



InTagral™ Plus

TIME & ATTENDANCE CLOCK



USER GUIDE

(REV. 1.0)



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TABLE OF CONTENTS

Chapter 1	Introduction	1-1
1.1.	About This User Guide	1-1
1.2.	Highlights and Benefits	1-2
1.3.	InTagral™ Plus Physical Description	1-3
1.3.1.	General View	1-3
1.3.2.	InTagral™ Plus Displays and Controls	1-4
1.4.	Supporting Software	1-6
1.4.1.	Communications Software – The ClockComm™ Application	1-6
1.4.2.	Data Management Software - The OnTime Pro™ Application	1-7
Chapter 2	Installation	2-1
2.1.	Getting Started	2-1
2.2.	Unpacking the Carton – Inventory Checklist	2-1
2.3.	Mounting the Time Clock in a Fixed Location	2-2
2.4.	Attaching Cables and Connections	2-2
Chapter 3	Set-Up and Configuration	3-1
3.1.	General	3-1
3.2.	InTagral™ Plus Normal-Display Screen	3-1
3.3.	Setting the Communications Method	3-3
3.3.1.	To specify the Communications Method	3-3
3.3.2.	To specify the <i>Direct</i> method of communications (through RS-232)	3-4
3.3.3.	To specify the <i>Modem</i> method of communications	3-4
3.3.4.	To specify the <i>TCP/IP</i> method of communications (Through LAN)	3-4
3.3.5.	To specify the <i>RS485</i> method of communications	3-5
3.3.6.	To specify the required <i>Baud Rate</i>	3-6
3.3.7.	To specify the <i>Query Server</i> communication data	3-6
3.4.	Supervisor ID Card	3-8
3.4.1.	Designating a Supervisor ID Card	3-8
3.4.2.	To view the Supervisor Menu	3-9
3.5.	Setting the Date and Time	3-9
3.5.1.	To set the date and time for InTagral™ Plus	3-9
3.6.	Configuring the Fingerprint ID Reader	3-10
3.6.1.	To activate the Fingerprint ID option	3-11
3.6.2.	To deactivate the Fingerprint ID option	3-11
Chapter 4	clock operation	4-1
4.1.	Routine Operations	4-1
4.1.1.	Clocking In and Out	4-2
4.1.2.	Temporarily Changing the In/Out Status	4-4
4.2.	The Employee Menu	4-8
4.2.1.	To access the Employee Options Menu	4-8
4.2.2.	Missing Punches	4-9
4.2.3.	In/Out List	4-9

4.3.	The Supervisor Menu	4-10
4.3.1.	To view the Supervisor Menu	4-11
4.3.2.	Who is in?	4-12
4.3.3.	Clock Setup	4-12
4.3.4.	Reset Clock	4-13
4.3.5.	Comm. Setup	4-14
4.3.6.	Badge Identify	4-15
4.3.7.	Fingerprint ID	4-16
4.3.8.	Erase Clock Data	4-26

Chapter 5 Appendixes..... 5-1

5.1.	Technical Specifications	5-1
5.2.	Error Messages	5-4
5.3.	Keypad Function Key Settings	5-5
5.4.	Door Opening Mechanism	5-6
5.5.	Safety Precautions	5-7
5.6.	InTagral Light\Plus External reader installation instructions	5-8
5.6.1.	Visible Installation	5-9
5.6.2.	Invisible Installation	5-10
5.6.3.	Important notes about the installation	5-10

LIST OF FIGURES

Figure 1-1:	InTagral™ Plus Clock Display	1-3
Figure 3-1:	Normal Display Screen	3-1
Figure 3-2:	Comm Setup Menu Screen	3-3
Figure 3-3:	Ethernet Setup Menu Screen	3-4
Figure 3-4:	Baud Rate Screen	3-6
Figure 3-5:	Service Parameters Screen	3-6
Figure 3-6:	Supervisor Menu Screen	3-8
Figure 3-7:	Clock Setup Screen	3-9
Figure 3-8:	Current Date Screen	3-10
Figure 4-1:	Normal-Display Screen	4-1
Figure 4-2:	Clock In Confirmation Screen	4-3
Figure 4-3:	Clock Out Confirmation Screen	4-4
Figure 4-4:	Employee Options Menu– Authorization Request Screen	4-8
Figure 4-5:	Employee Options Menu Screen	4-8
Figure 4-6:	Supervisor Menu Tree	4-10
Figure 4-7:	Supervisor Menu Screen	4-11
Figure 4-8:	Who Is In Table Screen	4-12
Figure 4-9:	Badge Identify Authorization Request Screen	4-15
Figure 4-10:	Badge Identify Screen	4-15
Figure 4-11:	One to One Main Screen	4-16
Figure 4-12:	One to Many Main Screen	4-17
Figure 4-13:	Fingerprint options Menu Screen	4-18
Figure 4-14:	Add Fingerprint Screen	4-19
Figure 4-15:	Add Fingerprint Edit Screen – Put Finger	4-19

Figure 4-16:	Add Fingerprint Edit Screen – Put Another Finger	4-20
Figure 4-17:	Test Fingerprint Menu Screen	4-21
Figure 4-18:	Test Fingerprint Verification Request.....	4-21
Figure 4-19:	Delete Fingerprint Screen	4-23
Figure 4-20:	Delete All Screen	4-24
Figure 4-21:	All Fingerprints deleted Confirmation Screen.....	4-24
Figure 4-22:	Calibrate Sensor Screen	4-25
Figure 4-23:	Calibrate Sensor Confirmation Screen.....	4-25
Figure 4-24:	PC Backup Reminder Screen.....	4-26
Figure 4-25:	Erase All Data Request Screen.....	4-27
Figure 5-1:	Door Opening Mechanism Diagram	5-6

Chapter 1

INTRODUCTION

1.1. ABOUT THIS USER GUIDE

Welcome to the **InTagral™ Plus Automated Time and Attendance Clock** User Guide by Micronet Ltd.

With this guide, you will learn to install, configure, and operate the InTagral™ Plus time clock. InTagral™ Plus is designed to give your organization sophisticated time and attendance functionality, with consistent ease of use for employees and management alike.

The InTagral™ Plus User guide is intended for personnel responsible for setting up and managing the InTagral™ Plus time clock, as well as for those who use InTagral™ Plus for routine operations.

The User guide is divided into five sections.

- 1. Introduction** – Provides introductory information about InTagral™ Plus. This information includes a physical description, displays and controls description, and a description of the clock's general purposes and uses.
- 2. Installation** – Provides detailed instructions for installing the InTagral™ Plus time clock. This section describes the different options of communicating with the host PC.
- 3. Set-Up and Configuration** – Explains how to configure operating parameters for InTagral™ Plus. Functions can be defined using the Supervisor menu on the time clock, in conjunction with a communications program running on the host PC that is part of the InTagral™ Plus system. You determine the particular conditions of your setup, such as card types, authorized employee users, and the way that the time clock communicates with other devices for processing time and attendance data.
- 4. Clock Operation** – Explains how your organization's employees and supervisors use InTagral™ Plus in their day-to-day routines.
- 5. Appendixes** – Provides supplementary technical information.

NOTE

*Throughout this document, the term 'time clock' refers to the **InTagral™ Plus Time and Attendance Clock** from Micronet Ltd., unless noted otherwise.*

1.2. HIGHLIGHTS AND BENEFITS

InTagral™ Plus is a fully integrated, digital time and attendance clock system that uses advanced technology to provide medium to large-size organizations with low cost, trouble-free employee attendance monitoring. Employees can update InTagral™ Plus by means of RF (radio frequency) based identification tags, as well as conventional magnetic strip and bar code employee ID tags.

InTagral™ Plus offers a full range of integrated management features such as project management, local and remote messaging and access control. Data collected by InTagral™ Plus is pre-formatted for automated data transfer to corporate departments such as human resource management and payroll. In addition, InTagral™ Plus provides further critical office control functions such as physical office access control and activation of alarm systems.

The time clock is powered by a conventional electrical wall outlet power source. A backup battery allows the time clock to operate for up to 4 hours in the event of power outage. In addition, an internally mounted lithium battery that is independent of the power source protects internal digital data for an extended period of time.

1.3. INTAGRAL™ PLUS PHYSICAL DESCRIPTION

1.3.1. General View

Figure 1-1 illustrates the InTagral™ Plus clock, with a description of each of its components.

