PX2000

Time & Attendance / Access Control Terminal

User Manual



Contents

. ł	Features	3
١.	. Specifications	3
	I. Exterior	
	/. Basic Settings	
	$\frac{1}{9} \frac{12}{3} \frac{7}{3}$	
	Clock	5
	Users	5
		-
	System	
	■ Network	
	Record Option	
	■ Tamper Switch	5
	■ Calibration	5
	■ Beep Hints	5
	■ Menu Password	6
	■ Security Level	6
	■ Volume	
	■ HTTP & TCP Port	
	■ FTP User Set(to be performed by professionals of your supplier only)	
	System Maintenance	
	■ Database Backup(to internal Micro SD card) — for enable/disable the function of auto of	
	backup from system memory to the internal Micro SD card every day at the time that you s	
	■ Language	
	■ WiFi Setting	6
	■ Camera	7
	Door	-
	Door	7
	IO Port(DI/DO)	7
/.	. User Interface	
/[I. Self-contained Time & Attendance / Access Control Software	8
	Set login password	9
	Database Backup(External database backup)	9
	System Setting	
	Clone Database(Internal database backup)	
	System Setting - Late/Absence E-mail Notice	10
	System Setting – FTP Setting	11
	Attendance Report (Detailed) – for fixed shifts users	12
	Attendance Report (Total) – for fixed shifts users	12
	Attendance Report (Multi Work Shift) – for multiple flexible shifts users	13
	Transactions	
	Transactions Delete	13
	Job Code Setting	
	Set Bell Schedule	
	Slave Host Setting	
	PC Server Info	
	Leave Setting(this function to be formally announced soon)	
	Insert Leaves(this function to be formally announced soon)	
	Work Shift Setting	16

Holiday Setting	. 17
Department	
User	. 17
User Weekly Shift	. 18

I. Features

- ARM 800MHz CPU; communication speed 100MB.
- Windows CE 6.0 operating system, built-in web server, FTP server and SQL CE 3.5 database.
- 7-inch color touchscreen LCD.
- Each terminal has a built-in web-based software. We also provides a free central management software (ASP.NET + SQL Express) for larger-scaled application.
- Can use either a terminal or a PC as the server for synchronizing all the connected slave terminals.
- TCP/IP interfaced. LAN / WAN(WiFi supported).
- 1.3MP camera records each punching to avoid faking.
- Every user can check its own attendance logs & work hrs between each IN & OUT record directly on the Touchscreen.
- Auto reconciliation of user accounts among multiple terminals in network.
- 256MB DRAM + 512MB Flash + 2GB Micro SD.
- 125KHz RF badge reader.
- Color touchscreen wallpaper is replaceable for displaying custom graphic design & company logo.

II. Specifications

CPU: ARM 800MHz

Memory: 256MB DRAM + 1GB Flash + 4GB Micro SD

Display: 7 inch 800x480 touchscreen LCD

Card reader: 125KHz RF badge reader

Camera: 1.3MP * 1

Comm. ports: Ethernet RJ45 * 1, WiFi * 1, USB2.0 * 3

Power input: DC12V 1.25~2A
Output: Relay dry contact * 1

Sound output: Piezo Buzzer *1; 2020 speaker * 1 LED indicator: Network * 1; RF Badge reading * 1

Operating temp.: $0 \sim 50^{\circ}\text{C} / 32 \sim 122^{\circ}\text{F}$ Operating hum.: $20 \sim 95\%$ (non-condensing)

Measurements: 226 * 150 * 72 mm

Weight: 1200 g(battery not included)

III. Exterior



IV. Basic Settings

Click [System Maintenance] to enter the setting menu(necessary settings are marked in Blue):



Manual time: Select Time Zone(UTC) > Click Apply > Set Date & Time.

Auto time: Tick the Auto Time check box > fill out IP address of a preferred time server > click Apply.



Add/Delete/Modify user information including User ID, Card numbers(Card numbers are used for identifying users. It can be the number of an actual RF card, User Names, Access PIN(default: 888888), User Group(if set as VIP the user will be allowed to

click the keyboard icon on the bottom of PX2000's main screen to pop up the keyboard and enter its card number to open the door without reading its card), & User Validity. A much faster and more convenient way for User management is through your PX2000's Self-contained or PC-end web-interfaced software (for details please refer to p.8 & 15).



System

■ Network

For setting IP address, Sub-net Mask, Gateway & DHCP on/off while using Ethernet cable. Once completed click [Apply] to save settings.

