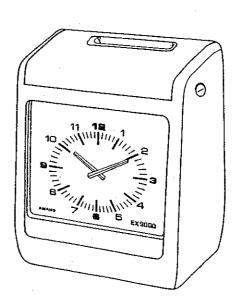
AMANO

ELECTRONIC TIME RECORDER

EX9000 series

OPERATION MANUAL



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	Day Time Change
	Setting of Time
	Setting of Date
	Setting
	SETTING METHOD

INTRODUCTION

Read this operation manual in order to operate EX9000 Series correctly to ensure that it operates efficiently for a long time.

- Specifications, appearance, descriptions, etc. may be subject to change due to improvement of
- This manual has been prepared very carefully, but if you find any errors or descriptions which you cannot understand clearly, please contact the dealer from whom you have purchased this product.

List of EX9000 Series Features and Options

	EX9000	EX9050	EX9200	EX9500
1-color printing	0	0		
2-color printing			0	0
Time signal		0	0	0
Automatic shift of print position				0
Across the card	0	0	0	0
Down or up the card				0
Full power reserve	OP	OP	OP	OP
Column dividing sensor	₽	₽	\$	퍄
Master-slave function	ቷ	₽	₽	*
Two time signal circuits		\$	ᅪ	₽

- **☆** .. OP: Option A: Available at dealers at the time of purchase.
- Option B: Option B items are assembled during the production process in our plant, please after purchase. impossible to assemble the optional function in your unit or to replace your unit inform us in advance it you need the optional functions. It is sometimes

Dip Switch Setting

OFF N	1 De	No.	
Not mod	ylight Savings Fime	Description	SW-13
OFF	1	No.	
Monthly semi-monthly	Payperind	Description	<u>SW-14</u>

					 _		- 1		<u> </u>				NO	H.	4	Š	Ή	ω,	Ž	¥	163	2)FF	-	, X
				ON	OFF	0N	OFF	30	OFF	NO	OFF	6		F			FF.						75]		
				8	*	2	63	Number of columns across	10.6mm (0.417 in)	11.4mm (0.449 in)	12mm (0.472 in)	Card width	Melody	No melody	Not used (Melody)	Signals	No signals	Signal output	Two color printing	Single color	Two color printing	Used	Not used	Daylight Savings Time	Description
8 OFF	NO	OFF	7	ON	OFF	9	NO	OFF	5	OFF OFF	NO NO	ON ON	ON OFF	OFF ON	OFF ON	OFF OFF	OFF OFF	2 3	NO	OFF	s.	NO	OFF	-	No.
Ψ	Z	15		N	F		۷.	F		F ON	NO	v off	FON	NON	N OFF	F ON	F OFF	1	Z	14			'1]),
Notaged Set to OFF position	Card side recognition	No side recognition	Recognition of front/back of card (Monthly)	35mm (1.378 in)	23mm (0.906 in)	Bottom margin setting for across card type	Up the card	Down the card	Print direction for 16 or 22 lifts type	Monthly pay, 31 lifts	Up/down card, 8 lifts/day, 2 weeks	Up/down card, 22 lifts/day, 1 week	Up/down card, 16 lifts/day, 1 week	Across card, 2 weeks standard	Across card, 1 week, 2 row per day(ND-1)	Across card, I week, upper print position	Across card, 1 week, lower print position	Card type	Single sided card	Two sided card	Card type for monthly only	Weekly, Bi-weekly	Monthly, semi-monthly	Pay perind	Description

OFF ON ON

Accessories

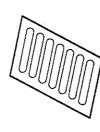
After unpacking the package of EX9000 Series, please check to see that you have the following

Operation Manual

EX9000 SERIES OPERATION MANUAL

Keys

Seals for Different Languages



Sensor Belt



Specifications

Power source 100VAC, 120VAC, 220VAC, 240VAC ± 10% (60 or 60Hz)

Environmental conditions Ordinary 5W, Maximum 30W

Power consumption

10% to 90%RH (without dew condensation) - 10°C to 45°C (14°F to 114°F)

 $260(W) \times 180(D) \times 320(H) \text{ mm}, \ 10.2(W) \times 7.2(D) \times 12.3(H) \text{ in}$

3.5 kg (7.8 lbs)

Weight Dimensions

Battery backup Clock system

Quartz, Accuracy ±3 seconds a week (at 25°C ±5°C) (at 77°F ± 10°F)

Standard: Built-in lithium battery keeps inner clock running and protects programmed data for 3 years of accumulated power failure

Full power reserve (option A):

When the battery is fully charged, it maintains:

 Clock advancement: 2-color selection, shift of print column, time signal for up to 72 hours.

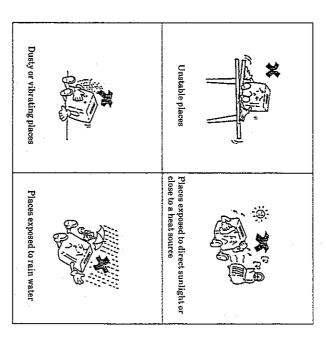
2) 200 printings, or within 72 hours

indicator light blinks. When the unit is operating on the full power reserve, the IN/OUT

INSTALLATION PROCEDURES

Place of Installation

For best use, do not install the clock at the places mentioned below:



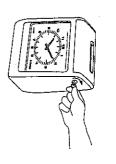
Power Source

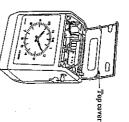
- Check the AC power commercially available in your district. (100VAC, 120VAC, 220VAC, or 240VAC)
- Select such places where supply voltages are stable.
- The power source should be independent of other equipment.
- (For 3 years of accumulated power failure time.) The unit contains a lithium battery inside that keeps the inner clock running

How to Remove Front Cover

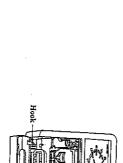
bell, and when mounting the unit on a wall. The front cover should be removed when connecting the battery (full power reserve), connecting wire to

- A Before removing the front cover, be sure to disconnect the power cord from the AC receptacle.
- Turn the key in the arrow direction.
- Open the top cover.



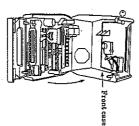


- Disconnect the connector as shown below:
- Place the machine flat on a table with the clock face up.



Hock

- Force open the upper right and left hooks and Before closing the front case, reconnect the lift the front case to remove it.



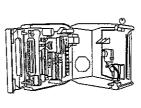
wall). If the front case is removed without lying it down, the rear case may fall off. When removing the front cover, be sure to place the machine flat down on a table (unless hung on a

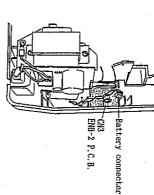
Connection of Battery (Full Power Reserve) (Option A)

occidenter a 400 biologica (com

- Disconnect the power cord from the AC receptacle, place the machine flat down, then remove the connector and the front cover from the unit.
- Insert a battery connector in place.

