## DIN W72×H72mm, Weekly Timer

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
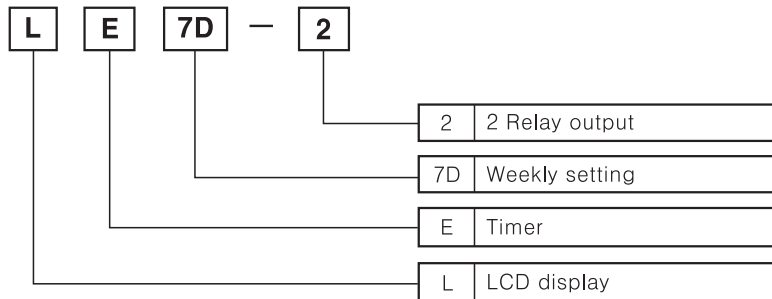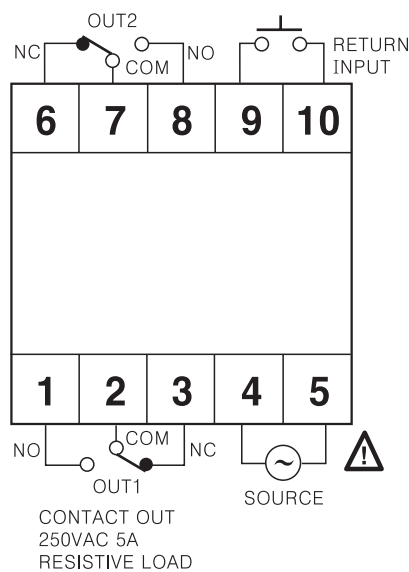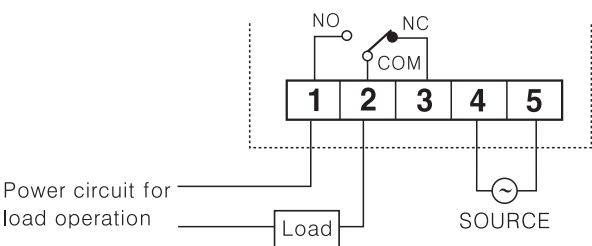panel

(P)
Production
stoppage
models &
replacement

### ■Features

- Easy to check and change the program setting.
- Individual programming of each day or each week
- 2 Independent control output.(Relay)
- Hardware included for both panel and DIN rail mounting
- When mounting base plate, DIN rail mounting is available

⚠ **Please read "Caution for your safety" in operation manual before using.**

c(UL)us

### ■Ordering information

| L | E | 7D | — | 2 |

| 2 | 2 Relay output |
| 7D | Weekly setting |
| E | Timer |
| L | LCD display |

### ■Specifications

| Model | | LE7D-2 |
|---|---|---|
| Power supply | | 100-240VAC 50/60Hz |
| Allowable voltage range | | 90 ~ 110% of rated voltage |
| Power consumption | | Approx. 3VA(240VAC 60Hz) |
| RETURN input | | Short-circuit or open by switch or relay |
| Timing program | | Programmable 24 Step |
| Operation mode | | ON/OFF mode, Cycle mode, Pulse mode |
| Operation cycle | | 1 week(7days) |
| Mounting | | Front panel, Surface, DIN rail |
| Time deviation | | ±15sec/month(25℃)（±4sec/week) |
| Memory protection | | 10years with power applied, 5years without power |
| Control Output | Contact type | Time limit DPDT(2c) |
| | Contact capacity | 250VAC 5A resistive load |
| | Output number | Independent 2 output(1c × 2) |
| Relay life cycle | Mechanical | Min.10,000,000 times |
| | Electrical | Min. 100,000 times(250VAC 5A resistive load) |
| Insulation resistance | | Min. 100MΩ (at 500VDC) |
| Dielectric strength | | 2000VAC 50/60Hz for 1minute |
| Noise strength | | ±2kV the square wave noise(pulse width:1μs) by the noise simulator |
| Ambient temperature | | -10 ~ 55℃ (at non-freezing status) |
| Storage temperature | | -25 ~ 65℃ (at non-freezing status) |
| Ambient humidity | | 35 ~ 85%RH |
| Approval | | c(UL)us |
| Unit weight | | Approx. 250g |

# LE7D-2

## ▣Connections



NC    OUT2    NO
      COM

RETURN
INPUT

| 6 | 7 | 8 | 9 | 10 |

| 1 | 2 | 3 | 4 | 5 |

NO    COM    NC
   OUT1

SOURCE

⚠

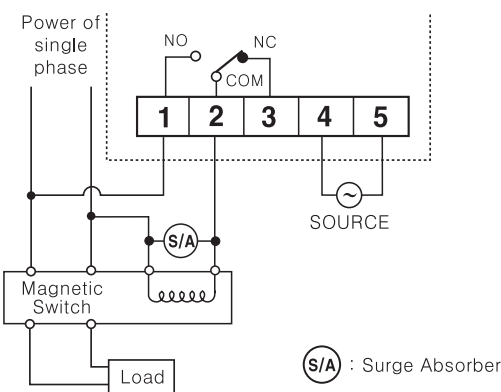CONTACT OUT
250VAC 5A
RESISTIVE LOAD

## ▣Connection with load

When controlling a non-resistive load(Ex: Magnetic switch etc), please connect to the both ends of surge absorber(R+C).
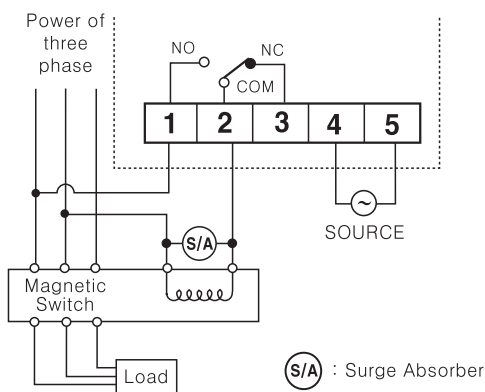
●In case of controlling the load directly



NO    NC
   COM

| 1 | 2 | 3 | 4 | 5 |

Power circuit for
load operation

Load

SOURCE

●In case of controlling the load by using a contactor

[Single phase]



Power of
single
phase

NO    NC
   COM

| 1 | 2 | 3 | 4 | 5 |

SOURCE

Magnetic
Switch

S/A

Load

S/A : Surge Absorber

[Three phase]



Power of
three
phase

NO    NC
   COM

| 1 | 2 | 3 | 4 | 5 |

SOURCE

Magnetic
Switch

S/A

Load

S/A : Surge Absorber

Autonics

# Weekly Timer

## ▣ Dimension & Mounting

### 1)Panel mounting

84
72
72
67
60
67.5

● Panel cut-out

Min. 91
Min. 91
$68^{+0.7}_{-0}$
$68^{+0.7}_{-0}$
□67.5

### 2)Surface mounting

67
13.5
95
64

Panel

● Panel hole cut-out

4-φ2.6
85
54.5

※Fix the timer on the panel with M3 tapping screws.