■ Record Option

For selecting required records & relevant rules:

In Record — In / Clock In records of registered users.

Out Record — Out / Clock Out records of registered users.

Event Record — including all records other than the above two, such as records of unregistered users, alarm, open-button, door open from software, etc.

Record Cycle — if enabled, new records will overwrite old records when PX2000 memory is full.

Unduplicate — once enabled PX2000 will stop recording the same card or fingerprint reading in the set interval(inMinute).

5 Digit — this is a special feature designed for those who require the card reader to decode only 5 digits of a card number. Ignore this if you are not sure about what this is!

■ Tamper Switch

If enabled, PX2000 will alarm in case of vicious destruction.

■ Calibration

Used for re-calibrating touch screen if touch point found imprecise. Steps to do:

- 1. Click [Re-calibrate].
- 2. A positioning cross will appear sequentially 5 times. Press on the centers of these crosses using your finger tip or a stylus precisely until you finish all the 5 crosses. Double-click on the blank screen to complete the procedure.

■ Beep Hints

For enable/disable sound for the following:

- 1. Kev
- 2. Music Ring
- 3. Hints

■ Menu Password

For setting a password for entering [System Maintenance]. Steps to do:

- 1. Old PIN: input old password(leave it blank if there is not).
- 2. New PIN: enter a new password(max. 6 digits).
- 3. New PIN Again: enter the new password again.
- 4. Click [Apply] to save setting.

■ Volume

For adjusting the speaker volume(totally 6 scales & the Mute option).

■ HTTP & TCP Port

For assigning PX2000 HTTP & TCP port.

■ FTP User Set(to be performed by professionals of your supplier only)

Each on-line(LAN or WAN) PX2000 can be logged in via FTP for updating or maintaining its:

- 1. Residence Application(firmware).
- 2. Datebase(SQL CE3.5).
- 3. Self-contained Time & Attendance / Access Control software.
- 4. Sound files(.wav).
- 5. All graphics used as User Interfaces, such as the touch screen wallpaper.

■ System Maintenance

- 1. Initialize System: Delete "everything", including all user information, users' enrolled fingerprints, attendance records & reset to factory defaults.
- 2. Delete Users & Finger: Delete all users & their enrolled fingerprints but keep all other settings.
- 3. Delete All Fingerprints: Delete all enrolled fingerprints but keep all users and other settings.
- 4. Delete Transactions: Delete all attendance & event records.
- 5. Reboot Device: for rebooting PX2000.
- 6. Database & Fingerprints restore: Your terminal system can back up database & enrolled fingerprints to the internal Micro SD card every day at the time that you have preset so that in case of data getting lost due to any hardware issue you will be able to restore the database and fingerprints copy on the repaired or a spare terminal.
- 7. Restore from Server: Your terminal system can back up database & enrolled fingerprints to a designated FTP directory every day at the time that you have preset so that in case of data getting lost due to any hardware issue you will be able to restore the database and fingerprints copy on the repaired or a spare terminal. For detail of how to set the FTP data backup please refer to [System Setting] in page 12.
- Database Backup(to internal Micro SD card) for enable/disable the function of auto database backup from system memory to the internal Micro SD card every day at the time that you set.

■ Language

For selecting interface language of PX2000's touch display. Currently supports English & Chinese. More languages will be included soon.

■ WiFi Setting

For those who use wireless LAN for data communication.

- 1. Select Encryption mode.
- 2. Select Authentication mode.
- 3. Provide you Wireless LAN connection password/key.

■ Camera

Provides following settings to the built-in camera:

- 1. Enable/Disable camera function.
- 2. Face detection enabled: once this function is enabled the camera will not take a snap until it successfully detects a human face
- 3. Photo storage path: for changing photo storage directory in PX2000's memory(if changed you will not be able to browse photos linked to each attendance/access log in Transaction Report of PX2000 self-contained Time Attendance/Access Control software).



