Time Reorder Utility User Manual

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Revisions

Release Date	Version	Description
7/28/2005	V1.0	Original document release
		SW Version : V1.1R9
2/15/2006	V1.1	Add.
		 Support TR510-515 terminal
		Modify.
		 Rename program from [TR4020-4030
		Downloader] to [Time Recorder Utility]
		SW Version : V1.1R17
5/10/2006	V1.2	Add.
		 Support WEC200-00 terminal
		SW Version : V1.1R26
9/11/2006	V1.3	Add.
		 Support WEC200-01 terminal
		SW Version : V1.1R37
7/10/2008	V1.4	Add.
		 Support UDP protocol of TR515 terminal
		SW Version : V1.1R56
1/26/2010	V1.5	Modify.
		• Push Mechanism is supported by TR51x
		TCP protocol
		SW Version:V1.2R5

Introduction

Time Recorder Utility (TRU) program is used to communicate with TR40xx / TR51x time recorder terminal and WEC200-00 terminal. By TRU, it is easy to download the punch time data^{*} or utilize the terminal just only by a single click, such as setting up the date, time, bell tables or any other properties that the terminal / controller owns.

TRU supports multi-connected terminals network, no matter the communications are going through RS232 or Ethernet (UDP/TCP protocol). It also allows you to schedule the time for downloading^{*} the time data. Even more, with the Extended Mode, TRU can implement the connected terminal to be an access control terminal. This will allow the terminal to control the door lock to meet your security policies.

* The function of downloading time data doesn't apply to WEC200-00 terminal because it doesn't have the ability to store punched tag code. If you use the WEC200-00 terminal, you can skip the information of downloading time data in this user manual.

Getting Started

Getting started with Time Recorder Utility (TRU) is easy. This chapter provides a procedural checklist, along with instructions on the set up and installation of the TRU program on the PC.

For TR40xx / TR51x time recorder &

WEC200-01 controller terminal

The following check list of activities will insure you have everything set up correctly.

- 1. Install Time Recorder Terminal
 - Install Terminal (refer to Hardware User Guide).
 - Connect communication cable.
 - For RS232 interface terminal: Connect the cable from terminal to PC.
 - For Ethernet interface terminal: Using WAS1498 cable to direct connects from terminal to PC. Or using WAS1499 cable to connect via hub.
 - Attach power connector.
- 2. Install Program
 - Optimize PC if required and make sure your system is sufficient¹.
 - Install the TRU program on your PC.
 - Set up terminal information².
 - Set up the file name & path that the downloaded time data is going to be saved to³.
- 3. Test the system by:
 - 1. Enter several in and out punches in the terminal.
 - 2. Poll or manually download the data clock in TRU Communications⁴.
 - 3. Check the downloaded time data by the Notepad program⁵. Data should appear for all badge IDs that have been punched. Be sure correct date is set up in terminal.

Notes:

- 1. System Required:
 - Microsoft Windows version Windows 98/ME/NT/2000/XP
 - 30MB free hard drive space
 - * The Windows NT should be installed the SP3 and IE4.01 or later version.

☆ The Auto E-mail function must be associated with the Email Account of the Outlook Express v5.5 or later version.

- 2. On the [Connections] Inspection, click 🕂 to add a terminal with the specified IP or Comport.
- 3. On the [Tools] menu, click [Option]. Select the [Download] tab, type the file name and path
- 4. On the [Download] Inspection, select the terminal that you just added. Click ▶ on the toolbar to download data.
- 5. From [Start] menu, click [Programs]/[Accessories] and launch the Notepad program.

For WEC200-00 controller terminal

The following check list of activities will insure you have everything set up correctly.

- 4. Install WEC200-00 terminal
 - Install Terminal (refer to Hardware User Guide).
 - Connect communication cable.
 - Using WAS1498 cable to direct connects from terminal to PC. Or using WAS1499 cable to connect via hub.
 - Attach power connector.
- 5. Install Program
 - Optimize PC if required and make sure your system is sufficient¹.
 - Install the TRU program on your PC.
 - Set up terminal information².
- 6. Test the system by:
 - On the [Download] inspection, select the terminal that you just added. Click and the toolbar to view the internal settings of terminal.

Notes:

- 1. System Required:
 - Microsoft Windows version Windows 98/ME/NT/2000/XP
 - 30MB free hard drive space
 - % The Windows NT should be installed the SP3 and IE4.01 or later version.
 - ☆ The Auto E-mail function must be associated with the Email Account of the Outlook Express v5.5 or later version.
- 2. On the [Connections] Inspection, click 🕂 to add a terminal with the specified IP.

Running Modes

The mode defines the behaviors that TRU should run, Normal Mode or Extended Mode. Below is the comparison table for these two modes.

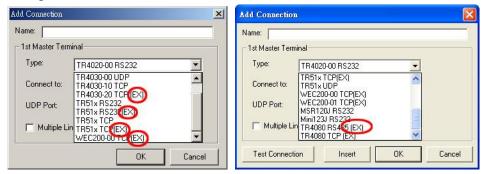
Modes Functions Supported	Normal Mode	Extended Mode
Retrieve time data stored in the	\bigcirc	
internal memory of terminal [*]		
Modify Properties	0	
Real-time get punch time data		\bigcirc
Real-time display message [*]		\bigcirc
Real-time control relay		\bigcirc

* Doesn't apply to WEC200-00 terminal

For the Normal Mode, the connections between terminals and TRU will not be established until a command is issued. The command could be downloading time data, retrieving or editing terminal properties. After the command is executed (completed), the connection will be terminated.

The Real-time means access right away. This function is mainly used for access control purposes. While TRU is starting the Extended Mode, the connections between terminals and TRU will be established. The connections are kept all the time until TRU goes into Normal Mode or ended. Keep the connection opened will let TRU get the punch time data instantly, not like the Normal Mode, using the polling method to get time data.

Not all terminals support Extended Mode, only the connection type with (EX) are allowed using this features.



Tray icon menu

When TRU is running you can see its icon in the system tray bar (which usually located in the right-bottom corner of screen, near the system clock). Tray icon menu is available by right mouse button click on TRU icon in the system tray. Normal Mode and Extended Mode GIGA-TMS Inc. Document Version: v1.5 Date: 1/26/2010 7

are using different icons. For Normal Mode:

Open Time Recorder Utility	
Exit	
€ €	4

For Extended Mode:

Open Time Rec	order Utility
Exit	
	JEQ S

Tray icon menu contains the items:

- Open Time Recorder Utility: Open TRU window.
- Exit: End the program.

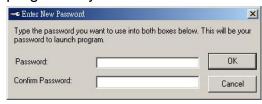
Enter Password

A password is always needed on below conditions:

- Launching TRU main window
- Exit program



Note: if you are using TRU first time, the TRU will require you to enter a new password. Please keep this password for future uses. If the password is lost, you cannot enter the program anymore.



Connections

Define Connections

Before starting to communicate with terminals, the connection has to be defined first. A connection contains the information that can tell TRU how to communicate with the connected terminal, and the properties that the terminal owns.

For TR51x terminal, each connection only contains one terminal. For TR40xx terminal, GIGA-TMS Inc. Document Version: v1.5 Date: 1/26/2010

each connection may contain one or more than one terminals (with slave terminal connected).

To define a new connection, please do the following steps:

- Go to [Connections] inspection.
- Click 4, a [Add Connection] window will pop up.

	minal	1st Master Tern
•	TR4020-00 RS232	Туре:
] 100 [СОМ1	Connect to:
	1001	UDP Port:
	ink (with slave terminal	F Multiple Li
]	1001	UDP Port:

- Enter a connection name.
- Select terminal type.
- Specify the Comport or IP where the terminal is connected.
- Enter Port (Only for Ethernet interface).
- If with slave terminal(s) connected, select [Multiple Link] (Only for TR40xx terminal).
- Click [OK] to save the change.

If the protocol that terminal uses is TCP, and is in the same subnet as PC (TRU installed), then you can click is to specify or change the terminal's IP.

Connection Settings	(Local IP: 192.168.100.184)	
	s (auto-discovery by broadd	ast) 💌	<u>R</u> efresh
MAC 0.2.3.4.40.113	IP 192.168.100.218	Owner/Device name	<u>S</u> ettings Initialize
			Rounting Statu:
			<u>B</u> uzzl
			<u>C</u> hange IP <u>A</u> dd
4		>	Select
an completed!			

For the network settings of TR4080 RS485 terminal, please refer to Appendix C.

Verify Connections

After adding or editing a connection, it should verify the connection right away to ensure the settings are correct or not.

To verify connections, please do the following steps:

- Go to [Download] inspection.
- Click 🖾 for scanning the changes.

	▶ • II ⊴ • ✓ •	🖸 🖆 🛧 🔫 💽	J)←_	Click	here		
Connections	All Terminals	Address	Scan for changes	Mach No	Mach Name	Status	Record
	🗄 👘 Connections	192.168.100.218	scall for changes	1	R00M #01	OK	0/0
₽ J	- 🤩 ti	192.168.100.218	2	2	R00M #02	OK	0/0
	📕 🧶 13	СОМ1	1	3	TR51x RS232(EX)	ОК	0/0
Download		192.168.100.210	1	4	WEC200 #4	On-line	0/0
Log							

- View the [Status] column to get the scanning result.
- If the [Multiple Link] of connection settings is selected, the connected slave terminal(s) will be displayed on the list view.

