ATR360

Top Loading Time Recorder
With Fingerprint & Proximity Badge
User Verification

User Manual
Lithium Battery Caution:

The circuit board on this terminal is populated with a lithium battery to protect data or programs stored in the Random Access Memory (RAM). Do not, under any circumstances, attempt to replace the lithium battery in the terminal. Failure to comply may void your warranty. Battery replacement should be done by qualified personnel wearing the proper eye protection.

CAUTION: Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instruction.

This product utilizes a battery that contains Perchlorate Material. Perchlorate Material – special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate
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Supplies, Parts & Accessories
Before You Start!

What’s In the Box

- ATR360 Time Recorder
- (2) Clock Cover Keys
- 18vDC Switching Power Supply
- User Manual
- (25) Sample ATR241 Weekly Time Cards
- (5) Sample Proximity Badges
- Clock Wall Mounting Template
  (Also available for download at http://support.acroprint.com)
- (2) Mounting Screws
- (2) Plastic Wall Anchors

1) Unpack clock. Inspect clock for any damages that may have occurred during shipment. Check box contents for any missing items. If any damages are found or if any parts are missing please contact Acroprint Customer Service at (800) 334-7190.

2) Connect the ATR360 power adapter and plug it into a wall outlet to turn the clock on.

3) If this is the first time you’ve turned the clock on, open the Ribbon Access Door with the key and, using a ball point pen, press the Reset button.

Do not attempt to service the ATR360 yourself. Disassembling the clock will void the warranty. Always follow the instructions in the user guide.

- Do not place the clock in direct sunlight. Bright light may significantly affect fingerprint reads or cause fingerprint verification to fail.
- The clock is designed for indoor use in a temperature range of 32-104°F (0-40°C). The clock is not waterproof or shockproof. Keep the clock away from heat sources such as radiators. Avoid dusty environments or exposure to chemicals.
- The clock may be placed upright on a solid surface or mounted to a wall with mounting screws. Use the enclosed template & screws for wall mounting. Avoid locations where the device will be susceptible to vibrations and shock, such as a slamming door.
- The terminal warranty does not cover defects or damages arising from improper installation, improper storage, abuse, or unauthorized service.
# Time Recorder Mode Settings

<table>
<thead>
<tr>
<th>Mode</th>
<th>Setting</th>
<th>Values</th>
<th>Default Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Year</td>
<td>2000 – 2099</td>
<td>Year of Mfg</td>
</tr>
<tr>
<td>02</td>
<td>Date</td>
<td>1-12 Mo, 1-31 Date</td>
<td>01, 01</td>
</tr>
<tr>
<td>03</td>
<td>Time</td>
<td>1-23 Hr, 0-59 Min</td>
<td>12 : 00</td>
</tr>
<tr>
<td>04</td>
<td>End of Day Change Time</td>
<td>1-23 Hr, 0-59 Min</td>
<td>00 : 00</td>
</tr>
<tr>
<td>05</td>
<td>Set Card Format (Set &quot;00&quot; for ATR241 cards)</td>
<td>00: first row blank 01: prints on 1st row</td>
<td>00</td>
</tr>
<tr>
<td>06</td>
<td>Pay Period Type End Day of Wkly P. Period Must set 07 for Wkly Card</td>
<td>00: Mthly, 01: Wkly 01=Mon…07=Sun</td>
<td>01 07</td>
</tr>
<tr>
<td>07</td>
<td>Clock Display Format</td>
<td>12 or 24 Hr</td>
<td>12</td>
</tr>
<tr>
<td>08</td>
<td>Adjust Printing Position Max: 6mm Vert/Horiz adj. Increase #’s to move up/right</td>
<td>00-15: Vertical Axis 00-30: Horiz. Axis</td>
<td>08,08 vert,horiz</td>
</tr>
<tr>
<td>09</td>
<td>DST Start Month / Date DST Start Time</td>
<td>1-12 Mo, 1-31 Date 00-23 Hr</td>
<td>00, 01 02</td>
</tr>
<tr>
<td></td>
<td>DST End Month / Date DST End Time</td>
<td>1-12 Mo, 1-31 Date 00-23 Hr</td>
<td>00, 01 02</td>
</tr>
<tr>
<td>10</td>
<td>Print Format (Independent of display format)</td>
<td>00: 24 Hr 01: Decimal Hrs 02: 12 Hr (pm)</td>
<td>02</td>
</tr>
<tr>
<td>11</td>
<td>Time Card Recognition Note: Turn “On” for Mthly cards</td>
<td>00: On, 01: Off</td>
<td>01</td>
</tr>
</tbody>
</table>

Note: pressing “All-Reset” on the control panel will reset all Time Recorder settings to their factory defaults.
Clock Overview

Top View

(Time Card Slot)

P1  P2  P3  P4  P5  P6
IN  OUT IN  OUT IN  OUT

Front View

Daylight Saving (DST) Icon

Current Print Color

AM PM 02:00

15

Day of Week
1=Mon, 2=Tue...

