ELECTRONIC TIME RECORDER

EX 6000 SERIES

OPERATION MANUAL
ENGLISH/SPANISH/FRENCH/GERMAN

—— CONTENTS ——

QUICK CHART FOR PROGRAMING

External View

Print position indicator

Card pocket

Keyhole

IN/OUT Column select button
(or program item select button)

EX 5000

Digital clock

Case

Face clock section

This time recorder accepts only 86mm (3-3/8") time cards in **width**.

Specifications

Power requirement	: AC100/120/220/240 V ±10%, 50/60 Hz
Power consumption	: Normal 3W, maximum 6W
Ambient conditions	: Temperature : $-10°C$ to 45 $°C$ (14$°$ F to 113$°$ F)
	Humidity : 10% to 90% (no condensation)
Dimensions	: Width 204 mm $\times$ height 228 mm $\times$ depth 154 mm
	(8.03 $\times$ 8.98 $\times$ 6.06 in.)
Weight	: 2.8 kg (6.17 lbs.)
Power reserve	: The built-in batteries maintain normal operation for 24 hours or 80 punches, and clock & memory for 7 days.

Before Programming EX-6000 series

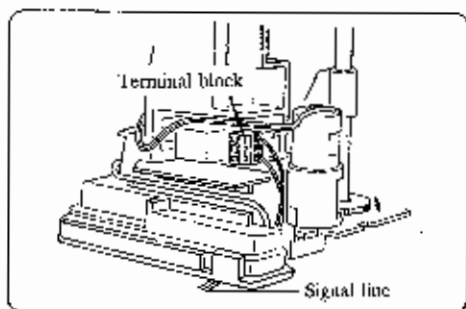**1** Insert the case key and turn it clockwise. Lift the cover case upward, off the main unit.


Case
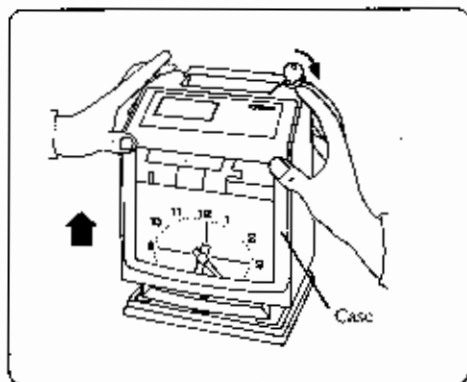
2 For wall mounting or external signal wiring, remove the back plate by holding the back plate as in the figure and pull down the back plate.


Rack gear holder (A,B,C)

Sensor rack gear

Back plate
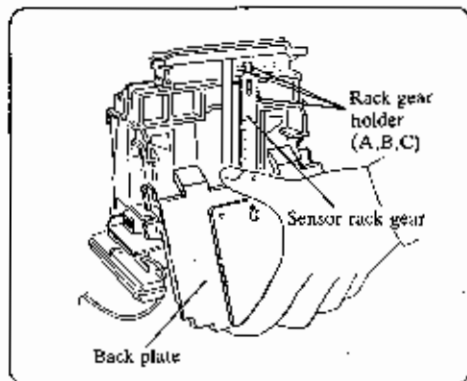
3 Connect external signal lines. (For EX-6200 series only)

Terminal block

Signal line

1) Bring the signal wires as in the figure and connect the wires on the signal terminal block using a flathead screwdriver.

Cable tie

Signal line
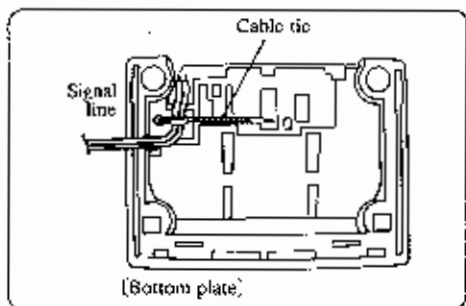
(Bottom plate)

2) Fix the signal line on the bottom plate with the cable tie.

