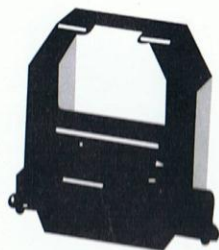


Time Recorder Operation Manual





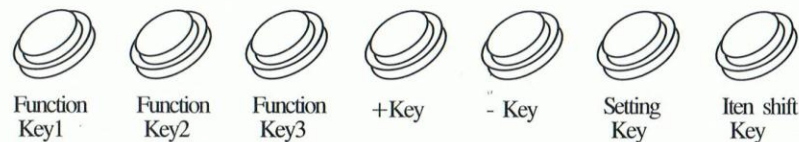
A.Appearance and Accessories:

- 1.Time Recorder
- 2.Operation Manual

B.Model Function Illustrate:

- 1.A:Over time total/Two color/Signal/Auto change printing column
- 2.B:Two color/Signal/Auto change printing column
- 3.C:Auto change printing column/Working arrive late printing#mark.

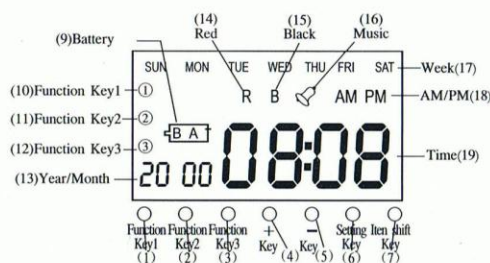
C.Display Expressions:



- (1)Function Key 1:Item Key (2) Function Key 2:Item Key
(3)Function Key 3:Item Key (4)+Key to ascend figures (5)-Key to descend figures (6)Setting Key to set the item (7)Item Shift Key to shift the items to set

D. Major Function Settings:

1. Code cancellation
2. Time setting
3. Year/Date setting
4. Signal/Color shift time/Weekly program(36 sets)
5. Printing Position Auto shift time settings(10 sets)
6. Signal length(0 Sec. ~ 59 Sec.)
7. Extra working hour calculation(Optional for A type)
8. Day column shift time
9. Code setting
10. Day Light Saving Time(Optional)

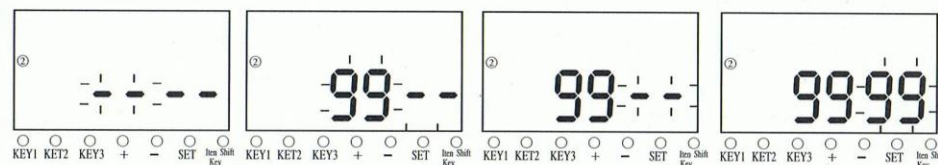


How to set the functions:

1. Code cancellation:

Open Top Cover to enter Code position. If Code has not been set, you can proceed next step for settings or changing the program as following 2. If Code has been set, first two figures blink for inputting first two codes. Using + or - Key enter first two figures. Press Setting Key at the second right of the key row to start blinking next two figures. Then, input them for taking next steps.

For the cancellation, press 7th Key, Item Shift Key, to shift LED to the third position, the lowest one, and press Function Key 2 to enter Code setting Mode. Press + or - Key until - appears. Then, press Setting Key and blink right side figures. Press + or - Key until - appears. And, press Setting Key for Code Cancellation.



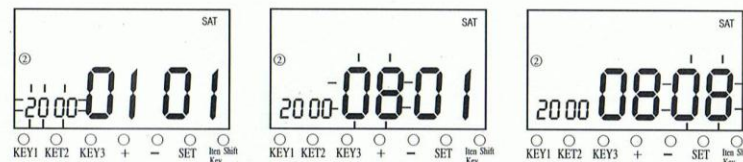
2. Time setting:

Press Function Key 1 and Hour blinks. Using + or - Key to input Hour and set by pressing Setting Key. Then, Minute blinks. Using + or - Key to input Minute and set by pressing Setting Key.