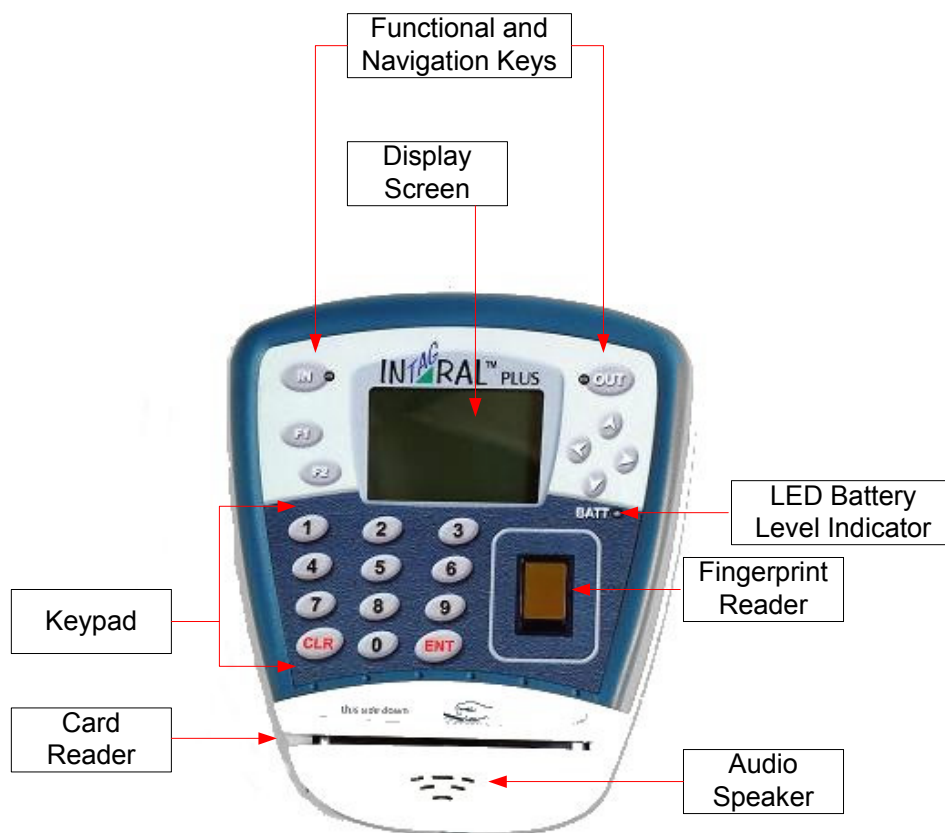


Figure 1-1: InTagral™ Plus Clock Display

1.3.2. InTagral™ Plus Displays and Controls

Table 1-1: InTagral™ Plus Displays and Controls

TIME CLOCK COMPONENT	DESCRIPTION
Display Screen	The Display Screen displays alphanumeric information for standard Employees and the Time Clock Supervisor. The Display Screen can display up to 8 rows of text, with a maximum of 21 alphanumeric characters per row. The display is backlit so that it can be viewed clearly under most lighting conditions.
Keypad	<p>The keypad consists of 12 function keys. Keys 1 through 9 allow you to enter numeric information.</p> <p>The remaining two keys, CLR and ENT, are at the bottom of the keypad. The CLR key returns you to the main time clock screen. [ENT] is for confirming an item selected by the user from a menu of options, and for returning an affirmative (YES) answer to a prompting question presented by the time clock.</p>
Function and Navigation Keys	<p>Eight keys at the top of InTagral™ Plus allow you to enter special functions and navigate commands in the menus that appear on the Display Screen.</p> <ul style="list-style-type: none"> • The IN key is for changing the clock's current status to Entry time. • The OUT key is for changing the clock's current status to Exit time. • The F1 key displays a menu of additional options and/or functions. • The F2 key (if selected) displays a list of the active projects. <p>The arrow keys (▲ ▼ ◀ ▶) are for screen navigation. The up and down arrows are for scrolling up and down a list. The right and left arrows take the cursor to the beginning or end of the list respectively.</p>
LED Indicators	<p>There are three LED indicators on the face of the time clock.</p> <ul style="list-style-type: none"> • The IN key LED indicator flashes to show that the time clock currently in IN mode. • The OUT key LED indicator flashes to show that the time clock currently in OUT mode. <p>The BATT LED flashes when the backup battery is low.</p>

InTagral™ Plus
Time & Attendance Clock



<i>Card Reader</i>	<p>The Card Reader detects and reads employee ID information from employee ID cards.</p> <p>For magnetic and bar code cards, employees must slide their ID card through the slot in the Card Reader with the magnetic strip facing down as shown on the Card Reader.</p> <p>If your organization uses RF (Proximity) employee cards, employees need only place their cards in front of the Card Reader a few centimeters away from the surface of the time clock.</p>
<i>Fingerprint Reader</i>	<p>An optional Fingerprint Reader adds another level of security for screening individuals attempting to gain access to an organization's premises.</p> <p>Supervisors are responsible for initially entering an Employee's fingerprint into the time clock's memory. As part of the recording process, an Employee places either the thumb or index finger facing upward over the Fingerprint Reader area on the time clock.</p> <p>To use the fingerprint identification feature, an Employee first slides his or her employee ID card through the Card Reader. When the time clock indicates, the employee must place the same index finger originally used to record the record over the Fingerprint Reader. InTagral™ Plus reads the employee's fingerprint information and compares it with the image stored in the time clock's memory.</p> <p>Only if the Employee's fingerprint matches that stored in InTagral™ Plus will the Employee card be verified. In the case of the optional door control function the door will then be opened.</p>
<i>Audio Speaker</i>	<p>Sounds a single-toned signal to indicate that operations have been carried out. In the event of an error, the time clock sounds a multi-toned signal.</p>

1.4. SUPPORTING SOFTWARE

Micronet Ltd. has two main software applications that support the InTagral™ Plus Time Clock. They are described in the following paragraphs.

1.4.1. Communications Software – The ClockComm™ Application

InTagral™ Plus comes with **ClockComm™**, a sophisticated time and attendance clock communications application that enables InTagral™ Plus to communicate with other devices in a variety of ways. InTagral™ Plus can be integrated with PCs for purposes of management and control in the following ways:

- Direct Connection from the Time Clock to the Host PC
- Standard Modem or Internal Modem (GPRS)
- RS485-based Network
- TCP/IP (Internet)

The ClockComm application is described in detail in the "**ClockComm Communications Module User guide**", included in the InTagral™ Plus package.

In order to perform configuration and monitoring of the time clock, you make use of a Host Computer connected to the time clock by one of the clock's communication options.

Installing the communications module software to the Host Computer and defining and configuring communications options are described in detail the "**ClockComm Communications Module User guide.**"

1.4.2. Data Management Software - The OnTime Pro™ Application

OnTime Pro™ is an optional software package developed by Micronet Ltd. that runs on a standard Personal Computer. OnTime Pro works with the time clock to provide a full range of professional attendance monitoring services, using the time and attendance data recorded by InTagral™ Plus. Examples of OnTime Pro's features are:

- Three Levels for Handling Employee Overtime
- Flexible Rounding Rules
- Automatic Crediting or Debiting of Break Time

With OnTime Pro, you can export attendance data processed according to user-defined rules to external Payroll applications.

For a full explanation of how to install, configure and operate OnTime Pro refer to the "***OnTime Pro Time and Attendance Application User guide.***"

Chapter 2

INSTALLATION

This section is directed to a new user of Micronet time clocks. It provides detailed instructions for unpacking and installing the InTagral™ Plus time clock.

2.1. GETTING STARTED

If you have experienced installing and using Micronet time clocks such as InTagral™ and InTagral™ Light, and would like to begin using InTagral™ Plus immediately, see the pamphlet entitled "**Getting Started With InTagral™ Plus**".

NOTE

For more detailed information about installing the time clock, review the following chapters of this User guide in detail.

2.2. UNPACKING THE CARTON – INVENTORY CHECKLIST

The InTagral™ Plus carton contains the following items:

- The time clock
- Docking station (cradle) and 2 white plastic keys

NOTE

- *InTagral™ Plus also offers various optional accessories, such as Communications cable, 12V Power Adaptor, and Twenty-five personal-employee-ID-cards.*
- *To obtain extra cards, contact your local Micronet distributor.*

2.3. MOUNTING THE TIME CLOCK IN A FIXED LOCATION

1. Select a place on the wall and mark the location of the four wall-anchoring studs.
2. Attach all the required wires and cables to the wall cradle.
3. Secure the wall cradle to the wall with the screws supplied. Tighten the screws firmly into their studs until the cradle is flush against the wall.
4. Mount the time clock on its cradle, using the hooks on the back of the clock to latch the lock into place.
5. The LCD screen displays the time of day in 12-hour (AM-PM) format. Verify that the time clock displays the correct local time. If not, you must adjust the time clock's time before use.

2.4. ATTACHING CABLES AND CONNECTIONS

Depending upon how you plan to have InTagral™ Plus installed and configured at your location, you will want to connect the time clock to one or more peripherals or communications devices or systems.

For further information about defining the appropriate communications configuration for your workplace refer to the "***ClockComm Communications Module User guide***".

Chapter 3

SET-UP AND CONFIGURATION

3.1. GENERAL

Basic configuration of the InTagral™ Plus time clock is done using the function keys and the instructions shown on the LCD Screen on the front of the time clock.

The supervisor is responsible for configuring InTagral™ Plus. The Supervisor's Menu allows access to all parameters that require configuring, as well as to operation and monitoring options.

3.2. INTAGRAL™ PLUS NORMAL-DISPLAY SCREEN

After completing the described installation steps, the clock's LCD displays the Normal-Display screen. This is the screen that is displayed during the clock's idle time (waiting for transactions). The Normal-Display screen is shown in the following illustration:

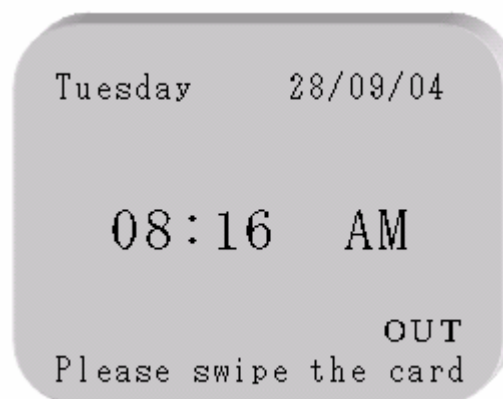


Figure 3-1: Normal Display Screen

NOTE

If the Normal-Display screen does not appear, a DOS prompt (' A> ') appears on the screen. In this case, reboot the internal clock software by performing the following steps:

1. Click **1**, followed by **[ENT]**. The boot screen is displayed.
2. Click 1. **RUN**.
3. Click 2. **Boot from A**. The Main Screen is displayed.

NOTE

Each time Supervisors and Employees make use of the clock during their day-to-day activities, the clock will automatically return to the Normal-Display screen after a few idle seconds.