7    60

Panel

### 3)DIN Rail mounting

67
13.5  9.5
95
64

Panel
DIN Rail

Base Plate

● Base Plate

35.3

Panel holder
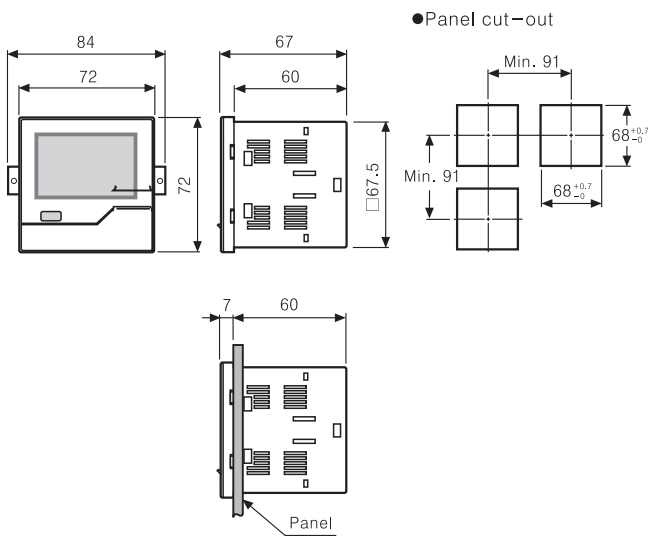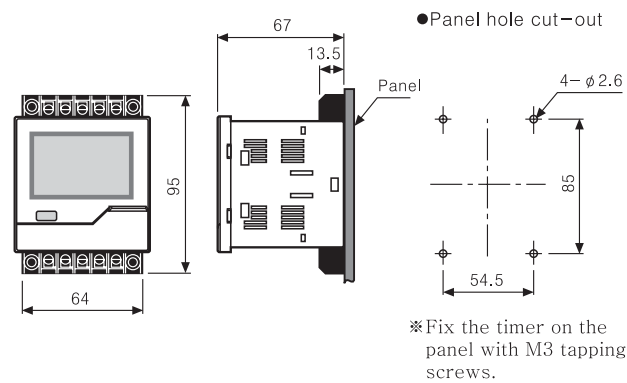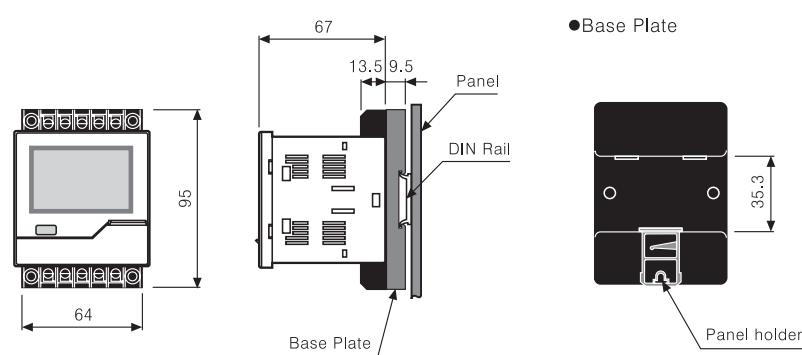
(Unit:mm)

## ▣ How to switch from the flush mounting to surface mounting type

Remove terminals from the body after unscrewing terminal screws, and then assemble terminals to the body after rotating terminals as below figure.

①Unscrew 4bolts from terminal block.

②Detach terminal block from case and then rotate it 180 degree.
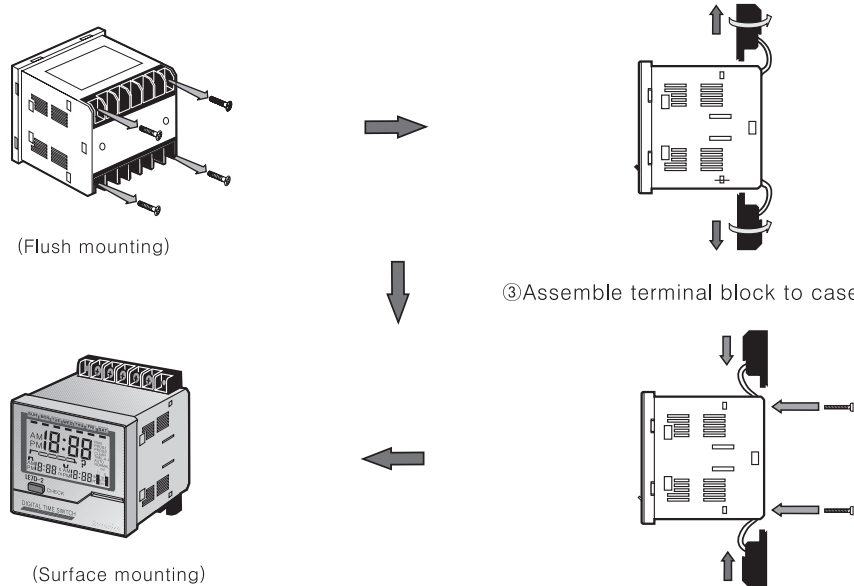
(Flush mounting)

③Assemble terminal block to case by using the 4 bolts.

(Surface mounting)

# LE7D-2

## ▣ Front Panel identification

① Indication of days
② Display(Current time, No of record, Available steps)
③ Indication for operation type
④ Display of ON time
⑤ Display of OFF time and pulse time width
⑥ CHECK key
⑦ MODE key
⑧ Shift key(▶, ▼, ▲)

⑨ Output selection switch, AUTO position indication
⑩ Main menu display
⑪ Output(OUT) operation display
⑫ Output(OUT) selection switch position display.
⑬ Slide switch of OUT mode
⑭ SET key

## ▣ Front panel

①Indication of week day(s)
 • Light ON:Status of the day has been set.
 • Light OFF:Status of the day has not been set.
  ☞When the flash is on the day has been set :
   Repeatedly flashes by turn(0.25sec)
  ☞When the flash is on the day has not been set :
   Repeatedly flashes by turn(0.5sec)
  ☞Refer to B−58page for "Setting days"
②Display(Current time, No of record, Available steps)
 • RUN mode : Display the current time
 • Program modify and check mode :
   Display the record No. of program that has been set.
 • Program setting mode :
   Display available steps remaining, Total steps:24 steps
③Indication of operation type
   Display the type of operation which have been set at "PROG1" and "PROG2".
 ●ON/OFF operation
 ●Cycle operation
 ●Pulse operation
④Display of ON time
   Display ON time that has been set in "PROG1" and "PROG2".
⑤Display of OFF time and pulse time width
   Display ON time that has been set in "PROG1" and " PROG2".
 ●It displays OFF time during ON/OFF operation and Cycle operation.
 ●It displays the width of pulse time during Pulse operation.
⑥CHECK Key
   This key can be used to set, modify program or change day.
⑦MODE Key
   This key can be used to set, modify, remove program and set current time, select AUTO or NORMAL mode.
⑧Shift key(▶, ▼, ▲)
   This key can be used to set, modify program or change day.
⑨Output selection switch, AUTO position indication
   Display status of OUT selection switches.
 ●RUN Indicator ON : The OUT selection switches are both set on AUTO position.
 ●RUN indicator OFF : One of OUT selection switches is set on ON or OFF position.
   Note)RUN indicator is shown during RUN mode.

⑩Display of main menu
 ●"PROG1"
   PROGRAM1 operation(Light ON), modification and setting of PROGRAM1, Check PROGRAM1(Flash).
 ●"PROG2"
   PROGRAM2 operation(Light ON), modification and setting of PROGRAM2, Check PROGRAM2(Flash)
   ※If PROG1"and "PROG2" are operationg at the same time, "PROG1" will be illuminated.
 ●"PROG1" and "CLEAR"
   This mode is to delete the content of "PROG1".
   ※When it is flashing, it will be deleted by pressing SET key for 3sec.
 ●Select memory protection.
  ※AUTO
   After power failure, Operation continues according to program setting.
  ※NORMAL
   When it turns on after power failure("☞" Mark flashes) apply Return input signal(Terminal ⑨, ⑩) ("☞" mark turn off), and then the output operates as set program. "☞" mark applies for "NORMAL" mode only and indicates when it turns on after power failure.
⑪Display of OUTPUT(OUT) operation
   Display operation of OUT1 and OUT2.
 ●No output  : Blank
 ●Output : OUT1 : Display **1**
         OUT2 : Display **2**
⑫Display of selection switch position
   Display position of Output(OUT) selection switches.
⑬Selection switch of OUTPUT(OUT)
   This switch is used to select between operating the output(OUT1, 2) according to the program or manually.
 ●ON
   Output always ON not related to program.
 ●OFF
   Output always OFF not related to program.
 ●AUTO
   Output operates according to program.
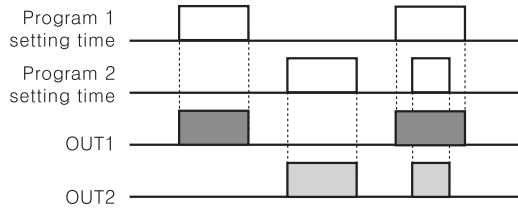   OUT1 and OUT2 are selected independently.□
⑭SET key
   Using when set the programed, corrected or changed data.