 Make sure that the insertion direction is





Set the front cover on the unit, insert the connector in the unit, then close the top

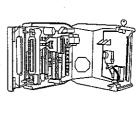


A lithium battery is also included in the unit to keep the inner clock running even without AC power, so when you insert the power cable in the AC receptacle set time keeps running

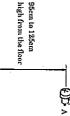
[Note] Use care to insert the battery connector in the correct direction. If it is inserted in the wrong direction, the unit may be damaged.

How to install on Wall

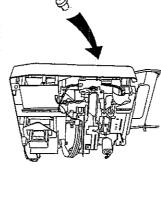
- Disconnect the power cord from the AC receptacle, place the machine flat down, then remove the connector and the front cover from the unit.

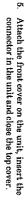


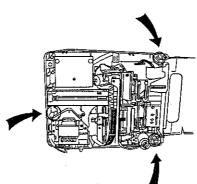
- Hang the unit on the screw so that the screw enters the upper part of the potbellied hole on the back of the unit. 4.
- Fix a 5.1ram screw at the "A" position shown below on the wall and leave a space of 4 or 5mm between the wall and the screw head. 95cm to 125cm 4 mm to 6 mm



Secure the unit with screws in three other holes. After knocking out the holes on the back plate.









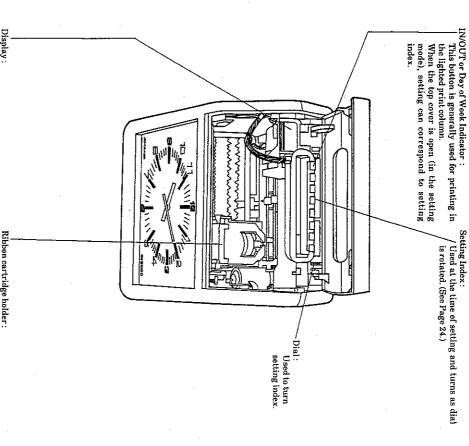
Note: Concerning Installing Method and Wall Material
When the unit is installed on a wall made of soft material, such as gypsum board, plywood, etc.,
the screw will become loose and the unit may drop from the wall during operation. So, attach a
mounting plate between the studs, and attach the unit on the plate. (Prepare an appropriate plate before installation.)

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Name and Function of Parts

aan gemeraken voorbesken siis



Display: Displays an item selected by the item button.

Ribbon cartridge holder:

Press the holder at the time of replacing a cartridge ribbon, and the rear section of cartridge goes up and the ribbon cartridge can be removed.

Default Values

pun s	Imprint of hours 1: 24 hours (0 - 23 hours) (0 is not printed at the ten's place of hour.) 2: 12 hours (AMPM hours) 3: 24 hours (0 - 23 hours) (0 is printed at the ten's place of hour.)	
0: Monthly pay 1: Weekly pay	Imprint of day of the week 0: Date 1: English 2: Spanish 3: French 4: German 5: Italian 6: Japanese 7: Day No. 8: No printing	
. 0	Double printing prevention <ex9500 (across="" card="" only)="" the="" type=""> 0 : Ineffective 1 : Effective</ex9500>	
0	Manual selection of IN/OUT print column <ex9500 (across="" card="" only)="" the="" type=""> 0: Manual selection available 1: Manual selection is not available</ex9500>	Imprint
05	Time signal duration in seconds: 00 to 59 (sec.) <ex9060, ex9200,="" ex9500=""> No time signal is output for 00 (sec.)</ex9060,>	Time signal duration
; ; ; 	Month: 01 to 12, Day: 01 to 31 Week: 1 to 5 Day of the week: Monday to Sunday To set day of which week	
0	Change-over method 0: No function 1: For setting month and date 2: For setting month and day of the week	Start/End of Daylight Savings Time
1	Current week: 1, 2 Bi-weekly pay only is set	
31 01	(Monthly pay): 01 to 31 Blank line 01 to 32	Pay period ending date, empty column
1: 03:00 2: 12:00	Hour : 00 to 23 Minute : 00 to 59	
. 1	Day time change Morning/Afternoon time change (2-vertical space-a-day card)	÷
03:00	Hour : 00 to 23 Minute : 00 to 59	Day time change
Default values	Set points	Items

	Items	Set points	Default values
Imprint		Imprint of minutes 1: Minutes 2: 1/100 hour A 3: 1/100 hour B 4: 1/10 hour	
Weekly program I	2-color printing	<ex9200, ex9500=""> R: Start of printing in red B: Start of printing in black</ex9200,>	
	Time signal	<ex9050, ex9200,="" ex9800=""> 0: No time signal is out put 1: Time signal is out put to Circuit 1 2: Time signal is out put to Circuit 2 (Option B) 3: Time signal is out put to Circuits 1 and 2 (Option B)</ex9050,>	·
Weekly program II	Print position	<ex9500 (fully="" automatic="" only)="" type=""> 00 to 22: According to each card type 00: No print position is shifted</ex9500>	00
	Restricted zone	Time zone for double printing prevention. <ex9500 (across="" card="" only)="" the="" type=""> 01: Starting time of double prevention 02: Ending time of double prevention Be sure to set the starting and ending times of double print prevention at the same time.</ex9500>	01

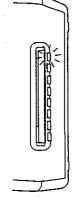
When setting a weekly program, pay attention to the following:

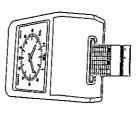
When setting multiple function at the same time, set the function at one program No.

Do not set the functions at each program No. (See Page 37.)

HOW TO OPERATE

- time card. By pushing the time card down, the printing is done on the time card in the For EX9000, EX9050, EX9200 press column where the button is lit. appropriate IN/OUT button and insert the
- automatically according to the set program. However, by pressing the appropriate button, a manual override can be performed. After For EX9500, fully automatic across the card its original position automatically. printing, the position of printing returns to type, IN/OUT printing position is determined





Since card is automatically pulled in, do not push it in or pull it out.

During Power Failure

When power supply is interrupted, everything except the inner clock stops. When the power supply is restored, everything returns to normal. \rightarrow The lithium battery will keep the inner clock and programmed data for three years of accumulated power failure time. (When a full power reserve [Option A] is not equipped, the duration is three years.)

At the time of power failure
If a full power reserve functions,

If a full power reserve is not equipped,





IN/OUT indicator light blinks.

IN/OUT indicator light goes out.

Full Power Reserve (Option A)
Can maintain clock motion, 2-color selection, shift of print column, time signal for 72 hours, or 200 printings within 72 hours when the battery is fully charged.

