fingerprints

In this example we will add fingerprints for User 1 (Admin 1).

1) Press **M.** The lock will momentarily display a welcome message with the current Firmware version number.

The lock will then display:
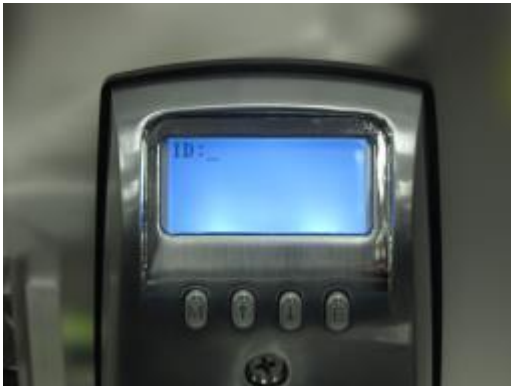- Date/time
- Lock ID
- Battery voltage.

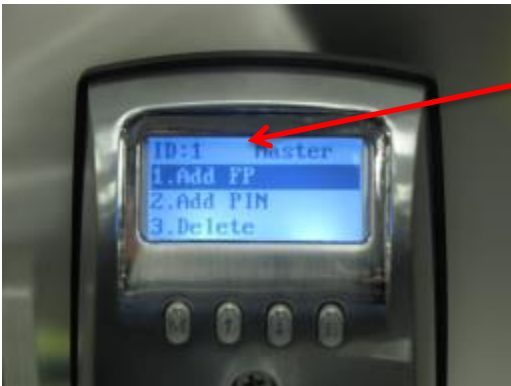"NO MASTER" will momentarily be displayed followed by Lock menu options 1 through 4.

2) Scroll down to Option 2 "User edit".
Press **M**.

3) When "ID:" is displayed, enter a numerical value and then press "#".
Note: Selection must be made within 5 seconds.

After pressing "#" key, the following screen will be displayed: Note that ID:1 is now being displayed

4) When "Add FP" is highlighted, press **M**.

5) "Add FP" is displayed along with "1N2N3N".

Note: Since no fingerprints have been enrolled for this User ID; **1N, 2N, 3N** will be displayed. A total of 3 fingerprints may be enrolled for each User ID.

5) "1N" is highlighted. Place finger on the sensor. Press **M**.

6) The sensor will flash 3 times. Keep finger on the sensor while it flashes.

"Capturing…" will be shown while the FP is being scanned.

7) If finger 1 was successfully enrolled, a single short beep will be heard, the LCD will display "Success," and "1N" will change to "1Y."

If the scan attempt was unsuccessful, "Failed" will display on the LCD and 1N will not change to 1Y. Repeat the steps above to try again.

Note: The same finger can be used for fingers 2 and 3. This is recommended for Users with poor quality fingerprints. Usually, different fingers will be used for fingers 1, 2 and 3.
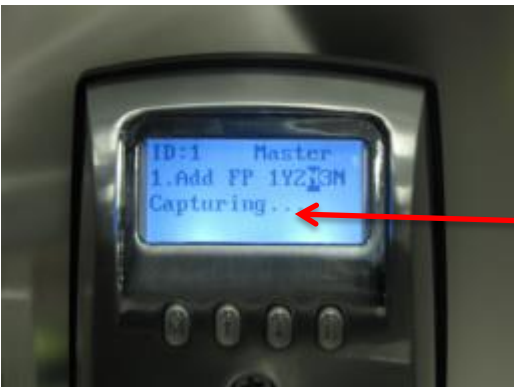
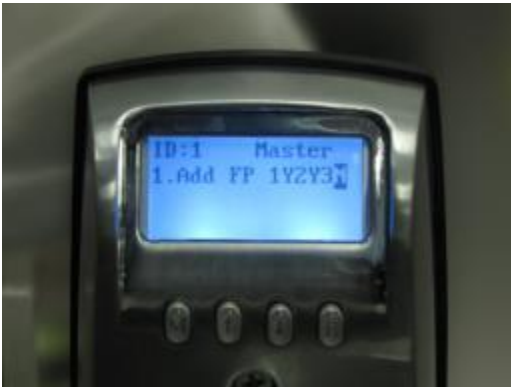8) Rest finger on sensor. Press the Up Arrow to highlight "2N." Press **M**.