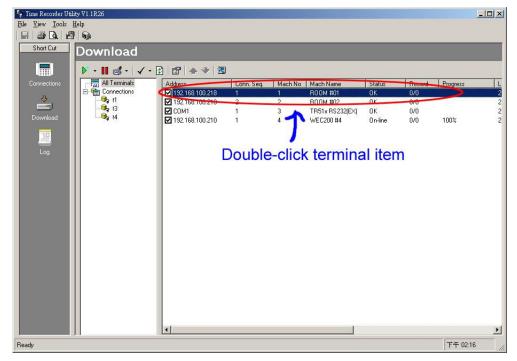
If the scanning result is failed, please re-check the connection settings, and the communication cable / terminal power is proper set or not.

Normal Mode

Under the Normal Mode, you can easily access all the information of the specified terminal, or download the time data that stored in the internal memory.

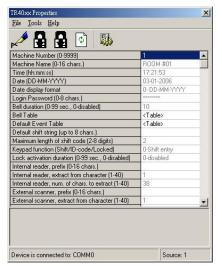
Terminal Properties

Each terminal contains its own properties, such as machine number, date, time, bell tables and so on. To display the properties values, in the [Download] inspection, double-clicking the specified terminal on the list view, or select the terminal, then click



A properties window will pop up as below.

TR40xx terminal properties window:



TR51x terminal properties window:

TR51x Properties		×
<u>File Tools H</u> elp		
1		
Machine Number (0-255)	0	-
Date/Time	2006/1/3 17:23:36	1
Display Mode	0 - Wall-Mount	
Bell Duration (0-255)	10	
Bell Table	<table></table>	
Event Mode	0 - Depend on User	
Event Table	<table></table>	
Unlock Duration (0-255)	10	
Relay Is Used For	0 - Bell	
Prefix (0-16 chars.)		
Extract From Character (1-37)	1	
Number of Character to Extract (1-37)	37	
Daylight Saving Time	0 - Disabled	
Daylight Saving Time - Start Date (MM/DD)	01/01	
Daylight Saving Time - End Date (MM/DD)	01/01	
Bell Table Mode	0 · Everyday	-
Daylight Saving Time - Start Date (MM/DD) Daylight Saving Time - End Date (MM/DD)	01/01 01/01	

WEC200-00 properties window

Machine Number (0-9999)	4
Machine Name (0-16 chars.)	WEC200 #4
Code Format	0 - Raw Data
Input Status	11
Service Code	000000000
Firmware Version	ROM0722A4

WEC200-01 properties window

Machine Number (0-9999)	0	
Machine Name (1-16 chars.)	M#00	_
Code Format	1- FC/ID	
Input Sensor Status	10	
Input Sensor Notification	0- Disabled	
Input Sensor Status	10	
Service Code	000000070	
Firmware Version	R0M0722A8	
Date (yyyy/mm/dd)	2006/9/11	
Time (hh:nn:ss)	13:52:17	
Weekday	2- Monday	
Lock Rule	1-Door Security	
Verify Site	2-Server OR Client	
Punch Criterion (1~255 times)	3	
Door Sensor	0- Disabled	
Door Sensor Duration (0~255 sec.,0-Disabled)	10	
Lock Duration (0~255 sec.,0-Disabled)	10	
Master Card	0- Disabled	
Master Card - Add	<table></table>	
Master Card - Remove	<table></table>	
Master Card - Return	<table></table>	
Time Zone	0- Disabled	
Time Zone Table	<table></table>	
Holiday Group	0- Disabled	
Time Zone Index for Holidau Group Specifies a serial number for this Machir	ln	

For TR40xx terminal, some properties need to login before editing. To login, from [Tools] menu, click [Login]. If the password is not blank, then a password required window would pop up. After entering a correct password, the terminal will go into login mode. To modify the property value, just double-click the item value. After entering a wanted value. Click [OK] to save the change.

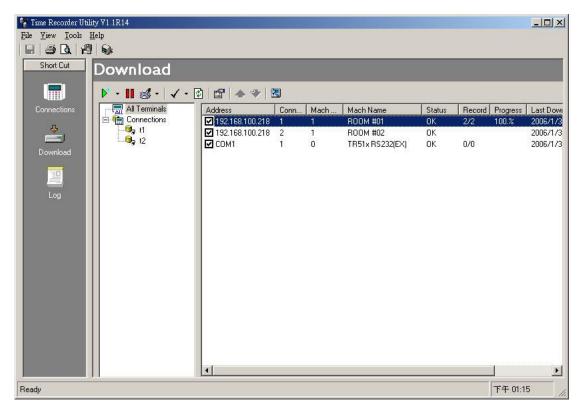
dit Item		
Item Value:	ROOM #01	
Default	ОК	Cancel

If you want to run the Extended Mode (implements the Access Control function), please give each terminal a unique Machine Number. This unique number will identity each door (terminal) TRU connects.

Download Time Data

While users punch the time data, the Tag ID will be stored in the internal memory of terminal, associated with the date, time, event id and shift number (shift number is only for TR40xx terminal). There are two ways to get the stored time data out, one is via the floppy disk (if floppy drive is built in), another way is, this chapter will introduce, download it via communication cable.

After setting up the connections, all the terminals will be displayed in the [Download] inspection.

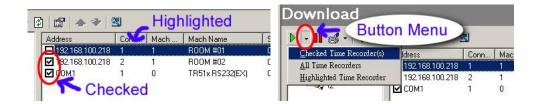


In this inspection, you can get a brief view of the properties of connected terminals, such as the machine number, name etc. If you want get more detail information, just double-click the list item, a properties window will pop up, which shows all the information of the selected terminal. Please keep in mind, some of the properties need to login first prior to modify.

Under Normal Mode, TRU provides two ways to download the time data: Download at once and Scheduling, which are detailed as below.

Download at once:

Select the checkbox on the list view, and then click \blacktriangleright on the toolbar. All the time data of selected (checked) terminals will be downloaded and saved to the specified path. For flexible purposes, TRU also allows to download the highlighted one or specified terminals. To do this, click the button menu of \blacktriangleright button, then click [Highlighted Time Recorder] or [Checked Time Recorder(s)].



Scheduling:

By using Scheduling, you can schedule any time to download the time data. Scheduling starts each time you start the TRU program and is able to run in the background. With Scheduling, you can schedule a time to download time data daily, weekly, monthly, or at certain times. To configure the scheduled time, from [Tools] menu, click [Options]. On the [Options] window, click [Schedule] tab.

Type				
 C Circulating Schedule 	Every	10 - minut	e(s).	
Schedule Settings Schedule Task:				
Daily	<u> </u>	<u>I</u> ime Table		
Schedule Task D				
1. 				

To enable the Scheduling function, select the Type to Schedule.

First, select the [Schedule Task] for days period of scheduling, and then click [Time Table] to edit the specified times of downloading time data.



After completing the scheduling configuration, click [OK] to activate the settings.

Extended Mode

While starting [Extended Mode], TRU will issue a [Extended Mode Login] command to the connected terminals of the connection that the type is with (EX) (refer to Running Modes section). If acknowledged, the terminal will go into Extended Mode until getting a [Extended Mode Logout] command.

When the terminal is running on Extended Mode, the punch time data will send to the TRU instantly (the time data is also restored the data into the internal memory). After retrieving the time data, TRU will determine how to display the specified messages on the terminal screen, or trigger the relay depending on the security settings and rules.

To run the [Extended Mode], please follow below steps:

1. On main window, from [Tools]/[Extended Mode], click [Go into Extended Mode].



2. While the [Extended Mode] window pops up, it will automatically scan the connected terminals, and then displays them on the tree view.