TIME CARDS

Time Card

is shown below. For across the card type, card format can be changed by setting the inner dip switch. A sample time card

_							Line pitch		-			Side margin ——				Column pitch—													
1		ŧ	=	Ξ	5	12	Ξ	ō	9	7	٥	u	-	2	4.5	Ť	Π	D/	Œ		Ţ	-	Г		2	=		F.	_
		HICHATURE .			L									_		1		ž	Democra	BALANCE DUE	TOTAL DEDUCTIONS	TOTAL BARNESS	r	ĺ	-	F	SINCH	NAME	<u>\$</u>
																		ş	the Par	ā	SPOID	NG1	r		Ī		12.5		
Card width			L			_		_										2	N. F				-	_	-		MICHIE		22
3	,							İ]	İ			ŝ	NOON		Ц	Dél			Ļ		٤	ĺ	ENDING
	Anuno.																	N S	ě	TA.LOL		_	7114	_	HOSP.	UNEWS (NG	704		
					_		_				1							8	amu.	-	Н	-		-		Ã	Ē		
4	L		1_1	_ [_ !	_		 					_			ня	ıs.	_					_			<u> </u>	

For adjustment of card width, side margin, thickness and slot depth, see Pages 19 - 20. To change time card format, inform the dealer from whom you have purchased this unit Vertical spacing change can be done by replacing the sensor belt.

Sensor belts available:

4.35mm (0.17in) 4.53mm (0.18in)

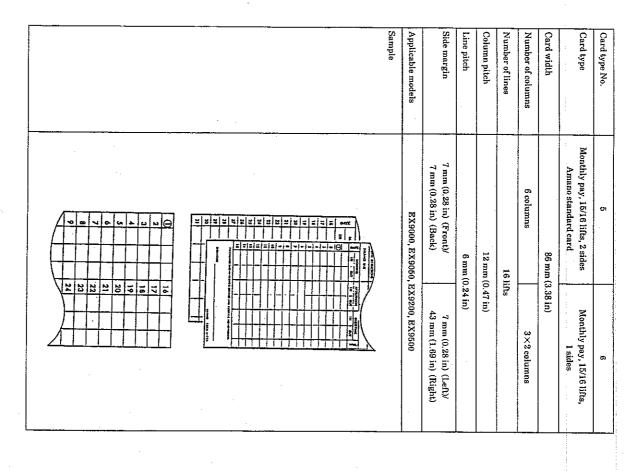
mm (0.24in) mm (0.27in)

Other adjustments are set by dip switch. (See Page 2.)

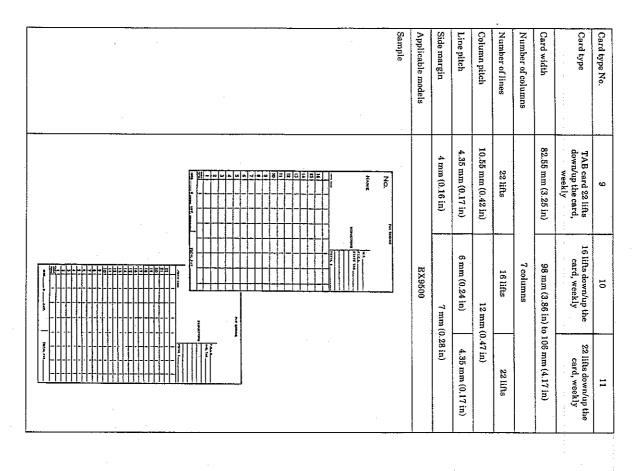
Types of Time Cards

	Sample	Applicable models	Side margin	Line pitch	Column pitch	Number of lines	Number of columns	Card width	Card type	Card type No.
NO. NAME N		EX9000, EX9050, EX9200, EX9500	6.5 mm (0.26 in)	6 mm (0.24 in)	12 mm (0.47 in)	7 lifts	6 columns	82.5 mm (3.25 in) to 86 mm (3.38 in)	7 lifts across the card weekly	
0017		.9600		7 mm (0.28 in)				38 in)	ly	2

	Sample	Applicable models	Side margin	Line pitch	Column pitch	Number of lines	Number of columns	Card width	Card type	Card type No.
		-					in			
7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	No.	EX9000, EX9050, EX9200, EX9500	5 mm (0.20 in) (1st week)/ 7.5 mm (0.30 in) (2nd week)	6 mm (0.24 in)	12 mm (0.47 in)	14 lifts	6 columns	86 mm (3.38 in)	14 lifts across the card bi-weekly	3
N NOT THE NOTE OF		EX9200, EX9500	16 mm (0.63 in)	6 mm (0.24 in)×2	0.47 in)	7×2 lifts	4 columns	82.5 mm (3.25 in)	14 lifts across the card weekly ND1	4



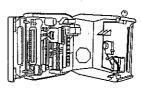
	Applicable models	Side margin	Line pitch	Column pitch	Number of lines	Number of columns	Card width	Card type	Card type No.
Control Cont	EX9500	8 mm (0.32 in)	4.53 mm (0.18 in)	12 mm (0.47 in)	31 lifts	6 columns	104 mm (4.09 in)	Monthly pay, 31 lifts	7
NAME **** **** **** **** **** **** ****	1500	4 mm (0.16 in)	6 mm (0.24 in)	10.55 mm (0.42 in)	16 lifts	7 columns	82.55 mm (3.25 in)	TAB card 16 lifts down/up the card, weekly	œ

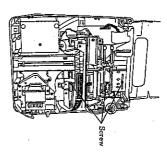


Sample	Side margin	Line pitch	Column pitch	Number of lines	Number of columns	Card width	Card type	Card type No.
THIS SIDE OUT 1 TO 7 — 14 TO 23 THIS SIDE OUT 1 TO 7 — 14 TO 23 THIS SIDE OUT 1 TO 1 — 14 TO 23 THIS SIDE OUT 1 TO 1 — 14 TO 24	8 mm (0.31 in) (Front)/ 8 mm (0.31 in) (Back)	6 mm (0.24 in)	12 mm (0.47 in)	16 lifts	8 columns	98 mm (3.86 in) to 106 mm (4.17 in)	16 lifts down/up the card, monthly	12
7 - 14 TO 23	7 mm (0.27 in) (Front)/ 7 mm (0.27 in) (Back)	4.35 mm (0.17 in)	10.7 mm (0.42 in)	22 lifts	umns	106 mm (4.17 in)	22 lifts down/up the card, monthly	13

Adjustment of Card Width

- Disconnect the power cord from AC 2. receptacle, place the machine flat down and remove the connector and the front cover.
- Loosen the three screws indicated in the figure shown below with a Phillips type screwdriver and adjust the slot width for the card to be used. The width can be adjusted in the range 82.5 106 mm.

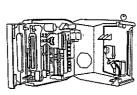


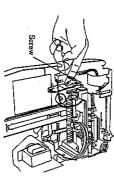


To check the card width setting, insert a card and turn the white gear located behind the motor to draw the card into the unit.

