MICRO-COMPUTER TIME RECORDER





Instruction Manual

Safety Information

This section contains detailed instructions on the operation and maintenance of this machine. To achieve optimum utility of this device, all operators should carefully read and follow the instructions in this manual. PLease keep this manual in a handy place near the machine.

- Do not modify this product, as a fire , electrical shock, or breakdown could result . If the product employs a laser, the laser beam source could cause blindness.
- Do not attempt to remove the covers and panels which have been fixed to the product. Some products have a high-voltage part inside that could cause an electrical shock or blindness.
- Only use the power cord supplied in the package. Failure to use this cord could result in a fire or electrical shock.
- Do not unplug and plug in the power cord with a wet hand, as an electrical shock could result.
- Plug the power cord all the way into the power outlet. Failure to do this
 could result in a fire or electrical shock.
- In principle, do not use an extension cord. Use of an extension cord could cause a fire or electrical shock. Contact your authorized service represen -tative if an extension cord is required.
- The appliance must be connected to an earthed mains socket-outlet.
- The socket-outlet shall be installed near the appliance and shall be easily accessible.

1

CONTENTS

1. Safety Information	
2. Introduction	3
3. Specification	
4. Parts Identification	,
5. Setting	
5-1).Setting the year , month, and date	
5-2).Setting the time of day	
5-3). Setting the card type , minute format ,	0
day of week, and language	9
5-4). Setting the perpendicularity prints a week pay	
5-5).Setting a pay period ending date	12
5-6).Setting the Bi-weekly pay & period ending day	12
5-7).Setting signal duration	
5-8).Setting signal	
5-9).Set the two color ribbon control	16
5-10). Setting the In/Out Printing Position	17
5-11). Setting the day change time	18
6.Special features	
(1) Wrong Printing Position (Up & Down)	10
(2) Wrong Printing Position (Left & Right)	19
(3) Adjust Minute Signal	19
(4) Reset seconds Signal	19
(5). Setting Daylight Saving Time	19
7. Reset	20
8. How to connect an external alarm	20
9.Replacing ribbon cassette	21
10.Case exploder	22
11.Troubleshooting	22

2. Introduction

In order to operate your Electronic Time Recorder accurately and efficiently with a longer life, please read this manual thoroughly.

3. Specifications

Power supply: AC 100~120V / 220V ~ 240V 60Hz/50Hz

Power consumption: Normal 0.05AM (Max 0.15AM)

Standard time signal: Quartz oscillation Time accuracy: ± 3 secon per week

Battery backup: $1.2V \times 12 = 14.4 V$ battery assembly Full operation of all

functions in case of a power failure, and memory backup

for subsequent 20 months

Temperature: 0°C ~ 40°C Humidity: 40% ~ 80%

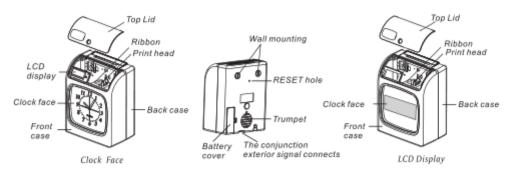
Dimensions: 190mm wide x 240mm tall x 125mm deep

Shipping Weight: approximately 7lbs.(3kg)

Functions	Model	Clock Face	LCD Display
Two color Print		•	•
Automatic card feeding / rejection of wrongside card injection		•	•
Perpetual calendar		•	•
Time signal		•	•
Music alarm		•	•
Auto-IN/OUT card slot		•	•
Full operation after power failure		•	•
Memory backup		•	•

4. Parts Identification

(1) Components



- (2) . The optional back-up battery installation
 - 1). Remove the battery cover .
 - 2). Connect the battery assembly to the socket, close the cover.
- the battery electric outlet

 Battery battery cover inserting 2 screws.

 BATTERY ON / OFF D

 (\bigcirc)

Battery switch control

- (3) .Wall mounting fix point
 - 1). Secure the bracket onto the wall by inserting 2 screws.



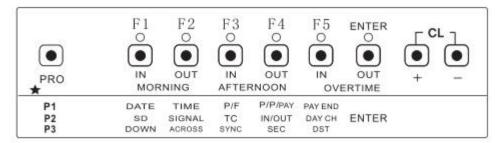
2). Mount the whole unit on the wall firmly.