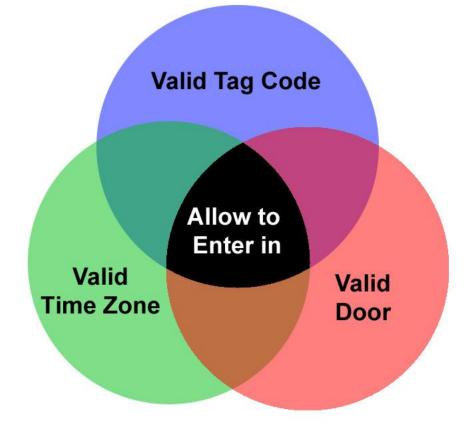
	Address	Mach Name	Date	Time	Code	User	Personal ID	Punch	Shift	
1-ROOM #01	0, 192, 168, 100, 210	12345	5/5/2006	4:49:17 PM	010011111000000000000000000000000000000	Mary		0		
-ROOM #01	192.168.100.210	12345	5/5/2006	4:49:23 PM	00111101100000000000110111			0		
ROOM #02	192.168.100.210	12345	5/5/2006	4:49:30 PM	010011111000000000000000000000000000000			0		
351x RS232(EX)	C 192 169 100 210	12345	5/5/2006	4:49:34 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	4:49:40 PM	010011111000000000000000000000000000000			0		
C200 #4	192.168.100.210	12345	5/5/2006	4:49:43 PM	01001111100000000000001011	Peter		0		
0200 #4	192.168.100.210	12345	5/5/2006	4:49:55 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	4:50:22 PM	01001111100000000000001011	Peter		0		
	4 192.168.100.210	12345	5/5/2006	4:50:30 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	4:54:43 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	5:03:19 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	5:03:51 PM	FC159ID00005			0		
	192.168.100.210	12345	5/5/2006	5:08:11 PM	FC159ID00005			0		
	192.168.100.210	12345	5/5/2006	5:08:47 PM	01001111100000000000001011	Peter		0		
	San 192.168.100.210	12345	5/5/2006	5:09:09 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	5:09:12 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	12345	5/5/2006	5:09:17 PM	01001111100000000000001011	Peter		0		
		WEC200 #4	5/11/2006	1:29:38 PM	FC159ID00003			0		
	192.168.100.210	WEC200 #4	5/11/2006	1:30:08 PM	010011111000000000000000000000000000000	Mary		0		
	192.168.100.210	WEC200 #4	5/11/2006	1:30:16 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	WEC200 #4	5/11/2006	1:30:37 PM	01001111100000000000001011	Peter		0		
	Q 192.168.100.210	WEC200 #4	5/11/2006	1:30:41 PM	010011111000000000000000000000000000000	Mary		0		
	192.168.100.210	WEC200 #4	5/11/2006	1:30:53 PM	010011111000000000000000000000000000000			0		
	San 192.168.100.210	WEC200 #4	5/11/2006	1:30:56 PM	010011111000000000000000000000000000000	Mary		0		
	192.168.100.210	WEC200 #4	5/11/2006	1:31:01 PM	010011111000000000000000000000000000000			0		
	192.168.100.210	WEC200 #4	5/11/2006	1:31:08 PM	01001111100000000000001011	Peter		0		
	Sa 192.168.100.210	WEC200 #4	5/11/2006	1:31:13 PM	01001111100000000000001011	Peter		0		
	192.168.100.210	WEC200 #4	5/11/2006	1:31:15 PM	01001111100000000000001011	Peter		0		
	2 192.168.100.210	WEC200 #4	5/11/2006	1:31:20 PM	010011111000000000000001011	Peter		0		
	4									٠ſ

If the terminal is disconnected, a cross red symbol will paint on terminal icon.



Configure Security Settings

TRU provides three settings to secure the doors. It can verify a valid punch by 1) the tag code, 2) date / time and 3) the door (terminal). If the three settings are all verified successfully, then the punch will be treated as an allowed punch.



If a punch is allowed, TRU will open the door (trigger the terminal's relay) and show the message on the terminal's screen. If not a valid punch, the door will not open and a warning message will be displayed on the terminal's screen.

For TR40xx terminal, the valid punch message is the user name. The invalid punch will display the reason why the punch is invalid.

For TR51x terminal, the valid or invalid punch message will be a message code (4 digital numbers).

To launch the security settings window, from [Tools] menu, click [Configure Access Control].

ile <u>V</u> iew	Tools
	<u>C</u> onfigure Access Control
n (All) 1 🥵 ti	Download Time Data
1	Set Accounts / Permissions.
- 📃 🕻 - 🍤 t2	Options

Pops up the [Access Control Configuration] Window:

	💑 💷 🕶 🗸	<i>6</i> 4	View by Departme	ent 💌 (All)	
er Name	Code	User ID	Time Zone	H.G.	[
Zones John ay Groups David ol Assign	000000002		(Default) (Default)	(Default) (Default)	
gement Card Ilaneous					
<					

Below will guide you how to configure the security settings.

User

A user can be an employee, visitor or customer. Those who own the tag to punch the terminals should be defined as users.

To add a new user, click 🕂 on the toolbar.

Add User					×
Name:					
Code:					
	Get tag code	e from termial direc	tly.		
Personal ID					
Time Zone:	(Default)				-
Holiday Group:	(Default)				-
Control Assign:	Mach No	Connection	Mach Na	C.S.	
		12	TR51x R	1	
Select all	 ✓ 1 ✓ 2 	_			
Deselect all		_			
Department:	<none></none>				•
Title:	<none></none>				-
Valid Period	·				
Effective:	2006/1/6			-	
Expired:	2006/1/7		-	_ _	
	1		-		
Quick Set:	To Next	- 1 -	Day (s)	*	
-			ок	Cano	
				Carlo	<u> </u>

Two fields – [Name] and [Code] are needed to be entered. Below details the way of setting up the user information.

- Name: The user name.
- **Code:** The tag code. If the tag code extracted function of terminal properties is set, the code should be the extracted one. For example, if the tag code is 1234567890, for non-extracted setting, enter whole code 1234567890 in the Code field. If the extracted function is set, and the setting, for example, is extracted from 2, length is 5, then enter 23456 in the Code field.
- **Personal ID:** The Personal ID should be consistent with your HR, T&A or payroll settings.
- **Time Zone:** Defines the weekday and time period that the user is allowed to enter.
- Holiday Group: Defines the holiday and time period that the user is allowed to enter.
- **Control Assign:** Defines which doors (terminals) the user can enter. If two or more than two terminals share the same machine number, they will be treated as the same door.
- **Department:** The department that the user belongs to.
- **Title:** User's title (position).
- Valid Period: Defines the date period that the user can enter. This is most used to visitors, customers or inactive employees.

To modify defined user, select the user, click I.

To delete defined user, select the user, click -.

To save user settings to a file, click . After specifying the users and saved path and file name (extension name is .tdu), click OK to save the settings.

xport User Information: Please S	Select U	sers	×
View by Department 💌 F	ind:		14
Contraction of the second seco			
Select	ISEI	5	
Set the path a to save to.	and	file r	name
Save File F:\Project\TimeRe	corderL	Jtility\06010	06_1333.
Select All Deselect All		OK	Cancel

To import user settings file, click $\overline{4}$. Specify the file and then click OK to import the settings. If there are duplicate tag codes, the old ones in the database will be overwritten.

The exported file of user settings is a text format file, you can use Notepad program to open it. Below is the content of the file.

```
        Tom 0001
        00040265420256
        3
        0,2 System Develop
        Engineer
        0

        Joe 0002
        00040265420255
        4
        0
        Sales
        Manager
        0
```

The fields name and sequence for each record are:

- 1. User Name
- 2. Personal ID
- 3. Tag Code
- 4. Time Zone Index
- 5. Machine Numbers Composition (allowed the user to enter)
- 6. Department Name
- 7. Title Name
- 8. Holiday Group Index

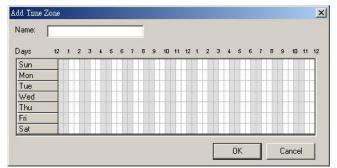
Each field is separated by TAB character. For Machine Numbers Composition field, each number is separated by comma character.

Time Zone

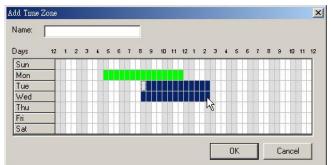
Time Zone defines the valid time period for entering the doors on every weekday (from Sunday to Saturday) in a week. By the Time Zone settings, TRU can limit the user to enter the doors in a certain time period and weekday.

e	+ - -																
User Time Zones Tome Zones Holiday Groups Control Assign Control Assign Management Card Miscellaneous	Name (Default) TZ1 TZ2																
	Days Sun Mon Tue	12 1	2	3 4	5	5 7	89	10 1	1 12	1 2	3	4 5	6	7 8	9	10	11
	Tue Wed Thu Fri Sat																

To define a Time Zone, in the Time Zone inspection, click +.



Give the new Time Zone a name, and then using the mouse to click (mark) or drag and drop the week grid to set the valid time period. The valid period time will be marked as green color.



To modify defined Time Zone, select the Time Zone on the list view, click I.

To delete defined Time Zone, select the Time Zone on the list view, click =.

Because Time Zone only defines a week valid time period, TRU will treat the Time Zone as a week template and rotate it (the settings) on every week.

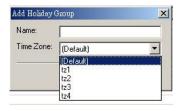
Holiday Groups

The purpose for Holiday Groups is to enhance the Time Zone function, because Time ZoneGIGA-TMS Inc.Document Version: v1.5Date: 1/26/201020

only defines a week template, which makes it not so flexible to meet some special day's requirements. For example, if 1/1 day is holiday and the weekday is Monday, then it should not be a workday and may not allow users to enter any doors. But for Time Zone settings, the Monday may be a workday that allows a certain people to enter the doors. By using Holiday Groups, it can meet this kind of needs.

🔯 Acc	ess Control Config	uration			
Tree		수 — 🕑 🛯 🐐 🌾			
2	User	Group Name	Time Zone		
	User Time Zones Holiday Groups Control Assign Management Card Miscellaneous	(Default)	(Default)		
		Holiday Name		Date	
		Holiday Name New Yea's Day 2005 Christmas Day 2000		2005/1/1 2005/12/25	
		<i></i>			

To add a new Holiday Group, in Holiday Group, click +.