Alarm Mode:
Mic = Internal
Bell = External

Fingerprint Settings Buttons

LED Display for Fingerprint Settings

Error & OK Lights

Battery Status Indicator

Icon indicating AC Power is Connected

- Battery Status Indicator: A fully charged Battery will have (5) bars.
- DST Icon: displays when exiting programming mode when DST is turned on.
- Each blink of the colon is one sec.
Rear View

Keyhole Mounting Slots

Speaker Holes

Ext. Signal Device Connector

Power Connector

Battery Compartment Cover
Initial Setup

Setting Year
1. Remove top cover
   a. Locate buttons at the top of the clock labeled P4, P5 and P6
      i. P4 changes values down
      ii. P5 changes values up
      iii. P6 is used to save and select modes
2. Locate the program switch to the left of the fingerprint reader. Move the switch to the down position, you are now in setup mode
3. The mode indicator “01” will be flashing, press P6 to select
4. Press P4 or P5 to select the current year
5. Press P6 to Save

Setting Month/Date
6. The mode indicator “02” will be flashing, press P6 to select
7. Press P4 or P5 to select the current month
8. Press P6 to save
9. Press P4 or P5 to select the current date
10. Press P6 to save

Setting Time
11. The mode indicator “3” will be flashing, press P6 to select
12. Press P4 or P5 to select the current hour
13. Press P6 to save
14. Press P4 or P5 to select the current minute
15. Press P6 to save

Setting Day Advance Time
16. The mode indicator “04” will be flashing, press P6 to select
17. Complete steps 11-15

Setting Pay Period
18. The mode indicator “05” will be flashing, press P5 to switch to mode “06”
19. The mode indicator “06” will be flashing, press P6 to select
20. Select the pay period type by pressing P4 or P5
   a. If the pay period is monthly select 00
   b. If the pay period is weekly select 01
21. Press P6 to save
22. To select the end of the weekly pay period you must select 07
23. Press P6 to save

Setting Clock Display Format
24. The mode indicator “07” will be flashing, Press P6 to select
25. Press P4 or P5 to select the clock display format
   a. You can choose between the 12 hour or 24 hour (military time) format
26. Press P6 to save
Setting Start and End of DST
27. The mode indicator “08” will be flashing, press P5 to switch to mode “09”
28. The mode indicator “09” will be flashing, press P6 to select
29. Press P4 or P5 to select the correct month (US-March)
30. Press P6 to save
31. Press P4 or P5 to select the correct date
32. Press P6 to save
33. Press P4 or P5 to select the correct start time (US-2am)
34. Press P6 to save
35. Complete steps 29-34 to complete the set up for the end of DST

Setting Print Format
36. The mode indicator “10” will be flashing, press P6 to select
37. Press P4 or P5 to select the correct print format
   a. 00 – 24 hour (Military Time)
   b. 01 – Decimal Hours
   c. 02 – 12 hours (pm)
38. Press P6 to save

Setting Time Card Recognition
39. The mode indicator “11” will be flashing, press P6 to select
40. Press P4 or P5 to select the correct time card format
   a. 00 – Monthly, Semi-Monthly
   b. 01 – Weekly, Bi-Weekly
41. Press P6 to save

Initial setup is complete. Locate the program switch and move it to the up position. Replace top cover.
## Fingerprint Settings Table

A list of the fingerprint settings is shown below:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add.U</td>
<td>Add User: Add Fingerprint and/or Proximity badge users to the clock. Change/delete existing Fingerprint templates or Proximity badge numbers.</td>
</tr>
<tr>
<td>dEL.U</td>
<td>Delete Users: Remove a user or remove Fingerprint templates and/or Proximity badges from the clock.</td>
</tr>
<tr>
<td>rtc.</td>
<td>Real-time Clock: <strong>Important!</strong> This must be synchronized with the System Clock (the clock display) or the clock will not function properly.</td>
</tr>
<tr>
<td>InO.S</td>
<td>Fingerprint Shift Schedule (In/Out Sch): Prevents employees from &quot;buddy&quot; punching.</td>
</tr>
<tr>
<td>dur.</td>
<td>Time Card Allowance Duration: The amount of time an employee has to insert their time card after scanning their finger or swiping their badges. The duration can be set from 1 to 60 seconds. The factory default is 3 sec.</td>
</tr>
<tr>
<td>All.r</td>
<td>All reset: Resets the Fingerprint Shift Schedule (InO.S) &amp; Time Card Allowance Duration (Dur.) to factory defaults.</td>
</tr>
<tr>
<td>ŁESŁ</td>
<td>Test Mode: For factory service only. End users should not enter this mode.</td>
</tr>
<tr>
<td>End.P</td>
<td>Exit Fingerprint/Proximity settings.</td>
</tr>
</tbody>
</table>
Correct Finger Positioning on the Sensor

Place finger flat on the sensor surface
Place finger in the center of the sensor surface

Incorrect Finger Positioning:

Tips for Improving the Success of Fingerprint Reads

Finger Print Setup

1. Remove top cover
2. Locate the finger print switch located to the left of the finger print reader
3. Move the switch to the up position to turn on the finger print reader.
4. Press the “FP Setup” button until ADD,U appears in the front LED display
   a. If no activity is detected within 30 seconds the setup program will be terminated
      and the “FP Setup” up button must be pressed again
Add User