3. Year/Date setting: (From year 2000 to 2050)

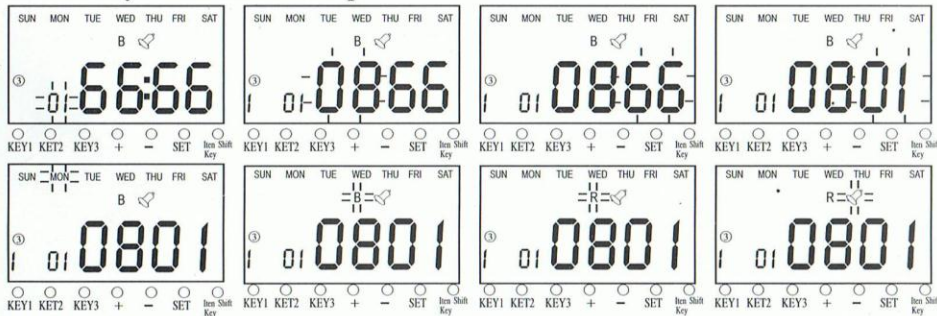
While LED at the top is ON, press Function Key 2 to blink Year figures. Using + or - Key to input Year. Then, Month figures blink. Using + or - Key to input Month and press Setting Key to set. And, Date figures blink. Using + or - Key, input Date and press Setting Key to set Date.



4. Printing color shift/signals/weekly program setting:(36 groups)

Ex.Color/Signal/Weekly setting (Monday to Friday 08:00/12:00/13:00/17:00)

Press Function Key3 and Group figures blink And, press Setting Key to blink Hour figures. Using+or-Key to display 08 and press Setting Key to set.Then,Minute figures blink. After setting Minute.Now,Days of week blinks.Using+or-Key,set Days on which color is shifted to Red and Signal is given at 08:00AM.In this case,SAT and SUN should be cancelled by using-Key from the display.When all Days of week has been set,press Setting Key to confirm.And,color setting position,B or R,blinks.Press+or-Key to set the color.Ifno display appears and press Setting Key,color mode is cancelled.And,choose Bell Mark and press Setting Key.This has set first Group.As well,other setting can be made.Thus,you can set 36 Groups.

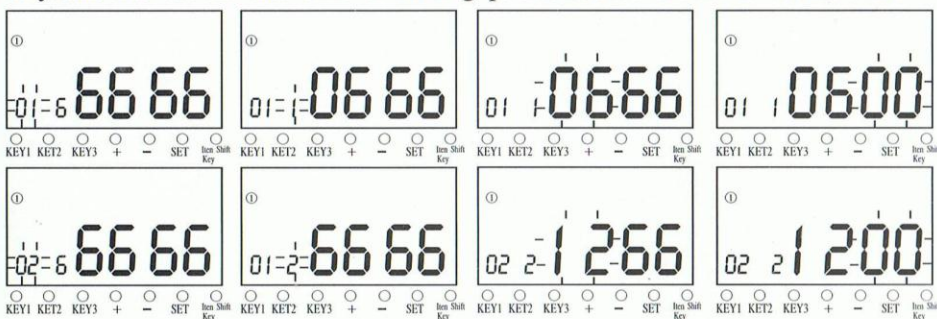


5. Printing position Auto shift settings:

(6/10sets in common, Optional sets in ten groups with weekly selection)

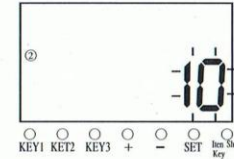
(Ex.01 ~ 10groups/first ~ 6th column positions/66:66hours)

After setting above 4,for several Groups,press 7th Key,Item Shift Key,for next item. Press Function Key 1 and Column Position blinks.Using+or-Key to set right figures. Press Setting Key to blink Hour figures and using+or-Key to input Hour and press Setting Key to enter Minute setting.Using+or-Key,input Minute and press Setting Key.This has set the first shift of Printing position.Others should be set as well.



6. Signal length setting:(inseconds,01~59 sec.)

Press Function Key 1 to set the length that signal continues. Using+or-Key,set the desired Figures.Its in seconds.Press Setting Key to set.

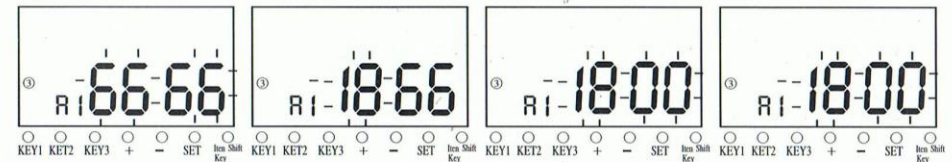


7. Auto extra working hour calculation setting:(Optional. A type has thisfunction)

(15 minute unit/30 minute unit/one minute unit)

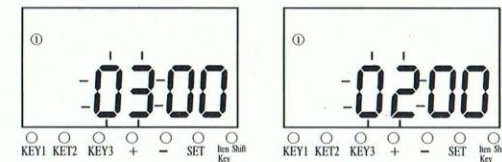
(Ex.Start from 18:00(A1 Start 18:00/b1 End 06:00 as Default)

Press Function Key 3 to start blinking Hour figures at A1. Using +or-Key to display 18, and set by pressing Setting Key and then enter Minute setting. While Minute figures are blinding,using +or-Key to set 00 and press Setting Key to set Starting time. Select Days of Week for this arrangement and b1 Hour blinks.Hour is set and set Minute and Days of Week to complete first set. You can set another group with A2 and b2.