Adjustment of Side Margin

- Disconnect the power cord from the AC 2. receptacle, place the machine flat down and remove the connector and the front cover.
- After having removed the case, hold the section indicated by hand from below, loosen it with a Phillips type screwdriver and adjust the side margin. (Scales are indicated.)
 The adjusting range is 3 15 mm.





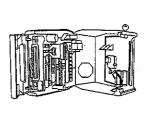
Adjustment of Card Thickness

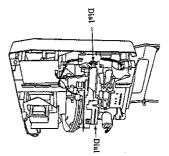
 Disconnect the power cord from the AC receptacle, place the machine flat down and remove the connector and the front cover.

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After removing the case, turn both the right and left dials to adjust the back and forth width of the slot. (Scales are indicated.) The adjusting range is 0.188 - 0.9 mm.

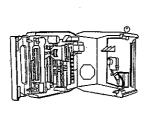
The original width is set at 0.37 mm.

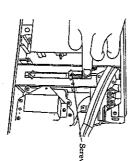




Adjustment of Time Card Bottom Margin

- Disconnect the power cord from the AC 2 receptacle, place the machine flat down and remove the connector and the front cover.
- After having removed the case, loosen the section indicated in the figure below with a Phillips type screwdriver and adjust the depth. (Scales are indicated.)
 The adjusting range is 17-31mm.



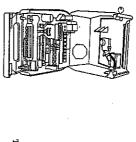


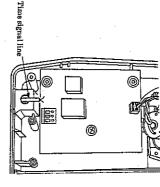
The time card bottom margin can also be changed by the dip switch settings. See the dip switch setting chart. (See Page 2)

TIME SIGNAL

Wiring of Time Signal

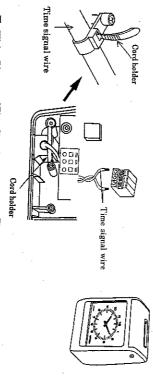
 Disconnect the power cord from the AC 2. Pass the time signal wire through the hole on receptacle, place the machine flat down and the left side of the rear cover.





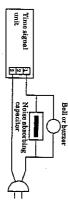
3. Press the protrusion of the time signal terminal 4, and insert the time signal wire in Nos. 1 and 3. Then, fix them with the cord holder. For two time signal cricuits or master-slave function (option B), insert time signal wires in terminal receptacles No. 1, 2, 4, and 5.

4. Attach the front case to the unit, insert the connector and close the top cover.



■ Wiring Diagram of Time Signal

For connection to a class 2 circuit only.



A noise absorbing capacitor is included in the time signal unit. (For example, S-1205)

MASTER-SLAVE FUNCTION

The master-slave function of the EX9000 series synchronizes the seconds every minute to all wire connected EX9000 series.

When it receives a pulse from the master clock during the interval between :00 - :29 seconds, the slave clock's internal display returns to :00.

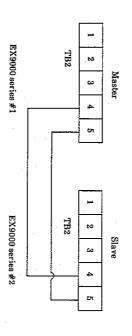
A pulse during the interval between :30 - :59 seconds advances the internal clock one minute, and the second display begins at :00. The EX9000 series does not have hourly connection of minutes.

EX9000 series Master output



Typical Connection (see Wiring of Time Signal)

Make sure the master clock has been set to the correct current time. After setting the slave clock :01 - :29 ahead of current time, connect the wires to the master clock.

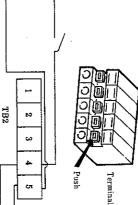


Jumpers and Connection

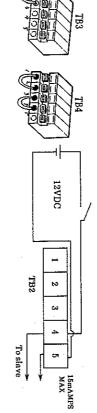
connections are the same, functions are different. Master/slave and two-time signal functions have their own software in the ENM P.C.B. If the jumper EX9000 series (option B) can select the master or slave clock by jumper connections in the ENE P.C.B.

For connection to a class 2 circuit only

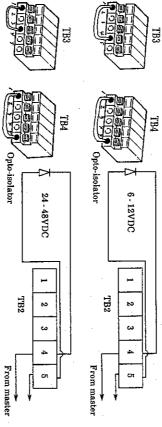
Disconnect AC power before connecting Master Dry Contact.



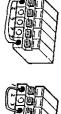
Master 12V Pulse



Slave Pulse



4. Two Time Signal Circuits

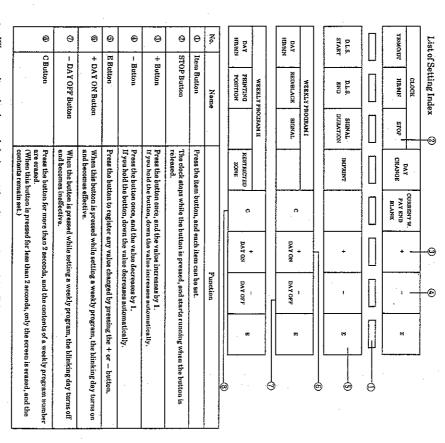




SETTING METHOD

Setting

- For program setting, open the top cover, and the setting mode starts. Turn the dial and select the appropriate setting index, press the item button, and start each setting. Set all hours on the military hours (0 23) system.



- programs are excluded.) Start and end of Daylight Savings Time and Restricted Zone should be set at the same time. Also, When an item is changed during setting, items registered by E button are effective. (Weekly
- such setting may not extend beyond the day time change.
- Precaution for setting weekly program.
- When setting multiple functions at the same time, set the functions at one program No. (See Page 37.)

Setting of Time

Example: Set "August 11, 1992" on the time recorder.

1. Press the YR/MO/DT button, and the current time is indicated.

STOP	
DAY CHANGE	
CURRENT W. PAY END BLANK	
+	
1	
8	7 25
	C3

HRMN CLOCK

- Set "92" for the year by using the + or button. 00 to 90 represent those of 2000s, while 91 to 99 represent those of

Press the E button.

- (田) (五)
- Set "08" for the month by using the + or button.
- 1 EBD 25
- 92 DB.Q

Press the E button

- Set "11" for the day by using the + or button.
- 9208

1 8025

Press the E button.

Example: Set "8:48 a.m." on the time recorder.

1. Press the HR/MN button, and the default value of time is indicated

1	\$	H
	STOP	
	CHANGE	,
	PAY END BLANK	CURRENT W.
	. +	
	1	
	e	

YEAMOADT

2. Set "08" for the hour by using the + or - button. Note: Set hours on the military hours (0 - 23 hours) system.



Press the E button.

4. Set "48" for the minute by using the + or - button.



Press the E button. The clock starts running immediately after the button has been



STOP Button

When the clock is running ahead of time, press the STOP button and wait until the right time.

released. The clock stops while the button is pressed and starts running immediately after the button has been

Day Time Change

Programmed time to start a new day line or column

Example: Set the day time change to 4:30

1. Press the DAY CHANGE button, and the default value appears.

DE:EU-

Set "04" for the hour by using the + or - button.