Door

- Contr Mode this function currently does not apply to model PX2000.
- Entry Type(authentication) provides 6 different combinations of user identification:
- 1. Card only.
- 2. PIN only(default PIN: 888888. Changeable at [Users]).
- 3. Card & PIN.
- 4. FP & Card.
- 5. FP or Card(either of two will be accepted).
- Sensor Type: Type of sensors connected to PX2000(Normally Open/Normally Close).
- Button Type: Door-open button type(Normally Open/Normally Close).
- First Card Open: This is a special feature that once activated, in the access-allowed periods of selected [User Group], the door will be kept unlocked since the 1st reading of a registered card until the period ends(door auto lock up then). This function currently does not apply to PX2000.
- Open Time: Door unlock duration after each reading of a registered card (default: 5 seconds).
- Close Time: the interval from the door being unlocked until the door sensor starting detecting whether the door is closed properly(default: 30 seconds). PX2000 will alert if the door detected not closed.
- Access PIN: for setting a common(applies to all registered users) door-open password(referring to [Entry Type] described in p.6).



IO Port(DI/DO)

- Relay 1: for assigning for connecting a Lock, Bell, Alarm, Illegal or Null.
- Relay 2: for assigning for connecting a Lock, Bell, Alarm, Illegal or Null.
- WG In: if a Wiegand-interfaced card reader is applied as an external reader you may define it as for In or Out here.
- Card(main): for assigning PX2000's built-in card readers(both125KHz & 13.56MHz) as for In or Out. This setting will be necessary only when a Wiegand-interfaced external card reader is applied to PX2000 for reading cards on different card readers at either side of a door.

■ WG Out: for connecting PX2000 to other host controller(PX2000 simply works as a data collection unit).

V. User Interface

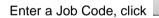


Click this icon & read a card for a Clock-In.



Click this icon & read a card for a Clock-Out.

For entering a Job Code(0~255) before reading a card. The entered Job Code will be part of the attendance record and used for distinguishing/classifying attendances of different types of works.





and then read a card.

Click this icon to enter the [Check Attendance] page. After reading your card you will get your own attendance hours between each Clock-In & Clock-Out. You may choose to browse data of Today, A Week, A Month, Select a Date or All. Click the [Exit] button to return to the main screen after a query.

Click this icon to enter the [Attendance Logs] page. After reading your card you will be able to browse your own Clock-In & Clock-Out records. You may choose to browse data of Today, A Week, A Month, Select a Date or All. Click the [Exit] button to return to the main screen after a query.

VI. Self-contained Time & Attendance / Access Control Software

PX2000's unique Built-in Web-based software is designed for fulfilling easy Time & Attendance management of small businesses(especially for stand-alone usage and employee numbers is under 30). It allows a system manager to manipulate it simply through a Web Browser such as Microsoft Internet Explorer! Please setup the system accordingly following below steps:

Log onto an PX2000's built-in web application.

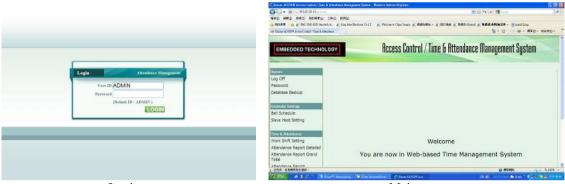
Method 1:

Connect your PX2000 clock to Ethernet and the device will get an IP address for itself. Enter Menu on the color touch-screen > System > NetWork and write down the device IP address you see. Go to any computer which is in the same network with your PX2000 terminal, open web browser(ex. Microsoft Internet Explorer) and enter IP address following http:// and followed by "/login.asp"(ie. http://192.168.123.105/login.asp) and press [Enter] key to enter the system log-on page. Enter the default user "ADMIN", leave the password blank, and click [Login] to enter the main page.

Method 2(for setting a designate IP address):

Enter Menu on the color touch-screen > System > and complete IP address, Subnet Mask, Gateway settings accordingly and disable DHCP. Connect your PX2000 clock to Ethernet(LAN), go to any computer which is in the same network with your PX2000 terminal, open web browser(ex. Microsoft Internet Explorer) and enter IP address following "http:// "and followed by "/login.asp"(ie. http://192.168.123.105/login.asp) and press [Enter] key to enter the system log-on page. Enter the default password "admin" and click [Login] to enter the main page.

Remark: For WiFi version the settings are at Menu > System > WIFI SET and Menu > System > WIFI IP



Login page

Main page

Set login password

For changing the default web login password.

- 1. Click on [Admin Password] in the left menu to enter the setting page.
- 2. Enter the new password and click [Save] to confirm the change.

Database Backup(External database backup)

For copying your PX2000 database to your computer.

- 1. Click on [Database Backup] in the left menu.
- 2. PX2000 database consists of two files, KATS.SDF & DISTR.SDF. Simply click on each file to download it to a favorite directory in your computer so that they can be applied in case of a hardware issue with your PX2000/SW.