5. Press enter
   a. Users must be assigned a number user number. You may add up to 150 users and 5 administrators
6. To assign the user a number use the up and down buttons to change each digit. Start with first digit. (For the number 001 you will start with 0). Press enter to go to the next digit.
   a. User numbers will appear Uxxx and can be assigned numbers U001-U150
   b. Administrator numbers will appear Axxx and can be assigned numbers A301-A305
7. When you have completed assigning the user, while the last digit is flashing press and hold the enter button for 3 seconds
8. The LED display will change to F.P.x.x
9. To register a finger print the last digit should be flashing
10. Place the finger on the finger print reader. 3 samples must be giving. If the finger print is accepted the LED Display will change (F.P.1.1, F.P.1.2, F.P.1.3) after all 3 samples are giving and accepted the message PASS will appear
11. Now select a second finger for a back up print
   a. This is for situations where the primary finger cannot be used because of injuries to the finger or the reader is unable to read the finger print
12. The LED display will read F.P.2.1
13. Complete step 10 to register the back up print
14. A third back up print may be registered or press cancel
15. Complete steps 5-13 to add another user or press cancel, down, enter to exit

Badge Setup

1. Remove top cover
2. Locate the finger print switch located to the left of the finger print reader
3. Move the switch to the up position to turn on the finger print reader.
4. Press the “FP Setup” button until ADD.U appears in the front LED display
   a. If no activity is detected within 30 seconds the setup program will be terminated and the “FP Setup” up button must be pressed again
5. Press enter
   a. Users must be assigned a number user number. You may add up to 150 users and 5 administrators
6. To assign the user a number use the up and down buttons to change each digit. Start with first digit. (For the number 001 you will start with 0). Press enter to go to the next digit.
   a. User numbers will appear Uxxx and can be assigned numbers U001-U150
   b. Administrator numbers will appear Axxx and can be assigned numbers A301-A305
7. To skip finger print recognition press cancel
   a. The third digit should be flashing
8. Press the down button the LED display will read “rFId”
9. Press enter the LED display will read “CARD”
10. Scan the card. If the card is successfully scanned the LED display will indicate “PASS”
11. Complete steps 5-10 to add another user badge or press cancel, down, enter to exit
Important! Setting the Real-Time Clock (RTC)

A Real-time Clock (RTC) is a computer clock (usually on a chip) that keeps track of the current time. RTC’s are present in almost any electronic device which needs to keep accurate time.

Important! You must always keep the RTC and the System Clock (clock display) synchronized! Failure to do this will cause the Shift Interval Settings to behave erratically and can even prevent employees from making normal punches (all punches could result in "err").

Any time you change the system clock you must also synchronize the RTC!

The ATR360 can maintain accuracy to within ±3 sec/wk of the RTC. It is recommended that you synchronize the RTC with the system time (clock display) at least once a year.

Synchronizing the RTC to the System Clock

1. Open clock lid. Press "FP Setup" button
2. Press "down" until the LED display shows "rtc." Press "Enter"
   Two sets of digits will be displayed. The first two digits sets the hour (00-23) & the last two digits sets the minute (00-59). First set the hour to the current hour. Next set the minute one minute ahead of the current time so that you can sync the seconds as soon as the minute advances.
3. After setting the minute press "Enter" for 3 seconds. The two digit value for seconds is displayed (00-59). Set the seconds at "00". Wait for the clock's minute to roll forward, then press and hold "Enter" for 3 seconds. This will synchronize the RTC to within a few seconds of the Clock Time. As long as the RTC and Clock Time are set within a minute there shouldn’t be any problems.

   Note: if no buttons are pressed for 30 seconds the clock will exit fingerprint settings. If you need more than 30 seconds for the minute to roll forward you can press "Enter" to toggle between the seconds digits….this will reset the 20 sec. time-out counter each time you press "Enter".

Fingerprint Shift Intervals (InO.S.)

The ATR360 has (4) default shift intervals:

<table>
<thead>
<tr>
<th>Shift</th>
<th>Time Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pe1</td>
<td>07:00 - 11:00</td>
</tr>
<tr>
<td>Pe2</td>
<td>11:01 - 13:20</td>
</tr>
<tr>
<td>Pe3</td>
<td>13:21 - 16:30</td>
</tr>
<tr>
<td>Pe4</td>
<td>16:31 - 20:00</td>
</tr>
<tr>
<td>P5 thru P12</td>
<td>Empty</td>
</tr>
</tbody>
</table>

Shift Intervals prevent employees from punching more than once during a Shift Interval in order to prevent "buddy punching". If there were no Shift Intervals an employee could use their fingerprint to punch their time card and then use their fingerprint to punch a buddy's time card. With the Shift Interval set an employee can punch a buddy's time card, but then if they try to punch their time card the punch will be rejected and they will have a missing punch. Shift Intervals also determine which column can be used for punching for a particular Shift Interval (they only restrict users, administrators can punch anytime, ie, they can edit the time cards of their employees to correct punches even if the employee has already punched within the current shift interval).

Note: The ATR360 can have up to 12 Shift Intervals (PE.1 thru PE.12). Shift Intervals can only be edited. They cannot be turned completely off. A blank shift interval worksheet has been provided on the following page.

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Editing Shift Intervals
1. Open clock lid. Press "FP Setup" button
2. Press "down" until the LED display shows "InO.S". Press "Enter". "PE.1" will be displayed. Press "up/down" if you want to edit a different shift. Press "Enter" to select the shift to edit. Edit the Start of Shift time (hrs : min). Press and hold "Enter" for 3 sec. to set the Start time ("Pass" will be displayed indicating the start time was correctly set). Now edit the Start minute if necessary. Press and hold "Enter" for 3 sec. to set the Start time.
3. Press "Up" or "Down" to select additional shifts for editing.