Press the E button

YR/MO/DT

HRWN CLOCK

FOLS

CHANGE

CURRENT W. PAY END BLANK

DEL OF

Set "30" for the minute by using the + or - button.

ÚÉ YO DYDD

DE HD

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Press the E button.

Press the E button.

(For 2-row-a-day Cards (card No. 4)) Morning/Afternoon Vertical Space Time Change

Example: Set the morning/afternoon time change to 14:30.

- Press the DAY CHANGE button, and the default values appear.

 1: Division 1 (Vertical space time change) 03:00
- 2: Division 2 (Morning/Afternoon time change) 12:00

DIDE COR

DAY CHANGE CURRENT W. PAY END BLANK

Set "2" for the default by using the + and - buttons

DOI: ED.

3. Press the E button. (The initial value for the Division 2 appears.)

Set "14" for the hour by using the + and - buttons.

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00:21/2

Ġ, Set "30" for the minute by using the + and - buttons.

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7. Press the E button.

Setting of Pay Period Ending Date and Blank Row (For Monthly Pay)

Example: Set the pay period ending date to the 25th day of the month and a blank row at the 17th row

Press the CURRENT W. PAY END BLANK button, and the default month), the top row is blank.) value appears. (The 31st day [For period ending at the end of the

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[)
1	1
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43	
[2]	
	_

o c_{n+1} 1951 for the new period ending date by using the $+$ and $-$	TOOMIST
er for the n	CLOCK
av period e	STOP
nding date	DAY
by using t	CURRENT W. PAY END BLANK
he + and	
Ì	
\neg	ы

buttons. Sec 79 in the hay be roo



TRYMODY

STOP

DAY

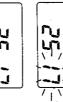
PAY END BLANK

CLOCK

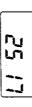
Press the E button, and the blank row turns to "17."



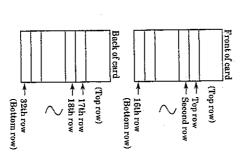
Set the blank row by using the + and - buttons



Press the E button



The top row of the time card is number 01, the lowest row on the back is number 32, and a blank row can be Blank Row the initial value "I" remains unchanged When a pay period ending date is set to any other date 25th day, the blank row automatically turns to "17." When a pay period ending date is set to the 20th or set by designating a number on the card.



Setting of Pay Period Ending Day of the Week and Current Week (For Weekly and Bi-weekly Pay)

Example: Set the pay period ending day of the week to Saturday (bi-weekly pay) and the current week to the second week.

Press the CURRENT W. PAY END BLANK button, and the default and the current week is the first one.) values appear. (The pay period ending day of the week is Friday,



Ŋ Set "2" for the current week by using the + and - buttons

Only for bi-weekly pay period.



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NJ

èΩ Press the E button



①:Monday②:Tuesday③:Wednesday④:Thursday⑤:Friday⑥:Saturday⑦:Sunday Set "6" for the day of the week by using + and - buttons.



Ģ Press "E" button



When the card specification is set to weekly pay, the current week is not shown on the display.

1st 2nd 9th 10th 17th 18th 25th 26th

31 to 12 to 14 to 15 to 1 1 1 1

Front side of the 1st card Back side of the 2nd card 29

Set "1" to leave this

column of the 1st card black.

Setting of Daylight Savings Time (Month and Date)

Example: Set the starting date of Daylight Savings Time to July 5

1. Press the D.L.S. START button, and the default value appears

兴

	_
D.L.S. START	
D.L.S.	
SIGNAL	
IMPRINT	
+	
M	
	_

- »
- No function Setting of month and date Setting of month and day of the week
- Select "1" as the setting method of Daylight Savings Time by using 兴 ŧ

ı

Press the E button

the + and - buttons.

- _| **[]**
- Set "07" for the month by using + and buttons.

Οī

Press the E button

ロナロ

Press the E button

- Set "05" for the date by using the + and buttons.
- 20,40,

-7

Press the E button.

7. Press the E button.

- 20105
- Set the ending date of Daylight Savings Time in the same way.
- Set both the starting and ending dates of Daylight Savings Time. When only one of them is set, Daylight Savings Time is not set
- When the starting date and the ending date are set to the same date, both dates are erased
- The change-over time for Daylight Savings Time is 2:00 a.m.

31 —

Setting of Daylight Savings Time (Month and Day of Which Week)

Example: Set the starting date of Daylight Savings Time to the second Monday of July.

1. Press the D.L.S. START button, and the default value appears



SIGNAL IMPRINT 2::: No function Setting of month and date Setting of month and day of the week

D.L.S. START

D.L.S.

Select "2" as the setting method of Daylight Savings Time by using the + and ~ buttons.

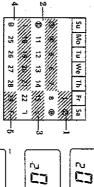
Ņ

**

Press the E button

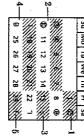
<u>[]</u> **[]**

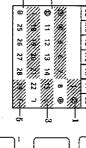
Set "07" for the month by using + and - buttons.



1: 1st week 2: 2nd week 3: 3rd week Set "02" for the week by using + and - buttons 4: 4th week 5: 5th week

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œ Set "1" for the day of the week by using + and - buttons. 5 : Friday 6 : Saturday 2 : Sunday ②: Tuesday ③: Wednesday @: Thursday

Press the E button

- Set the ending date of Daylight Savings Time in the same way.
- Set both the starting and ending dates of Daylight Savings Time. When only one of them is set,
- Daylight Savings Time is not set.
 When the starting date and the ending date are set to the same date, both dates are erased.
- The change-over time for Daylight Savings Time is 2:00 a.m.
- 32 -

Example: Set the time signal duration to 10 seconds

1. Press the SIGNAL DURATION button, and the default value appears (for 5 seconds).

D.L.S. START

D,L.8,

SIGNAL



Set "10" for the time signal duration by using the + and - buttons. (The setting range is 00 - 59 seconds. No time signal is output at 00

	17	
	7	
t	<u> </u>	

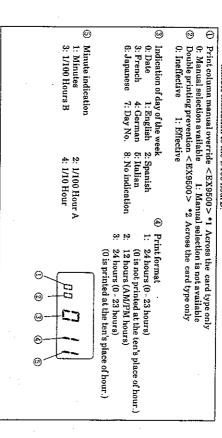
Press the E button



Even in the case of 2-circuit output of time signal [option B], the time signal duration is set to the same length.

Setting of Imprint

Example: Set the print column manual selection available, the double printing prevention to effective, indication of day of the week to English, hour indication to 12 hours (AM/PM hours) and minute indication to the 1/100 hourB



Note:

*1 Print column manual override <EX9500>

When set available a printing column other than the preset column may be selected manually.