Give the new Holiday Group a name and select the Time Zone it will use, then click OK to save the settings. Before adding a new Holiday Group, you should create a Time Zone that is special for the Holiday Groups use.

Next step is to add the holidays, which are included in Holiday Group. Select the Holiday Group, and then click *.

Name:		
Date:	2006/1/1	-
	ОК	Cancel

Give the holiday a name and select the date, then click OK to save the settings. To modify defined Holiday Group, select the Holiday Group on the list view, click . To delete defined Holiday Group, select the Holiday Group on the list view, click . To modify defined holiday of Holiday Group, select the holiday on the list view, click . To delete defined holiday of Holiday Group, select the holiday on the list view, click . GIGA-TMS Inc. Document Version: v1.5 Date: 1/26/2010

Control Assign

Control Assign defines the doors (terminals) that who can enter in.

e)					
😰 User	Mach. No	Con	nection	Mach. Name	C.S.	
Holiday Groups Control Assign Management Card	0	c1		TR4080	1	
	Code 0000000001		lser Iavid			
	000000002		ohn			

To assign the users to specified machine number of terminal, select the terminal, and then click **U**.

Code	User	
00040265420255	Joe	
00040265420256	Tom	

Select the users then click OK to save the settings.

Management Card

By using Management Card, it can be much more flexible for administrators to maintain the security system. There are three types of Management Card, details as below:

- Lock System: Once a Lock System Management card is punched in any of terminals, all the doors will be locked. TRU will not open any doors even a valid tag is punched.
- Unlock System: While a Lock System Management card is punched, the system will

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be in a totally lock mode. You can use the Unlock System Management Card to punch any of terminals to disable the lock mode. Unlock System doesn't mean opening the doors.

One Day Pass: This is most useful to make a quickly new tag for a one-day uses of visitor or customer. To define the one-day use tag is very simple; first, punch the One Day Pass Management card. Second, punch another tag; TRU will define the second tag next to the One Day Pass Management card as a one-day use tag. This tag is not limited by the Control Assign or Time Zone settings, which means it can enter all the doors and all the time period in the defined date.

Not like user defined tag, with a name given, the one-day use tag will not get a name associated with, which means you don't know who takes the one-day use tag to punch the terminals. The only information is the punch date, time and doors. But you can use a jotter to record the person who takes this one-day use tag while releasing.

Access Control Config	uration			
Tree	4 — 9			
🗗 🖸 User	Owner	Code	Туре	Description
- 👸 Time Zones	David	000000003	Lock System	
	John	000000005	Unlock System	
Control Assign				
Control Assign Management Card Miscellaneous				
- 🍪 Miscellaneous				
	<			>

To add a Management Card, in [Management Card] inspection, click +.

Add Manage	ement Card 🛛 🔀
Owner:	•
Code:	
	🔽 Get tag code from termial directly.
Туре:	Lock System 💌
Description:	
	OK Cancel

Enter the owner name and code; select the Management Card type, then click OK to save the settings.

To modify defined a Management Card, select the Management Card on the list view, and click .

To delete defined a Management Card, select the Management Card on the list view, and click —.

Miscellaneous

• **General tab:** This tab defines the way of how TRU reply to the terminal if a punch time data is retrieved from terminal.

🕵 Access Control Configu	1400/1	
Tree	General Organization Verify Rules	
Tree User Time Zones Holiday Groups Control Assign Master Card Miscellaneous	General Organization Verify Rules Display Image: Show user name on display while punching in. Display Duration: 5 million Lock Image: Dependence of the lock while punching in if tag code is allowed. Lock Duration: 5 million Bell Image: Sound the bell while punching in if tag code is allowed. Bell Image: Sound the bell while punching in if tag code is allowed. Bell Duration: 5 million Second(s). Apply	

Display: If selected, for TR4xx terminal, TRU will display the user name or the reason of invalid punch on the screen of terminal. For TR51x terminal, four digits will be displayed on the screen. Below table details the four digits.

Digits	Description
8800	Valid Punch
8801	Invalid Tag Code
8802	Invalid Time Zone
8803	Invalid Holiday Group
8804	Tag Code doesn't Take Effective
8805	Tag Code is Expired
8806	Lock System – Management Card Punched
8807	Unlock System – Management Card Punched
8808	One Day Pass – Management Card Punched
8809	One Day Use Tag
8810	Lock out - System is in Lock Mode
8811	Invalid Door (terminal)
8812	Invalid Prefix
8813	Invalid Suffix
8814	Valid Punch - Valid Prefix or Suffix Punch

If not selected, for TR40xx terminal, the tag code, date and time will be displayed on the screen. For TR51x terminal, the last four digits of tag code will be displayed on the screen. For WEC200-00 terminal, it doesn't feature a screen, but it can show the user about the punch result by sounding different pattern of beeps. An approved entry will sound a long beep; otherwise, an in-continuous beep will sound.

Display duration defines how much time the message will be kept on the screen. If there is a punch during the displaying, TRU will clear the previous message and show the next one.

- Lock: If selected, TRU will open the door (trigger the rely) while retrieving a valid punch. If not selected, TRU will not open the door even a valid punch is retrieved. Lock duration defines how much time it will take to open the door. But please keep in mind, TRU is not able to know that the door is closed or not.
- Bell: If selected, TRU will sound the external speaker (trigger the rely) while retrieving a valid punch. If not selected, TRU will do nothing for the external speaker even a valid punch is retrieved.

Bell duration defines how much time it will last to sound the external speaker. The Bell setting is only available for TR40xx terminal.

• **Organization tab:** Defines your company organization – Department and Title.

	General Organizatio	n Verify Rules		
User Time Zones Holiday Groups Control Assign Master Card Miscellaneous	Corganization	epartment		
		🥅 Department	×	
		🕂 💻 📑 🖉		
		Name	Code	
		System Develop Sales		
		12 A C 4 C 4 C 4 C 4 C 4 C 4 C 4 C 4 C 4 C		
		-		

To set up the organization will help you to search or filter the concerned time data more quickly.

Verify Rules tab: For a valid tag code, besides the defined user tags, TRU also provides another way to verify a valid tag code by its prefix and suffix.
To each be the prefix and suffix a string a just a sheat the D (stift a parts of the sector).

To enable the prefix and suffix settings, just select the [Verify parts of the content of punched tag code] item.

Please be aware of the prefix/suffix settings, too many prefixes or suffixes will lower GIGA-TMS Inc. Document Version: v1.5 Date: 1/26/2010

down the TRU system security.

ree	General Organization	Verify Rules		
User Time Zones Holiday Groups Control Assign Master Card Miscellaneous	C Unlock the Unlock the Unlock the When prefix is :	he content of pund door while prefix is door while suffix is door only while pre door while one of p	- hed tag code. matched. fix and suffix are both matched. refix and suffix is matched. cards whose tag code starts wi	th the same
	character sequ Prifix:	000456	Add Delete	
		I et, only those Use ence will be accep	cards whosetag code ends with ed) the same
	Canal.	093 068	_ Add Delete	
			Update	

Automation

After TRU starts Extended Mode and establishes all the connections, it will STAY and WAIT for the incoming time data punched from terminals. If there are exceptions occurred at the remote connected terminals, like power off or memory full, it will not know. If such kinds of exceptions happen in TRU security system, the users may meet to be locked out of the doors. To setup the automation may reduce the exceptions but not eliminate completely, because PC crushed (TRU installed) may also cause the users to be locked out. To setup the automation, from [Tools], click [Options].

C	T	Double-Click the cell and enter the time for
Seq.	Time 10:30	downloading the time data.
2	12:40	Note: The Extended Mode (Access Control)
3	14:30	function will be disabled temporarily during the downloading process.
4	16:50	downloading process.
5	18:00	
6	23:00	
7	01:00	
8		
9		
10		
11		

• Auto-Download Time Data tab: While users punch the tag, terminal will store the tag code to internal memory. From time to time, when the memory is full, users can't punch tags anymore. The time data in memory must be downloaded and removed before

next new punch. Of course, the administrators can do this by manually (return to Normal Mode and download / clear the time data), but by enabling the auto-download time data function will be more reliable to ensure the memory is not going to be full. There are 24 time periods you can set. When the time is up, TRU will return to Normal Mode and download the time data automatically. After the time data is downloaded and cleared completely, TRU will back to Extended Mode.

Auto-Scan tab: While the terminal's TCP connection is closed (only for Ethernet interface terminal) or the running mode is in Normal Mode (on terminal side, not TRU), TRU will not get the punch time data of the problem one terminal in real-time. The busy network or connection timeout may cause TCP disconnected, and the not in Extended Mode of terminal may be caused by that the terminal has ever been powered off and on again (the default mode for terminal is Normal Mode). These two exceptions can be solved by enabling the auto-scan function. Please take notes; too much frequency scanning the terminals may eat much more PC resources, and it will also slow down the reaction (open door or display messages) of TRU to terminal.