System Setting

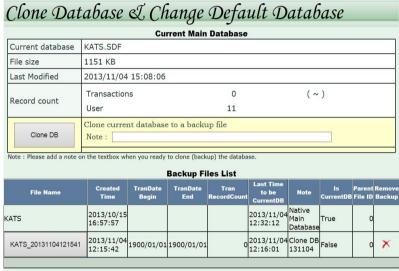
Click on [System Setting] in the left menu and you will find 3 settings:

- 1. Select the Date format that you want to apply to all attendance reports.
- 2. Enable or disable the Leave Setting function (this function is not ready yet. It's to be formally announced soon).
- Set the storage roof of Default Database(currently used by system) to maintain high system efficiency.
 Soft Limit: system will emit a reminder when records accumulate to the soft limit.
 Hard Limit: system will force user to run [Transactions Delete] when records accumulate to the hard limit.



Clone Database(Internal database backup)

Backup database in PX2000's own memory(Micro SD card). [Clone Database] can be taken any time you feel necessary or every time before you run [Transactions Delete]. You may also switch to use an older Clone Database for browsing earlier data or generating earlier attendance reports any time.



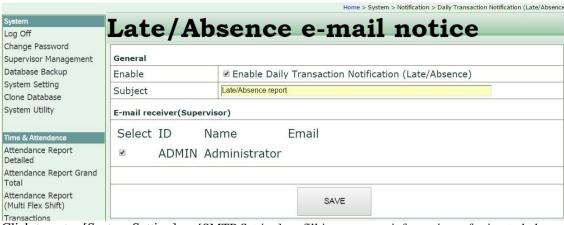
System Setting - Late/Absence E-mail Notice

E-mailing system administrator an employee Late/Absence report after 30 minutes since assigned work shifts start every day.

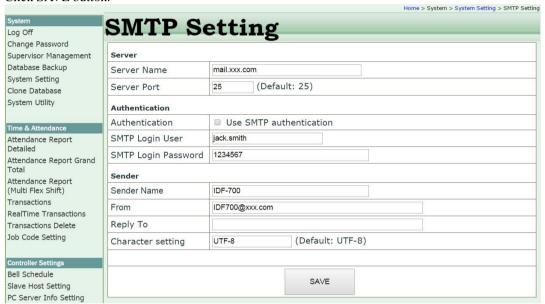
1. Make sure you have assigned a valid e-mail account for the system supervisor:



2. Click to enter [System Setting] → [Late/Absence e-mail notice] → enable Daily Transaction Notification(Late/Absence) → fill in Subject → click SAVE. Your terminal will auto reboot once SAVE button is clicked.



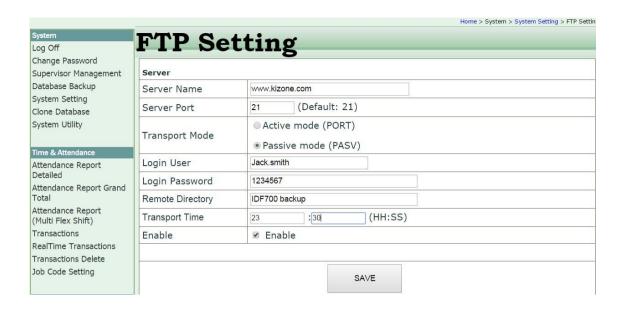
3. Click to enter [System Setting] → [SMTP Setting] → fill in necessary information referring to below example → Click SAVE button.



System Setting – FTP Setting

Your terminal system can back up database to a designated FTP directory every day at the time that you have preset so that in case of data getting lost due to any hardware issue you will be able to restore the database copy on the repaired or a spare terminal.

Click to enter [System Setting] \rightarrow fill in necessary information referring to below screen \rightarrow click SAVE.



Attendance Report (Detailed) – for fixed shifts users

For generating detailed employee attendance reports.

- 1. Click on [Attendance Report Detailed] in the left menu.
- 2. Select a searching criterion(by User, Department or All employee).
- 3. Set the query timeframe(yyyy/mm/dd ~ yyyy/mm/dd). Leave the timeframe blank for searching all time.
- 4. Click the [Query] button to generate the report. You may also click [Print] to print the report or export the report in .csv, .txt and .xls.



Attendance Report (Total) – for fixed shifts users

For generating attendance summary(accumulated worked hours).