*2 Double printing prevention <EX9500> With the double print prevention set to: 1 effective and the print column manual override set to:

- 1-Not Available: Cards will be locked out during the double print zone print zone A column must be selected manually before inserting the card during the double
- prevention to effective will make the unit unprintable during working hours Be cautious that setting the printing column manual selection to impossible and the double printing
- In the case of EX9000, EX9050, EX9200 and EX9500 (when across monthly pay and across weekly pay are set), start setting from Procedure 6 below:

\$	ekly pay,	When the card type is weekly pay, the	en the care	igure).	button, and the default value 00 appears (small figure). DLS DLA SIGNAL IMPRINT +	ши очен	efault valuefault valu	, and the d	button buts bus snarr
----	-----------	---------------------------------------	-------------	---------	--	---------	--	-------------	--------------------------------

\ initial value is "1."

- 2. Set the "print column manual selection" available (0) by use of + and - buttons.
- Press E button.
- 4. Set "1" for the double printing prevention (effective) by using the + and buttons. $<\!EX9500>$

10次日

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- Press the E button.
- 6. Set "1" (English) for the indication of day of the week by using the < The following procedures are applicable to all models. > + and - buttons.



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7. Press the E button.

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8. Set "2" (AM/PM hours) for the print format by using the + and -

Press the E button.

- 10. Set "3" (1/100 hours B) for minute indication by using the \pm and \pm 巡に

Press the E button.

buttons.

1/100 hour A, 1/100 hour B and 1/10 hour:

	1/100 hour B	1/100 hour A	Minute		1/10 hour	1/100 hour B	1/100 hour A	Minute	
	В	Α			-	В	A		
4	5	48	29		0	00	00	0	
Oτ	8	55	8		0	00	02	1	
Ċπ	50	52	31		0	00	03	2	
6	5	53	32		0	05	05	3	
Οī	55	55	33		0	05	07	4	
о т	55	57	34		0	05	80	5	
5	55	58	35	l	1	10	10	6	
₹	₹	~	ì		1	01	12	7	
9	90	90	54		1	10	13	8	
ဖ	90	92	55		1	15	16	9	
9	90	93	56		≀	ł	į	Ł	
9	36	95	57						
9	95	97	58						
9	95	98	59						

	1/100 hour B 45 50	1/100 hour A 48 50	Minute 29 30	1/10 nour 0 0 0 0 0 0
от от	50	62	31	_
0	50	53	32	-
Οī	99	55	33	u
о т	55	57	34	9
ŏ	55	58	35	>

EX9000 series time recorders include the following functions.

- 2-color Printing <EX9200, EX9500>
- Time Signal < EX9050, EX9200 and EX9500 >
- Print Position <EX9500>
- RESTRICTED ZONE < EX9500>

When setting a weekly program, pay attention to the following:

functions at each program No. When setting multiple function at the same time, set the function at one program No. Do not set the

EXAMPLE

Start printing in black at 17:00, Monday - Friday Time signal to sound at 17:00, Monday - Friday

Weekly program No. 1

Set day of the week, Monday - Friday

Set time signal.

Set 2-color printing, Black Set time of day, 17:00

Setting List

	02 motuwethfrsasu : R B	01 @@@@@sasu / 7:00 R (B) 〇 .	NO. DAY HRWIN BLACK SIGNAL PRINTING PO	WEEKLY PROGRAM!
В	B	(D)	D/ .CK SIGNAL PRINTING POSITION	LY PROGRAM I WEEKLY PROGRAM II
01 02	01 02	01 02	N RESTRICTED ZONE	OGRAM II

Setting of 2-color Printing < EX9200, EX9500 >

Example: Start 2-color printing at 8:31 a.m. from Monday to Friday.

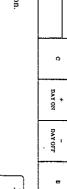
1. Select WEBKLY PROGRAM I from the setting indexes, and a program no. appears.

Ü

WEEKLY PROGRAM I	SIGNAL	c	DAY ON	DAYOFF
UED/BLACK	TANDIS	a	DAY ON	DAYOFF

REDIBLACK

Press the DAY HR/MN button.



Day of the week is set as follows

①: Monday ②: Tuesday ③: Wednesday ④: Thursday ⑤: Friday ⑤: Saturday ⑦: Sunday

STORES

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. t.

DAY OFF (--) button. press the DAY ON (+) button. When cancelling, press the When setting a day of the week where the LED goes on and off,

To set the time when 2-color printing starts, follow the procedures mentioned in the paragraph "Setting of Time" page 26.

Press the RED/BLACK button.
R: Start of printing in red

B: Start of printing in black

Use the + and - buttons to select "R", "B" on the display, then press the E button.

è Check if the above setting is correct, and press the E button again to (The next program step no. is indicated.) register the setting

20-0

Example: Set the time so that a time signal goes on at 8:30 from Monday to Saturday.

Select WEEKLY PROGRAM I from the setting indexes, and a program no. appears.

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Г	_		Τ		1
	NW/RH	DAY			
		REDIBLACK		WEEKLY P	
		SIGNAL		ROGRAM I	
			,		
		DAYON	4		
		JAO YAG			
		ı			

2 Press the DAY HR/MN button.

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ç Day of the week is set as follows:

①: Monday ②: Tuesday ③: Wednesday ④: Thursday ⑤: Friday ⑥: Saturday ⑦: Sunday

press the DAY ON (+) button. When cancelling, press the When setting a day of the week where the LED goes on and off, DAY OFF (--) button

To set the time when the time signal goes on, follow the procedures mentioned in the paragraph "Setting of Time" page 26.

Press the SIGNAL button.

- No signal goes on
- 1: The signal goes on in Circuit 1.
- The signal goes on in Circuit 2. [option B]
- 3: The signal goes on in both Circuits 1 and 2. [option B]

display, then press the E button. Use the + and - buttons to select the content to be indicated on the

Check if the above setting is correct, and press the E button again to (The next program step no. is indicated.) register the setting.

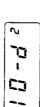
20-9

Setting of Print Position < EX9500 >

- A) Across the card type-print positions 1 8 are available to shift print columns across the card during
- B) Up or down the card type-print position 1 16 or 1 22 are available to shift print lines up or down the card during the day

Example: Shift the print position to the Column 4 at 18:00 from Monday to Sunday

Select WEEKLY PROGRAM II from the setting indexes, and a program no. appears. *



PRINTING WEEKLY PROGRAM II RESTRICTED ZONE O DAY ON DAY OFF

Press the DAY HR/MN button



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Day of the week is set as follows:

①: Monday ②: Tuesday ③: Wednesday ④: Thursday

press the DAY ON (+) button. When cancelling, press the (5): Friday (6): Saturday (7): Sunday DAY OFF (-) button When setting a day of the week where the LED goes on and off,

To set the time when a print column is shifted, follow the procedures mentioned in the paragraph "Setting of Time" page 26.

σ Press the PRINTING POSITION button to set the position of the column to be shifted on the display. (00 to the MAX column of each

the E button. If the print column shifting is set to "00", the column stays the same without regard to the programming Use the + and - buttons to position the print column, then press

04 18.00 18.00

Check if the above setting is correct, and press the E button again to (The next program step no. is indicated.) register the setting.