5. Settings

When open plastic top lid, the time recorder will automatically in program status.



PRO:Press the "PRO" (gram)button to select the program group. If your are in "PI" mode, press the "PRO" button again to enter the "P2" program group.Pressing "PRO" again will take you to the "P3" programming choices.

P1 options:

Function Key	Abbreviation	Section	See pages
F1	DATE	Setting the year, month, and date	7
F2	TIME	Setting the time of day,	8
F3	P/F (PRINT FORMAT)	Selecting the time card type, minute format, day of week, and language	9
F4	P/P/PAY	The perpendicularity prints a week in/out time.	10
F5	PAY END	Seetting a pay period ending date	12

P2 options:

Function Key	Abbreviation	Section	See pages
F1	SD	Setting signal duration	14
F2	SIGNAL	Setting signal	14
F3	TC	Setthg two color ribbon control	16
F4	IN/OUT	Setting auto across the card shifting	17
F5	DAY CH	Setting thc day change time	18

P3 options:

Function Key	Abbreviation	Section	See pages
F1	DOWN	Setting the up/down adjustment	19
F2	ACROSS	Setting the across the card	19
F3	SYNC	synchronization	19
F4	SEC	Seconds reset	19
F5	DST	Setting Daylight Saving Time	19

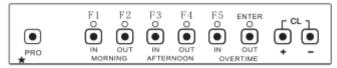
CL: Press the+ and - button at the same time to cancel the existing program contents. Pressing the + button by itself advances the display, the - button backs it up. The digital display is used when programming the settings. The portion of the display that is flashing is the component that you arc currently setting. Press the "E" button to advance to the next feature or component.

6

5-1). Setting the year, month, and date

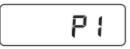
Example:Change November 8,2005 to December 10,2005 Setting:

(1) Open the plastic top lid, "P1" shown on LCD. (2) Press "F1" key.

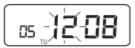


- (3) Press or to select the year to 05 and press ENTER to confirm the setting.
- (4) Press⊕or to select the month to 12 and press ENTER to confirm the setting.
- (5) Press⊕ or ⊕ to select the day to 10 and press ENTER to confirm the setting.

 The Date will automatic occur.
- (6) After finish the above procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.









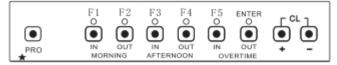


5-2). Setting the time of day

Example: Change 12-hour system 3:14 p.m to 24-hour system 10:30 Setting:

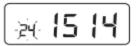
(1) Open the plastic top lid, "P1" shown on LCD.

(2) Press "F2" key.





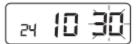
(3) Press or to select the time system to 24 and press ENTER to confirm the setting.



(4) Press⊕or ⊕ to select the hour to 10 and press ENTER to confirm the setting.

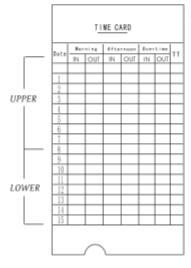


(5) Press or to select the minute to 30 and press ENTER to confirm the setting.



(6) After finish the above procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.

5-3). Setting the card type , minute format , day of week, and language



*The surface detection function operates only when the "01" time card (monthly pay cards) or any equivalent is used with a surface detection cut-out.

* Time card type

Setting code	Function	Bottom Space
01(6mm line width)	Semimonthly monthly pay	23mm
02(6mm line width)	Semimonthly monthly pay	23mm
03(6mm line width)	Lower part weekly pay	23mm
04(6mm line width)	Lower part weekly pay	35mm
05(7mm line width)	Upper part weekly pay	70mm
06(6mm line width)	Lower part perpendicular weekly pay	23mm
07(6mm line width)	Lower part perpendicular weekly pay	35mm
08(7mm line width)	Upper part perpendicular weekly pay	70mm
09(6mm line width)	Full vertical weekly pay	23mm
10(5mm line width)	Monthly pay	23mm