3.3. SETTING THE COMMUNICATIONS METHOD

A Supervisor can configure the time clock Communications Method directly from the InTagral™ Plus unit. The Communications Method is the method that the time clock uses to send data for processing and reporting.

3.3.1. To specify the Communications Method

1. Slide a Supervisor Card through the Card Reader at the bottom of the time clock. The Supervisor Menu is displayed.

NOTE

Until you have designated an Employee ID Card as the Supervisor Card (see Paragraph 3.4.1.1), you may use any of the cards provided with the time clock to access the Supervisor menu. Once you have designated a particular card as the Supervisor card, only the individual making use of this card can access the Supervisor menu.

2. Click 4. The Comm Setup menu is displayed.

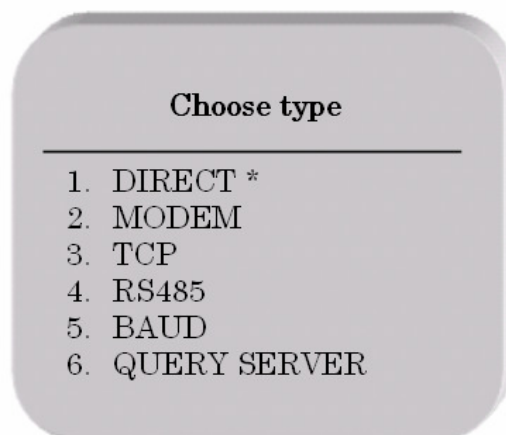


Figure 3-2:Comm Setup Menu Screen

The asterisk (*) to the right of the options designates which Communications Method is currently in effect.

3.3.2. To specify the *Direct* method of communications (through RS-232)

Click **1** to specify **Direct**. The Display Screen returns to displaying the Supervisor menu,

3.3.3. To specify the *Modem* method of communications

1. Click **2** to specify **Modem**.
2. The Display Screen goes blank, and the time clock sounds a short, high-pitched sound. The word '**WAIT**' is displayed on the screen for a short moment. The time clock is now checking for proper connection with the modem.

NOTE

In the event that there is a problem with the connection, the time clock displays an error message. In such a case, you must verify that the modem is working properly. When the communication connection is working properly, the Screen Display shows the Normal Display.

3. Press **[ENT]**. The Communications Method is now set to Modem, and an asterisk (*) symbol follows the MODEM option in the **Select Type** menu.

3.3.4. To specify the *TCP/IP* method of communications (Through LAN)

1. Click 3 to specify TCP. The **Ethernet Setup** menu is displayed.

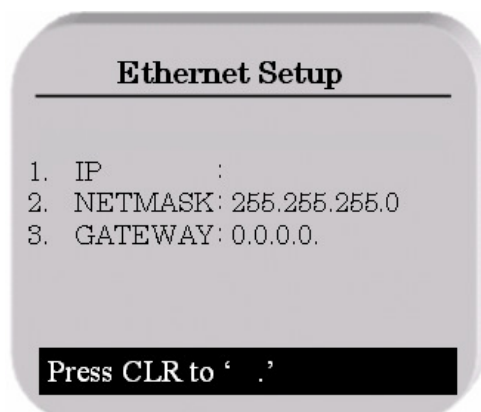


Figure 3-3: Ethernet Setup Menu Screen

NOTE

In the case where you have chosen to use the TCP Communications Method, you must consult your organization's Systems Administrator, who will provide you with your network IP address and the Netmask and Gateway settings if they differ from the default values. The fields in which you can enter data blink, indicating they can be changed.

2. Click 1 to define the time clock IP address. Change options 2 and 3 if necessary, in accordance with your System Administrator's instructions.
3. Using the arrow keys to navigate, select the appropriate numeric keys to enter the proper specifications. To enter a decimal point ('.') select **[CLR]**.
4. Press **[ENT]** to enter the settings to the time clock. The Communications Method is now set to **TCP**, and an asterisk (*) symbol now appears directly after the TCP option of the Select Type menu.

NOTE

If you do not have a LAN cable properly connected the time clock, the Display Screen displays the following message:

LAN Cable Not Connected.

3.3.5. To specify the RS485 method of communications

Click 4 to specify RS485. The Display Screen returns to displaying the Supervisor menu,

3.3.6. To specify the required *Baud Rate*

1. Click 5 to specify BAUD.
2. a list of available options is displayed. Select the required Baud Rate from the list.
Available Options are: **115200, 57600, 38400, 19200, and 9600** Baud.

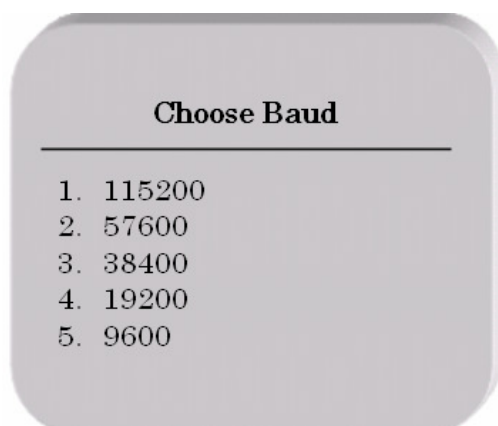


Figure 3-4: Baud Rate Screen

3.3.7. To specify the *Query Server* communication data

1. Click 6 to specify QUERY SERVER. The **Server Params.** Menu is displayed.

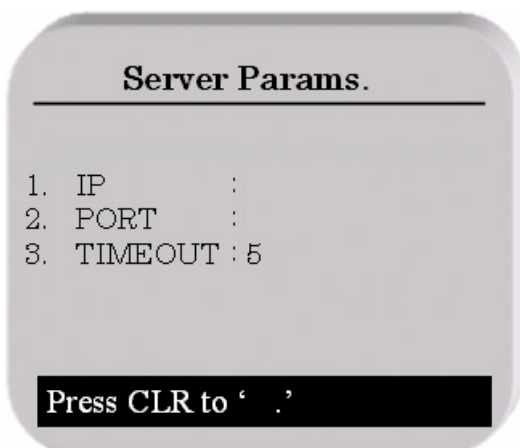


Figure 3-5: Service Parameters Screen

NOTE

Please consult your organization's Systems Administrator, who will provide you with the server's network IP address. The fields in which you can enter data have a blinking cursor indication.

2. Click 1 to define the time clock **IP** address in accordance with your System Administrator's instructions.
3. Using the arrow keys to navigate, select the appropriate numeric keys to enter the proper specifications. To enter a decimal point ('.') select **[CLR]**.
4. Press **[ENT]** to enter the settings to the time clock.
5. To specify the **PORT** data (the Query Server's Communication Port) click 2 and then enter the required Port number (usually a number between 5000 and 65535). The default Port number of both the clock and the Query Server is 5010.
6. Press **[ENT]** to enter the settings to the time clock.
7. To set the **TIMEOUT** data (the number of seconds the clock waits for communication with the Query server before announcing an error), click 3, then specify the number of seconds.
8. Press **[ENT]** to enter the settings to the time clock.

NOTE

*For further information about Communications Methods, refer to the "**ClockComm Communications Module User guide**"*

3.4. SUPERVISOR ID CARD

3.4.1. Designating a Supervisor ID Card

In order to access the Supervisor Menu and its functions on an ongoing basis, you must make use of an ID card that has been designated as a Supervisor Card.

3.4.1.1. To designate an ID card as a Supervisor Card

1. Select an ID card that you want to designate as the Supervisor Card.
You may assign up to three Supervisor Cards.

NOTE

All cards are provided from the factory with a default designation as Supervisor Cards. When you assign each card to a specific employee, the cards no longer will have Supervisor status.

2. Slide the card through the card reader at the bottom of the time clock.
The Supervisor Menu is displayed.

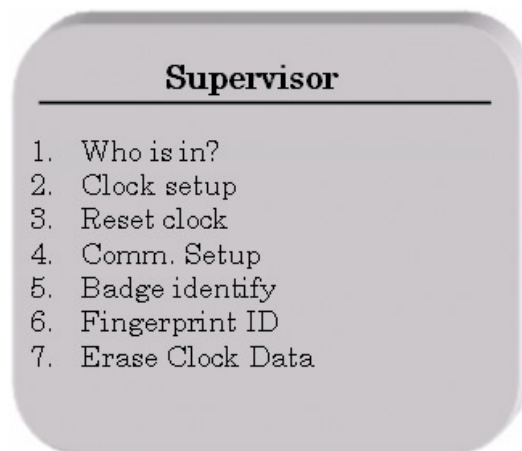


Figure 3-6:Supervisor Menu Screen

3. Click **5** on the time clock keyboard to select the Badge identify option to identify the number of an ID card, and slide the card you have selected as the Supervisor Card through the Card Reader. The card's unique number is displayed on the time clock screen.
4. Using the PC, type the complete, 6-digit identified card number into the **Master Card** field of the Card Definition page of the **ClockComm** application. This number now designates the Supervisor Card to the system.
5. Click the **Set Clock** button in the Card Definition page. The Supervisor Card is saved to the time clock.

NOTE

*For detailed information about the host PC and its functions, refer to the "**ClockComm Communications Module User guide.**"*

3.4.2. To view the Supervisor Menu

Slide an ID card that you have previously designated as a Supervisor Card through the Card Reader at the bottom of the clock. The Supervisor menu is displayed (see Figure 3-6).

3.5. SETTING THE DATE AND TIME

InTagral™ Plus is preset at the factory with the local time and date. Nevertheless, you may need to change the current system date and/or time stored in and displayed by InTagral™ Plus.