- 1. Click [Attendance Report Total] in the left menu.
- 2. Select searching criterion(by User, Department or All employee).
- 3. Set the query timeframe(yyyy/mm/dd \sim yyyy/mm/dd). Leave the timeframe blank for searching all time.
- 4. Click the [Query] button to generate the report. You may also click [Print] to print the report or export the report in .csv, .txt and .xls.

At	te	nda	nce Rej	port G	rand	Tota	al				
User Date											
S.L	User ID	User Name	Department Name	FP/Card No	Total hrs	Regular hrs	Late In	Late Times	Early Out	Early Out	Overtime hrs
										Times	
Total					010:01	007:24	00:00	OHANSKOU!	000:36		00:00
Total 01		Jeff Lauren	Administration	0000000001	010:01 010:01		00:00	OHANSKOU!	000:36		00:00
			Administration	0000000001		007:24 007:24		0		1	

Attendance Report (Multi Work Shift) - for multiple flexible shifts users

This function is for calculating work hour sum of employees who are requested to attend more than one flexible shifts a day. Work hour sum can be calculated and displayed by each single shift, each day or selected date range. To apply this function the clock(PX2000 series) needs to be switch from Access Control to Time & Attendance mode and employees are requested to press 1 for a clock-in and 2 for a clock-out before read their proximity badges.

- 1. Click [Attendance Report (Multi Work Shift)] in the left menu.
- 2. Select users(by User, Department or All employee).
- 3. Set the query date range(yyyy/mm/dd ~ yyyy/mm/dd). Leave the columns blank for searching all time.
- 4. Select report type(by work shift, daily sum or sum of selected date range).
- 5. Click the [Query] button to generate the report.

User Date	By Use Betwee	er: 1 en:2014/04/08~2	014/04/08			
User ID	User Name	Date	Week	In Time	Out Time	Total hrs
Total						010:5
001	Jeff Lauren	2014/04/0	08 Tuesday	06:29	11:29	005:0
			\0 T 1	13:07	19:04	005:5
001	Jeff Lauren	2014/04/0	08 Tuesday	15.07	13.04	000.0
001	Jeff Lauren	2014/04/0	Total Record : 2	15.07	13.04	000.0

Transactions

For browsing or exporting attendance records.

- 1. Click [Transactions] in the left menu.
- 2. Click [Add New] directly to generate a new record manually—select a Card ID(Employee)—enter date & time for that record(format: yyyy/mm/dd hh:mm:ss)—click [Save] to confirm or [Cancel] to abort.
- 3. Set searching criteria and click [Search] to browse current records stored in the clock database.
- 4. Click the [Query] button to generate the report. You may also click [Print] to print the report or export the report in .csv, .txt and .xls.



Transactions Delete

For deleting Transactions(access/attendance records) to reduce database size. You have following choices:

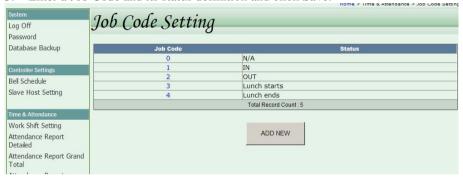
1. Delete all records but keep those of latest 2~6 months.

- 2. Delete all records in the selected date range.
- 3. Delete all records.
- 4. Enable/disable internal database auto backup every time you perform data deletion.

Job Code Setting

For defining reasons of punches(only valid in Time Attendance mode under which each user may enter a code from 1~9 before scanning a card).

- 1. Click [Job Code Setting] in the left menu.
- 2. Click ADD NEW to enter the setting page.
- 3. Enter a Job Code and its status definition and click Save.

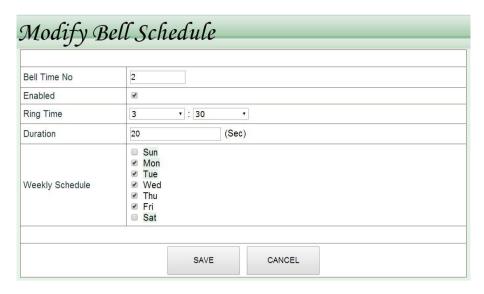


Set Bell Schedule

For programming 50 sets of bell activation schedule.

- 1. Click on [Bell Schedule] in the left menu to enter the bell schedule list.
- 2. Click on the [Bell Schedule No.] to enter the setting page.
- 3. Tick the [Enabled] check box, fill out the [Ring Time] and [Duration], and set the [Weekly Schedule].
- 4. Click [Save] to confirm change or [Cancel] to abort.