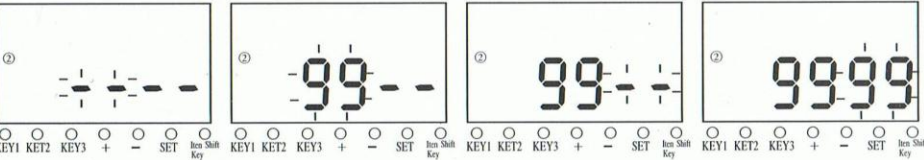
8. Time to change printing column: (3:00AM) as Default)

Press Function Key 1 to blind Hour figures. Using +or-Key to set Hour by pressing Setting Key.Set Minute as well.



9.Code setting:(Four digits)

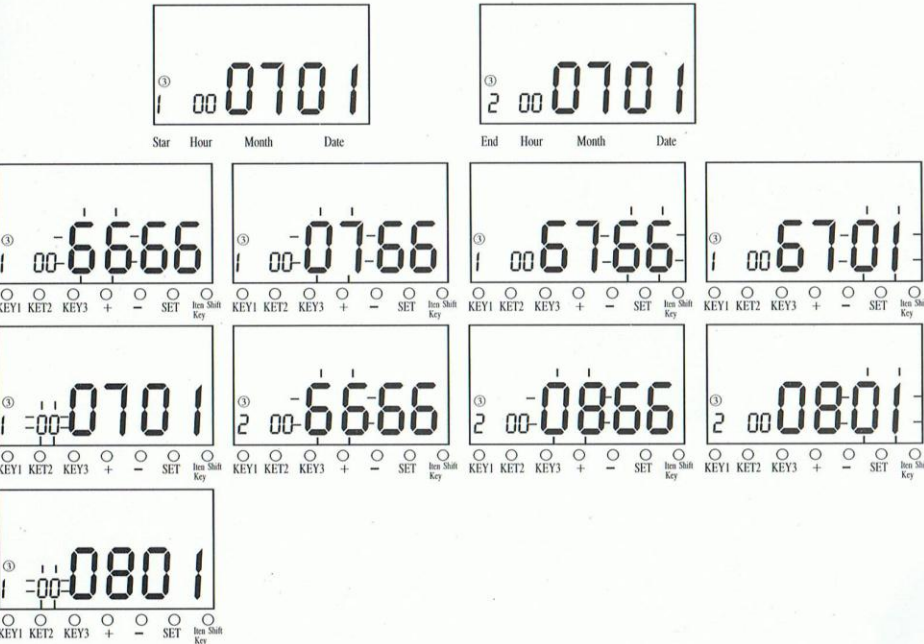
Press Function Key 2 to set front two figures by using +or-Key and set by pressing Setting Key to enter back two figures.By pressing +or-Key to input figures and set by pressing Setting Key. Once this set, before changing any setting, you must input these figures first



10.Day Light Saving Time setting:(Optional)

Press Function Key3 to set Day Light Saving Time:

1/Start to blink Month (Figure between 01~12),using +or-Key to set by pressing Setting Key. Then, enter Date(between 1 ~ 31).After setting Date,Hour blinks (Figures to input 01 ~ 09)Using +or-Key to set Hour.
2/End Month(Figures should be between 01 ~ 12)should be set by using +or-Key . And then,enter To set Date(Figures between 01 ~ 31).After setting Date by pressing Setting Key, set Hour(Figures between 01 ~ 09) by using +or-Key and press Setting Key to set.



★ Working Method of Key 7:

Set Extra Working hour calculation and when sixth Key lamp is on and 7th starts blinking, it calculates extra working hour and print when the cards are put. After 3:00AM(Day Column shift time,Default)by pressing seventh key and put the cards,it prints on the same column as the previous day.Be sure to set Starting Time and Ending Time.