Surge absorber

TB1

Bell or buzzer

AC 100 V

EXM board
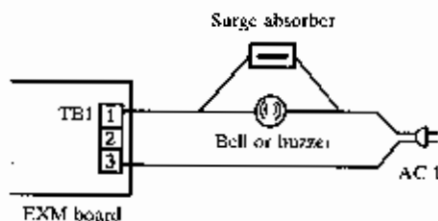
Contact output : Dry contact
(make contact)
Contact capacity:
AC 250 V, 0.5 A or less
DC 24 V, 0.5 A or less
Install a surge absorber on the signal unit side.

4 Wall Mounting :

1) Punch out the holes Ⓐ , ⓐ , ⓑ , and ⓒ on the back plate.
2) Hang the back plate with a wood screw through the hole Ⓐ on the wall.
3) Fix the back plate on the wall through the holes ⓐ , ⓑ , and ⓒ using screws.
4) Install the main unit on the back plate.
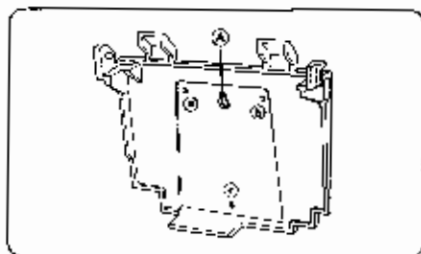
5 Connect the battery.

1) Press down the knob on the left side of the face clock section and release the hook from the hook hole.
   Open the face clock section toward the front.
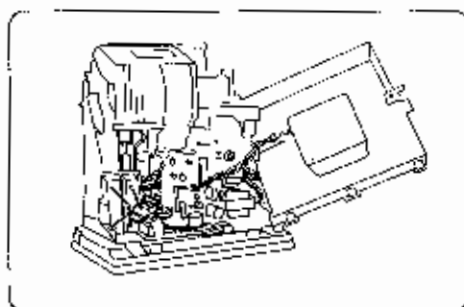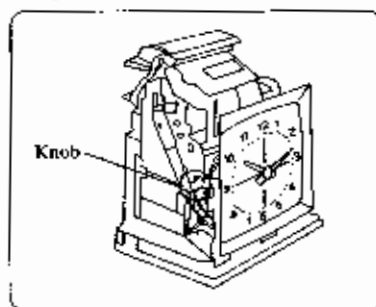
2) Plug in the two battery connectors to CN3, CN4 on the P. C. Board as in the figure.

Battery connector
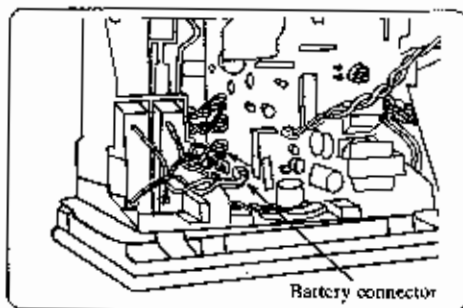
3) Close the face clock section.

— 1·4 —

6 Plug in the A.C outlet and initialize the machine as follows.

1) Set the slide switch at "1."
2) Keeping the buttons ① and ② pressed together, press the reset button with ball-point pen.