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different than weekly program I. Use the next unused program no. available to add programs. Use the + button to advance the program no

Setting of RESTRICTED ZONE <EX9500 (Across the card type only) >

Example: Make the Double Printing Prevention effective between 8:31 and 17:00 from Monday to

Select WEEKLY PROGRAM II from the setting indexes, and a program no. program no. appears. Use the + button to advance to an unused

ď י י

Press the DAY HR/MN button

DAY HR/MN

PRINTING POSITION

RESTRICTED ZONE

DAY ON

DAY OFF

WEEKLY PROGRAM II

- ω Day of the week is set as follows:
- ①: Monday ②: Tuesday ③: Wednesday ④: Thursday ⑤: Friday ⑥: Saturday ⑦: Sunday

press the DAY ON (+) button. When cancelling, press the When setting a day of the week where the LED goes on and off, DAY OFF (-) button.

To set the time zone during which the double print prevention paragraph "Setting of Time" page 26. remains effective, follow the procedures mentioned in the

Press the RESTRICTED ZONE button 01: Start of double print prevention 02: End of double print prevention

Ò

Use the + and - buttons to indicate 01 or 02 on the display and

- 6. Check if the above setting is correct, and press the E button again to
- 0
- .~7 Register the ending time (17:00) of double stamping prevention in

(The next program step no. is indicated.)

Be sure to set the starting and ending times of double printing prevention at the same time. These times cannot be set when extending beyond the day time change

Example of Main Settings

Example: Start printing in black and sound a time signal at 17:00 from Monday to Saturday.

Select the WEEKLY PROGRAM I, set a day of the week and a time, and press the E button

DAY RED/BLACK Weekly Program I TVNDIS c PAY ON DAY OFF

Press the RED/BLACK button, and indicate "B" on the display by using the + and - buttons, then press the E button.

ç Press the SIGNAL button, and indicate "1" on the display by using the + and - buttons, then press the E button.

Check if the above settings are correct, and press the E button again to register the setting. (The next program step no. appears.)

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If the E button is pressed for 2 seconds at this stage, the weekly program is copied. For details, see page 43.

If you have made a mistake during the setting procedures, press the C button. The function of the C button depends on the length of the time that the C button is pressed.

When the C button has been pressed for less than 2 seconds, P-05 appears on the display (and the program contents remain)

program are completely erased When the C button has been pressed for more than 2 seconds, the contents of the relevant

When setting a weekly program, pay attention to the following:

When setting multiple function at the same time, set the function at one program No. Do not set the functions at each program No. (See Page 37.)

Copying of Weekly Program:

The set day of the week and time can be copied to the next program no. by holding down the E button for 2 seconds. When the next programs have already been set, then they are copied to the next available program not set.

Example: Sound time signals at 9:00 and 12:00 from Monday to Friday

. Set a weekly program to sound a time signal at 9:00 in the WEEKLY PROGRAM I.

 Press the E button for 2 seconds, and the number of programs, in which the weekly program is copied, appears on the display. (When program step no. 7 is empty.)

DAY HR/MN

WEEKLY PROGRAM I
RED/BLACK SIGNAL

DAY ON

DAY OFF

P-07

3. Release the E button. And you will set the time.

OT.CO.

12:21 12:21

Set the time signal the same way as mentioned in the paragraph "Setting of Time Signal" page 39, then press the E button.

Ö

4.

Change the time (to 12:00) and press the E button

Check if the setting is correct, then press the E button again to register the setting. (The next program step no. appears.)

6

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MODIFICATION OF SET DETAILS OF WEEKLY PROGRAM

Modification (or Confirmation) of Weekly Program

Example: When modifying (confirming) 2-color printing and time signal,

 Open the top cover and select the WEEKLY PROGRAM I from the setting indexes.

10-01

DAY		
 REDIBLACK	WEEKLY PROGRA	
SIGNAL	ROGRAM I	
c		
DAYON		
DAY OFF	1	
ts		

. Select a program no. to be modified (or confirmed) by using the + and -- buttons.

Example: program no. 12

Press the E button, and the data of the program to be modified (or confirmed) appear on the display.

ω

Example: Set to change over to printing in black and to sound a time signal at 17:25 from Monday to Friday.

4 17:75

When modifying the data, press the button of an item to be modified, change it by using the + and - buttons, then press the E button to register.

button to register.

Example: Modify so as to change over to printing in black and to sound a time signal at 17:30 from Monday to Friday.

12 - 13

After completion of modification, press the E button, and the next program step no. appears on the display. When nothing has been modified in the procedure 4, press the + button, and the next program step no. appears on the display.

(Press the - button to indicate the previous program no.)

Additional Setting

Open the top cover and select the WEEKLY PROGRAM I from the setting indexes.

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HEMN	DAY	
	RED/BLACK	WEEKLY PROGRA
	TVNDIS	ROGRAMI
	c	
	DAYON	
	DAY OFF	

?2 Press the E button for 2 seconds, and an empty program step no. appears on the display.

ယ To set an additional item, see the WEEKLY PROGRAM from page



Cancellation of Set Data

(Only one program no. can be cancelled at a time.)

1. Open the top cover and select the WEEKLY PROGRAM I from the setting indexes.



DAY RED/BLACK WEEKLY PROGRAM I TYNDIS DAYON DAY OFF

Select the program step no. to be canceled by using the + and -

buttons. (Programs can be canceled even after having displayed the

contents by pressing the E button.)



3. Press the C button for 2 seconds (All items go on and off during this time.), and you will hear "Pip!" Now, the cancellation has ended. Example: Cancel Program no. 3.



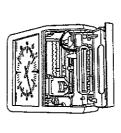
MAINTENANCE

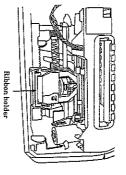
Change of Ribbon Cartridge

 Open the top cover, and the dot printer head moves to the place where you can change the

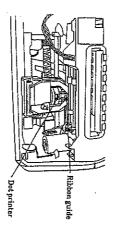
'n

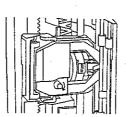
To remove the ribbon, pull the ribbon holder at the end of the ribbon cartridge towards you, remove it. and the ribbon pops up. Lift the ribbon up to





- 3. Set a new ribbon cartridge between the ribbon 4. Turn the knob clockwise, and the ribbon guide and the dot printer head becomes tight.





Close the top cover.



Specific Situations

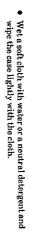
inside the unit. Disconnect the power cord plug for a short while and re-inserting back to the AC receptacle. In case the unit will not return to normal, contact your local dealer from whom you have When the error sound goes "Pip, pip, ..." and the IN/OUT indicator lamp goes out, a trouble has occurred bought the unit.