3.5.1. To set the date and time for InTagral™ Plus

1. Slide a Supervisor Card through the Card Reader at the bottom of the time clock. The Supervisor Menu appears on the Display Screen.
2. Click 2. The **Clock Setup** screen is displayed.

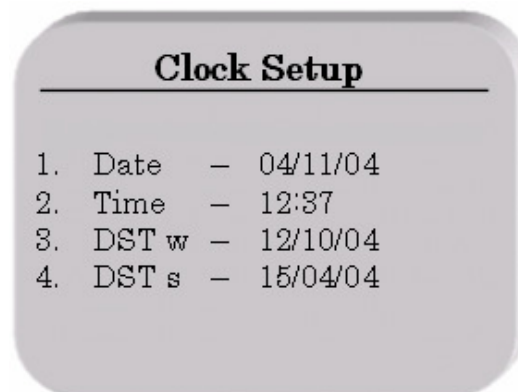


Figure 3-7:Clock Setup Screen

3. From the **Clock setup** menu, click 1 to specify the current date. The Current Date screen is displayed.



Figure 3-8:Current Date Screen

4. The first 'D' within the two-character Day field of the complete DD/MM/YY that is displayed as the last row of the screen blinks, indicating that it can be changed. Select the numeric keys on the keyboard to set each date character, one key for each digit you enter.

NOTE

The arrow keys (▲ ▼ ◀ ▶) can also be used to navigate from character to character.

5. When you have entered the current date, Press **[ENT]** to set the date in the system. (If the date is incorrect format, a beep will sound, and the screen cursor will return to the beginning of the character date field.) Verify that you have set the new date properly by viewing it displayed on the main screen.
6. From the Clock Setup screen, set the following parameters:
 - **Time** – click **2**.
 - **DST w** (Daylight Saving Time beginning date) – click **3**.
 - **DST s** (Daylight Saving Time ending date) – click **4**.

These parameters should be set in the same way you set the current date. The internal clock times used for calculations are now set.

3.6. CONFIGURING THE FINGERPRINT ID READER

The Fingerprint ID function works in conjunction with the Fingerprint ID Reader, an optional feature of the time clock that adds an extra level of security to the functions InTagral™ Plus.

If your time clock includes a Fingerprint ID reader, you have the option of activating the Fingerprint ID option and adding Employee finger print records to the time clock's memory.

3.6.1. To activate the Fingerprint ID option

1. From the ClockComm application running on the Host PC, click the **Configure** button. The ClockComm main window opens.
2. Click the **Clock Options** folder tab. The Clock Options folder opens.
3. In the **Finger Print** area, select the **Use Finger Print** option. A check mark now appears in the check box to the immediate left of this option, indicating that the option is selected.
4. Click the **Set Clock** button. The Fingerprint ID function is now active.

NOTE

For further information about using the Host PC to configure InTagral™ Plus, refer to the "ClockComm Communications Module User guide" and the "OnTime Pro Time and Attendance Application User guide".

3.6.2. To deactivate the Fingerprint ID option

1. From the ClockComm application running on the Host PC, select the **Configure** button. The ClockComm main window is displayed.
2. Select the **Clock Options** folder tab. The Clock Options folder is displayed.
3. In the **Finger Print** area, clears the check mark from **Use Finger Print** check box by selecting the option.
4. Select the **Set Clock** button. The Fingerprint ID function is now inactive.

Managing the fingerprint images used by InTagral™ Plus for identifying and authorizing Employees is done through the time clock and a connected Host PC (see Paragraph 4.3.7)

Chapter 4

CLOCK OPERATION

This section describes how Employees and Supervisors use the InTagral™ Plus time clock for day-to-day use, as well as for ongoing maintenance operations.

General operations begin with the time clock operating normally and showing the Main Screen display:

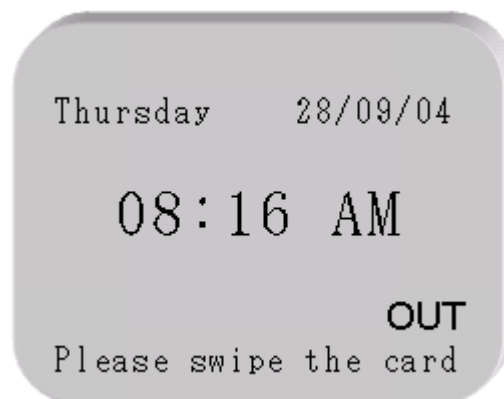


Figure 4-1: Normal-Display Screen

4.1. ROUTINE OPERATIONS

According to the settings that the Administrator has determined in the configuration process, the clock will function in one of the following modes:

- **In and Out** – the time clock shows a Normal Display of IN or OUT for the specific hours defined by the System Administrator.
- **Swipe and Go** - no status cue is displayed. The first transaction is recorded as in, and the second transaction is recorded as out.
- **Save Mode** – the time clock retains the value, whether in or out, of the card most recently passed through the Card Reader.
- **Projects** – The time clock records time by the projects you specify. The Normal Display shows the current project title.

NOTES

- *The System Supervisor is responsible for setting how the time clock records time. If the time clock is set to record time according to project, only the Supervisor can unlock the clock from Project status.*
- *In some configurations of InTagral™ Plus, the time clock, in addition to recording the employee's time of arrival, controls the door lock mechanism that actually allows the employee to enter your offices. For detailed information about this feature refer to the **"OnTime Pro Time and Attendance Application User guide"**.*
- *Additionally, you can find more information about these possibilities in the **"ClockComm Communications Module User guide"**, in the section describing the use of the **Entry/Exit Tab**.*

4.1.1. Clocking In and Out

The primary function for which your organization's employees use the InTagral™ Plus time clock is clocking in and out. When employees arrive on your organization's premises, they slide their ID cards through the time clock Card Reader to indicate to the system the time they arrived.

4.1.1.1. To clock in

- 1 .Check to see that InTagral™ Plus is operational, is displaying the Main Screen.
2. If the green indicator light at the right of the **IN** Function Key is not yet flashing, select the **IN** Function Key. The IN green indicator now flashes.

NOTE

If the Time Clock is currently set to Swipe and Go status, the green light will not be lit.

3. Slide your valid Employee ID card through the Card Reader. The Display Screen a confirmation message of a successful clock in:

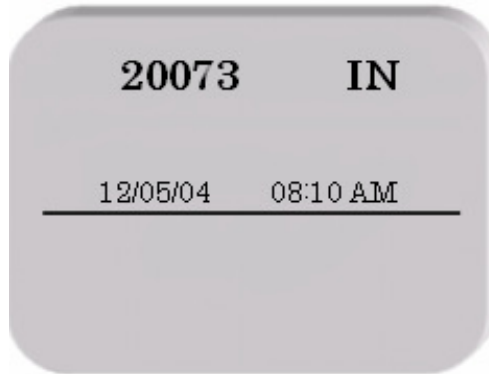


Figure 4-2: Clock In Confirmation Screen

The Display Screen displays the following information:

- ID card number
- Transaction type (in this case, IN)
- Date and the time of clocking in.

NOTE

The operator can enable or disable the time clock from checking if there are consecutive identical transactions.

4.1.1.2. To clock out

1. If the green indicator light at the left of the **OUT** Function Key is not yet flashing, select the **OUT** Function Key. The **OUT** green indicator now flashes.

NOTE

If the Time Clock is currently set to Swipe and Go status, the green light is not lit.

2. Slide your valid Employee ID card through the Card Reader. The Display Screen displays a message confirming that you have successfully clocked out.

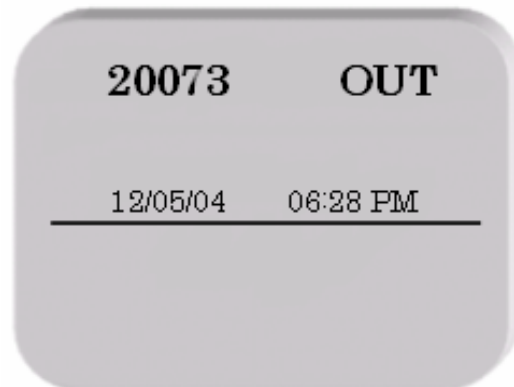


Figure 4-3: Clock Out Confirmation Screen

4.1.2. Temporarily Changing the In/Out Status

An employee may need to perform a clock in or clock out transaction that is different from the current status of the time clock. InTagral™ Plus indicates current In/Out status by blinking the green LED indicator light adjacent to the IN and OUT keys.

4.1.2.1. To temporarily alter the Time Clock's In or Out status

From face of the InTagral™ Plus clock, select the **IN** or **OUT** function key. The time clock is now operating in the **IN** or **OUT** status according to which function key you selected.

NOTE

*The default status of the time clock, or the time ranges for which the clock is in IN mode and OUT mode, is set using the **Host PC**. For further information, refer to the "**ClockComm Communication Module User guide**".*

4.1.3. Entering and Exiting Projects (OnTime Pro Extra only)

Building projects using the **OnTime Pro Extra**, and loading them to an InTagral Plus time clock, enables employees to associate an IN and OUT transaction with a specific project. This makes it possible for the organization to keep track of the amount of time invested in each project by every employee, as well as total amount of time worked on each project.