01 1/60 hour 02 1/100 hour A 03 1/100 hour B 04 1/10 hour

1/60 hour	00	01	02	03	04	05	06	07	08	09	~	29	30	31	32	33	34	35	~	54	55	56	57	58	59
1/100 hour A	00	02	03	05	07	08	10	12	13	15	~	48	50	52	53	55	57	58	~	90	92	93	95	97	98
1/100 hour B	00	00	00	05	05	05	10	10	10	15	~	45	50	50	50	55	55	55	~	90	90	90	95	95	95
1/10 hour	00	00	00	00	00	0.0	01	01	01	01	~	04	05	05	05	05	05	05	~	09	09	09	09	09	09

* Date of the week indicator:

Chose either one of the following 00~08 setting mode

(00	01	02	03	04	05	06	07	08
N	No indication	Date	English	Italian	German	French	Spanish	Japanese	Day no. 1-7

* Internal setting is 010101, indicate time card is monthly pay card with a surface detection cut-out, minute indicator is 1/60 hour, day of week indicator "01" date.

9

Example:change to lower part weekly pay (bottom space 35mm) minute indicator 1/60 hour ,day of weekly indicator to "02" English

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "F3" key.



PRO IN OUT IN OUT IN OUT OVERTIME

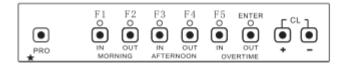
- (3) Press or to select the time card type to 04, press ENTER to confirm the setting.
- ± 15 14
- (4) Press ⊕or ⊕to select the minute indicator to 01, press ENTER to confirm the setting.
- [] [] [D]
- (5) Press⊕or to select the the day of week indicator to 02, press ENTER to confirm the setting.
- G 01-02
- (6) After finish the above procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.
- 5-4). Setting the full perpendicularity prints a week pay
- * Time Card type "09" full perpendicularity prints a week pay of equivalent is used with this function. Total 16 groups. Group 1 time printed on the first row, Group 2 time print on the second row... Etc, Group 16 time printed on the 16th row.

Example:setting 8:00 printed on the first row, 13:00 printed on the 8th row, pay date on Sunday.

Setting:

(1) Open the plastic top lid, "P1" shown on LCD.





(2) Press "F4" key, Press + or − to select the time to 08, press ENTER to confirm the setting.



- (3)Press \bigoplus or \bigcirc to change the minute to 00, press \overline{ENTER} to confirm the setting.
- (4) The day SU will flash, Press + or to select the date required or press to delete, press ENTER to confirm and will enter the next time group.
- (5) Keep pressing the "F4" to select the 8th time group, Press⊕or to change the hour to 13, press ENTER to confirm the setting.
- (6)Press ⊕or ⊕to change the minute to 00, press ENTER to confirm the setting.
- (7) The day SU will flash, Press or to select the date required or press to delete, press ENTER to confirm and will enter the next time group.











* Check or change the set time:

Repeat above steps to step 2, then press F4 key to select the required change time group, then follow below step to change the time. If can cellation required, Press (+) or (-) at the same time.

Perpendicularity week time card pay period ending day at Sunday.

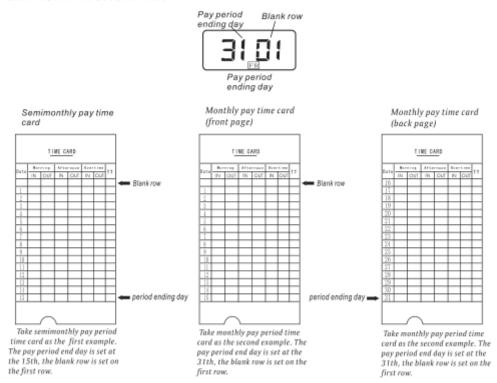


5-5). Setting Pay Period end day

Initial setting is 31 01 FR indicate the period end day of monthly pay time card type 31st. The blank row is set on the 1st row. The period end day of weekly pay time card type is set on Friday.

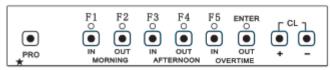
*Setting the (semimonthly) monthly pay & period ending day

Attention: Semimonthly pay period card totally 16lines; Monthly salary card totally 32 lines. Can set up arbitrarily an among those behaviors blank line; Can set up at the same time in a month arbitrarily a day is to settles accounts the day. Balance of accounts day position usually the last one line in card, divided by to be when the blank line set up in the last one line, balance of accounts day position at count down the second line.