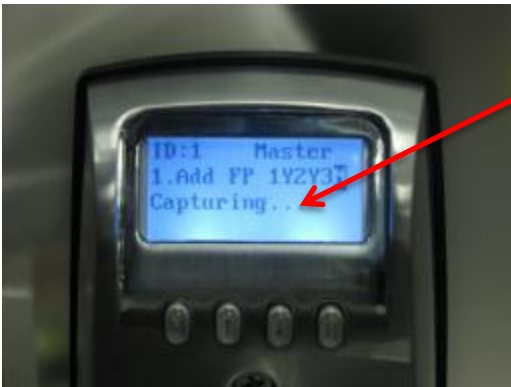"Capturing…" will be shown while the FP is being scanned.

2N changed to 2Y indicates a successful scan.

If unsuccessful, "Failed" will display on the LCD and 2N will not change to 2Y. Repeat the steps above to try again.

9) Rest finger on sensor. Press the Up Arrow to highlight "3N." Press **M**.

"Capturing…" will be shown while the FP is being scanned.

When 3 fingerprint matches for a user have been successfully enrolled, "1Y2Y3Y" will be displayed.

If unsuccessful, "Failed" will display on the LCD and 3N will not change to 3Y. Repeat the steps above to try again.

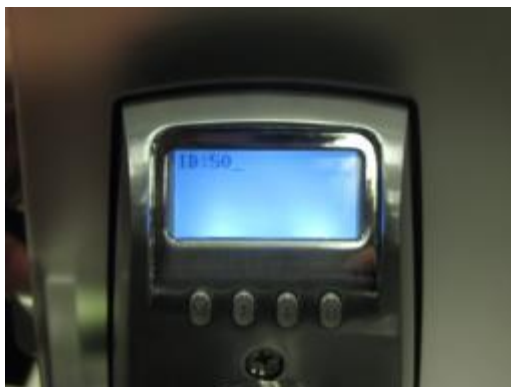**A2.2. Add or modify a User PIN**

Overview:

When this option is chosen, a PIN Code can be created, changed, or deleted for a specific User ID.

In the example below we will create User ID 50 and add a 4 digit PIN.
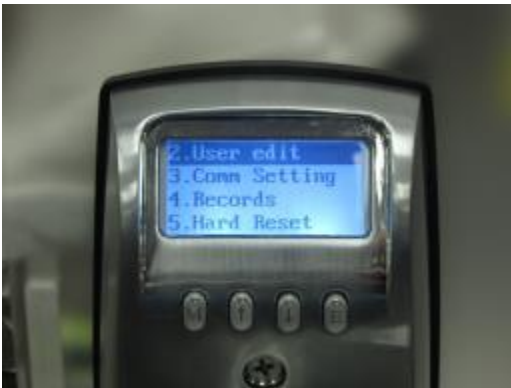
1) Scroll to the "User Edit" menu. Press **M**.

2) Using front keypad: press
5 0 #

Enter the PIN followed by "#"

LCD will momentarily display "SAVED!" to confirm the entry and then the User ID setup menu will be displayed.

Tip: If you enter a digit in error, use "*" to delete the last entered digit.

A2.3 Deleting Fingerprints and PINs

Overview:

When this option is chosen, the fingerprints and/or PINs associated with the specific User ID will be deleted.

In this example, we will delete all FPs and PIN for user ID 50.

1) Scroll to the "User Edit" menu. Press **M**.

2) Using front keypad press 5 0 #.

This menu will be displayed. It allows deletion of PIN Only, FP Only, or both FP&PIN.

3) Select option 3. Press **M**.

"Deleted!" indicates all FPs and PIN for user 50 were deleted.

Option 1 (FP Only) and Option 2 (PIN Only) operate in the same manner as Option 3.