4.1.3.1. Entering a project

Before starting work on a specific project, employee must do the following:

- 1 Press the Functional Key (F1/F2) that was defined using the ClockComm application's Key Mapping function (see *Chapter 5 - Parameters* in the ClockComm User Manual) to present the available projects list. The following clock screen appears:



- 2 Swipe ID card. The following clock screen appears, displaying the list of available projects:



NOTES

- The displayed project list includes both Global projects, and projects that are associated with this specific employee
- The "+" sign to the right of a project indicates this employee's currently active project (appears only when this employee is registered as currently working on the marked project)

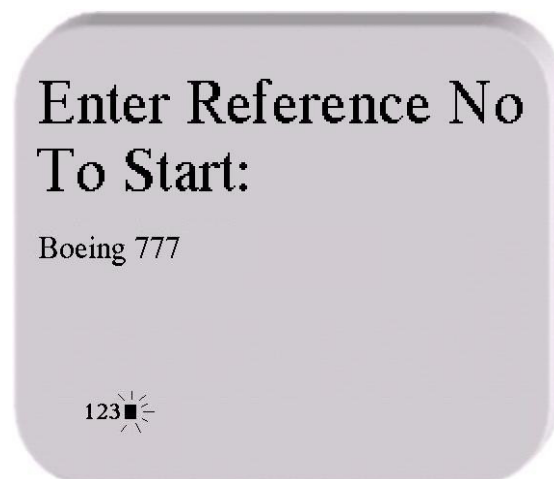
- 3 Navigate in the project list using the clock's arrow keys

- 4 Select required project (Sub-Projects and Missions are available only when using the OnTime Pro Extra application) by pressing the clock's **ENT** key

NOTE

It is also possible to select the required project by entering the numerical ID code (up to 4 digits) that was defined during the creation of the project.

- 6 If the Reference Number option is enabled in the selected project (see paragraph 8.3.2. *Add, Delete or Edit Projects* in the *OnTime Pro/OnTime Pro Extra User Manual*), the following screen appears, asking employee to enter the relevant reference number:



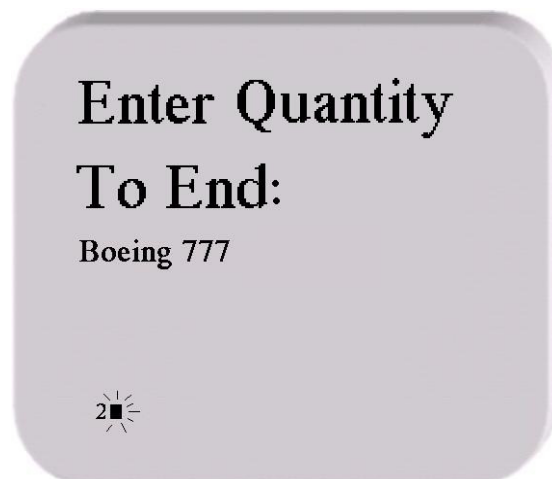
- 7 Enter relevant reference number
- 8 Employee is now registered as working on the selected project

4.1.3.2. Exiting a project

To exit a project do one of the following (choose appropriate exit method according to relevant situation, as described below):

- **Exit a project without assigning employee to different project:** Press the Functional Key (F1/F2) that was defined using the ClockComm application's Key Mapping function to present the available projects list. Then press the **OUT** key.
- **Enter a new project automatically (exits employee from current project):** Repeat steps 1 to 8 in paragraph 4.1.3 above.
- **Exit a project at the end of the workday:** Perform an OUT transaction.

Upon exiting a project in which the Quantity option is enabled (see paragraph 8.3.2. *Add, Delete or Edit Projects* in the *OnTime Pro/OnTime Pro Extra User Manual*), the following screen appears, asking employee to enter the number of items produced on the time worked on that project:



Enter quantity produced, then press the **ENT** button.

4.2. THE EMPLOYEE MENU

Employees, like Supervisors, have functions they can perform in addition to clocking in and clocking out. Employees access the Employee Options menu to select the function they want to perform

4.2.1. To access the Employee Options Menu

1. Select **[F1]** Function Key at the right side of the clock face. The Employee Options menu is displayed.

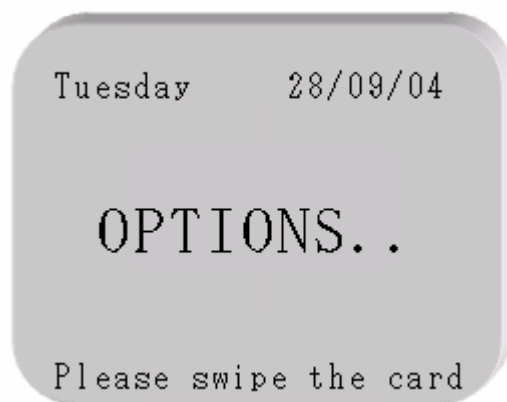


Figure 4-4:Employee Options Menu– Authorization Request Screen

2. Slide your Employee ID card through the Card Reader. The **Options** menu is displayed.

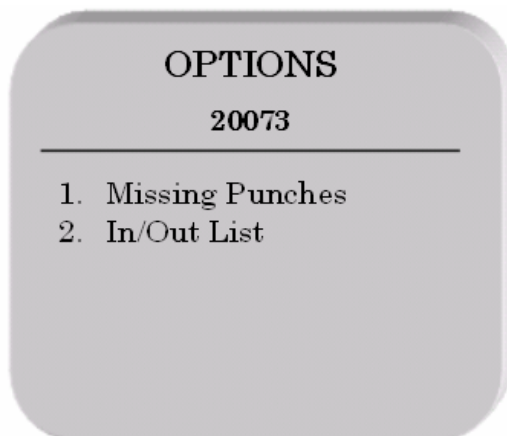


Figure 4-5:Employee Options Menu Screen

4.2.2. Missing Punches

The Missing Punches option displays a list of the Employee's missing punches for that day. A 'Missing Punch' occurs any time an Employee clocks in without performing a corresponding clock out process. A Missing Punch creates a situation where the clock has an incomplete record of the Employee's attendance.

NOTE

The Missing Punch list displays information relevant only to the specific Employee ID requesting the information.

4.2.3. In/Out List

The In/Out List option shows the Employee the record of the last few In and Out transactions carried out by the employee. The list is presented in reverse order, with the most recent transaction at the top of the list. The In/Out list includes the date, time and type of transaction (In or Out).

4.3. THE SUPERVISOR MENU

This section describes the operation and maintenance functions that a Supervisor performs using the Supervisor Menu.

NOTE

For further information about the supervisor Configuration capabilities and duties when setting up the time clock, see Chapter 3.

Figure 4-6 Illustrates the Supervisor Menu tree.

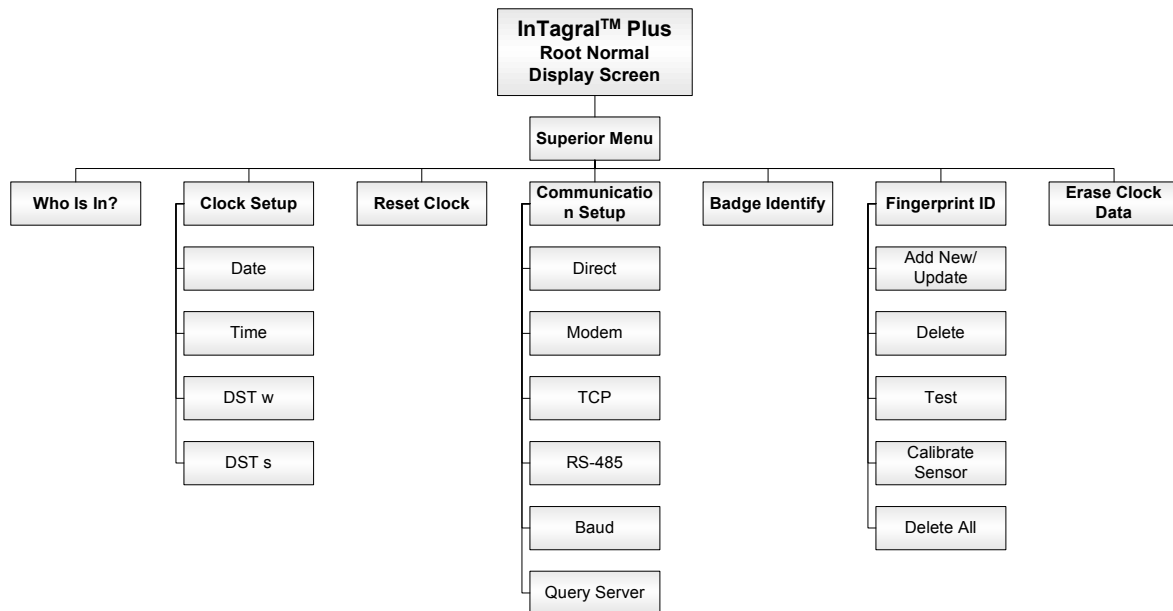


Figure 4-6:Supervisor Menu Tree

4.3.1. To view the Supervisor Menu

1. Slide an ID card previously designated as a Supervisor Card through the Card Reader. The Supervisor menu is displayed.

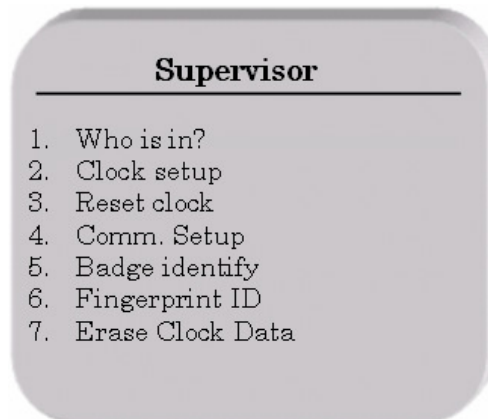


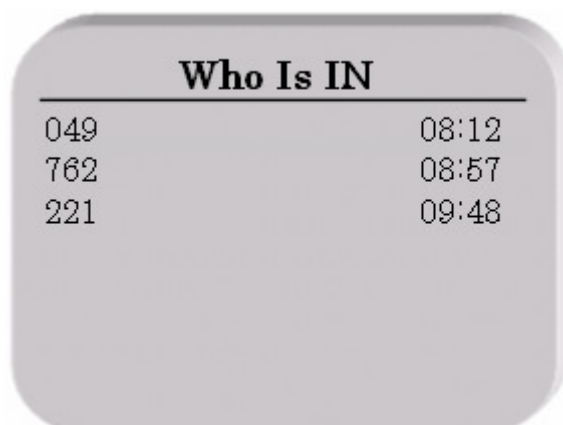
Figure 4-7: Supervisor Menu Screen

4.3.2. Who is in?

The **Who is in?** function is an on-demand feature with which a Supervisor can determine which Employees are currently listed by the system as being present at the organization.