<table>
<thead>
<tr>
<th>Shift</th>
<th>Shift Start Time</th>
<th>Shift End Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Deleting a User’s Badge Number
1. Open clock lid and press "FP Setup".
2. "Add.U" is displayed.
3. Press “Down”. "dEL.U" is displayed.
4. Press “Enter”. Select the User/Admin to delete then press and hold “Enter” for 3 sec.
5. F.P.1 will flash (if the user has fingerprints enrolled). Press “Up” (skipping all fingerprints) until "rFId" is displayed. Press “Enter”. If the badge is successfully deleted the LED display will show “PASS”.
Set Ink Color Change Time

1. Remove top cover
2. Locate the program switch to the left of the finger print reader. Move the switch to the down position, you are now in setup mode
   a. P1,P4,P5,P6 will now be flashing
4. If this is the initial setup you must begin with 01
5. Press P6 to save
6. Press P4 or P5 to select the correct hour
7. Press P6 to save
8. Press P4 or P5 to select the correct minute
9. Press P6 to save
10. Press P4 or P5 to select the correct color
   a. 01 – Black
   b. 02 – Red
11. Press P6 to save
12. Deselect days by pressing P4 or P5 to highlight the day. Press P1 to deselect the day. After P1 is pressed the day will disappear
   a. 7 = Sunday, 1 = Monday….
   b. To reselect the day's press P4 or P5 until the day is flashing then press P1
13. Press P6 to save
14. Complete steps 5-13 to complete the remaining 11 slots or to exit setup move the program switch to the up position

Alarm Settings

You can set up to (6) alarms to activate each day or you can set each alarm to only activate on certain days of the week. Also you can set each alarm to sound the internal alarm, the external alarm, or both. You can set the alarm duration from 1 sec. up to 4 min & 59 sec. The internal alarm volume can be adjusted via the volume screw but note that it will affect all sounds from the clock's speaker. The volume is adjustable from 0 to 102 decibels.

To Set an Alarm:
1. Enter Setup mode.
2. Press [P2].
3. Press [P4↓] or [P5↑] to select the Alarm time slot:
   Available Slots: 01, 02, 03, 04, 05, 06
   Note: alarm slots must be set starting with Slot 01 first. Additional alarm slots must be added in order. You cannot skip an alarm slot.
   01=Internal, 02=External, 03=Both
9. Press [P6].

By default, the current Alarm slot will apply to all days of the week. If you want to deselect a day, press [P4↓] or [P5↑] to select the day (the day selected will begin flashing) then press [P2] to deselect the day. The icon for the day will disappear. Repeat this step to deselect any other days. To add a day back, follow the same steps and the icon will re-appear.
10. Press [P6] to save the Alarm settings for the current slot. Repeat steps for any remaining time slots or move the Setup switch to the upper position to exit Setup mode.

See “Connecting External Signal Devices” (pg. 26) for instructions on how to connect bells, horns or buzzers.
**Set Column Change Time Setup**

1. Remove top cover
2. Locate the program switch to the left of the finger print reader. Move the switch to the down position, you are now in setup mode
3. Press P3  
   a. P3, P4, P5, P6 will now be flashing
4. If this is the initial setup you must begin with 01
5. Press P6 to save
6. Press P4 or P5 to select the correct hour for the first time slot
7. Press P6 to save
8. Press P4 or P5 to select the correct column  
   a. Choose a column 1-6
9. Press P6 to save
10. Complete steps 4-9 until all slots are completed or to exit move the program switch to the up position
Using the Time Clock

Using the Time Card to Clock In
1. When clocking in P1, P3 or P5 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. The time card will automatically feed into the time clock and print the correct time
4. Remove the time card

Using the Time Card to Clock Out
1. When clocking out P2, P4 or P6 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. The time card will automatically feed into the time clock and print the correct time.
4. Remove the time card

Using a Finger Print to Clock In
1. When clocking in P1, P3 or P5 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. Using a registered finger place the finger on the finger print reader. If the finger print is accepted the time card will automatically feed into the time clock and print the correct time.
4. Remove the time card

Using a Finger Print to Clock Out
1. When clocking out P2, P4 or P6 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. Using a registered finger place the finger on the finger print reader. If the finger print is accepted the time card will automatically feed into the time clock and print the correct time.
4. Remove the time card

Using a Badge to Clock In
1. When clocking in P1, P3 or P5 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. Scan the badge by placing it in front of the badge scanner, if the badge is accepted the time card will automatically feed into the time clock and print the correct time.
4. Remove the time card

Using a Badge to Clock Out
1. When clocking out P2, P4 or P6 must be selected
2. Insert the time card with the current week facing you and the card in the upright position
3. Scan the badge by placing it in front of the badge scanner, if the badge is accepted the time card will automatically feed into the time clock and print the correct time.
4. Remove the time card
# Features and Specifications