If the clock stops or will not print check the error code displayed

Error code	Meaning of error	Measures
Err 1	Error of analog clock	Contact the dealer from whom you have
Err 2	Column home position error	bought aid diffe.
Err 3	Column timing pulse error	
Err 4	Abnormal surface/back sensor level	
Err 5	Error of column division sensor	
Err 6	Malfunction due to external noise Abnormal set details of weekly program	Set the weekly program again. If it cannot be restored, contact the dealer from whom you have bought the unit.

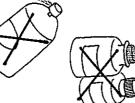
Daily Maintenance

Cleaning of case when it becomes dirty:





Do not use benzine, volatile thinner, or other chemicals for cleaning, because the case may be damaged or discolored.



Do not spray insecticide over the case, because the case may be damaged.

Wipe the window glass with a dry soft cloth. Note that the surface is specially finished.

APPENDIX

Index of Items for Setting

- When setting a program, open the top cover and the setting mode appears. Turn the setting index to select items and press item buttons for setting.
- Set all hours and minutes on the military time (0 23 hours) system

Items for setting and their explanations are as follows:

41	To set the time zone of double print prevention.	RESTRICTED ZONE	program II
40	To set column no. for shifting column.	Print position	Weekly
39	To set data for sounding time signal.	Time signal	program i
38	To set items changed to 2-color printing.	2-color printing	Weekly
34	To set formats for daily printing (day of the week, 12-hour system or military hours (0 - 23 hours) system and minute indication system)		Imprint
33	To set the length of time signal.	l duration	Time signal duration
32	To set Daylight Savings Time to a designated month and day of which week.	Daylight Savings Time (month and day of which week)	Daylight Sa (month and
31	To set Daylight Savings Time to a designated date.	Daylight Savings Time (date)	Daylight Sa
30	To set pay period ending day of the week and current week (in the case of bi-weekly pay card).	Pay period ending day of the week, current week (weekly pay)	Pay period current wee
29	To set pay period ending date and blank row in time card.	Pay period ending date, blank row (monthly pay)	Pay period en (monthly pay)
28	To set the time for changing to second row on a 2-row-a-day card.	Morning/Afternoon vertical space time change (2-row-a-day card)	Morning/Ai time change
27	To set the time for changing column/vertical space for a new day.	nange (y card)	Day time change (1-row-a-day card)
26	To set hour and minute.		Time
25	To set year, month and day.	-	Date
Page	Explanation	Items	

When setting a weekly program, pay attention to the following:

(See Page 37.) When setting multiple function at the same time, set the function at the program No.

Weekly Program Setting List Example of Entry

M V d J U d		7	WEEKLY PROGRAM!	OGRAMI	WEEKLY PROGRAM II	HAM II	ļ
NO.	DAY	HRMN	нед/ ведск	SIGNAL	SIGNAL PRINTING POSITION	RESTRICTED ZONE	E G
01	@@@@@sasu 9:0/®	9:0/	®	×		2	02
02	®©®®® ®s∧su /7:30	17:30	я (0		01	02
							Ţ

			WEEI	LY PR	WEEKLY PROGRAMI	WEEKLY PROGRAM II	IRAM II	
PROGRAM NO.	DAY	HRMN	RED/ BLACK	CK	SIGNAL	PRINTING POSITION	RESTE	RESTRICTED ZONE
10	MO TU WE TH FR SA SU		R	æ			2	02
02	MO TU WE TH FR SA SU		R	₩			2	92
03	mo tu we th fr sa su		æ	₩			21	02
04	MO TU WE TH FR SA SU		R	В			01	02
05	MOTU WETH FRSA SU		₽	В		\$ \$000 mm	2	02
06	MOTU WETH FRSASU		z	В			01	02
07	MO TU WE TH FR SA SU		æ	В			2	02
08	MOTU WETH FRSASU		≂	В			2	02
09	MOTUWETH FRSASU		₽	В			01	28
10	MOTUWETH FRSASU		R	В			01	02
11	MO TU WE TH FR SA SU		×	В			22	92
12	MOTU WETH FRSASU	٠.	æ	В			2	8
13	MO TU WE TH FR SA SU		Ħ	В			2	92
14	MOTUWETH FRSASU		77	В			2	02
15	MO TU WE TH FR SA SU		R	В			2	02
16	MOTU WE THER SASU		æ	В			2	02
17	MOTUWETH FRSASU		æ	В			2	02
18	MO TU WE TH FR SA SU		æ	В			2	02
19	MOTUWETH FRSASU	ļ <u> </u>	₽	В			2	02
20	MOTU WE TH FR SASU		æ	В			2	02
21	MOTU WE TH FR SA SU		77	В			2	22
22	MOTU WE TH FR SA SU		R	В			2	02
23	MO TU WE TH FR SA SU		₩	₩			2	22
24	MOTU WE THER SASU		₽	В			2	02
25	MOTU WE TH FRSA SU		77	В			2	02

* A maximum of t * 2-color printing	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	NO.	рвосвим
60 weekly R	motu we th frsa su	MOTUWE TH FRSA SU	MOTUWETH FRSA SU	MOTUWETH FRSASU	MOTU WETH FRISA SU	MOTUWETH FRSASU	MOTU WE TH FR SA SU	MO TU WE TH FR SA SU	MOTUWETH FRSASU	MO TU WE TH FR SA SU	MO TU WE TH FR SA SU	mo tu we th fr sa su	MOTUWETH FRSASU	MOTUWETH FRSASU	MOTUWETH FRSASU	MOTUWETH FRSASU	MO TU WE TH FR SA SU	motu weth frsa su	MO TU WE TH FR SA SU	MOTU WETH FRSASU	MO TU WE TH FR SA SU	motu weth frsa su	MO TU WE TH FR SA SU	MOTU WETH FRSASU	MOTU WETH FRSA SU	DAY	
ns can be							<u></u>											;	,.			:	-			DAY	
set.	R	æ	æ	æ	≂	≈	≈	R	R	R	≈	₽	R	₽	æ	R	Ħ	R	R	R	R	R	R	Ħ	R	RED/ BLACK	WEER
ging	ш	В	В	В	₩	æ	В	В.	В	В	В	В	В	ಹ	В	В	В	В	В	В	В	В	В	æ	В	CK CK	LYPR
programs can be set. Starting time for changing printing to red																										SIGNAL	WEEKLY PROGRAM I
red											-															PRINTING POSITION	WEEKLY PROGRAM II
	01	10	1.0	01	10	10	10	01	01	01	01	01	01	01	01	01	01	91	01	2	21	21	21	01	10	RESTI	3RAM II
	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	RESTRICTED ZONE	

^{*2-}color printing R: Starting time for changing printing to red
B: Time for changing printing to black
*RESTRICTED ZONE 01: Start of double printing prevention
02: End of double printing prevention