Slave Host Setting

If you have multiple PX2000 terminals in a network, you are allowed to designate one of them as a Master terminal. All the users registered to the Master terminal will be reconciled to all the Slave terminals and all the clock-In & Clock-Out records on the Slaves will be collected to the Master in real time.

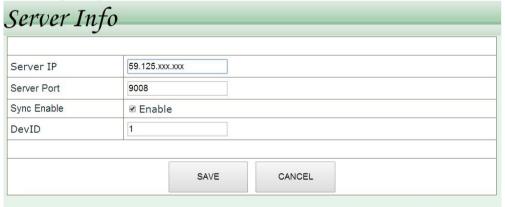
- 1. Click on [Slave Host Setting] in the left menu to enter the Slave terminal list.
- 2. Click on a Slave terminal $ID(1\sim30)$ to enter the detailed setting form.
- 3. Enable the Slave terminal, enter the IP address it applies and give the terminal a name.
- 4. Click [Save] to confirm or [Cancel] to discard.

Notice: This setting is only required on the unit that you want to make as Master/Server.

PC Server Info

For editing server information if you choose to install Kizone's KATES central management software on a PC to manage all the PX2000 in the network (this function is to be set up by professional from your product supplier).

- 1. Enter the IP of the server PC.
- 2. Keep the server port 9008 unchanged.
- 3. Tick to enable this setting.
- 4. Give this PX2000 an ID.
- 5. Click [SAVE].



Leave Setting(this function to be formally announced soon)

For appending different types of leaves.

- 1. Click[ADD NEW].
- 2. Enter Leave No/ID and Leave Name and click [SAVE].



Insert Leaves(this function to be formally announced soon)

For inserting leaves for users/employees. You are allowed to insert 3 leaves a day at most.

- 1. Click [ADD NEW].
- 2. Select user/employee, date, leave, enter hours and note and click [SAVE].

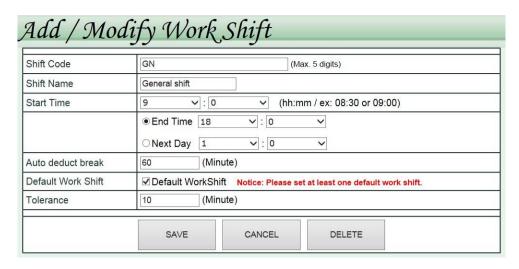


Work Shift Setting

For generating employee work shifts.

- 1. Click on [Work Shift Setting] in the left menu to enter the work shift list.
- 2. Click on an existing shift code to modify the details or click [Add New] to append a new work shift.
- 3. Enter Shift Code, Shift Name, Start Time, End Time and Auto Deduct Break time. Tick the Default Work Shift check box if necessary.
- 4. Click [save] to confirm, [Cancel] to abort or [Delete] to delete an existing work shift.

Notice: A Cross-day shift spanning two days is allowed only when it's followed by another Cross-day shift or a Holiday.



Holiday Setting

For appending holidays in the year.

- 1. Click [ADD NEW].
- 2. Select Date and enter description(holiday name) and click [SAVE].



Department

For browsing, modifying and generating departments.

- 1. Click [Department] in the left menu to browse the current departments list.
- 2. Click the Department ID directly to get the detail—enter a new Department ID—click [save] to confirm or [Cancel] to abort.
- 3. Click [Add New]→enter Department ID→enter Department Name→click [save] to confirm or [Cancel] to abort.

User

For browsing/modifying/deleting/adding users(employees).

- 1. Click [User] in the left menu to browse current users.
- 2. Click on User ID directly for modifying details of or deleting the user.
- 3. Click [Add New] to enroll a new user. Enter User ID→enter User Name→assign a department for the user→enter the Card No. if a proximity card will be used →click [save] to confirm or [Cancel] to abort.

Notice: All enrolled users will have door access right if PX2000 is applied for door control.



User Weekly Shift

For programming weekly shift schedules for each user.

- 1. Click [User Weekly Shift] in the left menu.
- 2. Select an user→select an work shift for each week day and weekend→click [Save] to confirm.

Notice:

- 1. The work shift choices contains a built-in shift named "Holiday".
- 2. An overnight shift(cross-day shift) can only be followed by another overnight shift or Holiday(Holi) in the next day!



FCC REGULATORY INFORMATION

§ 15.19 Labeling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

§ 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.