## Clock Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Authentication Method</td>
<td>Fingerprint or Proximity Badge</td>
</tr>
<tr>
<td>Display Language</td>
<td>English</td>
</tr>
<tr>
<td>Operation Mode</td>
<td>Stand-alone (No PC Interface)</td>
</tr>
<tr>
<td>Proximity Card Reader</td>
<td>EM</td>
</tr>
<tr>
<td>Operational Battery Backup</td>
<td>Optional</td>
</tr>
<tr>
<td>Auto Card Feeder</td>
<td>Yes</td>
</tr>
<tr>
<td>Printing Method</td>
<td>9-Pin Dot Matrix</td>
</tr>
<tr>
<td>Eliminates Buddy Punching</td>
<td>Yes</td>
</tr>
<tr>
<td>Two Color Printing</td>
<td>Yes</td>
</tr>
<tr>
<td>Perpetual Calendar</td>
<td>Yes</td>
</tr>
<tr>
<td>Auto Fix Positioning</td>
<td>Yes</td>
</tr>
<tr>
<td>Power Failure Printing</td>
<td>Yes</td>
</tr>
<tr>
<td>Power Failure Memory Retention</td>
<td>Yes</td>
</tr>
<tr>
<td>Display Format</td>
<td>12 or 24 hour</td>
</tr>
<tr>
<td>Print Format</td>
<td>12 hr, 24 hr, decimal time</td>
</tr>
<tr>
<td>External Alarm</td>
<td>Connection Available</td>
</tr>
<tr>
<td>Auto Column Changing</td>
<td>Yes</td>
</tr>
<tr>
<td>Compatible with Wkly Time Card</td>
<td>Yes (Card Recognition Off)</td>
</tr>
<tr>
<td>Card Recognition (front/back)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

## Clock Specifications

### Fingerprint Recognition

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective FP Detection Area</td>
<td>16 x 14 mm</td>
</tr>
<tr>
<td>Average Recognition Speed</td>
<td>1.2 sec</td>
</tr>
<tr>
<td>FRR</td>
<td>≤0.01%</td>
</tr>
<tr>
<td>FAR</td>
<td>≤0.0001%</td>
</tr>
<tr>
<td>Fingerprint Verification</td>
<td>1:N</td>
</tr>
<tr>
<td>Fingerprint Placement Angle</td>
<td>360°</td>
</tr>
<tr>
<td>Fingerprint Template Capacity</td>
<td>150</td>
</tr>
</tbody>
</table>
## Miscellaneous

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>DC 18v</td>
</tr>
<tr>
<td>Input Current</td>
<td>1.5A</td>
</tr>
<tr>
<td>Anti-static Strength</td>
<td>&lt; 15KV</td>
</tr>
<tr>
<td>Operational Relative Humidity</td>
<td>10 – 60%</td>
</tr>
<tr>
<td>Operational Temperature</td>
<td>0 – 40º C (32 – 104º F)</td>
</tr>
<tr>
<td>Storage Relative Humidity</td>
<td>10 – 80%</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10 – 60º C (14 – 140º F)</td>
</tr>
<tr>
<td>Dimensions (Clock)</td>
<td>197 (w) x 239 (h) x 133 (d) mm</td>
</tr>
<tr>
<td>Dimensions (Box)</td>
<td>266 (w) x 283 (h) x 208 (d) mm</td>
</tr>
<tr>
<td>Weight (Clock Only)</td>
<td>4.3 Lbs.</td>
</tr>
<tr>
<td>Weight (Boxed)</td>
<td>4.5 Lbs.</td>
</tr>
<tr>
<td>Time Card Dimension</td>
<td>190 – 192mm x 85-85.5mm</td>
</tr>
<tr>
<td>Time Card Weight</td>
<td>300g</td>
</tr>
<tr>
<td>Circuit Board Batteries (2)</td>
<td>CR2032 (2 yr life)</td>
</tr>
</tbody>
</table>

## Ribbon Life

The ATR242 ribbon (39-0135-000) will typically last 3 months with 50 employees punching 6 times per day (~18,000 punches). Actual ribbon life will vary based on the number of punches, humidity, temperature and exposure to air.

## Operational Battery Pack

The optional Operational Battery Pack (58-0114-000) is a 12 cell NiMH (Nickel Metal Hydride) battery pack that recharges when the ATR360 is plugged in. In the event of a power failure the clock will instantly switch to battery power without any interruption in service. The operational battery pack allows for full operation of the clock with punching using the fingerprint reader or Prox badge. The clock will also continue to print on time cards. The LCD backlight is not activated when the clock is running on battery power in order to save power, however, the LCD display is plainly visible in a lighted room.
Battery Pack Specs:
- Voltage: DC 14.4v
- Capacity: 1800mA
- Standby mode: 30-36hr reserve power
- Fully charged: 5 days use (300 punches/day)

Note: Actual battery life depends on many factors such as battery age, temperature, discharge history, etc., and can vary greatly depending on these factors.

The ATR360 should be plugged in for 12 hours to fully charge the battery pack.

For more information see “Installing the Operational Battery Pack” in the Appendix.

Warning:
Batteries may leak, overheat, catch fire or explode if proper safety & handling procedures are not followed:
- DO NOT get batteries wet
- DO NOT place batteries near heat sources
- DO NOT use any power supply other than the original one supplied with the time recorder.
- DO NOT inverse polarity connection
- NEVER throw batteries into fire. Properly dispose of batteries according to local rules and regulations.
- DO NOT allow anything to short circuit the batteries
- Dropping a battery may damage the battery.
- Replace the battery if you suspect any damage.