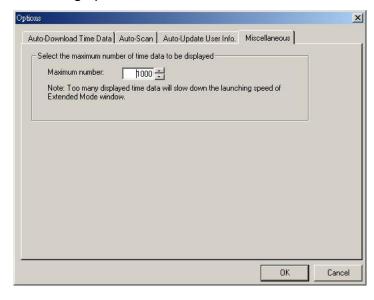
But if the disconnection is caused by the no-power terminal or disconnected communication cable, then there is no way to establish the connection. For TRU, in this kind of exceptions, you can set up the auto-email function to inform the administrator(s) where the disconnected door (terminal) is and the time that exception happens (The email account must consist with your MS Outlook Express's account).

Auto-Update User Info. tab: This function has nothing to do with the system exceptions. If you have your own program and want to define the user information by yourself (your program), including user name, tag code and allowed entering doors etc, and often to make modification, then you may need this function.
 First, your program must export the user information to a file, which the format is detailed in export file format of User definition section. Second, set the update timetable for importing and updating the user information to TRU database. Please take notes; the duplicated user (tag code) will be overwritten.

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Seq.	Time	Double-Click the cell and enter the time for
1	12:00	downloading the time data.
2	07:51	
3	17:33	Import File:
4		F:\Project\TimeRecorderUtility\060106_1349.td
5		
6		
7		
8		
9		
10		
11		
10		-1

 Miscellaneous tab: This setting defines how many time data will be displayed in the Extended Mode main window. Too many displaying records will slow down the launching speed of Extended Mode.



View Time Data

Under Extended Mode, TRU displays the retrieved time data on the list view, and uses the icons to present the punch results of tag verification.

1 1 1 2	2006/1/5 2006/1/5 2006/1/5 2006/5/1	PM 04:14:10 PM 04:14:38 PM 04:15:03	0004026542015
1 1 2	2006/1/5	PM 04:15:03	0004026542025
1 2			
2	2006/5/1	DH 041410	
	Econ of 1	PM 04:14:12	0004026542025
1	2006/5/1	PM 04:14:33	0004026542025
2	2006/5/1	PM 04:14:38	0004026542025
j ico	ons to pi	resent	
	icc	2 2006/5/1	2 2006/5/1 PM 04:14:38 I icons to present

Below table details the presentation of the icons.

Icon	Description
2	Valid Punch
×	Invalid Tag Code (not defined)
©_×	Invalid Time Zone
₽ ×	Invalid Holiday Group
<mark>@</mark>	Tag Code doesn't take Effective
	Tag Code is Expired
-	Lock System – Management Card Punched
-	Unlock System – Management Card
	Punched
1	One Day Pass – Management Card
	Punched
1	One Day Use Tag
Ω_	Lock out - System is in Lock Mode
	Invalid Door (terminal)
	Invalid Prefix
	Invalid Suffix
	Valid Punch - Valid Prefix or Suffix Punch

Because the main window of Extended Mode only displays a certain number of time data, if you want to view more or all records, or want to get the concerned time data right away, please use the [View Punched Time Data] window. To launch this window, from [View] menu, click [Punched Time Data].

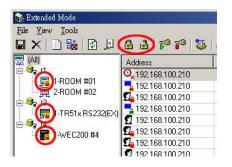
🕋 View Punched Time Data							
View by Terminal	🖬 🗙 😂 [à 🕼			#4		
	Address	C.S.	Date	Time	Code	User	
🖻 🦉 ti	COM1	1	2006/1/5	PM 04:14:10	00040265420256	Tom	
BOOM #01	🖸 COM1	1	2006/1/5	PM 04:14:38	00040265420255	Joe	
⊡ BOOM #02 ⊡ 🤩 t2	l <mark>- ↓</mark> СОМ1	1	2006/1/5	PM 04:15:03	00040265420150		
TR51x RS232(EX)							
						-	
			()				
0 T.J. 0 Y.J.J.					-		
C Today C Yesterday							
C This Week 💿 Past 7 Days							
C Customize							
From: 2006/1/4							
To: 2006/ 1 /10							
C = 1							
<u> </u>		04	- 11 - 11 -				
Records: 3					1		

In this window, you can filter the time data by departments, titles, connections, terminals and the date range specified. It also allows you to export or print out the filtered time data.

Handle the Terminals

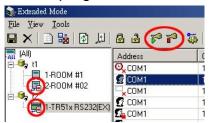
Lock specified terminal

In some cases, you will need to lock certain door(s) that not allows any person to enter in, no matter a valid or invalid tag punches on the terminal. To do this, select the terminal (in the tree view of terminals list), on the toolbar, click a. The selected terminal will change to lock mode (for TR40xx terminal, icon changed from \blacksquare to \blacksquare). To return the lock mode back, on the toolbar, click a. Although the terminal is set to lock mode, the terminal still sends out the punch time data to TRU, which will display on the list view and store into the database.



Set specified terminal to Normal Mode

If you want to verify the punch by terminal itself (check the tag code by the prefix setting of terminal), select the terminal, click \mathbb{P} . The selected terminal will be in the Normal Mode (for TR40xx terminal, icon changed from \mathbb{R} to \mathbb{P}). To return the selected terminal back to Extended Mode, on the toolbar, click \mathbb{P} . While the terminal is in Normal Mode, the punch time data will not send out to TRU, which means this data will not be displayed on the list view of program, but will be still stored in the internal memory of terminal.



TRU - Client Program

TRU provides a way of sharing the database file to allow client program viewing and editing the database, such as security configuration, viewing time data. By using this way, you can install the TRU program into a PC that not so many people to operate, which can ensure the TRU can work without any incident or man-made exceptions happen.

TRU also provides user-level security (permissions) to limit client user to access the database. For example, a client user may only allow viewing time data but can't edit the security configuration.

User Level Security – Set Accounts and

Permissions

Before starting the client program, the user accounts and permissions have to be set up firstly. To setup the accounts and permissions, under TRU's Normal Mode main window, from [Tools] / [Extend Mode], click [Set Accounts / Permissions].



Pops up the main window.

Tree	Set Accounts / Permissions		×
Groups Statistic Built-in account for administering the pro	Tree	1 5 111	
Built-in account for guest access to the		tor	

Users folder: Defines the users account, password and the Groups that belongs to.

Edit User	<u>x</u>
Name:	User
Full Name:	
Description:	Built-in account for guest access to the program
Member of:	Users
1	
Password:	XXXXXX
Confirm Passwo	ord: xxxxxx
C Account is	disabled 🔽 Change Password
-	OK Cancel

Groups folder: Defines the group name, users belong to, and the permissions.

80 B	sions	General Permissions	
Group Name:	Administrators	Access Control Configuration	<u> </u>
Description:	Administrators have complete and unrestricted access	■ User → ✓ Add	
Members:		Delete	
Administrati	n	Edit .	
A-9-14		Export	
		E 🗹 Time Zone	
		Add	
		□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
		🖶 🖉 Holiday Groups	
Add	Remove	Add	•

Installation

The setup files of TRU – Client program is located in the [Client] folder of Setup CD. Double-clicking the setup.exe file to install the program. The program short cut is located in the [Start] / [Programs] / [GIGA-TMS] / [Time Recorder Utility - Client]. GIGA-TMS Inc. Document Version: v1.5 Date: 1/26/2010



First Launch

For the first launch, TRU – Client will inquire the file and path of TRU database (TR.mdb) that is located in the TRU (Server) installation path.

Time Reco	order Utility - Client	×
	Not connect to the database yet, please specify the location (path) and file	name of the database.
	()	

After locating the file, a login window will pop up.

e and password th	nat is valid for this
1	
οκ	Cancel
	e and password th

(Default account - User Name: User, Password: 0000)

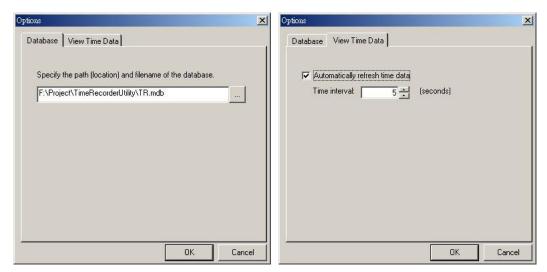
Enter a valid user name (case-sense) and password, pops the TRU - Client main window.

Time Recorder	r Utility - Client V1.1R14	
	Access Control Configuration	
Ī	View Punched Time Data	
	Options	
	<u>E</u> xit	1

Run the TRU – Client program

Below details how the command buttons of main window work.

- Access Control Configuration: Launch [Access Control Configuration] window, which is totally same to the TRU program. But some functions may be limited to access depending on the permissions settings.
- View Punched Time Data: Launch [View Punched Time Data] window, which is totally same to the TRU program.
- Options:



- **Database tab:** Locate the path of TRU database file.
- View Time Data tab: Set the frequency of refreshing time data. You also refresh the time data by manually.
- Exit: End program

Maintain Database

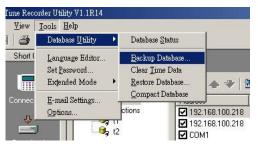
From time to time, it is important for the TRU database to be backed up, purged and compacted. The frequency at which these tasks are performed depend on the size of your time data and the speed at which the TRU database file is growing.