## ■Function

### ◎Programs

There are PROG1 and PROG2 in this unit and 2 outputs. These programs work independently then drive OUT1 and OUT2. (PROG1 : OUT1, PROG2 : OUT2)
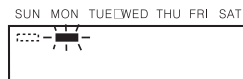
Program 1 setting time
Program 2 setting time
OUT1
OUT2

### ◎Setting days

①Cursor operation when setting the day

When entering into the mode in order to set the day, Sunday will flash first. After moving th day cursor by pressing ▶ key, select the day by pressing ▼, ▲ key.

Ex) When intending to set Monday, Tuesday, Wednesday

SUN MON TUE☐WED THU FRI SAT

Move the cursor to Monday from Sunday by pressing ▶ .

SUN MON TUE☐WED THU FRI SAT
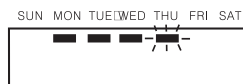
It will be selected as shown in LCD by pressing ▲ , ▼ key. (Monday, Tuesday, Wednesday are steady on and Thursday will flash.)

SUN MON TUE☐WED THU FRI SAT

The day selection is completed by pressing SET key.

※The flashing day cursor is not selected one.

②Cursor operation when changing the day

Move the flashing cursor to target day by ▶ key, then turn off the cursor by ▼, ▲ key to complete the day change.

Ex) When need to change Monday, Tuesday, Wednesday to Monday, Wednesday.

SUN MON TUE☐WED THU FRI SAT
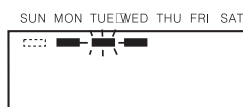
When entering into the mode in order to set the day, Sunday will flash first. (It will flash by turning on 0.25sec. cycle) Move the flashing cursor to Tuesday by ▶ key.

SUN MON TUE☐WED THU FRI SAT
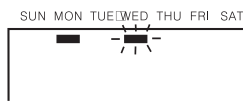
Turn off the light on Tuesday cursor and change the flashing cursor to Wednesday by ▲, ▼ key. (It will flash by turning on 0. 25sec. cycle)

SUN MON TUE☐WED THU FRI SAT

Press SET key to complete setting.

※If move the cursor with wrong key operation, the previous setting day cursor will be turned off and target setting day cursor will be turned on.

※If the flashing cursor is located on a previously set day, it will flash by turning on 0.25sec. and it will flash by turning on 0.5sec. cycle when the cursor is located on the non setting day.

### ◎STEP

● It is available to program 24 STEPS. This is total number of PROG1 and PROG2. Also when entering into program setting mode, available STEPS will be displayed.

● Required number of STEP for 1 time setting by each operation form.

\* ON/OFF operation : Total 2 Steps

$$\frac{\text{ON day, ON time}}{\text{1 Step}} \quad \frac{\text{OFF day, OFF time}}{\text{1 Step}}$$

\* CYCLE operation : Total 4 Steps

$$\frac{\text{ON day, ON time}}{\text{1 Step}} \quad \frac{\text{OFF day, OFF time}}{\text{1 Step}}$$

$$\frac{\text{ON time width}}{\text{1 Step}} \quad \frac{\text{OFF time width}}{\text{1 Step}}$$

\* PULSE operation : Total 1 STEP

$$\frac{\text{ON day, ON time, ON time width}}{\text{1 Step}}$$
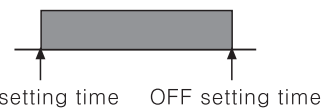
### ◎Operation

①ON/OFF operation

Output will be ON at ON time that has been set in Program and output will be OFF at OFF time that has been set in Program.
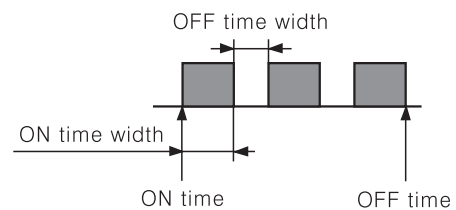
- You can set ON day and OFF day differently.
- Min. time setting unit : 1 minute

ON setting time    OFF setting time

②CYCLE operation

Output will be ON for ON time width and OFF for OFF time width for ON time and OFF time that have been set in Program.

- Min. time width of ON or OFF setting unit:1 minute

OFF time width
ON time width
ON time    OFF time

③PULSE operation

Output will be ON for programmed time at ON time that has been set in Program then OFF.

- Output ON pulse time width : 1sec. ~ 59min.

Pulse time width
ON time
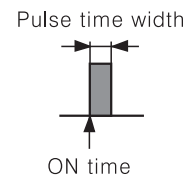
### ◎Time indication

PM 12:00 will be displayed PM0:00.
Ex) PM 12:20 will be displayed PM 0:20.

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/ Speed/ Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

(P) Production stoppage models & replacement

# LE7D-2

## ▣Function

### ◎Memory protection

- In case of setting AUTO

  When power on again after power off, the output (OUT1, OUT2) operates according to program status. When selecting "AUTO", the power will be supplied after power failure automatically. Therefore it might cause accident. Please select NORMAL instead of "AUTO" if the possibility of an accident exists.

- In case of setting Normal

  When power on again after power off, the output (OUT1, OUT2) operates when the signal is applied at external return input terminal. When power on again after power off, "☞" mark in display window appears and flashes. The output operates according to program status by applying Return input.
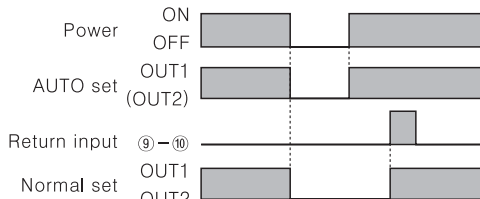


### ◎How to apply Return input

- Contact signal input

  Please select reliable contact if using a switch or Relay

- Solid state signal input

  When using solid state input, please use isolation transformer with a separated primary and secondary. If cannot use isolated transformer, please use photo-coupler to separat the input device.

  Also be sure to check polarity when using solid state element.
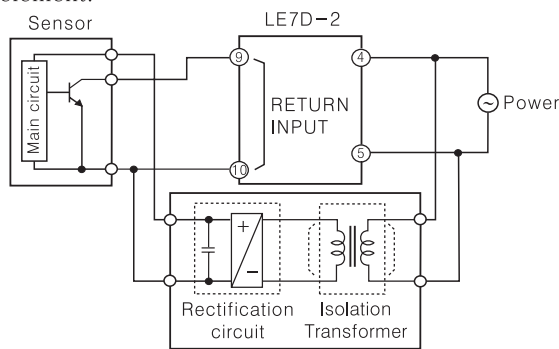


< External power supply for sensor >

### ◎RECORD

① This is basic unit of Program to control output. When checking Program, "r01 ~ r24" as RECORD will be displayed in LCD.

② Setable number of Step in 1 RECORD

- ON/OFF operation : 2 Steps per 1 RECORD

  (ON day, ON time, OFF day, OFF time setting will be 1 RECORD)

- CYCLE operation : 4 Steps per 1 RECORD

  (ON day, ON time, OFF day, OFF time, ON time width, OFF time width setting will be 1 RECORD)

- PULSE operation : 1 Step per 1 RECORD.