Optional Settings

(Press Seventh Key for five seconds for settings)

Code	Items	00	01	02	03	04	05	06	07
1	Min sets	1/60	1/100A	1/100B					
2	Extra calc unit	15min unit	60min unit	1min unit					
3	Closing date	1 ~ 31							
4	Card mode	Monthly 1	Monthly 2	Weekly 1	Weekly 2				
5	Weekly expression	Date	Blank	Eng.	Spa.	Fre.	Ger.	Ita.	Jap.
6	Card side check	Yes	No						
7	Day Light Sav.Time	No	Yes						
8	12/24 hr express	24	12						
9	Vert.adjust	-12 ~ 12							
10	Horiz.Adjust	-6 ~ 6							
11	Singal Volume	01(small)	02(Middle)	03(Big)					
12	Print position Shift group	06	10						
13	Extra hr calc.(A)starting Time	1(Weekly)	2(Weekly)	3(Weekly)					
	Extra hr calc.(b)ending Time	1(Weekly)	2(Weekly)	3(Weekly)					
14	Hr expression	Yes	No						

The explanations of optional settings:

01 Minute expression settings:

(00) 1/60(Default)

(01) 1/100A Type

(02) 1/100B Type

Minute	0	1	2	3	4	5	6	7	8	9	-	29	30	31	32	33	34	35	-	54	55	56	57	58	59
1/100A Type	00	02	03	05	07	08	10	12	13	15	-	48	50	52	53	55	57	58	-	90	92	93	95	97	98
1/100B Type	00	00	00	05	05	05	10	10	10	15	-	45	50	50	50	55	55	55	-	90	90	90	95	95	95

02 Unit for extra working hour calculation:

(00) Cut every fifteen minutes(Default), One unit fifteen minutes

Ex. One hour and 28 minutes should be printed as 1:15.

(01) Cut every thirty minutes, One unit thirty minutes

Ex. One hour and 48 minutes should be printed as 1.5.

(02) Add one minute by one minute

(00) Minute by minute setting Add every minute

Ex. 1 hour and 22 minutes to print as 1:22

(01) 1/100 hour A Type Add one hundredth unit

Ex. 1 hour and 35 minutes to print as 1.58. See Table at above 01 1/100 hour A

(02) 1/100 hour B Type Add one hundredth unit

Ex. 1 hour and 35 minutes to print as 1.55. See Table at above 01 /100 hour B

03 Closing date:

31(Default)

04 Printing Styles on Cards:

(00)SA(Default)(01)S Card(02)Weekly Cards

Cf.C1,D,1=Closing day of the week 1

		1			CLD1		CLD2		CLD3		CLD4		CLD5		CLD6		CLD7
1		2		1	TUE	1	WED	1	THU	1	FRI	1	SAT	1	SUN	1	MON
2		3		2	WED	2	THU	2	FRI	2	SAT	2	SUN	2	MON	2	TUE
3		4		3	THU	3	FRI	3	SAT	3	SUN	3	MON	3	TUE	3	WED
4		5		4	FRI	4	SAT	4	SUN	4	MON	4	TUE	4	WED	4	THU
5		6		5	SAT	5	SUN	5	MON	5	TUE	5	WED	5	THU	5	FRI
6		7		6	SUN	6	MON	6	TUE	6	WED	6	THU	6	FRI	6	SAT
7		8		7	MON	7	TUE	7	WED	7	THU	7	FRI	7	SAT	7	SUN
8		9		8		8		8		8		8		8		8	
9		10		9		9		9		9		9		9		9	
10		11		10		10		10		10		10		10		10	
11		12		11		11		11		11		11		11		11	
12		13		12		12		12		12		12		12		12	
13		14		13		13		13		13		13		13		13	
14		15		14		14		14		14		14		14		14	
15				15		15		15		15		15		15		15	

(03)weekly Card2(Space to the bottom of printing position 35mm)

05 Printing languages of Days of Week:

	Figures(Default)(00)	Blank(01)	Eng(02)	Spa(03)	Fre(04)	Ger(05)	Ita(06)	Jap(07)
First	1		MO	LU	LU	MO	LU	月
Second	2		TU	MA	MA	DI	MA	火
Third	3		WE	MI	ME	MI	ME	水
Fourth	4		TH	JU	JE	DO	GI	木
Fifth	5		FR	VI	VE	FR	VE	金
Sixth	6		SA	SA	SA	SA	SA	土
seventh	7		SU	DO	DI	SO	DO	日
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							

06 Auto Printing Side Check on Cards:

(00)Auto Printing Side Check on Cade(Default)

(01)Cancellation of checking Printing side for using free printings.