Internal View
(Internal Control Panel)

Note: turning the Fingerprint Reader off will also disable the Proximity Badge Reader.
# Fingerprint Reading Issues

<table>
<thead>
<tr>
<th>Problem</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to select finger?</td>
<td>Use the index or middle finger to enroll; try the left hand fingers if the right hand fingerprints are worn, damaged or missing. If the user’s fingers are small, select the thumb.</td>
</tr>
<tr>
<td>Poor Fingerprint Definition</td>
<td>Some people have fingerprint definition that is too poor to verify. These employees should use Proximity badge verification.</td>
</tr>
<tr>
<td>Dirty or Dry Finger</td>
<td>Wash hands with moisturizing soap or use hand lotion to hydrate skin.</td>
</tr>
<tr>
<td>Damaged Fingerprint</td>
<td>Use alternate finger with backup fingerprint template.</td>
</tr>
<tr>
<td>Bad Finger Positioning</td>
<td>Place finger in the middle of the sensor; keep finger flat on the sensor and apply firm pressure; DO NOT touch the sensor in an angled or tilted position, DO NOT slide finger.</td>
</tr>
<tr>
<td>Fingerprint pattern change</td>
<td>For a user with a worn or injured finger, the identification can be affected. Use an alternate finger or select Proximity badge verification.</td>
</tr>
<tr>
<td>Clock has trouble reading most fingerprints</td>
<td>Clean the fingerprint sensor (see cleaning the fingerprint sensor. Using a fingerprint overlay on the sensor will often significantly improve fingerprint reads (call Acroprint for availability).</td>
</tr>
<tr>
<td>Clock has trouble reading fingerprints on sunny days</td>
<td>Move clock out of direct or bright sunlight.</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clock does not power on</td>
<td>Power Outage</td>
<td>Check circuit breaker. Wait for power to be restored</td>
</tr>
<tr>
<td></td>
<td>The power source was not properly connected</td>
<td>Check the connections of the power supply and/or backup battery</td>
</tr>
<tr>
<td>The time is incorrect</td>
<td>The time was not set correctly</td>
<td>Set correct time</td>
</tr>
<tr>
<td></td>
<td>Prolonged power outage</td>
<td>Set time after power is restored</td>
</tr>
<tr>
<td>The date is incorrect</td>
<td>The date was not set correctly</td>
<td>Set correct date</td>
</tr>
<tr>
<td>Clock beeps and rejects time card</td>
<td>Wrong side of card is inserted (monthly card)</td>
<td>Flip card over and re-insert</td>
</tr>
<tr>
<td></td>
<td>Incompatible time card</td>
<td>Use card approved for the ATR360</td>
</tr>
<tr>
<td>Print too light</td>
<td>Ribbon cassette not properly seated</td>
<td>Remove and re-insert ribbon cassette correctly</td>
</tr>
<tr>
<td></td>
<td>The print ribbon is dried out</td>
<td>Replace ribbon cassette</td>
</tr>
<tr>
<td>Clock will not print</td>
<td>RTC not synchronized with display time.</td>
<td>Set RTC</td>
</tr>
<tr>
<td>Punches print in wrong column</td>
<td>Wrong column selected (manually selected) or column change time set incorrectly</td>
<td>Select the correct column (P1 – P6) or set the correct column change time</td>
</tr>
<tr>
<td>Punches print on wrong row</td>
<td>The End of Day set incorrectly</td>
<td>Set End of Day correctly</td>
</tr>
<tr>
<td></td>
<td>Time Card Format set incorrectly</td>
<td>Set Time Card Format again</td>
</tr>
<tr>
<td></td>
<td>Pay period type is set incorrectly</td>
<td>Set Pay Period type correctly</td>
</tr>
<tr>
<td>Symptom</td>
<td>Possible Problem</td>
<td>Solution</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>The clock keeps losing time</td>
<td>The coin cell battery on the motherboard needs to be replaced</td>
<td>Replace the coin cell on the motherboard</td>
</tr>
<tr>
<td>Display Off, Clock has Power</td>
<td>Defective Motherboard</td>
<td>Contact Local Dealer or Acroprint for repair.</td>
</tr>
<tr>
<td></td>
<td>Defective LCD Display</td>
<td></td>
</tr>
</tbody>
</table>
| Display is in AM/PM hours but clock prints in 24 Hr format | The clock display format and print format are independent. You must make sure each is set correctly. | Set the display format correctly  
Set the print format correctly |
| Clock is printing in wrong color    | Ink Color Change Time set incorrectly                                             | Set the Ink Color Change Time correctly       |
| Clock print location is a little off| Clock printing position needs to be adjusted                                   | Adjust the clock print position               |
| Print registration is faint or not visible at all | Ribbon cassette not firmly seated.                                               | Press down firmly on ribbon cassette until it clicks into place. |
|                                    | Ribbon is stuck.                                                                  | Turn ribbon advance knob clockwise. If ribbon will not advance remove cassette and try advancing again. If ribbon won’t advance replace ribbon. |
Frequently Asked Questions

1. Q: Why can’t the clock verify my fingerprint?
   A: Possible Causes: The following conditions could result in a failed read.
   a. Finger is dry
   b. Fingerprint is damaged
   c. Finger was not properly positioned when enrolled
   d. Employee hasn’t been enrolled
   e. Fingerprint sensor is dirty
   f. Fingerprint sensor is defective
   **Correction:** Moisturize finger. Enroll a different fingerprint or re-enroll finger. Clean fingerprint sensor.