Before we continue, read the definitions of each action that can be performed on the TRU database:

- Backup Database This function makes an copy of the TRU database as of the time the function is executed. This is very useful for keeping a copy of your data file in case of a disaster. It should be performed on a weekly basis or even more frequently if the data in TRU is extremely important. This method of backup should not take the place of a normal daily tape backup.
- Clear Time Data This function can be used to delete all time data records, which are retrieved under Extended Mode. This should never be done without first performing a backup. When time data is removed from the database, it can never be recovered. This function rarely needs to be performed, if at all.
- Restore Database This function can be used to import the backup database. Please keep in mind; the current database settings will be overwritten by the imported database.
- **Compact Database** To increase performance, when records are deleted from the TRU database, they are not permanently deleted. However, when many deleted records accumulate in the TRU database, it can hinder performance. To permanently remove deleted records (and therefore reduce the size of the database and increase

performance) 'Compacting' the database is recommended on a monthly or semi-monthly basis.

A good indication of when you should clear time data is when TRU performance seems to have slowed considerably due to the increase in file size (usually well over 10MB). If reporting is taking much longer than it used to, it might be time to clear time data. All the database maintenances are all running under Normal Mode.



Backup Database

To backup data, follow these instructions:

- From Tools menu, click Database Utility/Backup Database.
- You will be asked to give a path name for the copy of the database. Enter a valid path name and click OK.

Clear Time Data

To clear time data, follow these instructions:

- From Tools menu, click Database Utility/Clear Time Data.
- You will be given a warning. Read the warning and click **OK** if you wish to remove time data from the database.

Restore Database

To restore database, follow these instructions:

- From Tools menu, click Database Utility/Restore Database.
- You will be given a warning. Read the warning and click **Yes** if you wish to continue.
- Specify the path that the backup database is located.
- Click **Open** if you are certain you want to continue.

Compact Database

To compact the database, follow these instructions:

• From Tools menu, click Database Utility/Compact Database.

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FAQ

Q: How do I know my current use terminals are supported Extended Mode or not? If not supported, can I upgrade the terminals' firmware to meet the needs?

A: For TR40xx version, only TR40xx-20 models are supported (firmware version is V3.69 or later). For TR51x terminal, the firmware version is V1.81 or later.

You can use the [Terminal Properties] window to view the firmware version.

For the TR51x terminal, they all can use firmware upgrade method to get the new features of implementing Extend Mode. For TR40xx terminal, if the interface is RS232, then they all can use the firmware upgrade method; if is Ethernet interface, only using TCP protocol (TR40xx-10/TR40xx-15/TR40xx-20) can be upgraded, which means, the TR40xx-00 model, with UDP protocol is not available for the Extended Mode.

Q: Can terminal switch to Normal Mode automatically while disconnected to server PC?

A: This function only applies to TR40xx and TR51x terminal, not for WEC200-00. To achieve this, needs two properties to be set on the terminal. One is the [Prefix] property; another is [Punch Error Time – Mode Switch] property.

		TR51x Properties		X
TR40xx Properties		File Tools Help		
File Iools Help		-		
2 🗄 🔮 🖄 🥾		Prefix (0-16 chars.)	200	
Internal reader, prefix (0-16 chars.)	> 0	Extract From Character [1-37]	1	
Internal reader, extract from character (1-40)	1	Number of Character to Extract (1-37)	37	
Internal reader, num, of chars, to extract (1-40)	38			
External scanner, prefix (0-16 chars.)	00	Daylight Saving Time	0 - Disabled	
External scanner, extract from character (1-40)	1	Daylight Saving Time - Start Date (MM/DD)	01/01	
External scanner, num. of chars. to extract (1-40)	38	Daylight Saving Time - End Date (MM/DD)	01/01	
External scanner, start character (0-255)	2			
External scanner, end character (0-255)	13	Bell Table Mode	0 - Everyday	
Enable/disable external printer	0-Disabled	Bell Table (Week Mode - Sun)	<table></table>	
Allow/Disallow duplicate record entry	1-Allow	Bell Table (Week Mode - Mon)	<table></table>	
Logfile extension (DAT/TXT/DOC)	0-DAT		<table></table>	
External scanner, baudrate	3-9600bps	Bell Table (Week Mode - Tue)		
Total number of records	0	Bell Table (Week Mode - Wed)	<table></table>	
Number of new records	0	Bell Table (Week Mode - Thu)	<table></table>	
Number of free records	12149	Bell Table (Week Mode - Fri)	<table></table>	
Power status	0-Power OK			
Firmware version	TimeRec V3.69	Bell Table (Week Mode - Sat)	<table></table>	
Punch Error Times - Mode Switch (0-10)	3	Duplicate Entries	1 - Enabled	
Under Extended Mode, if the terminal doesn't get a		Punch Error Times - Mode Switch	3	•
specified punched, then the terminal will switch to r (D=Disabled)	iormal mode automatically.	When prefix is set, only those User ca the same character sequence will be a		arts with
Device is connected to: COMM0	Source: 1	Connect to COM1		

Q: Why TR510 can't open the door (activate the relay) under Extended Mode even a valid tag code is punched in?

A: Make sure the property of [Relay is Used for] is set to [0 – Door unlock].

TR51x Properties		×
<u>File T</u> ools <u>H</u> elp		
A .		
Machine Number (0-255)	2	-
Date/Time	2/15/2006 13:08:02	
Display Mode	1 - Disktop	
Bell Duration (0-255)	10	
Bell Table	<table></table>	
Event Mode	0 - Depend on User	
Event Table	<table></table>	
Unlock Duration (0-255)	10	
Relay is Used For	🔰 - Door-unlock	
Prefix (0-16 chars.)	00	
Extract From Character (1-37)	1	
Number of Character to Extract (1-37)	37	
Daylight Saving Time	0 - Disabled	
Daylight Saving Time - Start Date (MM/DD)	01/01	
Daylight Saving Time - End Date (MM/DD)	01/01	
Bell Table Mode	0 - Everyday	-
Selects the function of internal relay is	used for: Bell or Door-un	lock
Connect to COM1		

Contact Us

Giga-TMS Inc.

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Appendix A – WEC200-01

Firmware

There are three kinds of firmware reside separately in the WEC200-01 device, details as below:

- Firmware #1: Resides in the IC U5 of main board. The firmware #1 file is upgraded by the TRU program. This firmware is irrelevant to firmware #2 & #3, which means after upgrading the firmware #1, it doesn't need to upgrade firmware #2 & #3.
- Firmware #2: Resides in EM200 module, which plays the role of operating system (Tios - Tibbo Operating System). The Tios firmware file is upgraded by the [Device Explore] program. After upgrading Tios firmware, the Tios application will be removed. So it needs to upgrade the application firmware after Tios firmware is upgraded.
- Firmware #3: Resides in the EM200 module, which plays the role of application program running under Tios. For WEC200-01, the Tios application name is mini-TRU. This firmware file is upgraded by the [Device Explore] program. Tios application firmware can be upgraded alone without upgrading Tios firmware firstly.

The **Device Explore** program is built in the TIDE (Tibbo Integrated Development Environment) program. To set up TIDE, from the tide folder of Setup CD, click tide-1-15-09-beta.exe. This set up file may be upgraded in the future. You can get the latest version on tibbo web site (<u>http://www.tibbo.com/</u>).

Upgrades Firmware #1 – Main board IC U5

Below procedures guides you how to upgrade firmware #1.

- Launch WEC200-01 properties window.
- From **Tools** menu, click **Firmware Upgrade**.



• On the **Firmware Upgrade** window, select the firmware file (extension name is bin), and then click **OK** to start upgrading.

Using Protocol:	XModem - Checksum 🗾	
Firmware Code:	Not Encripted - ZX	
File Name & Path:		4
oject\WEC200\f	irmware\20060705\ROM0722ABIN	Browse

Upgrades Firmware #2 – Tios Operating System

Below procedures guides you how to upgrade firmware #1.

• From Start / Programs / Tibbo / Tibbo IDE, click Device Explore.

-	Windows Update									
	Set Program Access and Defaults									
1	Programs	1	-	Accessories Startup	+ +					
	Documents	+ (ē	Internet Explorer						
	Settings		-	Outlook Express Tibbo	Þ	ſ.,	Tibbo IDE	•		Device Explorer
	Search	۰Ī							3	Tibbo IDE Documentation
9	Help								8 >	Tibbo IDE on the Web Tibbo IDE
	Run								\odot	Uninstall
6	Shut Down									

• On the **Device Explore** window, select the upgraded device.

1	MAC	IP	Version	Comment	Refresh
0	0.200.0.0.9.147	192.168.100.2		GIGA-TMS/W	Buzz
D	0.2.3.6.29.18	192.168.100.1	<v3.31(s)>+N</v3.31(s)>	1	
0	2.200.0.0.11.0	192.168.100.2	<v3.56+nl></v3.56+nl>	QA/WEC200	Change MAC
D	0.2.3.4.40.113	192.168.100.2	<v3.28(w)></v3.28(w)>	1	Change IP
D	0.200.0.0.6.59	192.168.100.2	<v3.61+nl></v3.61+nl>	1	unange In
D	0.200.0.0.13.28	192.168.100.2	<v3.61+nl></v3.61+nl>	1	Upload
D	0.200.0.0.13.101	192.168.100.2	<v3.61+nl></v3.61+nl>	1	- AL
	0.200.0.0.9.147	192.168.100.2	<em202-1.20.02></em202-1.20.02>	WEC200	Abort
D	0.1.2.3.4.5	192.168.100.1	<nv1.10 netloa<="" td=""><td>1</td><td></td></nv1.10>	1	
					Close

• Click Upload, select Load Firmware Through the Network.