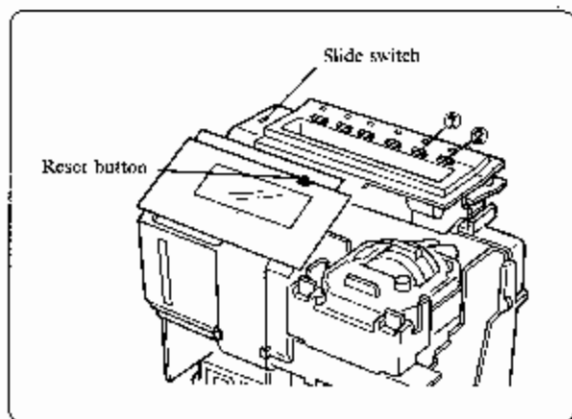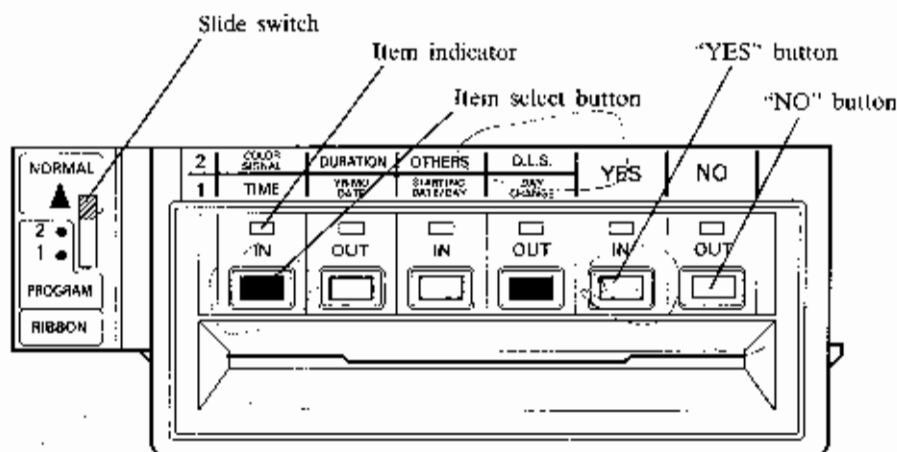# How To Program EX-6000 series

[EX 6200]

Slide switch	Set it at "1" when programming TIME--DAY CHANGE, and at "2" when programming COLOR/SIGNAL--D.L.S. When programming is completed, set it back at "NORMAL."
Item select button	Press the button corresponding to the programming item.
Item indicator	The red lamp of the selected item lights.
"YES" button	When the displayed data is correct, press this button. The data is registered.
"NO" button	When the displayed data must be changed, press this button. The data increases by 1. When the correct data appears, press "YES" button.

1. TIME SETTING, DIGITAL AND CLOCK DIAL.

1) Set the slide switch at position "1."
Press item selection button of "TIME" and
"00 : 00" appears on the display.

2) Repeat pressing "NO" button until the current hour
appears and then press "YES."
(Default uses 0-23-hours mode.)

3) Repeat pressing "NO" until one minute after the
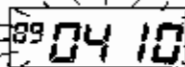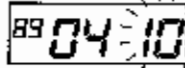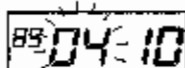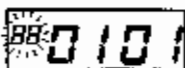current minute appears and then press "YES."

4) All digits on the display should blink. Press "YES",
then the clock starts at "00" second of the set time.

5) Set the present time of clock dial by turning
the minute hand clockwise with your finger.
* Do not touch the hour hand.
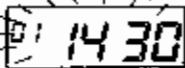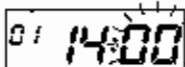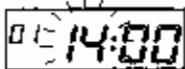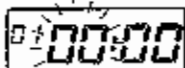
2. YEAR, MONTH & DATE
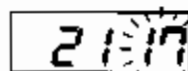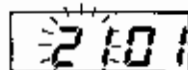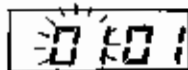
1) Make sure the slide switch is set at position "1" and
item indicator of "YR·MO / DATE" is lighting. If
not, set the slide switch to position "1" and press
item select button of "YR·MO / DATE." And
indicator "YR·MO / DATE" lights up.

2) Repeat pressing "NO" until last 2 digits of the cur-
rent year appears and then press "YES."

3) Repeat pressing "NO" until current month (01 to
12) appears and then press "YES."

4) Repeat pressing "NO" until current date (01 to 31)
appears and then press "YES."

5) All digits on the display should blink now. If they
are all correct, press "YES." If not, press "NO" and
repeat procedure from step 2.
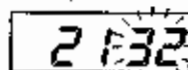
3-1. PAY PERIOD START DATE & BLANK SPACE
For monthly and semi-monthly time card

1) Set the slide switch to position "1" and press item select button of "STARTING DATE / DAY."

2) Repeat pressing "NO" until the pay period start date appears and then press "YES."

3) Repeat pressing "NO" until desired number for blank space appears and then press "YES."