A2.4 Access Time

Overview:

Choosing this option allows timed access to be created for a specific date range, days of the week or time frame within the days of the week for a User ID.

Each USER ID has three TIME MODES that can be created for them.

1. **Invalid** - This can also be called "lock down" mode. When this is enabled, the User will not be able to unlock the door with fingerprints or PIN Codes until an Administrator re-assigns them to Any Time or Acc-Time.

2. **Any Time** - When this is chosen, the User can unlock the door with fingerprints or PIN Codes at any time. The exception to this is if specific Timed Access is set up for the LOCK (Menu 1; Lock Setup: 1.6. Access Time).

3. **Acc-Time** – When this is chosen, the User can unlock the RTE-301 with fingerprints or PIN Codes during a specific date range, days of the week or time frame within the days of the week. Acc-Time means Access Time.

Note: The Time Setting chosen or created for the LOCK (Menu 1, Lock Setup: 1.6. Access Time) will override any Timed Access assigned for a User. Example: If Acc-Time for the lock is set to Mon, Wed and Fri 9am to 5pm, Users will only have access to unlock the door during those times, no matter what individual timed access was set for them. Administrators (User ID 1-3) will always have access to unlock the RTE-301.

Tip: To delete the last entered digit on the outside keypad, press "*"

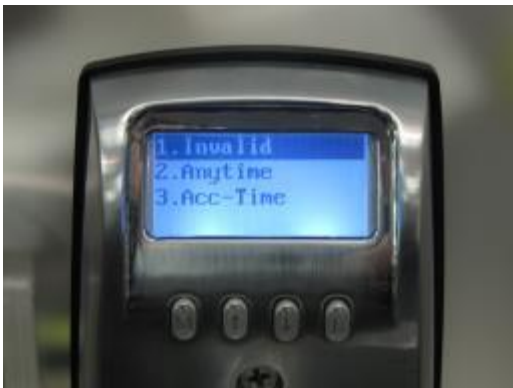## A2.4.1 Example – Access Time for a specific User ID
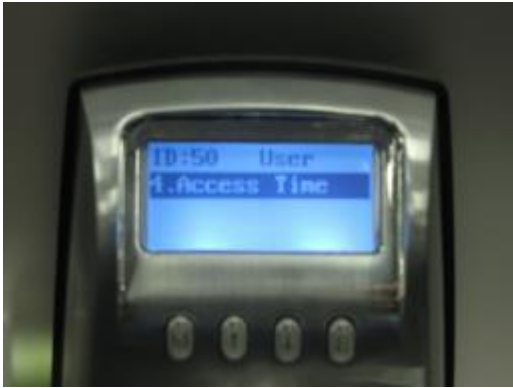
From the User edit menu, select the User ID. Press #**.**

Scroll to 4 "Access Time".
Press **M.**

A2.4.1.1 Invalid

This setting will disable all access for the User ID until an Administrator resets it to Anytime or Acc-Time.

Scroll to 1 "Invalid". Press **M.**

Display will momentarily show "SAVED!" and then return to User Access Time menu.

A2.4.1.2 Anytime

Scroll to 2 "Anytime". Press **M.**

Display will momentarily show "SAVED!" and then return to User Access Time menu.

A2.4.1.3 Acc-Time

A2.4.1.3.1 Date

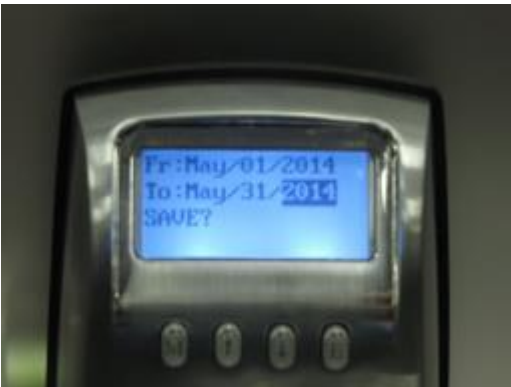1) Scroll to 3 "Acc-Time". Press **M**.