  (ON day, ON time, Output operation time width setting will be 1 RECORD)

### ◎Manual output ON/OFF operation
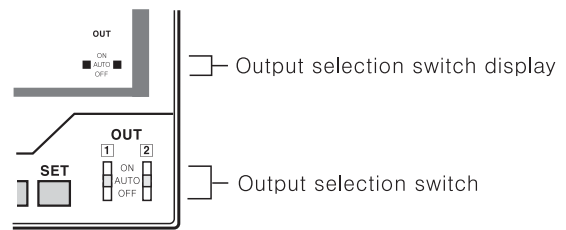


- Output selection switch AUTO position

  Output operation as programmed.

- Output selection switch ON position

  Output is ON not related to program.

- Output selection switch OFF position

  Output is OFF not related to program.

※ Output selection switch position is displayed in LCD always.
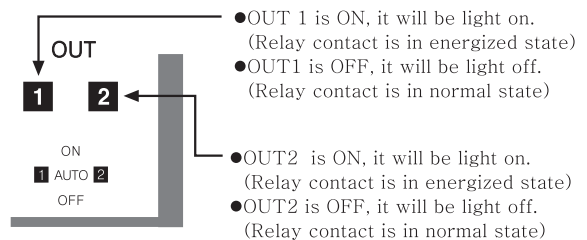
### ◎Display in LCD

① The size of Display (Time display)
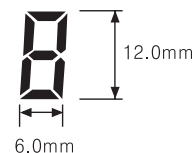


② Operation type display

- ON/OFF operation display :
- CYCLE operation display :
- PULSE operation display :

③ Output operation display



- OUT 1 is ON, it will be light on. (Relay contact is in energized state)
- OUT1 is OFF, it will be light off. (Relay contact is in normal state)

- OUT2 is ON, it will be light on. (Relay contact is in energized state)
- OUT2 is OFF, it will be light off. (Relay contact is in normal state)

④ Time/Time width display

- ON time display :
- OFF time display :
- ON operation time width display :
- OFF operation time width display :

### ◎Look-ahead function

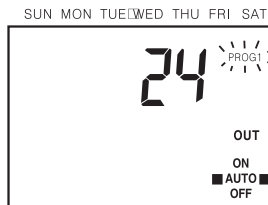When the current day and time is in pause status, it flashes the next operation time.
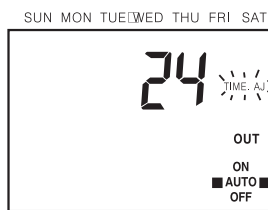(Look-ahead operation)

## ▣ The current time setting

When supplying the power for the first time, the display will appear as shown.
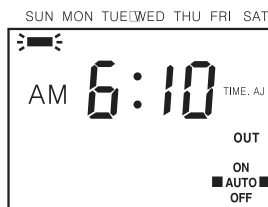Then please set the current time.
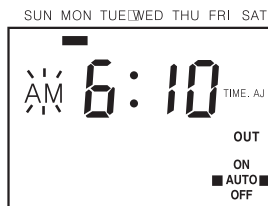
Ex)When setting the current time as AM 9:00 Monday

Pressing [MODE] key for more than 1sec., "PROG1" will be flashing and the total number of Steps will be displayed.

Then press [MODE] key 4 times, "TIME.AJ" will be flashing.

Press [SET] key.
The time will be displayed as shown and the cursor will flash on Sunday.

After moving the day cursor to Monday by pressing ▶ key press the ▼ , ▲ key to select Monday. It will change from flashing to steady. "AM" is now flashing.
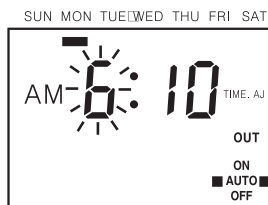
Press ▶ key.
Then "AM" is steady on and "Hour" position is flickering. If the setting time is PM, change AM to PM by pressing ▼, ▲ key then press ▶ key.
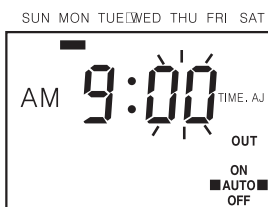
After changing to 9 o'clock with ▲ key then "9" will be steady on by pressing ▶ key and "Minute" position is flashing.
After changing to "00"minute by pressing ▲ key then press [SET] key to complete the current time setting.
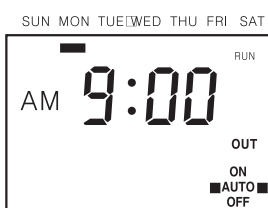
Pressing [MODE] key 2 times, it will return to RUN mode then display the current time.

## ▣ Program setting

```
RUN mode
(Indicating the
current time)
```
Press [MODE] to 1sec.

LEVEL1 → PROG1 mode ("PROG 1" flashes)□ —Press [SET]→ LEVEL2 Operation type, Operation day, Operation time setting

[MODE]

LEVEL1 → PROG2 mode ("PROG 2" flashes)□ —Press [SET]→ LEVEL2 Operation type, Operation day, Operation time setting

[MODE]

LEVEL1 → PROG1 CLEAR mode ("PROG 1", "CLEAR" flashes)□ —Press [SET]→ Pressing [SET] key for more than 3sec., Program1 will be deleted. ("clr" is flashing)

[MODE]

LEVEL1 → PROG2 CLEAR mode ("PROG 2", "CLEAR" flashes)□ —Press [SET]→ Pressing [SET] key for more than 3sec., Program2 will be deleted. ("clr" is flashing)

[MODE]

LEVEL1 → Setting mode of current time ("TIME. AJ" flashes) —Press [SET]→ LEVEL2 Set current week day & Time

[MODE]

LEVEL1 → Setting mode of operation after power failure "☞" flashes —Press [SET]→ LEVEL2 "AUTO" or "NORMAL" is flickering and select desired function by ▼ , ▲ key.

[MODE]

● If no key is touched for 30sec. at [LEVEL1] , it will be returned to operating mode automatically.

● If no key is touched for 30sec. at [LEVEL2] , it will be returned to [LEVEL1] automatically.

● If [MODE] key is pushed at [LEVEL2] , modified program is cancelled and returned to automatically.
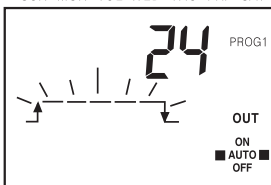
# LE7D-2

## ■Program setting

◎Set ON/OFF mode in PROG1

Every week Monday, Tuesday, Wednesday OUT1 is ON at AM 8:30 and OUT1 is OFF at PM 6:00.

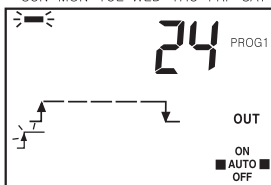| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|
| | AM PM<br>8:30 6:00 | AM PM<br>8:30 6:00 | AM PM<br>8:30 6:00 | | | |

### ①PROGRAM selection

Press MODE key for more 1sec. then "PROG1" will flash.
Press SET key to turn on "PROG1" then ON/OFF operation is flashing.

### ②Select operation mode

ON/OFF operation is being displayed, so press SET key to complete setting of ON/OFF operation.
(The day cursor is flashing on Sunday, " ⌐ " is flashing indication.)

### ③ON day(s) setting
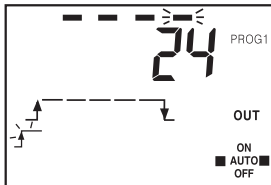
After moving the day cursor to Monday by pressing ▶ key 1time(Moday is flashing) then set ON day by pressing ▲, ▼ key.
(Monday, Tuesday, Wednesday curse will be light on, Thursday cursor is flashing) Then press SET key to complete the ON day setting.
(Thursday cursor is light off and "AM" is flashing)

### ④AM/PM setting of ON time
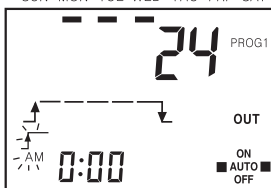
Because ON time is "AM", press ▶ key to complete AM setting.
(" ⌐ ", and Hour position are flashing)
※If ON time is "PM", press ▲, ▼ key to select "PM" then ▶ key.