Blank space	No.
Front top line	01
Front bottom line	16
Back top line	17
Back bottom line	32
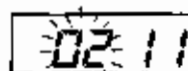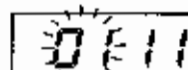
4) Finally, pay period start date and blank line No. blink together.
Check if they are right and press "YES."

3-2. PAY PERIOD START DAY & WEEKLY/BI-WEEKLY SETTING
For weekly (7 lifts) and bi-weekly (14 lifts) time card

1) Set the slide switch to position "1" and press the "STARTING DATE/DAY" button.

2) Repeat pressing "NO" to select the pay period start day (Monday = 01, Tuesday = 02, Wednesday = 03, Thursday = 04, Friday = 05, Saturday = 06, Sunday = 07), and then press "YES" when desired code appears.

3) Press the "NO" button to select the pay period type, then press "YES" when desired code appears.

`02:11`
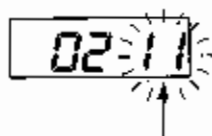
Pay period type	No.
Weekly [7 lifts]	11
Bi-weekly [14 lifts] (now in the first week)	21
Bi-weekly [14 lifts] (now in the second week)	22

4) Both selections will begin to blink on/off.

Press "YES" to enter the date into memory and program moves automatically to next.

Press "NO", if date is not correct and restart from the above 2nd step.

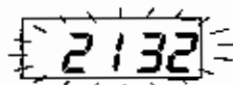** For Bi-weekly (14 lift) time card, peel off the tape from the sensor rack gear refering page 2.

`0221`
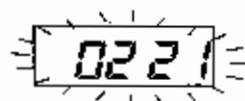
4 . DAILY PRINT POSITION CHANGE TIME

1) Set the slide switch at position "1" and press item select button of "DAY CHANGE."
The display shows "05 : 00."

`05:00`

2) Set the daily print position change time in the same way as setting clock (section 1).

`03:00`

3) The program goes back to "TIME." If the programming is completed, set the slide switch at "NORMAL" position and reinstall the cover case.
If you continue programming (print color change, etc.), proceed to the next step.
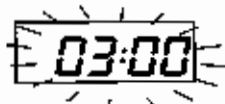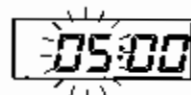
5 . PROGRAMMING OF COLOR CHANGE / SIGNAL / MELODY (For EX-6200 series only)

1) Set the slide switch at position "2."
   There are 20 "times" that can be programmed in
   this area for an entire week.
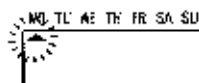
2) Select day(s) of week. Press "YES" to select the day
   which is indicated by a blinking triangular mark,
   and press "NO" to skip the day.

3) When day(s) of week is set, a number appears at
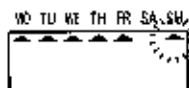   upper left of the display. Refer to the chart for code
   No. to select print color and/or signals.
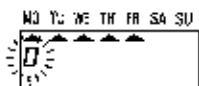
No.	Print color	Signal
0**	No change	Not output
1	No change	Output
2**	Black	Not output
3*	Black	Output
4**	Red	Not output
5*	Red	Output

*   If time signal and melody are output
    at the same time, enter "3" or "5"
    even if print color does not need to
    be changed.

** Code No.0, 2, and 4 can be used for
    only melody output.

Repeat pressing "NO" until the desired number
appears and then press "YES."
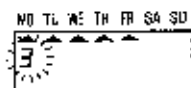
4) Refer to chart for code No. to select melody.

No.	Melody
0	(No melody output)
1	*Greensleeves*
2	*For Elise*
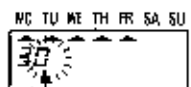
Repeat pressing "NO" until the desired number
appears and then press "YES."
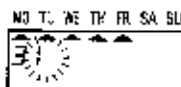
5) Then the display shows "00 : 00." Designate the
   time in the same way as setting clock.

6) The display goes back to step 2. If you continue programming print color change and time signal of the same days of week, press "YES" and repeat steps 3 to 5.

If you want to program other days of week, press "NO" and designate the day(s). (Steps 2 to 5.)