	MAC	IP	Version	Comment	Refresh
00	0.200.0.0.9.147	192.168.100.2		GIGA-TMS/W	Buzz
00	0.2.3.6.29.18	192.168.100.1	<v3.31(s)>+N</v3.31(s)>	1	
0	2.200.0.0.11.0	192.168.100.2	<v3.56+nl></v3.56+nl>	QA/WEC200	Change MA(
۵	0.2.3.4.40.113	192.168.100.2	<v3.28(w)></v3.28(w)>	1	Change IP
۵	0.200.0.0.6.59	192.168.100.2	<v3.61+nl></v3.61+nl>	1	unangen
00	0.200.0.0.13.28	192.168.100.2	<v3.61+nl></v3.61+nl>	1	Upload
00	0.200.0.0.13.101	192.168.100.2	<v3.61+nl></v3.61+nl>	Load Firmware Throug	
2	0.200.0.0.9.147	192.168.100.2	<em202-1.20.0< td=""><td>Load Application Throu</td><td></td></em202-1.20.0<>	Load Application Throu	
00	0.1.2.3.4.5	192.168.100.1	<nv1.10 netlo-<="" td=""><td>Load Firmware Throug</td><td></td></nv1.10>	Load Firmware Throug	

- Select Tios firmware file (extension name is bin).
- Click **Open** to start upgrading firmware.

Upgrades Firmware #3 – Tios Application

Below procedures guides you how to upgrade firmware #3.

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• From Start / Programs / Tibbo / Tibbo IDE, click Device Explore.

	Windows Update Set Program Access and Defaults						
	Programs	, 🖨	Accessories Startup	•			
	Documents	• 6	Internet Explorer				
尉	Settings	•	Outlook Express Tibbo	› 📻	Tibbo IDE		Device Explorer
X	Search	•				3	Tibbo IDE Documentation
2	Help					1 2 2	Tibbo IDE on the Web Tibbo IDE
	Run					0	Uninstall
	Shut Down						

• On the **Device Explore** window, select the upgraded device.

MAC	IP	Version	Comment	Refresh
0.200.0.0.9.147	192.168.100.2		GIGA-TMS/W	Buzz
0.2.3.6.29.18	192.168.100.1	<v3.31(s)>+N</v3.31(s)>	1	
2.200.0.0.11.0	192.168.100.2	<v3.56+nl></v3.56+nl>	QA/WEC200	Change MAC
0.2.3.4.40.113	192.168.100.2	<v3.28(w)></v3.28(w)>	1	Change IP
0.200.0.0.6.59	192.168.100.2	<v3.61+nl></v3.61+nl>	1	unange in
0.200.0.0.13.28	192.168.100.2	<v3.61+nl></v3.61+nl>	1	Upload
0.200.0.0.13.101	192.168.100.2	<v3.61+nl></v3.61+nl>	1	Abort
0.200.0.0.9.147	192.168.100.2	<em202-1.20.02></em202-1.20.02>	WEC200	Abort
0.1.2.3.4.5	192.168.100.1	<nv1.10 netloa<="" td=""><td>1</td><td></td></nv1.10>	1	
				Close

• Click Upload, select Load Application Through the Network.

0.200.0. 0.2.3.6.2		192.168.100.2		GIGA-TMS/W	
0.2.3.6.2	10.10				Buzz
	23.10	192.168.100.1	<v3.31(s)>+N</v3.31(s)>	1	
2.200.0.	0.11.0	192.168.100.2	<v3.56+nl></v3.56+nl>	QA/WEC200	Change MAC
0.2.3.4.4	40.113	192.168.100.2	<v3.28(w)></v3.28(w)>	1	Change IP
0.200.0.	0.6.59	192.168.100.2	<v3.61+nl></v3.61+nl>	1	
0.200.0.	0.13.28	192.168.100.2	<v3.61+nl></v3.61+nl>	1	Upload
0.200.0.	0.13.101	192.168.100.2	<v3.61+nl></v3.61+nl>	Load Firmware Through	
0.200.0.	0.9.147	192.168.100.2	<em202-1.20.0< td=""><td>Load Application Throu</td><td></td></em202-1.20.0<>	Load Application Throu	
0.1.2.3.4	4.5	192.168.100.1	<nv1.10 netlo-<="" td=""><td>Load Firmware Through</td><td>B 110</td></nv1.10>	Load Firmware Through	B 110

- Select Tios Application firmware file (extension name is tpc).
- Click **Open** to start upgrading firmware.

Change WEC200-01 to WEC200-00

The hardware between WEC200-00 and WEC200-01 is totally identical; the only difference part is the firmwares in EM200 moudle. For WEC200-00, the EM200 firmware is "Device Server", for WEC200-01, the EM200 firmware is "Tios".

Before changing the firmware, it has to install the DS Manager program into Windows system firstly. The setup file of DS Manager program is located in the folder "tdst" of the setup CD.

To change the firmware from "Tios" to "Device Server" please follow below steps:

• From Start / Programs / Tibbo / Tibbo IDE, click Device Explore.

Windows Update							
Set Program Access and Defaults							
Programs	,	Accessories))				
Documents	•	Startup Internet Explorer					
Settings	•	Outlook Express Tibbo	•	G	Tibbo IDE	N 🔯	Device Explorer
Search	+				Connection Wizard	3	Tibbo IDE Documentation
🧼 Help				3	DS Manager Help Manual	e) >	
Run					Port Monitor Uninstall		Uninstall
Shut Down					VSP Manager		

• On the **Device Explore** window, select the upgraded device.

MAC		IP	Version	Comment	Refresh
0.200.0).0.7.60	192.168.100.221		GIGA-TM	Buzz
0.200.0).0.7.237	192.168.100.222		GIGA-TM	Buzz
0.200.0	0.0.9.147	192.168.100.210		GIGA-TM	Change MAC
0.2.3.5	.24.62	192.168.100.211		GIGA-TM	Change IP
0.200.0	0.0.7.233	192.168.100.223		GIGA-TM	
0.200.0	0.0.7.237	192.168.100.222	<em202-1.20.02></em202-1.20.02>	WEC200	Upload
0.200.0	0.0.6.59	192.168.100.228	<v3.61+nl></v3.61+nl>	1	Abort
0.200.0	0.0.9.147	192.168.100.210	<em202-1.20.02></em202-1.20.02>	WEC200	Abon
0.200.0	0.0.13.28	192.168.100.225	<v3.61+nl></v3.61+nl>	1	
0.2.3.5	.24.62	192.168.100.211	<em202-1.20.02></em202-1.20.02>	WEC200	
0.200.0	0.0.13.101	192.168.100.229	<v3.61+nl></v3.61+nl>	1	
0.200.0	0.0.7.60	192.168.100.221	<em202-1.20.02></em202-1.20.02>	WEC200	
â 0.200.0	0.0.7.233	192.168.100.223	<em202-1.20.02></em202-1.20.02>	WEC200	
۹					Close

• Click Upload, select Load Firmware Through the Network.

	MAC	IP	Version	Comment	Refresh
D	0.200.0.0.7.60	192.168.100.221		GIGA-TM	Buzz
	0.200.0.0.7.237	192.168.100.222		GIGA-TM	Buzz
	0.200.0.0.9.147	192.168.100.210		GIGA-TM	Change MAC
D	0.2.3.5.24.62	192.168.100.211		GIGA-TM	Change IP
D	0.200.0.0.7.233	192.168.100.223		GIGA-TM	
Þ	0.200.0.0.7.237	192.168.100.222	<em202-1.20.02></em202-1.20.02>	WEC200	Upload
D	0.200.0.0.6.59	192.168.100.228	<v firmula<="" load="" td=""><td>re Through th</td><td></td></v>	re Through th	
F	0.200.0.0.9.147	192.168.100.210		tion Through I	
D	0.200.0.0.13.28	192.168.100.225	01	re Through th	
Þ	0.2.3.5.24.62	192.168.100.211	<em202 1.20.027<="" td=""><td>WECZOO</td><td>o sonar ore</td></em202>	WECZOO	o sonar ore
1	0.200.0.0.13.101	192.168.100.229	<v3.61+nl></v3.61+nl>	1	
	0 200 0 0 7 60	192 168 100 221	ZEM202-1-20.025	WEC200	

• Select "Device Server" firmware file (extension name is bin).

Browse for Tibbo	Firmware				<u>?</u> ×
Look jn:	🔁 tdst		•	🗢 🗈 💣 📰 🕈	
History Desktop My Documents	EM_362D				
My Network P	 File <u>n</u> ame:	EM_362D			<u>O</u> pen
	Files of type:	Firmware binary fil	es (*.bin)		Cancel

This file is located in the folder "tdst" of setup CD. The file name is EM_362D.BIN. This name may be changed in the future at firmware upgraded.