2) Highlight "Date" Press **M**.

"From" and "To" Date Range options will be displayed. Date Ranges are in MM/DD/YYYY format.

3) Press **M**. The "Fr" month field will be highlighted. Use the Up/Down arrow keys to select the month.

4) Use the Up/Down arrow keys to choose the DD & YYYY. When desired value is chosen for each section, press **M** to move to the next value.
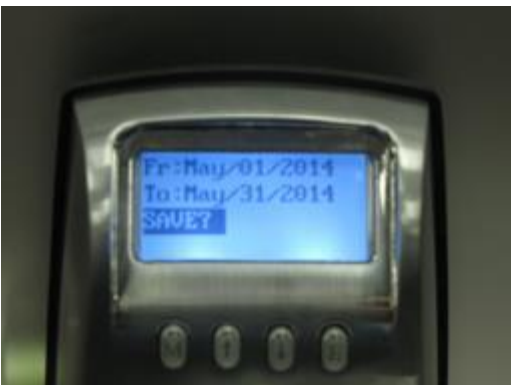
5) Once the Date Range is entered, press **E**. "SAVE?" will display on the LCD.
Press **M** to save.
Press **E** to exit without saving.

"SAVED!" indicates that the date range setup was saved.

A2.4.1.3.2 Time

Use the following steps to set up the Time for the User ID.

1) Scroll to 2 "Time" Press **M**.

2) The "Fr" hour field will be highlighted. Press **M**.

3) Use the Up/Down arrow keys to select the desired hour.
Press **M**.

4) Repeat the above steps for the remaining fields.

5) Once the Time Frame is set up, press **E**. "SAVE?" will display on the LCD.
Press **M** to save.
Press **E** to exit without saving.

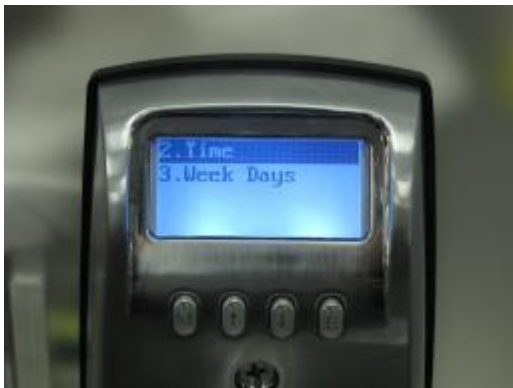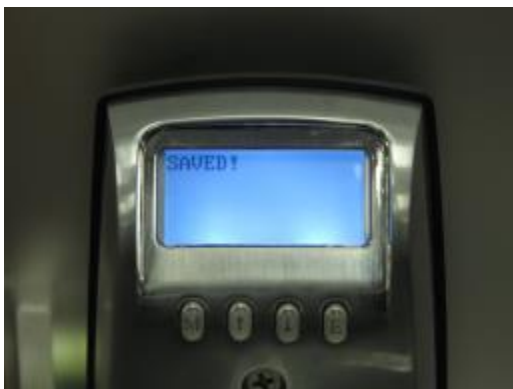"SAVED!" will be shown indicating that the Time frame setup was saved successfully.

A2.4.1.3.3 Days of the Week

Overview:

This is an extension to the Date Range or Time Frame options. If "Y" (Yes) is chosen for a specific day of the week, then the user can only unlock the RTE-301 on that day of the week, during the Date Range and Time Frame that has already been created.

If "N" (No) is chosen for a specific day of the week, then the user will not be able unlock the RTE-301 for that day of the week.

1). Scroll to 3"Week Days".
Press **M**.

2) Press **M** to select Y/N. Press **M** again to toggle between "Y" (Yes) and "N" (No) for each day of the week.

3) When completed, press **E**.
"SAVE?" will display on the LCD.
Press **M** to save.
Press **E** to exit without saving.

"SAVED!" indicates Day of the week settings were saved.

Appendix B – User Enrollment Table

User ID	Hand (L/R)	Finger	PIN	Name