### ⑤ON time "Hour" setting

After setting "8" with ▲ key, press ▶ key to complete ON time "Hour" setting. "AM" and "8" are steady on, " ⌐ " and "Minute" position are flashing)

### ⑥ON time "Minute" setting
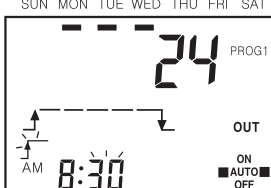
After setting 30minutes by pressing ▲key then press SET key to complete ON time "Minute" setting.
(Sunday cursor is flashing, " ⌐ " is flashing indication)
※ON time "Minute" setting will be completed and STEP indication will be decreased by 1.

### ⑦OFF day(s) setting
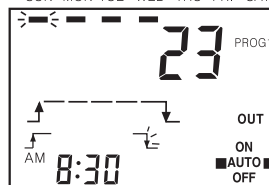
Because ON day and OFF day are the same, therefore press SET key, OFF day setting will be completed.
("AM" and " ⌐ " are flashing while ON time of ON day is displayed at OFF time display)

### ⑧AM/PM setting of OFF time
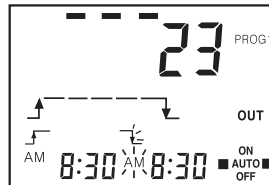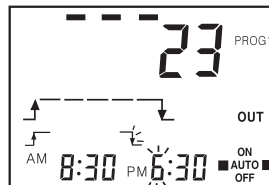
Because OFF time is "PM", after selecting "PM" by ▲ or ▼ key then press ▶ key to complete setting.
( " ⌐ " and "Hour" position are flashing indication)

### ⑨"Hour" setting of OFF time

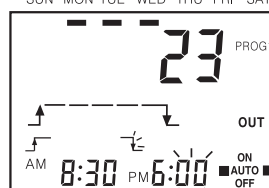After changing it to "6" at "Hour" position by ▼ key then press ▶ key to complete OFF time "Hour"setting.
("PM" and "6" : On steady, " ⌐ " and "Minute"position : Flashing)

### ⑩"Minute"setting of OFF time
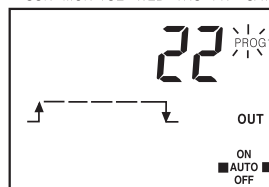
After changing it to "00" minute by ▼key then press SET key to complete OFF time "Minute" setting.
※STEP indication will be decreased by 1 when OFF time "Minute" setting is completed.

### ⑪Display completion of setting

After completing the ON/OFF operation setting, PROG1 will be flashing which would allow you to enter another program.
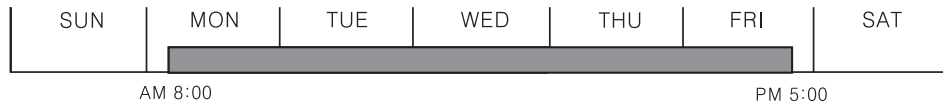
### ⑫RUN mode

If programming is completed, press the MODE key 6 times to return to the RUN mode.
The current day, time and program will be displayed.

# Weekly Timer

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

◎Set ON/OFF mode in PROG2

Turn OUT2 on at AM 8:00 every Monday and turn OUT2 off at PM 5:00 Friday.

| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|

AM 8:00                                              PM 5:00

①PROGRAM selection
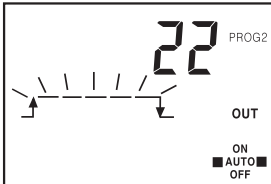
Press MODE key for more than 1sec.
PROG1 flashes.
Press MODE key once again. then
PROG2 flashes.
Then press SET key, "PROG2" turns
on and ON/OFF mode flashes.
(Day cursor flashes at SUN[Sunday],
and "⌐" mark flashes.)

②Select operation mode
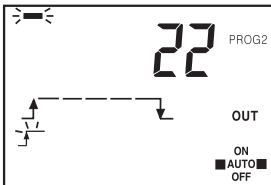
Press ▶ key to move SUN cursor
to WED then press ▼ or ▲ once.
(WED turns on THU flashes)
Press SET key, then ON weekday
is set. (WED cursor turns on
steady, "⌐" flashes.)

③Select ON weekday
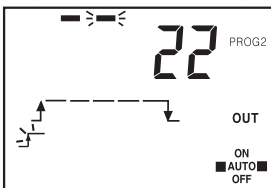
Press ▶ key to move the day cursor
to MON and then press ▼ or ▲ once.
(MON turns on, TUE flashes.)
If press SET key, ON weekday is set.
(TUE cursor turns off, "⌐" and "AM"
flash)

④Select AM/PM of ON time
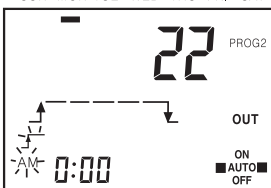
Press ▶ key to set "AM" ON time
then AM is set.
(⌐, Hour digit flashes.)
※If ON time is "PM", press ▼, ▲
key to select "PM" then ▶ key.

⑤Select "Hour" of ON time
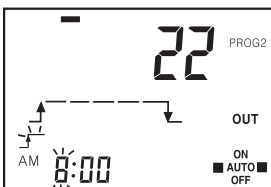
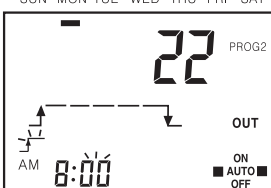Press ▲ key to set 8 hour, and then
press ▶ key, Hour time is set.
("AM" and "8" turn on steady, and
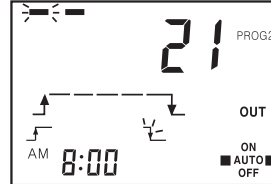minute digits flash.)

⑥Select "Minute" of ON time

Set value is "00", so press SET key
then Minute is set.
(Day cursor flashes at SUN. "⌐"
flashes.)
※Minute of ON time is set and STEP
indication is reduced by 1.

⑦Select OFF weekday

Press ▶ key to move the day cursor
to MON then press ▼ or ▲ key once.
MON turns off and TUE flashes.
Move the day cursor to FRI by
pressing ▶, then press ▼ or ▲ key
once. (FRI turns on SAT flashes.)
Press SET key, OFF weekday is set.

(SAT cursor turns off and ON time of ON day is displayed in OFF
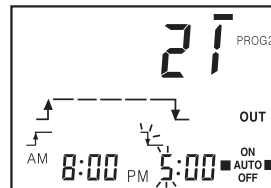time display "AM" and "⌐" are flashing.)

⑧AM/PM setting of OFF time
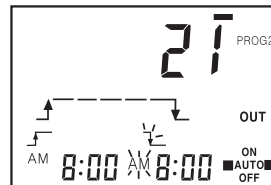
OFF time is "PM", therefore
press ▼ or ▲ key to select "PM".
Then press ▶ key to set PM.
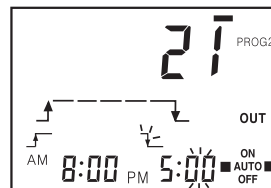("⌐" and Hour digit flashes.)

⑨Select "Hour" of OFF time

After changing it to 5 at "Hour position
by pressing ▼ key, then press ▶
key, Hour time is set.
("PM", Hour digit turn on, ⌐ and
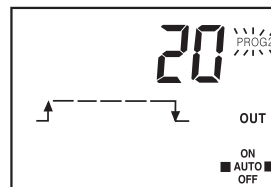Minute digit flashes.)

⑩Select "Minute" of OFF time

Set value is "00", so press SET key,
then Minute is set.
※Minute of OFF time is set and STEP
indication is reduced by 1.

⑪Display completion of setting

When ON/OFF setting is complete
the display to set next program mode
appears.