- Click **Open** to start upgrading firmware.
- After the upgrading is completed, the device will restart automatically.
- Next steps will initialize the Device Server settings of EM200 by DS Manager program.
 To do this, From Start / Programs / Tibbo, click DS Manager

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-	Windows Update							
	Set Program Access and Defaults							
F ***	Programs	•		Accessories Startup	*			
	Documents	+	e	Internet Explorer				
5	Settings		2	Outlook Express				Þ
	Search	•	20	Tibbo			Tibbo IDE Connection Wizard	1
2	Help					2	DS Manager Help Manual	
-	Run						Port Monitor Uninstall	
	Shut Down						VSP Manager	

• Select the upgraded device (This default IP-address is 1.0.0.1^{*}), click **Initialize**.

_	g <mark>er - ¥5.7.10</mark> mode Device Help			
	PTY Address Book MAC 0.24.77.1.176.189 0.2.3.8.60.240 0.100.0.0.244.131 0.24.77.1.176.182 0.24.77.0.64.61 0.2.3.8.30.200 0.120.0.0.118.53 0.120.0.0.61.40 0.120.0.08.131 0.120.0.0.59.212	Serial Access IP 192.168.110.250 (local) 192.168.100.221 (local) 192.168.100.225 (local) 192.168.100.214 (local) 192.168.100.102 (local) 192.168.100.214 (local) 192.168.100.214 (local) 192.168.100.216 (local) 192.168.100.210 (local) 192.168.100.212 (local) 192.168.100.212 (local) 192.168.100.212 (local) 10.01 (local)	Owner/Device name /TR4030 SysEng-1/PDS200 /8F TR515 SysDept3/TR4050 SysEng-1/TR515 SysEng-1/TR515 SysEng-1/TR510E	Refresh Settings Upgrade Initialize Routing Status Buzz! Change IP Add Find
		t Device Server ating normally mreachable. <u>More info</u> ed (the device is idle)		

- The device will reboot, it will take about 5~10 seconds.
- After starting the device, click Settings.

Auto-Disc	overy Address Book	Serial Access		
Status	MAC	IP	Owner/Device name	Refresh
00	0.24.77.1.176.189	192.168.110.250 (local)		Settings
	0.2.3.8.60.240	192.168.100.221 (local)		
	0.100.0.0.244.131	192.168.100.225 (local)	/TR4030	Upgrade
۵	0.24.77.1.176.182	192.168.100.214 (local)	SysEng-1/PDS200	Initialize
	0.24.77.0.64.61	192.168.100.102 (local)	/8F TR515	
	0.2.3.8.30.200	192.168.100.170 (local)	SysDept3/TR4050	Routing Status
	0.120.0.0.118.53	192.168.100.210 (local)	SysEng-1/TR515E	Buzz!
🗶 🛄	0.120.0.0.61.40	192.168.100.213 (local)	SysEng-1/TR515	Change IP
	0.120.0.0.8.131	192.168.100.212 (local)	SysEng-1/TR510E	Change II
	0.120.0.0.59.212	192.168.100.211 (local)		
				Add
				Find
				Find
	This is a single-po This device is open	rt Device Server		

• On the Settings DS window, click Connection tab. Select the value of Transport protocol to 1- TCP.

Connection timeout (min)	5		
ransport protocol	0-UDP		
Broadcast UDP data	0- UDP 1- TCP		
Link Service login	(incidentia)		
Inband commands	(irrelevant)		
Data login	(inelevant)		
Routing Mode	0- Server (Slave)		
Accept connection from	0- Any IP-address		
Connection mode	(irrelevant)		
Destination IP-address	(irrelevant)		
Destination port	(irrelevant)		
lotification destination	0- Last port		

• Click **OK** to update the setting.

Off-line Security Policy

WEC200-01 features the off-line access control application. It also allows you to do on-line access control, just like WEC200-00, or other time recorders, such as TR51x and TR40xx. Below lists all the features of WEC200-01.

- Provide Management card for appending or deleting personal authority from external reader directly.
- 2K Memory capacity, which can store 50 users, 20 time data and 10 visitors.
- Circuit design with 2 input devices for door broken detective.
- Feature of door unlocked detection.
- Provide 2 relay outputs for external alarm and electric lock.
- Separate controller and reader for higher security demand.
- With Ethernet connection to PC and able to work independently at off line with PC.
- Provide 1 holiday table that allows defining 10 holiday dates.
- Provide 3 time zones of door-unlocked mode.
- Provide setting for length reading and checking of card numbers.

All the off-line security settings can be configured via the WEC200 properties window. To modify the property value, double-click the selected item; the value window will pop up. Enter the wanted value and click **OK** to update the value.

er value
0 🚺 🔺
м#00
curity
+
nt Return
FUMU/200
2006/9/11
13:52:17
2-Monday
1 · Door Security
2- Server OB Client
3 🏠
ick Item
10
0- Disabled
<table></table>
<table></table>
<table></table>
0-Disabled
Scription
0- Disabled
n 🖊 📃

Each property description is displayed under the grid. Refer to the description to set up the security rules to meet the needs.

Some properties changed need to restart the device, such as IP-address, Gateway IP etc. The reboot process may take about 10 seconds.

The timer will stop if the device power is shutting down. Even if the power is always on all the day, it is still lagging about 30 seconds (in a single day). If the timer is not updated by server frequently (at least once per day), it recommends to disable the security settings that is related to date and time, such as Time Zone, Holiday Group etc.

Exit Button Setup

The Exit Button function is used to activate the relay and keep activating in a specified time duration. The Exit Button is able to be selected to connect to the sensor #1 or sensor #2. Below WEC200 Properties windows shows you 3 properties needed to be setting up before implementing the Exit Button function.

Troperties	
<u>F</u> ile <u>T</u> ools <u>H</u> elp	
🔎 🖸 🛃	
Machine Number (0-9999)	0
Machine Name (1-16 chars.)	WEC200_Test —
Code Format	0- Raw Data
Input Sensor Status	11
Input Sensor Notification	1-Enabled
Service Code	000000003
Firmware Version	ROM0722Ab
Encode Raw Data	0- Disabled
Date (yyyy/mm/dd)	2010/3/16
Time (hh:nn:ss)	20:4:11
Weekday	3- Tuesday
Lock Rule	1- Door Security
Verify Site	2-Server OR Client
Punch Criterion (1 200 times)	3
Input Sensor #1	2- Exit Button
Input Sensor #2	1-Door Sensor Detector
Door Sensor Duration (0~255 sec. 0-Disabled)	10
Lock Duration (0~255 sec. ,0-Disabled)	10
Master Card	0-Disabled
If enabled, device will generate an event any change occurs on input sensors.	to server on its own if there is

The 3 properties are:

- Input Sensor Notification: This MUST set to 1- Enabled.
- Input Sensor #1: Set up the function that this sensor is used for. Please select to 2-Exit Button.

** It is also allowed to set the Input Sensor #2 to 2-Exit Button, depends on the need.

• Lock Duration: Set up how much time is passing then to inactivate the relay after pushing the Exit Button.

Appendix B – Push Mechanism for

TR515 UDP/TCP Terminal

The "push mechanism" means the TR515 terminal will send the punch time data to host PC right away; it doesn't require the host PC to "poll" the time data. The time data is still kept in the internal memory of terminal, which can be downloaded to host PC later on. TR515 terminal that uses UDP or TCP protocol supports this feature. Using RS232 interface is not available for the "push mechanism".

To enable the "push mechanism", please follow below steps:

• While adding or editing the connection, click [Correct Network Setting] button.

Name: c2		
-1st Master Ten	minal	
Туре:	TR51×UDP	•
Connect to:	169 . 254 . 236 . 2	01 🗰
UDP Port:	1001 🕂	
	C	Correct Network Setting:

• On the Options window, click [Miscellaneous #1] tab, tick the "Enable the real-time receiving (push mechanism) function for TR51x terminal".

Options	2
Download Schedule Miscellaneous Miscellaneous #1	
Real-Time Receiving for TR51x Terminal	
Enable the real-time receiving (push mechanism) function for TR51x terminal (The Access Mode value must be Enabled).	
* The real-time receiving function will be blocked temporarily if program is in the process of downloading the time data ,editing the properties or entering into Extended Mode.	
Saved file name and location:	
c:\iPas\trx515a.txt	
Enable the second path. Besides the above path, also save the time data in the second path.	
c:\iPas\trx515.txt	
OK Cancel	

• On the properties window, set the Access Mode to 1.

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TR51x Properties	
<u>File T</u> ools <u>H</u> elp	
A 3	
Daylight Saving Time - Start Date (MM/DD)	01/01
Daylight Saving Time - End Date (MM/DD)	01/01
Bell Table Mode	0 - Everyday
Bell Table (Week Mode - Sun)	<table></table>
Bell Table (Week Mode - Mon)	<table></table>
Bell Table (Week Mode - Tue)	<table></table>
Bell Table (Week Mode - Wed)	<table></table>
Bell Table (Week Mode - Thu)	<table></table>
Bell Table (Week Mode - Fri)	<table></table>
Bell Table (Week Mode - Sat)	<table></table>
Duplicate Entries	1 · Enabled
Punch Error Times - Mode Switch	0
Access Mode 🤇	1 - Enabled
Number of Records	170
Firmware Version	V1.91 (standard)