7) When programming of print color and signal output is completed, press item select button and proceed to the next section (SIGNAL DURATION).
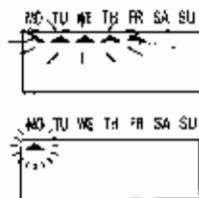
6. SIGNAL DURATION

(Signal duration is preset at 5 seconds. If it does not need to be changed, proceed to the next section.)
Make sure to set the slide switch at position "2."

1) Press item select button of "DURATION."

2) Repeat pressing "NO" until desired number (signal duration) appears and then press "YES." Signal duration can be set between $0 \sim 12$ seconds.
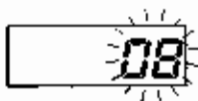
7. OTHER PROGRAMMING

Make sure to set the slide switch at position "2."

Selection of Hours for Display and Imprint

1) Press item select button of "OTHERS."

2) The left digit of the two small digits blinks. Refer to chart for code No. to select display and imprint hours.
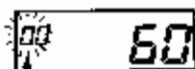
No.	Imprint	Display
0	0-23 hours	0-23 hours
1	0-23 hours	AM/PM hours
2	1 12, 1-12 hours	0-23 hours
3	1-12, 1-12 hours	AM/PM hours

Repeat pressing "NO" until desired number appears and press "YES." Next, the other of two small digits begins to blink.

Selection of Date / Day Imprint

1) Refer to chart for code No. to select date or day imprint.
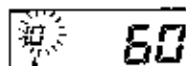
No.*	Date/day Imprint
0	Date (01-31)
1	Day of week (Japanese, 月 - 日)
2	Day of week (English, MO-SU)
3	Day number (Monday=D1-sunday=D7)

2) Repeat pressing "NO" until the desired number appears and then press "YES."

Imprint of Minutes

1) Press "NO" until desired number appears.
   Imprint of minutes can be selected among 60 (regular minutes), 100 (1 / 100 of hour), and 10 (1 / 10 of hour). When the desired number appears, press "YES."

   Finally, all digits blink together. Check if they are correct and press "YES."

8. DAYLIGHT SAVINGS TIME

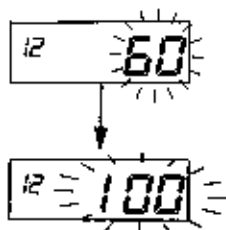In the similar way as setting date, set the month (01 ~ 12) and date the daylight savings time starts when "0" appears at upper left. Press "YES," then "1" appears to set ending month and date.

When programing is complete, reset the slide switch to "NORMAL" and replace the case upon the main unit.

9. TO REVIEW THE "COLOR / SIGNAL" PROGRAM

1) Set the slide switch at position "2."

2) Press and hold down "YES" button for about 3 seconds. The programmed times will be displayed one after another.

Note 1 : When all the contents have been displayed, display prompts you to designate day(s) of week again.

Note 2 : If there is no area left for "COLOR / SIGNAL," the display goes back to the first data.

10. TO CHANGE THE "COLOR / SIGNAL" PROGRAM

1) Set the slide switch at position "2."

2) Press and hold down "YES" button until the contents you want to delete appears, and then release the "YES" button.

3) Delete all the triangular marks (for day of week) by pressing "NO." When all the marks are deleted, this content of the "COLOR / SIGNAL" program is deleted.

4) Re-input the correct data for "COLOR / SIGNAL."

11. PRINTING SPACE (VERTICAL) ADJUSTMENT

After all programming is done, check the imprints if they were in the right spaces of the time card following the procedure described below.

1) Set the pay period start Month & Date by refering Year, Month, Date setting program. Set the slide switch back to normal position and insert a time card making a sample imprint. The imprint should be in the top space provided for printing of the time card.

2) Set pay-ending Month & Date by refering Year, Month, Date setting program. Set the slide switch back to normal position and insert the same time card for printing. The imprint should be in the bottom space provided for printing of the time card.

3) In case both sample imprints were out of space, the adjustment can be done to some extent which is described below.

(a) Refering page 1·2, remove cover case and back plate.

(b) Locate the sensor rack gear almost in the center installed vertically.

(c) Break plastic rack gear holders (A. B. & C) at the top part of the rack gear.