2. Q: The display does not work or parts of it do not work.
   A: Possible Causes:
   a) Motherboard is defective
   b) The LCD display is defective.
   **Correction:** Contact your local dealer or Acroprint for repair.

3. Q: How do I change an employee from an Administrator to a user?
   A: Delete the employee and re-enroll them as a user.

4. Q: I checked all settings on my clock and it still won’t print on my time card.
   A: Make sure the RTC and clock display are synchronized.

5. Q: Why is the light for the fingerprint reader not working?
   A: Make sure the fingerprint switch is set to “FP ON”.
   If this doesn’t correct the problem contact your local dealer or Acroprint for repair.

6. Q: Can I turn the fingerprint reader off and just use prox badges?
   A: No. Sliding the FP switch to “off” also disables the Prox reader.

7. Q: If I turn the fingerprint reader off can I still punch my time card?
   A: Just insert your card. It will automatically be “punched” since user verification is turned off.

8. Q: I pressed FP setup but why does nothing happen?
   A: Make sure the FP Switch is “On”. You cannot access the FP settings if the FP Switch is turned “Off”.

9. Q: Why do I get an "err" message when registering my prox badge?
   A: The badge has already been registered to another User ID or the badge could be defective.

10. Q: Why do I get an "err" message when swiping my prox badge?
    A: Check to make sure the badge is registered.

11. Q: Can my clock calculate the pay period total?
    A: No. The ATR360 does not offer time total calculation.

12. Q: Why does the clock keep rejecting the time card?
    A: Check to see if the correct side of the Time Card is inserted. If Time Card Recognition is turned on your Monthly Time Card must be inserted with the current date on the front side. If you are using a Weekly Time Card make sure Time Card Recognition is turned off.

13. Q: Why didn’t the time recorder setting I changed not work?
14. Q: Why is my clock printing on the wrong row?
   A: - Make sure the date is set correctly.
       - Make sure the “End of Day” time is set correctly.
       - For Weekly pay periods make sure the "End Day of Pay Period" is set correctly.
       - Make sure the Pay Period type is set correctly.

15. Q: I can’t get my clock to print for any employees. It just keeps giving an “err” message.
   A: Make sure the display time is synchronized to the RTC time.

For more info on troubleshooting or general “how to” info go to:
   http://support.acroprint.com

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**Maintenance**

**Replacing the Ribbon Cassette**

1. Open clock cover. Press “P3” to move the print head to the center of the clock so that the ribbon cassette can be more easily accessed.
2. Pull the ribbon holder tabs towards you to unlock the ribbon cassette and use the handle on top of the ribbon to pull the cassette out.
3. Insert replacement ribbon. Make sure to feed the ribbon over the black ribbon guide and slide the ribbon down between the guide and the silver print shield. Push the ribbon down until it clicks into place. Turn the ribbon winding knob clockwise to remove any slack in the ribbon.
Replacing the Circuit Board Batteries

The ATR360 is equipped with (2) CR2032 3v Lithium Coin Cell batteries: one battery is on the Main board and the other is on the Display board. The batteries should last approximately 1.5 to 2 years under normal operating conditions. Do not attempt to replace these batteries as it will void your warranty. If your clock is already out of warranty you can attempt to replace the batteries yourself but note that you could damage the boards if you short out any components on the circuit board. Avoid using metal objects to remove the batteries.

Note: All Time Recorder settings will be reset to factory defaults as soon as the Main board battery is removed.

1. Unplug clock.
2. Remove the front cover and the two screws that connect the front and back case. Remove the front case and lay it flat being careful not to pull any wires or cables loose.
3. To remove batteries press the metal retaining clip away from the battery. The battery should pop up. It may be necessary to use a small probe to pop the battery out.
4. Replace the batteries and re-assemble clock.
Installing the Operational Battery Pack

First unplug the clock. The door to the battery pack compartment is located on the bottom edge of the back of the clock. Remove the screw that secures the door. The door may be tightly fitted. Insert a thin knife blade under the bottom of the door at the screw end and rotate the blade to open the door.

Insert Blade Here

Connect the battery cable to the connector on the left side of the compartment. Note that the two ridges on the side of the battery connector should be facing down to line up with the slots in the clock’s power connector. Turn the battery so that the cable connection is on the bottom. Insert the battery pack into the clock with the wires inserted into the opening in the side of the compartment. This is important since the battery door can’t be attached if the battery is sitting on top of the wires. You may need to use a pencil or screwdriver to push the wires into the opening. Attach the door by inserting the door tabs into the left side of the compartment and firmly rotating the door into place. If the door won’t close check to make sure the wires aren’t under the battery. Plug in the power supply once the battery door is secure. The ATR360 should be plugged in for 12 hours to fully charge the battery pack.
**Cleaning the ATR360**

Do not use cleaning products that contain alcohol or other strong chemicals as they could discolor or crack the terminal housing. Use a soft damp cloth to remove dirt. Wipe dry.

**Cleaning the Fingerprint Sensor**

**Caution:** Do not use any cleaners on the sensor or it could be damaged.

If there is a fingerprint overlay on the fingerprint sensor you can do a quick clean by lightly pressing a small strip of adhesive tape to the overlay and then slowly peel it off to remove dust & dirt particles. You can also remove it and clean it with soapy water then rinse and dry and re-attach to the sensor.