TO DETERMINE WHICH EMPLOYEES ARE CURRENTLY PRESENT AT THE ORGANIZATION:

1. Slide a designated Supervisor Card through the Card Reader at the bottom of the clock. The Supervisor Menu is displayed (see Figure 4-7).
2. Click **1**. The Display Screen displays a table of the ID Card numbers of the currently present Employees and the time they entered the organization's premises.



Who Is IN	
049	08:12
762	08:57
221	09:48

Figure 4-8: Who Is In Table Screen

NOTE

Only those Employees who have not slid their cards through the Card Reader to indicate that they are leaving the your organization's appear in Who Is In list.

4.3.3. Clock Setup

The **Clock Setup** menu allows the operator to set the date and time configuration of the InTagral™ Plus clock. For detailed information on setting the date and time configuration, see Paragraph 3.5.

4.3.4. Reset Clock

The **Reset Clock** option allows you to reset of the time clock's internal clock software. This can prove useful if for any reason clock processing becomes suspended.

4.3.4.1. To reset the InTagral™ Plus internal software:

1. Slide a Supervisor Card through the Card Reader at the bottom of the clock. The Supervisor Menu is displayed (see Figure 4-7).
2. Click 3. The Display Screen goes blank, and the clock sounds a short, high-pitched sound to indicate that it is restarting. The word '**WAIT**' displays on the screen for a short moment, followed by the Normal Display screen. The time clock is now reset.

IMPORTANT

In the event that you encounter a processing halt such that the Time Clock does not respond when you slide the Supervisor Card through the Card Reader, you may have to perform a Warm System Restart.

4.3.4.2. Performing A Warm Restart of the Time Clock

To execute a Warm System Restart, perform the following:

1. Press and hold down the **Up Arrow** [^]+[6]+[ENT], and then release them together. The time clock restarts at the Main Menu.

4.3.5. Comm. Setup

The **Communication Method** menu allows the operator to set the communication method to one of the following:

- **Direct Method** – Sets communication through a direct RS-232 cable (see Paragraph 3.3.2 for configuration process).
- **Modem Method** – Sets communication through modem (see Paragraph 3.3.3 for configuration process).
- **TCP Method** – Sets communication through LAN (see Paragraph 3.3.4 for configuration process).
- **RS-485 Method** – Sets communication through RS-485 cable (see Paragraph 3.3.5 for configuration process).
- **Baud** – Sets the communication Baud rate. When setting the clock, the device matches an optimal Baud rate automatically (see Paragraph 3.3.6 for configuration process).
- **Query Server** – The InTagral™ Plus has the ability to communicate with a query server for online queries such as employee online permissions (see Paragraph 3.3.7 for configuration process).

For detailed information about setting the communication method, see Paragraph 3.3.

4.3.6. Badge Identify

The Badge Identify option gives a Supervisor the ability to determine and display the ID number of any card valid for the time clock system. This option is quite useful for those cards that do not have the Employee identification number readily visible on the card.

4.3.6.1. To identify the ID number of any valid ID Card:

1. Slide a Supervisor Card through the Card Reader at the bottom of the clock. The Supervisor Menu is displayed (see Figure 4-7).
2. Click 5 to select the **Badge Identify** option. The Display Screen displays the following request:



Figure 4-9:Badge Identify Authorization Request Screen

3. Slide the card you would like to identify through the Card Reader. The card's unique identification number is displayed on the Display Screen.

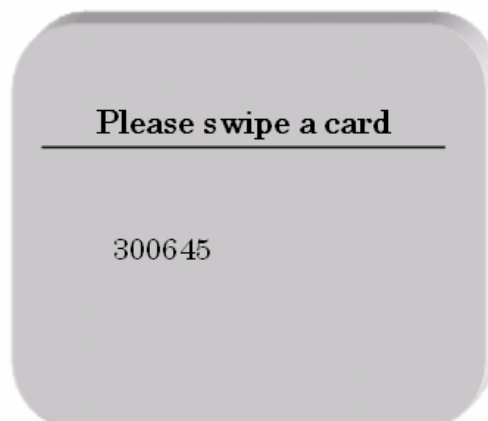


Figure 4-10:Badge Identify Screen

4.3.7. Fingerprint ID

The InTagral™ Plus clock has an optional Fingerprint reader.

If the time clock is equipped with a Fingerprint ID, Supervisor operator can enable or disable the Fingerprint function.

NOTE

The default setup of the Fingerprint ID is inoperative.

For further and detailed information about activating the Fingerprint ID function and adding employee fingerprint records, see Paragraph 3.6.

4.3.7.1. Clocking IN with Fingerprint ID Reader

When activating the Fingerprint ID Reader, there are two options for clocking IN:

- **One to One** – When setting the InTagral™ Plus to One to One mode, the clock requires both card read and fingerprint ID. The following screen is displayed as the Normal Display:

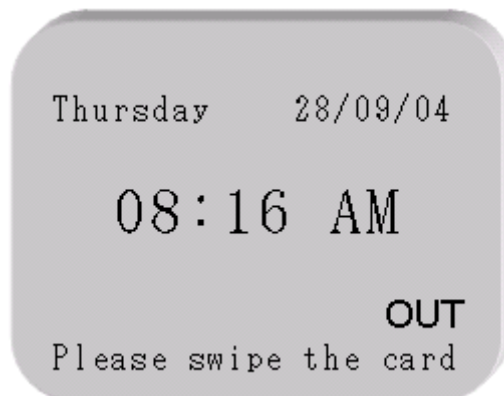


Figure 4-11:One to One Main Screen

The clock reads the card, and then requests for a fingerprint. Then it compares the fingerprint with the employee fingerprint records searching for a match.

- **One to Many** – When setting the InTagral™ Plus to One to Many mode, the clock requires fingerprint ID only. The following screen is displayed as the Normal Display:



Figure 4-12:One to Many Main Screen

The clocks compares the fingerprint to the entire fingerprint records in its memory.

NOTE

When set to One to Many mode, the InTagral™ can still perform a One to One compare of card and fingerprint. When given a card ID, the clock query for a fingerprint as well, and then perform both comparisons – One to One and One to Many.

4.3.7.2. Adding a Fingerprint Image – Enrollment

If your time clock is configured with a Fingerprint Reader, you must enter a Fingerprint image for all employees who will be using the time clock. This process is called enrollment. Fingerprint images are stored in the memory of the time clock itself.

When enrolling a new employee/supervisor in the system, the clock must correspond the fingerprint with an ID card/PIN number. For that purpose, before entering a fingerprint, the new employee will be asked to either swipe their card or enter their PIN number.

4.3.7.3. To add a new Employee fingerprint image to the time clock's memory:

1. From the **ClockComm** application running on the Host PC, click the **Configure** button. The **ClockComm** main window is displayed.
2. Click the **Clock Options** folder tab. The Clock Options folder opens. Verify that the **Use Finger Print** checkbox is activated.

NOTE

*For further information refer to the "**ClockComm Communications Module User guide**," in the section describing the use of the **Clock Options** tab.*

3. From the time clock, slide the Supervisor Card through the Card Reader. The Supervisor menu is displayed (see Figure 4-7).
4. Click 6 to select the Fingerprint ID option. The **Fingerprint Options** menu is displayed.

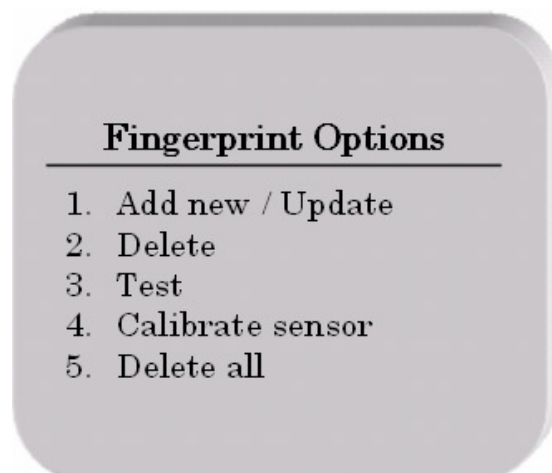


Figure 4-13:Fingerprint options Menu Screen

- Click 1 to select the **Add new/Update** option. The **Add Fingerprint** menu is displayed.



Figure 4-14: Add Fingerprint Screen

- Slide an Employee ID card through the Card Reader for the Employee for whom you are adding a Fingerprint Record. The following message is displayed:



Figure 4-15: Add Fingerprint Edit Screen – Put Finger

If there is already a fingerprint that matches the employee card, the following screen is displayed:



Figure 4-16: Add Fingerprint Edit Screen – Put Another Finger

NOTE

*The InTagral™ Plus does not allow more than 5 fingerprint records per employee.
Micronet Ltd. strongly recommend use of two fingerprint records per employee.*

7. The Employee now places the top of the thumb or index finger over the fingerprint reader on the time clock. After a few seconds, the time clock beeps to indicate that a new fingerprint has been successfully added to the time clock memory, and displays the quality of the scan in percentages.

NOTE

Micronet recommends using fingerprint scans that are at least 80% in quality.