(d) Set the rack gear with set screw utilizing either one of the 2 holes on the machine body at desired position.

(e) Make sure Pay-start day imprint is at the top space and the Pay-ending day imprint is at the bottom space of the time card.

(f) Install the back plate and the cover case back to the position.

How To Replace Ribbon Cartridge

When the print becomes too light, replace the ribbon cartridge.

1) Insert the case key and turn it clockwise.
   Lift the case upward, off the main unit.

2) Set the slide switch at position "1."
   (The ribbon cartridge moves to the right.)

3) Pull the catches Ⓐ of the cartridge toward
   you and remove the ribbon cartridge.

4) Set the new ribbon cartridge.
   Turn the knob on the cartridge clockwise
   to take up the slack in the ribbon.

5) Set the slide switch to "NORMAL" and
   put the case.

6) Check the printing.
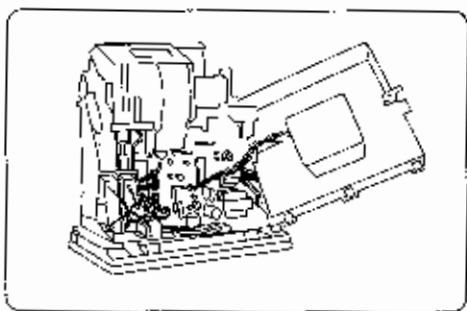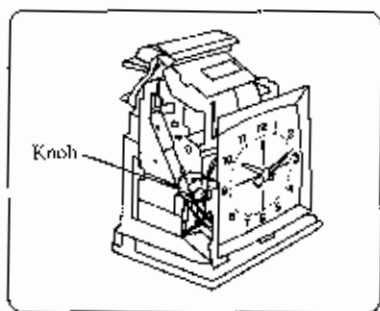
Ribbon cartridge
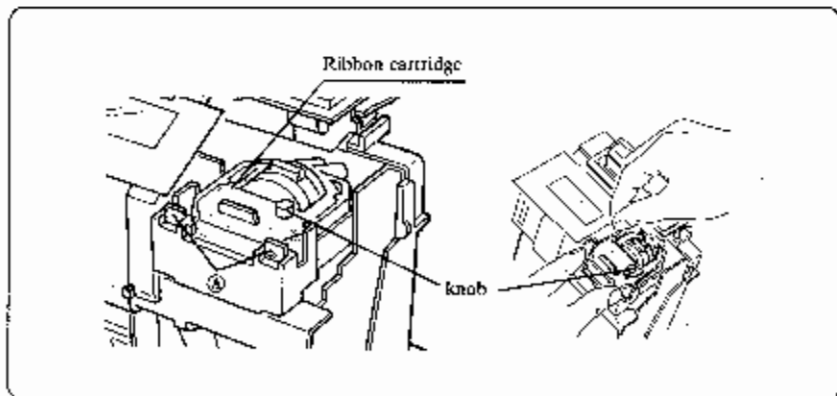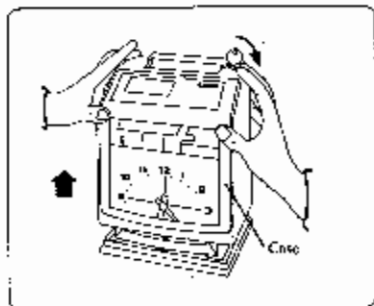
knob

Melody Sound Volume Adjustment

1) Insert the case key and turn it clokwise. Lift the case upward, off the main unit.
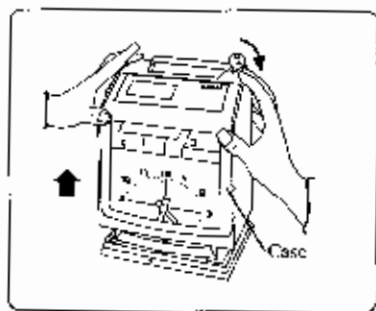
2) Press down the knob on the left side of the display panel and release the hook from the hook hole.
Open the display panel toward the front.

3) Turn the sound volume on the printed circuit board using a flat head screwdriver.