Clean the fingerprint sensor glass as follows:

1. Use a can of compressed air to blow off any loose dust or dirt particles on the sensor.

2. Use a soft, lint free non-abrasive dry cloth to wipe the sensor surface. Be careful not to scratch the surface of the sensor. If there are lint particles on the sensor surface, use clear adhesive tape to remove particles. Place the clean overlay over the sensor glass (if applicable).
Appendix

Connecting External Signal Devices (Bells & Horns)

The connections for an external signal device (bells, horns, buzzers, chimes, etc) are made via a 2-wire Green terminal block on the back of the clock above the power jack. Connections are made by pressing the orange wire release tabs below each wire hole, fully inserting the wire and releasing the clip. Gently pull on the wires to make sure they are firmly secured in the terminal block.

In order to use a bell or horn a relay is required. Please call Acroprint or your Dealer to order the relay (PN 01-0230-000).

When a signal is activated by the clock the internal contacts of the relay close and complete the circuit. These internal contacts are "dry" and supply no voltage. Voltage applied to these contacts must not exceed 30 volts. The relay then activates the 120v external signal device such as:

- 65-0103-000  "Grille Horn"
- 65-0104-000  "4-1/4" Bell"
- 65-0105-000  "8" Bell"

For more information about connecting an external signal device using a relay go to

http://support.acroprint.com

Under “Time Clocks & Document Stamps” click on “ATR360 Time Clock” in the drop down menu and download 06-0346-000 “Connecting an External Signal Device”.
Wall Mounting Instructions
The ATR360 can be placed on a table or desk and it can also be mounted to a wall. A mounting template is included with the documents for the ATR360. If you misplace the template you can download it at:

http://support.acroprint.com

Under “Time Clocks & Document Stamps” click on “ATR360 Fingerprint Clock” in the drop down menu.

Follow the instructions on the template to mount the clock.

Fingerprint Privacy
1. The ATR360 merely captures points of the fingerprint but not the actual fingerprint image.
2. The fingerprint points cannot be used to create a fingerprint image.
3. Acroprint will not be liable for any direct or indirect damages resulting from the use or inability to use the clock.
4. If you have a question about privacy concerning the use of the clock you should have your employer contact Acroprint.
## Supplies, Parts & Accessories

<table>
<thead>
<tr>
<th>Part#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-0230-000</td>
<td>24 Volt Switching Relay Kit</td>
</tr>
<tr>
<td>01-0270-000</td>
<td>ATR360 Biometric/Proximity Time Recorder</td>
</tr>
<tr>
<td>01-0270-001</td>
<td>ATR240 Time Recorder</td>
</tr>
<tr>
<td>06-0400-000</td>
<td>ATR360 User Manual (available on web)</td>
</tr>
<tr>
<td>06-0400-001</td>
<td>ATR240 User Manual (available on web)</td>
</tr>
<tr>
<td>06-0401-000</td>
<td>Mounting Template (available on web)</td>
</tr>
<tr>
<td>09-7000-000</td>
<td>ATR241 Weekly Time Card (pack of 250)</td>
</tr>
<tr>
<td>09-7001-000</td>
<td>ATR241 Monthly Time Card (pack of 250)</td>
</tr>
<tr>
<td>14-0126-000</td>
<td>Proximity Badges (pack of 15)</td>
</tr>
<tr>
<td>39-0135-000</td>
<td>ATR242 Red/Black Ribbon Cassette</td>
</tr>
<tr>
<td>45-0182-000</td>
<td>ATR240/360 Case Keys (set of 2)</td>
</tr>
<tr>
<td>45-0183-000</td>
<td>125 kHz RFID Key Fob (Pack of 15)</td>
</tr>
<tr>
<td>56-0135-000</td>
<td>18v DC Power Supply (w/removable plug)</td>
</tr>
<tr>
<td>58-0114-000</td>
<td>ATR240/360 Operational Battery Pack</td>
</tr>
<tr>
<td>58-0111-000</td>
<td>CR2032 3v Lithium Coin Cell Battery</td>
</tr>
<tr>
<td>64-0103-000</td>
<td>Grille Horn, 120vAC 50/60Hz</td>
</tr>
<tr>
<td>64-0104-000</td>
<td>4-1/4&quot; Bell, 120vAC 50/60Hz</td>
</tr>
<tr>
<td>64-0105-000</td>
<td>8&quot; Bell, 120vAC 50/60Hz</td>
</tr>
<tr>
<td>75-0185-000</td>
<td>US Power Plug (for 56-0135-000)</td>
</tr>
<tr>
<td>75-0185-001</td>
<td>Euro Power Plug (for 56-0135-000)</td>
</tr>
<tr>
<td>75-0185-002</td>
<td>UK Power Plug (for 56-0135-000)</td>
</tr>
</tbody>
</table>

An updated list of accessories with pricing can be found on the web at: [www.acroprint.com](http://www.acroprint.com)
For your reference, fill out the information below and keep it in a safe place.

Model Number ________________________________________________

Serial Number ________________________________________________

Date Purchased ______________________________________________

Purchased From ______________________________________________

Location ____________________________________________________

Telephone Number ____________________________________________