07Day Light Saving Time Setting:

(00)Free from Day Light Saving Time Setting (Default)

(01)Day Light Saving Time Settings

08 12/24 Hour Expression:

(00)(Default)24 Hour expression 0~23

(01)12Hour expression(Morning AM/Afternoon PM,in the morning,there is no under line/Afternoon.There is underline at minute expression
cf.AM9:00/PM09:00)

09 Printing position vertical adjustment:

If the printing positions are not set at the column well,vertically it is adjusted by inputting the figures between-12~ +12(0 Default)-Lower(Downward) +Higher(Upward)

6	(↑Adjust up ward)
7	(Adjusting direction↑)(between 1~12)
8	cf. 08:00
9	(Adjusting direction↓)(between.-1~-12)
10	(↓Adjust down ward)

10 Printing position horizontal adjustment:

If the printing positions are not set at the column well,horizontally it is adjusted by inputting the figures Between-6~ +6(0 Default)-Leftward+Rightward

7	(←Adjust leftward) (between-6~0)
8	CF. 08:00
9	(→ Adjust rightward 0)(between+1~+6)

11 Signal volume adjustment:

01(Small)02(Middle)03(Big)(Default) Input+Key or-Key to adjust volume

12 Printing position shift group:

(06)six groups(Default) (10)ten groups(Weekly settings programmable)

13 Extra working hour calculation(A normal starting setting)

Extra working hour calculation(b ending setting:)(06:00 ending setting default)

(01)One group (No weekly settings:Default)

(02)Two groups(One or two set weekly settings possible)

(03)Three groups(One,two or three weekly setting can be selected)

*Auto extra working hour calculation setting:(Only model A type has this function)
 cf.(02)Two groups(one or two set weekly settings possible)can be set as follows:
 Set days of a week to calculate Monday ~ Friday from 18:00 Saturday from 12:00 noon
 Set days of a week to end calculation Monday ~ Friday to 6:00 Saturday to 18:00
 Press Function Key 2 to set calculation starting time A1 to blink HOUR figure.
 Using +Key or -Key to Set 18 by pressing Setting Key which is located at the Second from right. And, Minute figures blink. After pressing +Key to display 00, press Setting Key to set 18:00. And, week expression starts blinking. Leaving the desired days on display up to five days between Monday to Friday(if you use five days,leave them as they are on the display),set Hour at b1 when b1 is blinking to 06. And,set MINUTE at 00 while Minute position blinks.
 As Setting Key is pressed, now, A2 HOUR figures are blinking, using +or-Key to set 12 and set Minute by pressing +or-Key as 00 and until weekly expression Saturday only appears on weekly line,set day of the week.Press Setting Key to set b2 HOUR as 18 and set 00 as Minute.After setting closing time,then set Saturday eliminating other day of a week

14.Hour expression:

- (00)(Default) 24Hour expression 0 ~ 23(Before 10,no 0 is printed cf.9:00)
 (01) 24Hour expression 0 ~ 23(Before 10,0 is printed cf.09:00)

★Error Codes:

Error Codes	Causes	Points to check
EC-1	Signal sensor error	1.Sensor 2.Signal motor
EC-2	Printing sensor error	1.Sensor 2.Printing motor 3.Printing belt out of position.
EC-3	Card feed sensor error	1.Card is not fed smoothly 2.Print is not made on the right column 3.Check card feed part or motor
EFC	Card side error	1.Check if card side right 2.Check if card specification is good.

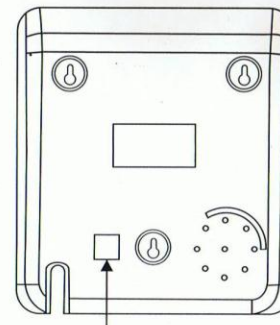
※ How to reset the program:

- 1.Press reset key to recover Default.
- 2.Press Function Key 1 and Function Key 3 at the same time to recover Default

※ How to confirm the setting program

Put card first and press Function Key 1 and Key 2 to print and check.

External alarm way:



When out put of external alarm, please break this slice . And put into the external alarm's power line then buckle the line.