Setting:

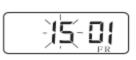
- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "F5" key.



- (3) Press or to change the pay period end day to 15, press ENTER to confirm the setting.
- (4) Press or to change the blank row to 01, Press ENTER to confirm the setting.
- (5) The day FR will flash, Press ENTER to confirm.

 After finish the above procedure, the LCD will light off.

 If required, other setting can also be performed before closing the lid.



P:



- 15 QĮ
- (6) The enactment method of the second example is similar to the above example.

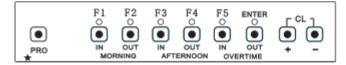
* Setting the weekly pay & period ending day

The print out of weekly time card can be dividing into two styles, they can be print horizontally and vertically. The period enging day of horizontal printing is set at the last row, but there is none for the vertical printing style.

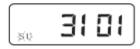
Example: Setting the weekly pay period day at Sunday Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "F5" key.





(3)Press ENTER key twice, the day field will flsah, Press⊕or ⊖to change the day to Sunday



SU, press ENTER to confirm the setting. After finish the above procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.

Weekly pay time card sample

| No ______ | NAME | NOT | IX | OUT |

Horizontal print weekly time card period end day(Sunday)



5-6). Setting signal duration

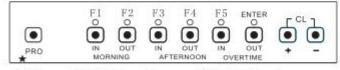
Internal setting is 05, indicates 5 seconds.

Example: Change to 10 seconds

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.







(3) Press "F1" key, then press or to change the second to 10, press ENTER to confirm the setting.



After finish the above procedure, the LCD will light off. If required, other setting can also be performed before closing the lid.

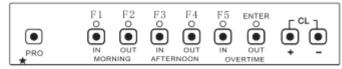
5-7). Setting signal

Totally 42 program addresses.

Example:Set a time signal sound at 8:00 a.m . On everyday and 17:00 Monday to Friday .

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.

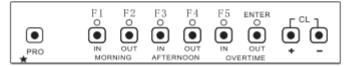


- (3) Press "F2" key, then press or to change the time to 08, Press ENTER to confirm the setting.
- (4) Press⊕or to select the minute to 00, press ENTER to confirm the setting.
- (5)The whole day field shown and SU will flash, (It means whole week is select), press ENTER to confirm the setting and will enter the next addresses.
- (6) Press⊕or⊕to change the time to 17,then press ENTER to confirm the setting.
- (7) Press⊕or⊕to select the minute to 00, Then press ENTER to confirm the setting.
- (8)The whole day field shown and SU will flash, Press to select the day and press ENTER to confirm the setting.

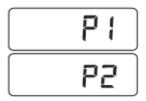
* Check or change the set time:

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.



(3) Press "F2" key again, every time press "F2" key, the LCD will display the next addresses. Repeat the above step 3 to change the time. If cancellation required, Press or at the same time. The LCD shown as figure.





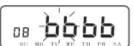










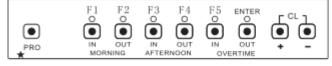


5-8). Set the two color ribbon control

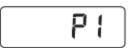
Totally 18 program addresses. Single addresses is red color, Even addresses is blue color. Individual date setting or whole week setting is also accepted. Example: Set 8:01 a.m. Change red color everyday, 17:00 change blue color from Monday to Friday.

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.



- (3) Press "F3" key, then press⊕or to change the time to 08, Press ENTER to confirm the setting.
- (4) Press or to select the minute to 01, press ENTER to confirm the setting.
- (5)The whole day field shown and SU will flash, (It means whole week is select), press ENTER to confirm the setting and will enter the next addresses.
- (6) Press⊕or⊕to change the time to 17, then press ENTER to confirm the setting.
- (7) Press⊕or to select the minute to 00, then press ENTER to confirm the setting.
- (8)The whole day field shown and SU will flash, Press⊕to select the day and pressENTER to confirm the setting.













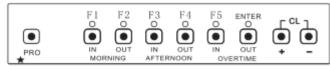




* Check or change the set time:

Setting:

- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.