8. If the additional fingerprint mode is enabled, the enrollment process described in step 7 is repeated with the second finger.

In order to ensure that the new Employee record has been enrolled properly, perform a test of the enrollment process.

4.3.7.4. Testing the Accuracy of the Enrollment

To test the operations of the Employee fingerprint recognition process, perform the following:

1. Perform Steps 1 and 2 as described in the Add Employee Fingerprint image process above.
2. Click **3** in the **Fingerprint Options** menu to select the Test option. The **Test Fingerprint** menu is displayed.



Figure 4-17:Test Fingerprint Menu Screen

3. Slide the ID card of the Employee that you want to test through the Card Reader. The following message is displayed:



Figure 4-18:Test Fingerprint Verification Request

4. The Employee now places the top of his or her thumb or index figure over the fingerprint reader on the time clock. The Fingerprint Reader checks to see that the current image of the Employee's finger matches the image stored in the time clock's memory.

5. Depending on the accuracy of the match, the time clock displays one of two resulting messages:
 - **Fingerprint match** – The Fingerprint test was successful, and there is no need to re-enter the Employee's Fingerprint image.
 - **Fingerprint not match** – The Fingerprint test failed. The image was recorded improperly, and the Employee must re-enroll, as described above in Paragraph 4.3.7.1.

If the Fingerprint Test failed, the Employee re-enters the Fingerprint image, taking care to correct the entry process in accordance with the error message he or she received. The Employee repeats the Fingerprint enter-and-test process until the Fingerprint test is successful.

From now on, each time the employee clocks in or out, he or she first slides the Employee ID card through the Card Reader and then places the appropriate finger over the Fingerprint Reader for authorization.

NOTE

Employees must always place that same finger over the Fingerprint Reader in order for the time clock to authorize their entry.

4.3.7.5. Deleting a Fingerprint Image

To delete an Employee fingerprint image from the time clock's memory, perform the following:

1. From the Host PC, connect to the time clock and go to the **Clock Options** tab to verify that the Use Finger Print checkbox is activated.
2. From the time clock, slide the Supervisor Card through the Card Reader. The Supervisor menu is displayed (see Figure 4-7).
3. Click **6** to select the Fingerprint ID option. The **Fingerprint Options** menu is displayed (see Figure 4-13).
4. Click **2** to select the Delete option. The Delete Fingerprint screen is displayed.



Figure 4-19:Delete Fingerprint Screen

5. Slide the ID card for which you wish to remove the Fingerprint record.
The record is erased from the time clock memory.

4.3.7.6. Delete All Fingerprints

To delete all fingerprints from the memory, perform the following:

1. From the time clock, slide the Supervisor Card through the Card Reader. The Supervisor menu is displayed (see Figure 4-7).
2. Click **6** to select the Fingerprint ID option. The **Fingerprint Options** menu is displayed (see Figure 4-13).

3. Click **5** to select the Delete all option. The **Delete All Fingerprint** screen is displayed.



Figure 4-20:Delete All Screen

4. Enter the password and press **[ENT]**.

NOTE

*Each day there is a new password. The password is the date written from right to left in an MMDD format. For example, if today is November 16th(1611), the password will be **1161**.*

After successfully deleting all fingerprints, an "All Fingerprints Deleted" message is displayed.



Figure 4-21:All Fingerprints deleted Confirmation Screen

4.3.7.7. Calibrate Sensor

To calibrate the sensor, perform the following:

1. From the time clock, slide the Supervisor Card through the Card Reader. The Supervisor menu is displayed (see Figure 4-7).
2. Click **6** to select the Fingerprint ID option. The **Fingerprint Options** menu is displayed (see Figure 4-13).
3. Click **4** to select the Calibrate sensor option. The **Calibrate Sensor** screen is displayed.



Figure 4-22:Calibrate Sensor Screen

4. Enter the password and press **[ENT]**.

NOTE

*Each day there is a new password. The password is the date written from right to left in an MMDD format. For example, if today is November 16th(1611), the password will be **1161**.*

5. After two dual bleeps, the clock will approve calibration.

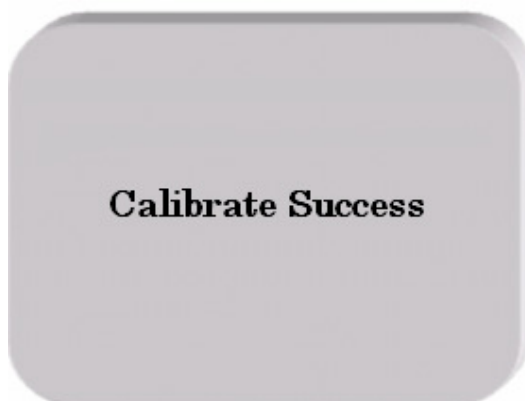


Figure 4-23:Calibrate Sensor Confirmation Screen

4.3.8. Erase Clock Data

The Erase Clock Data option erases all data and settings that are currently stored in the InTagral™ Plus Time Clock.



CAUTION

USE GREAT CAUTION IN PERFORMING THIS TASK. ONLY THE SYSTEM ADMINISTRATOR AT YOUR ORGANIZATION SHOULD BE AUTHORIZED TO PERFORM THIS FUNCTION.

YOU MUST BE CERTAIN THAT YOU HAVE PROPERLY BACKED UP ALL CLOCK DATA BEFORE YOU ATTEMPT THIS OPERATION.

*FOR FORTHER INFORMATION ABOUT BACKING UP DATA REFER TOTHE "**CLOCKCOMM COMMUNICATIONS MODULE USER GUIDE**".*

4.3.8.1. To erase all system data

1. Slide a Supervisor Card through the Card Reader at the bottom of the clock. The Supervisor Menu is displayed (see Figure 4-7).
2. Click **7** to select the Erase Clock Data option. If the clock data has not been backed-up yet, the following screen is displayed:



Figure 4-24:PC Backup Reminder Screen

Otherwise, the Display Screen displays the following request:

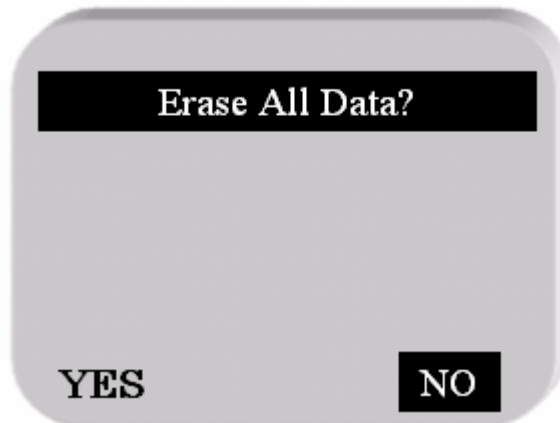


Figure 4-25: Erase All Data Request Screen

3. The screen default is '**NO**'. Use the arrows to mark '**YES**'. Press **[ENT]** to complete the erasing process.

Chapter 5

APPENDIXES

5.1. TECHNICAL SPECIFICATIONS

Following are the Hardware and Software specifications of the InTagral™ Plus system.

Operating System: Windows 98 or later.

Main memory: 32 MB minimum.

Hard disk: 5 MB minimum free space.

Table 5-1: InTagral™ Plus Basic Configuration and Options

BASIC CONFIGURATION	BUILT IN OPTIONS	ADD-ON OPTIONS
<i>O/S: DOS</i>		
<i>CPU: Intel 386EX</i>		
<i>Development Environment and tools</i> <i>Borland C 3.1</i>		
<i>System and Application Memory</i> <i>RAM 1MB</i> <i>Flash 1MB</i>	Additional RAM:2 MB Flash Disk on chip:16 MB	
<i>Graphic Display</i> <i>128x64 Graphic LCD, FSTN technology</i> <i>at contrast ratio of 7:1, Variable font size</i> <i>8 lines of 21 characters, LED backlight</i>		

Table 5-1: InTagral™ Plus Basic Configuration and Options

BASIC CONFIGURATION	BUILT IN OPTIONS	ADD-ON OPTIONS
Keyboard 10 numeric keys, 10 functional keys, tactile feedback technology		
Slot reader support	Magnetic track II Barcode Proximity EM	Dedicated additional slot reader support: Magnetic reader Barcode reader Proximity Reader
Biometrics	Fingerprint	
Alert Indications 3 colored LED's Buzzer		
Communication		
Serial Communication Ports 2 RS232 Communication ports including 1 pair of HW hand-shake control signals	1 RS485 port , Ethernet card for TCP/IP 10Mbps	
Relay -		1 relay for door/Bell connection
Power 12VDC Rechargeable backup batteries pack Lithium battery for memory & RTC backup		

InTagral™ Plus
Time & Attendance Clock



Table 5-2: InTagral™ Plus Characteristics and Specification

FEATURE	SPECIFICATIONS
<i>Standard accessory kit (included with Basic configuration model)</i>	<ul style="list-style-type: none">• -Clock wall cradle• -Opening key• -Power supply• -9 pin RS232 cable for use with PC• -Clock communication software• -Installation and user manual (PDF)
<i>Environment</i>	Operating: -0°C +50°C (-32°F + 122°F) Storage: -10°C +70°C (-42°F + 158°F)
<i>Physical Dimensions</i>	<ul style="list-style-type: none">• Length: 177mm/6.9"• Width: 150mm/5.9"• Depth: 64mm/2.5"• Weight: 500gr./17.6Oz. (basic configuration)

5.2. ERROR MESSAGES

The following is a table of error messages generated by InTagral™ Plus when a card is read incorrectly.