# LE7D-2

## ◎Set Cycle mode

From Wednesday AM 8:00 to Thursday PM 5:30, OUT1 turns on for 2 minute and turns off for 3 minute repeatedly.

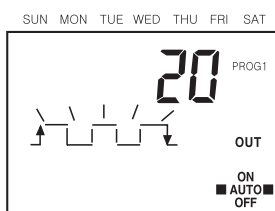| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|

AM8:00     PM5:30
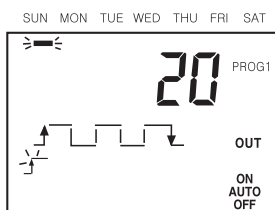
ON for 2 minutes     OFF for 2 minutes
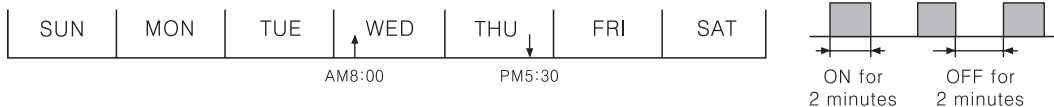
### ①PROGRAM selection
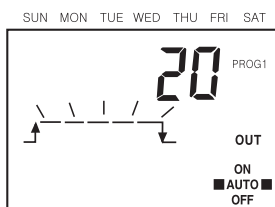
Press MODE key for more than 1sec. then "PROG1" flashes.
Press SET key to turn on "PROG1". (ON/OFF mode flashes.)

### ②Select Cycle mode

Press ▶ key to select Cycle mode, then Cycle mode flashes.
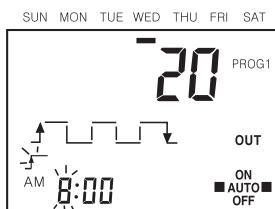Press SET key. Cycle mode is set (SUN cursor flashes, ⌐ flashes.)

### ③Select ON weekday

Press ▶ key to move SUN cursor to WED then press ▼ or ▲ once.
(WED turns on THU flashes.)
Press SET key, then ON weekday is set(WED cursor turns on steady, "⌐" flashes.)
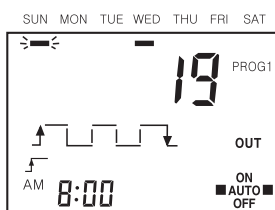
### ④Select AM/PM of ON time
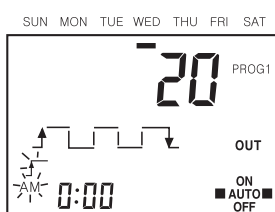
Press ▶ key to set AM of ON time then AM is set.
(" ⌐ ", Hour digit flashes.)

### ⑤Select Hour of ON time

Set 8 hour by pressing ▲ key then Press SET key, then Hour of ON time is set.
(SUN cursor flashes, " ⌐ " flashes)
※If select minute, press ▶ key instead of SET key. then press ▲ or ▼ key to set minute.
※Hour of ON time is set and STEP indication is reduced by 1.

### ⑥OFF day setting□

Press ▶ key to move SUN cursor to WED, then press ▲ or ▼ once (WED cursor turns off, THU cursor flash.) press ▲ or ▼ once, then THU cursor turns on, FRI cursor flashes.) Then press SET key, OFF weekday is set.("AM" flashes while ON time of ON day is displayed at OFF time display.)
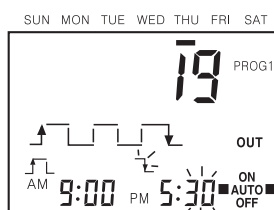
### ⑦Select AM/PM of OFF time
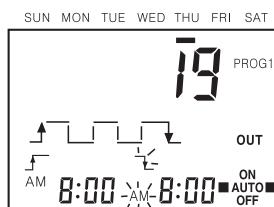
OFF time is PM, therefore press ▼ or ▲ key to select PM, then press ▶ to set. (" ⌐ ", Hour digit flashes.)

### ⑧"Hour" setting of OFF time
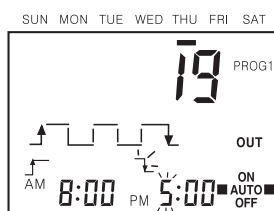
Press ▲ or ▼ key to select 5 then press SET key to set Hour of OFF time.
("PM" , "5" are on steady and " ⌐ " Minute digit flashes.)
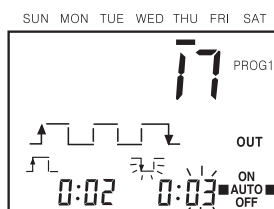
### ⑨"Minute"setting of OFF time

Press ▲ or ▼ key to select 30, then press SET key to set Minute of OFF time. (" ⌐ " & Hour digit of ON time width flashes.)
(" ⌐ ",Hour digit of ON time width flashes.)
※Hour of OFF time is set and STEP indication is reduced by 1.

### ⑩Select time width of ON time
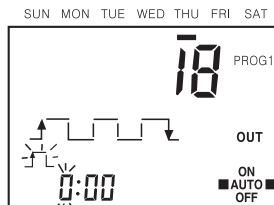
Press ▶ key to shift to MInute digit, then press ▲ key to select 2 of ON time width.
Press SET key to set time width of ON time. (" ⌐ ",Hour digit of OFF time width flashes.)
※Minute of ON time width is set and STEP indication is reduced by 1.

### ⑪Select time width of OFF time

Press ▶ to shift to minute digit, then press ▲ key to select 3 of OFF time width, then press SET key to set time width of OFF time.
※Minute of OFF time width is set and STEP indication is reduced by 1.

### ⑫Display completion of setting
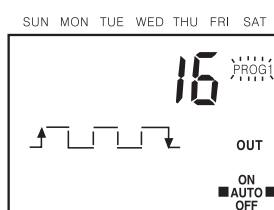
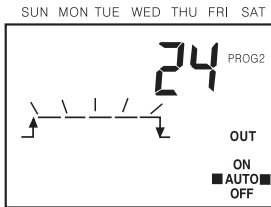When Cycle setting is completed, the display to set next program appears.

# Weekly Timer

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

## ◎Set PULSE mode

OUT2 turns on for 10sec. at AM 8:50 in Monday,Tuesday and Wednesday.

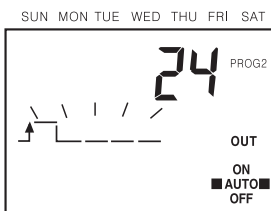| SUN | MON | TUE | WED | THU | FRI | SAT |
|-----|-----|-----|-----|-----|-----|-----|
| | AM8:50 | AM8:50 | AM8:50 | | | |

ON for 10 sec

### ①PROGRAM selection
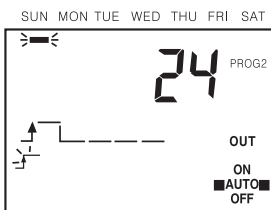
Select PROG2 use OUT2.
Press MODE key for more than 1sec.
PROG1 flashes, if press MODE once again. PROG2 flashes, then press SET key to set PROG2.
("PROG2" turns on, "⌐‾‾‾‾⌐" flashes.)

### ②Select the operation mode

Press ▶ key twice to select pulse mode, then pulse mode flashes.
Press SET key to set pulse mode.
(SUN cursor flashes, "⌐_" flashes.)