(3) Press "F3" key, every time press "F3" key, the LCD will display the next addresses. Repeat the above step 3 to change the time. If cancellation required, Press⊕or at the same time. The LCD shown as figure.



5-9). Setting the IN/OUT Printing Position

Totally 18 program addresses. Program can be set everyday, since the LCD can only show 6 digits, so it cannot display the addresses code. You are required to input the position code before entering the time, position code as below:

11: Morning IN 12: Morning OUT 13: Afternoon IN 14: Afternoon OUT 15: Overtime IN 16: Overtime OUT

Example: Set 7:00 print on every Morning IN and Monday to Friday 16:00 print on the Afternoon OUT.

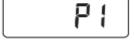
Setting:

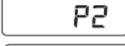
(1) Open the plastic top lid, "P1" shown on LCD.

(2) Press "PRO" key until "P2" shown on LCD.



- (3) Press "F4" key, then press ⊕or ⊕to change the time to 11, Press ENTER to confirm the setting.
- (4) Press or to select the minute to 07, press ENTER to confirm the setting.
- (5) Press⊕or to select the minute to 00, press ENTER to confirm the setting.











- (6)The whole day field shown and SU will flash, (It means whole week is select), press ENTER to confirm the setting and will enter the next addresses.
- (7) Press or to change the position code to 14, press ENTER to confirm the setting.
- (8) Press or to select the hour to 16, press ENTER to confirm the setting.
- (9) Press⊕or⊕to select the minute to 00, press ENTER to confirm the setting.

(10)The whole day field shown and SU will flash,

Press to select the day and press ENTER to confirm the setting.

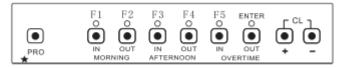


5-10). Setting the day change time

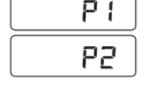
Initial setting is 0000, indicates that the print switch time 00:00. Example: Set the print line switch time to 3:30

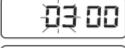
Setting:

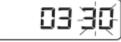
- (1) Open the plastic top lid, "P1" shown on LCD.
- (2) Press "PRO" key until "P2" shown on LCD.



- (3) Press "F5" key, then press or to change the hour to 3, Press ENTER to confirm the setting.
- (4) Press⊕or⊕to select the minute to 30, press ENTER to confirm the setting.







After finish the above procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.

6.Special features

P3	DOWN	ACROSS	SYNC	SEC	DST

- (1) Wrong Printing Position (Up & Down) when the printing prints on the time card were found not in the middle of the row. Use this function to adjust, initial value is 50. During P1 status, press program key until P3 shown on the LCD, then press F1, press ⊕ or ⊕ to change the value and press ENTER to confirm the setting. Value > 50, printing higher, value < 50, printing lower, the distance between value + 1 or -1 is approx. 0.5mm
- (2) Wrong Printing Position (Left & Right) when the printing prints on the time card were found not in the middle of the column. Use this function to adjust, initial value is 50. During P1 status, press program key until P3 shown on the LCD, then press F2, press for to change the value and press ENTER to confirm the setting. Value > 50, printing move to light, value < 50, printing move to left, the distance between value + 1 or -1 is approx. 0.125mm
- (3) Adjust Minute Signal During P1 status, Press program key until P3 shown on the LCD, then press F3 to advance 1 minute.
- (4) Reset seconds Signal During P1 status , press program key until P3 shown on the LCD, then press F4 to reset seconds to zero.

(5). Setting Daylight Saving Time

Daylight Saving Time can be set by month, date , hour , if the start and end time are set to be at AM2:00, in summer time , the time clock will automatically goes to AM3:00 . While the summer time ends, the time clock will automatically back to AM1:00. The first setting group these two as a group, otherwise no Daylight Saving Time solstice is set.

The time can be set from 1-9

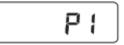
Example: Set the start time and date to 1st April at AM 2:00, end time is 1st October at AM 2:00

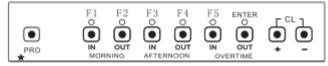
Setting:

(1) Open the plastic top lid, "P1" shown on LCD.

(2) Press "PRO" key until "P3" shown on LCD.

(3) Press "F5" key.







(4) Press⊕or⊕to change the hour to 2, press ENTER to confirm the setting.