MESSAGE	EXPLANATION
<i>Invalid Card</i>	The card is not valid for some reason, such as an invalid badge number.
<i>Rejected</i>	Two consecutive In or Out transactions from the same card. This message appears in the case where the Consecutive Identical Transactions field is not selected. The Consecutive Identical Transactions field appears in the Card Definition tab of the ClockComm application Configuration window running on the Host PC. For more information, see the " <i>ClockComm Communication Module User guide</i> ".
<i>No Authorization</i>	<ul style="list-style-type: none">• The card swiped is not included in the authorized list for this clock• For a clock with a door-opening relay –this card is not authorized, i.e. it does not appear in the Authorization Table.

5.3. KEYPAD FUNCTION KEY SETTINGS

The numerical digit keys on the Keypad are been preset to provide direct shortcuts to specific functions and options. Default settings can be reset by the System Administrator according to your organization's needs.

Listed below are the default Function Key settings.

KEY	FUNCTION	ACCESS
F1	Option Menu 1	Opens the standard Option Menu
F2	Option Menu 2 (if selected) Displays a list of active project for the employee selection.	Any Employee
1	Missing Punches (individual)	Any Employee
2	IN / OUT list (individual)	Any Employee
3	Open Door	Any Employee
4	Who is in? (entire organization)	Only from the Supervisor Menu
5	Clock setup	Only from the Supervisor Menu
6	[Unassigned]	Authorized personnel only
7	[Unassigned]	Any Employee
8	[Unassigned]	Any Employee
9	[Unassigned]	Any Employee
0	DOS shell	Supervisor (programmer)
ENT	Confirmation	Any Employee
CLR	Back to main screen	Any Employee

NOTE

Projects can be assigned to the F2 Function Keys. Consult your distributor if you would like to assign Function Keys according to your specific needs.

5.4. DOOR OPENING MECHANISM

The InTagral™ clock is capable of electrically control an electric door lock. The InTagral™ clock incorporates a 2-pin connector located on the unit backside (see the figure below). The left side pin must be wired to a third party power supply (not supplied). The right side pin must be wired to a third party door solenoid (not supplied). The nominal power supply voltage is 12V/2A or 24V/1A DC. Power supply voltage and current rating must comply with the load requirements. The Power supply polarity must be connected according the door solenoid polarity. The following is an example for a door lock connection.

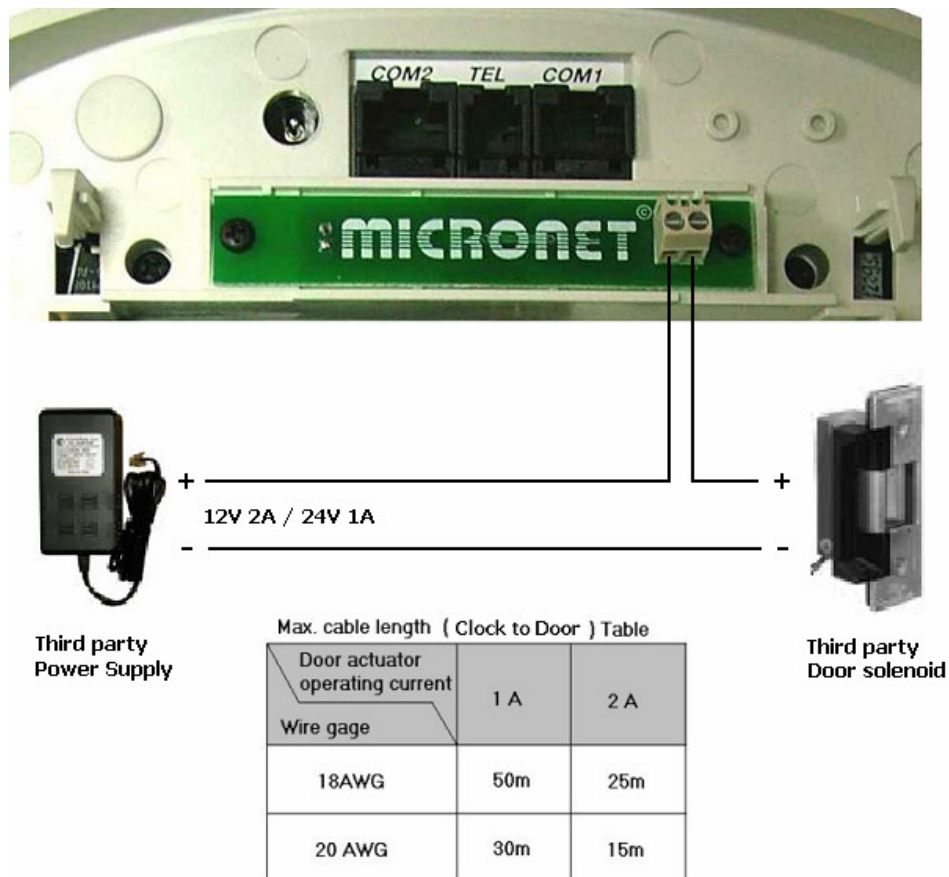


Figure 5-1:Door Opening Mechanism Diagram

5.5. SAFETY PRECAUTIONS



ABNORMAL CONDITION

SHOULD THE INTAGRAL™ CLOCK BECOME HOT OR START TO EMIT SMOKE OR A STRANGE ODOR, IMMEDIATELY TURN OFF THE POWER AND CONTACT YOUR ORIGINAL DEALER OR AN AUTHORIZED SERVICE PROVIDER. CONTINUED USE CREATES THE DANGER OF FIRE ELECTRIC SHOCK.



CATION

*BACKUP BATTERY: INCORRECT REPLACEMENT OF BATTERY CAN CAUSE EXPLOSION. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE OF BATTERY RECOMMENDED BY THE MANUFACTURER. DISPOSE OF USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
(REFERS TO NiCAD & LITHIUM BATTERIES WHERE APPLICABLE)*



POWER SUPPLY

- *Any power supply which be used by the user must be "CE" certified and limited power source, in order to keep the compliance of the whole system.*
- *Do not use other power supply than the specified rating. Doing so creates the danger of fire and electric shock.*
- *Keep the power cable away from sources of extreme heat. Heat can melt the covering of the power cable and create the danger of fire and electric shock.*
- *Never twist, sharply bend, or pull on the power cable. Doing so can creates the danger of fire and electric shock.*



LCD SCREEN

- *Never apply strong selecture to the screen or object it to strong impact. Doing so can crack the screen or LCD panel glass, which can cause the danger of personal injury.*
- *Should the LCD panel glass break, never touch the liquid inside. Doing so can cause skin inflammation.*
- *Should liquid from the LCD panel accidentally get into your mouth, immediately wash your mouth with water and then consult a physician.*
- *Should liquid from the LCD panel accidentally get into your eyes or onto your skin, immediately rinse for at least 15 minutes with clean tap water and then consult a physician.*

5.6. INTAGRAL LIGHT\PLUS EXTERNAL READER INSTALLATION INSTRUCTIONS

The following instructions are intended for Magnetic\Barcode and RF readers.








IMPORTANT

1. Please read with consideration all of the instructions before starting the installation.
2. Micronet will not be responsible for malfunctions or damage to equipment or people, resulting from installation done not according to following instructions

The following table displays a list of items included in the external reader set:

Table 5-3: External Reader Set Items Table

ITEM PICTURE	Item No 1	Item No 2	Item No 3	Item No 4	Item No 5
					
DESCRIPTION	Reader back side (Inside view)	Reader front side (Inside view)	External reader – clock cable	4 screws to be plug to the reader box	Front label
COMMENTS		The item in the picture is RFID reader but the sketch is good also for magnetic /barcode readers			The item in the picture belongs to RFID, there are similar labels for magnetic / barcode readers
MAKE SURE YOUR SET HAS ALL ITEMS IN IT					

5.6.1. Visible Installation

For visible installation, perform the following:

1. In this installation the cable that connects the external reader to the clock unit is visible.
2. Mark 4 holes, supposed to be drilled, with the help of the Reader back side (Item No 1)
3. Hang the reader back side on the wall with the screws (not supplied in the existing Set)

NOTE

The external reader has one way closing, therefore it is recommended to set slot "A" downwards.

4. Connect the cable (Item No 3) to J1 connector on the main board (look Item No 2)
 - a. Tie the cable (Item No 3) to slot "A" that exist in the box parietal
 - b. Tie both sides of the reader with the help of the 4 screws (Item No 4)
5. Connect the cable to the connector circled in Picture 1.
6. Disconnect the communication cables from the clock (do not disconnect the power supply). Make sure the clock does not show the message '**Wait**', then reset the clock (see Paragraph 3.5) in order to activate the external reader option.
7. Check the external reader functionality by swiping several suitable cards.
8. Connect the communication cables to the clock and hang it back on its cradle.
9. When the external reader functions, attach the label to the front side of the reader (Item No 5), notice that the description on the label is not reverse. Be careful, Label should be detached and may be destroyed to open the reader box again.
10. Tie the cable to the wall to avoid unnecessary swings.

5.6.2. Invisible Installation

For invisible installation, perform the following:

1. In this installation the cable that connects the clock with the external reader is invisible.
2. Mark 4 holes, supposed to be drilled, with the help of the Reader back side (Item No 1). Mark the centered bore, through this bore the cable will pass from the wall.
3. Channel the external reader cable (Item No 3) through the wall; make sure the cable edge (both edges are identical) prominent from the wall in the exact cable entrance point that was made (see Paragraph 2 aforementioned).

Continue as described in Paragraph 5.6.1 (exclude step 4a)

5.6.3. Important notes about the installation

- The clock and the external reader stand CE & FCC regulation and as is defined INDOOR only!
- The maximum cable length allowed, is 2 meters.
- In case it is RFID reader, it is recommended to install the reader 25 centimeter far from the clock radius to avoid mutual distractions between the readers.