### ③Select ON weekday

Press ▶ key once to shift SUN cursor to MON, and press ▼ or ▲ key to set ON weekday.
(MON, TUE, Wed cursor turn on steady, THU cursor flashes.)
Press SET key to set ON weekday (THU cursor turns off, "AM" of ON time flashes.)
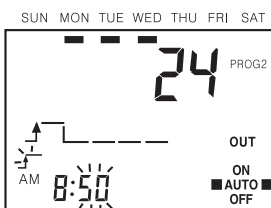
### ④Select AM/PM of ON time
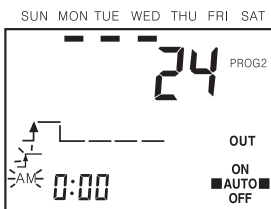
ON time is AM, therefore press ▶ key to set AM.
( "⌐_", Hour digit flashes.)
※If ON time is PM, select PM by ▼ or ▲ key, then set PM by pressing ▶ key.
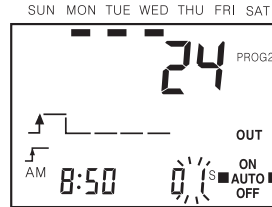
### ⑤Select Hour of ON time
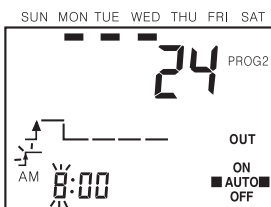
Select 8 by ▲ key, then press ▶ to set hour of ON time.
("AM" & "8" turn on steady, ⌐_ & minute digit flash.)

### ⑥Select Minute digit of ON time□

Press ▲ or ▼ key to set 50minute, then press SET key to set minute of ON time.
( "⌐_ "& "50" turn on steady, "01s" flashes.)

### ⑦Select operation time of output

Select 10sec. by pressing ▲ key, then press SET key to set PROG2.

※Output operation time is set and STEP indication is reduced by 1.

Note)Output operation time can be selected from 1sec. to 59min.

If press ▲ key, it can select time range as follows:    ┌1sec → 59sec → 1min → 59min┐

If press ▼ key, it can select time range as follows:    ┌59min → 1min → 59sec → 1sec┐

### ⑧Display completion of setting
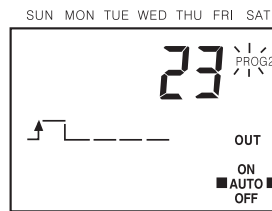
If PULSE mode setting is complete. the display to set next program appears.

※When returning to RUN mode, if current time is later than programmed time, only current time is displayed and output does not operate that day.

※Indication of setting time will be appeared at TUE./ & WED AM 0:00 of next operation, and when current time reaches set time, output operates 10sec. Then indication of set time disappears.
(Note) Set program does not cancel.

※When selecting pulse ( ⌐‾L___ ) mode at PROG1(or PROG2). If adding program at PROG1(or PROG2), operation mode of PROG1(or PROG2) is fixed as pulse( ⌐‾L___) mode.

※When ON/OFF(⌐‾‾‾‾L) or cycle mode(⌐‾L_L_L) was selected at PROG1(or PROG2), pulse mode(⌐‾L___) cannot be added at PROG1(or PROG2).

# LE7D-2

## ■How to change program

### ◎Program modify

The status of several programs are set, this function is used to modify particular part without erasing program.

| RUN mode | Display current time |

Press MODE + SET together over 1sec.


Modify r01(RECORD No.1) of PROGRAM 1

Press SET key


Modify r02(RECORD No.2) of PROGRAM 1

Press SET key


Modify rn (RECORD No.n, Max. value is 24) of PROGRAM 1

Press SET key


Modify r01(RECORD No.1) of PROGRAM 2

Press SET key


Modify r02(RECORD No.2) of PROGRAM 2

Press SET key


Modify rn (RECORD No.n, Max. value is 24) of PROGRAM 2
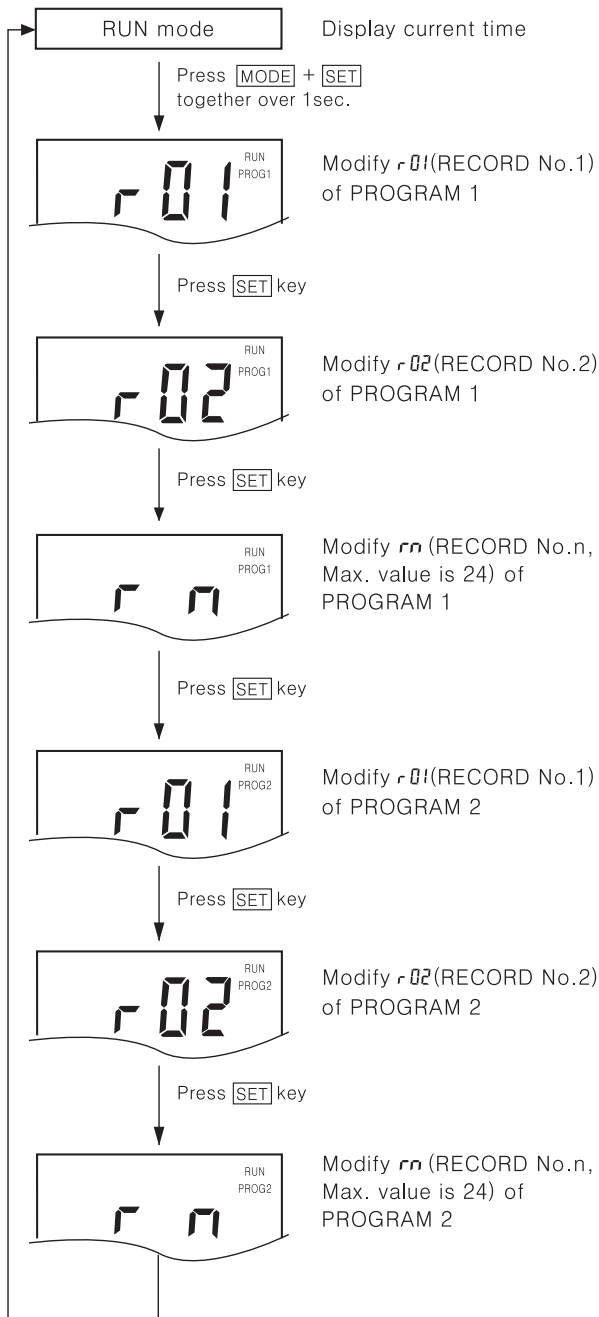
※To check program of each record, use SET key.
Press ON/OFF mode for 4 times, press CYCLE mode for 6 times, PULSE mode for 3 times , then display will shift to next RECORD.

※Change set value each record, then press SET key to set it. If press MODE key instead of SET key, program is not changed.

※If no key is touched for 30 sec., the status will be retruned to RUN mode.
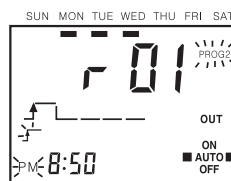
### ◎Example of program modify

If you want to modify the operation of OUT2 which is ON for 10 sec. every AM 8:50 on Monday, Tuesday, Wednesday to the operation of OUT2 is ON for 3 min. every PM 8:50 on Monday, Tuesday, Wednesday.
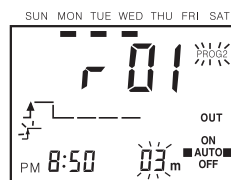
①ON day modify
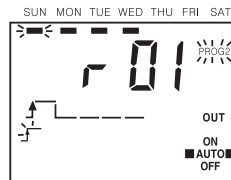

Press MODE + SET key over a second, it will be entered into modification status. Press SET key because there is no change of day.

②ON time modify


Change AM to PM by pressing ▼ key then SET .

③PULSE time width modify


Modify as 3 minute with ▲ key. (The time progresses fast when pressing ▲ key continuously.) After modification, it is completed pressing SET key, then it will be entered into RUN mode automatically.

## ■How to modify the day

The program is set to operate from every Monday to Saturday. In order to change as it cannot be operated because from this Friday to next Tuesday is holiday.

①Day change operation


Able to enter the status of day change operation by pressing CHECK key for 3 sec. continuously in RUN mode.

②Changing day selection


Move day cursor to Friday with ▶ key and select Friday, Saturday,Monday and Tuesday with ▲ or ▼ key, then the selection of holiday is completed when pressing SET key and selectionof standard day is displayed.