æ **bbbb**

(5) Press or to change the month to 04, press ENTER to confirm the setting.

(6) Press⊕or⊕to change the day to 01, press ENTER to confirm the setting.

(7) When finished the above setting, The LCD will shown the second setting code data as figure.



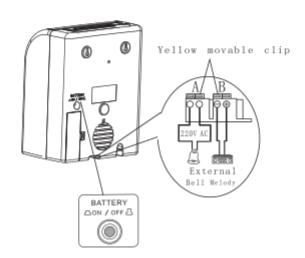
- (8) Repeat the step 3 to program the end time data.
- (9) After finish the above Procedure, the LCD will light off. If required, other settings can also be performed before closing the lid.

7. RESET

when pressing "RESET" on the control panel, all program data were deleted and reset to initial setting.

8. How to connect an external alarm

Connect the wires of the external alarm and AC power into the outlet at the lower corner at the back of the time recorder . The contact capacity should AC250V or AC110V, 0.5 A or less and DC24V, 0.5A or less.

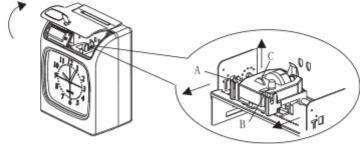


9. Replacing ribbon cassette

(1). Insert the key into the keyholes on the top, turn 90° anti-clockwise.



(2). Open the lid.

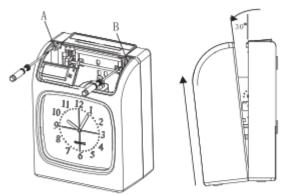


- (3). Remove the cassette. Follow the arrow direction, pull the ribbon holders towards you and, holding them steady in that position, use the handle to pull out the cassette.
- (4). Insert a new cassette. Correctly insert a new cassette between the ribbon guide and the dot printer head.
- (5). Push the cassette head until it clicks into place. Turn the knob clockwise to remove and slackness in the ribbon.
- (6). Close the lid .Insert the key into the keyholes on the top, turn90° clockwise to lock the lid.



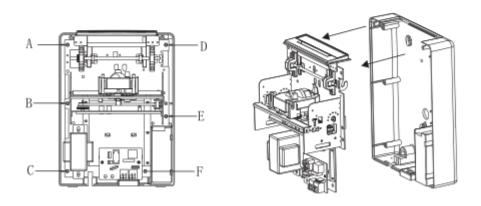
10. Case exploder

- (1). Front case
 - 1) Use the key to open the lid.
 - 2) Use cross head screwdriver to remove the A.B screws.
 - 3) Remove the LCD date cord, move 30° toward you and take away the front case carefully.



(2). Back case

1) Use cross head screwdriver to remove the ABCDEF screws and take away the rear case carefully.



11. Trouble-shooting

Trouble	Causes	Corrective Measures			
The time recorder	Power failure	Wait untill power supply is restored			
does not accept time card.	The power cord is disconnected	Insert the power plug firmly into the power outlet			
	Card feed wrongly	Insert it in the card slot the other way round			
A long "beep" sound is heard without printing	The reverse side of the card was inserted in the card slot	Insert it in the card slot the other way round			
	Card feed wrongly	Insert it in the card slot with slight pressure			
The date printing line is set incorrectly	Mistake in setting day change	Reset the date referring to "Setting Day change"			
Light printting (Imperfect printing)	The ribbon is worn out of ribbon cassette is not installed correctly	Replace the ribbon cassette or install it correctly.			
The clock is inaccurate	Mistake in setting the clock	Set it correctly.			
(too fast or too slow)	Power failure over the specified period	Reset the "setting"			
Cannot punch time card (with battery backup)	The suspension time of power failure is longer than the battery life	Wait until power supply is restored			
	Card feed wrongly	Insert it in the card slot the other way round			
The clock stopped	Power failure	Wait until power supply is restored			
(without battery backup)	The power cord is disconnected	Insert the power plug firmly into the power outlet			
EC 0	Err of clock home position sensor				
EC 1	Err of motor (Card lines)	Contact the dealer from whom you bought the time recorder			
EC 2	Err of motor (Card columns)				
EC 3	Err of card insert or defective of the card side detect				