③Standard day selection
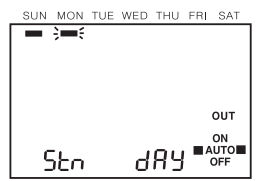

Select Sunday as standard day with ▲ or ▼ key then SET (Setting will be completed and return to RUN mode)

●Change of weekday applied to next day of the modification.
●When output of special weekday is completed, it is cancelled automatically, then it returns to the prior program.
●If you set it as Full for a week, it cannot select standard weekday, therefore it is impossible to change weekday. In this case, please select other method for modification.
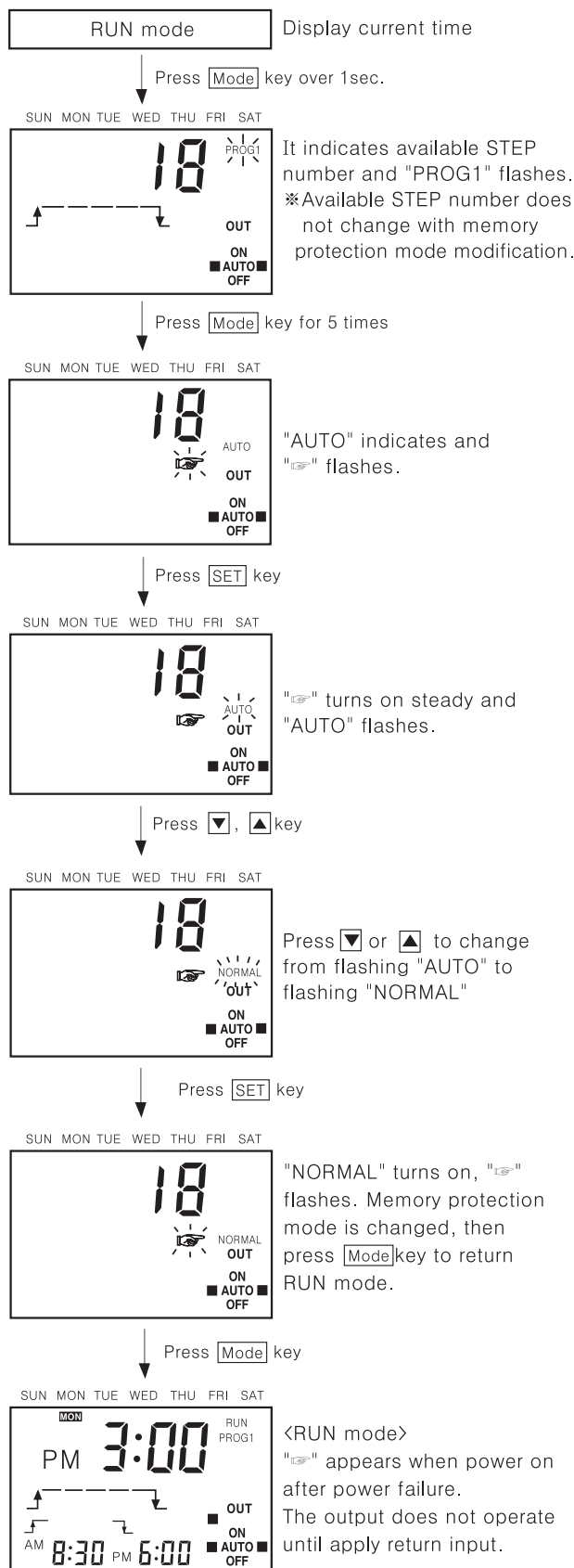
## ▪Program check

Press CHECK key to check program for PROG1 and PROG2.

| RUN mode | Display current time |

Press CHECK key

Check r01(RECORD No.1) of PROGRAM1

Press CHECK key

Check r02(RECORD No.2) of PROGRAM1

Press CHECK key

Check rn(RECORD No.n, Max. value is 24) of PROGRAM1

Press CHECK key

Check r01(RECORD No.1) of PROGRAM1

Press CHECK key

Check r02(RECORD No.2) of PROGRAM2

Press CHECK key

Check rn(RECORD No.n, Max. value is 24) of PROGRAM2

Press CHECK key
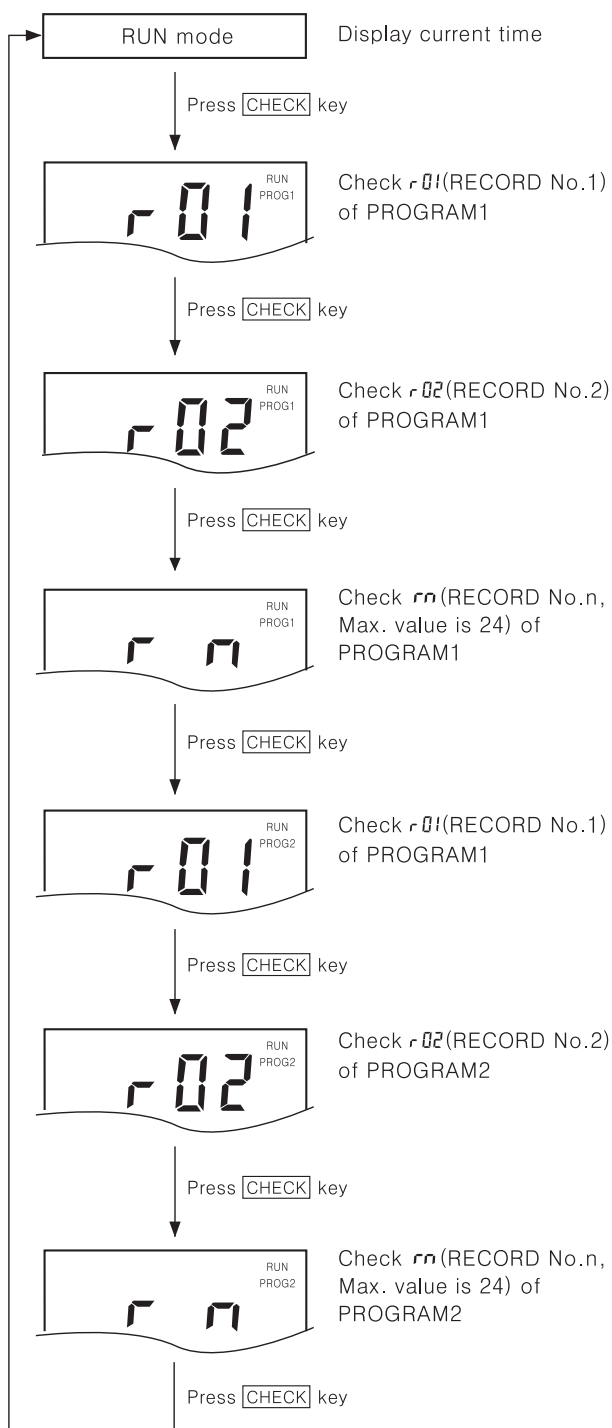
※On checking each RECORD, if you press MODE key, or do not touch any key for 30 sec. It will return to RUN mode.

## ▪How to change memory protection mode

Change "AUTO" of memory protection mode to "NORMAL" mode as below.

| RUN mode | Display current time |

Press Mode key over 1sec.

It indicates available STEP number and "PROG1" flashes.
※Available STEP number does not change with memory protection mode modification.

Press Mode key for 5 times

"AUTO" indicates and "☞" flashes.

Press SET key

"☞" turns on steady and "AUTO" flashes.

Press ▼, ▲ key

Press ▼ or ▲ to change from flashing "AUTO" to flashing "NORMAL"

Press SET key

"NORMAL" turns on, "☞" flashes. Memory protection mode is changed, then press Mode key to return RUN mode.

Press Mode key

<RUN mode>
"☞" appears when power on after power failure.
The output does not operate until apply return input.