Autonics

Weekly/Yearly Timer
LE7M-2

M A N U A L

Thank you very much for selecting Autonics products.
For your safety, please read the following before using.

■ Caution for your safety

※Please keep these instructions and review them before using this unit.

※Please observe the cautions that follow:

⚠ **Warning** Serious injury may result if instructions are not followed.

⚠ **Caution** Product may be damaged, or injury may result if instructions are not followed.

※The following is an explanation of the symbols used in the operation manual.
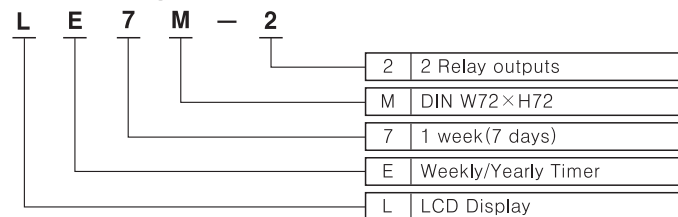⚠ caution:Injury or danger may occur under special conditions.

⚠ Warning

1. In case of using this unit with machinery(Nuclear power control, medical equipment,vehicle, train, airplane, combustion apparatus, entertainment or safety device etc), it is required to install fail-safe device.
   It may cause a fire, human injury or damage to property.
2. It should be mounted on Panel to use.
   It may give an electric shock.
3. Do not connect, inspect and repair when power is ON.
   It may give an electric shock.
4. Do not disassemble or modify this unit. Please contact us if it is required.
   It may give an electric shock and cause a fire.
5. Lithium battery is used for memory protection in this product, therefore do not disassemble or burn up.
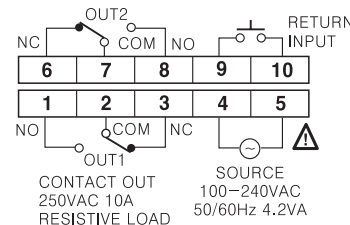   It may cause an explosion.

⚠ Caution

1. This unit shall not be used outdoors.
   It might shorten the life cycle of the product or give an electric shock.
2. When wire connection, No.20AWG(0.50mm²) should be used and screw bolt on terminal block with 0.74N·m to 0.90N·m strength.
   It may cause a malfunction or fire due to contact failure.
3. Please observe the rated specifications.
   It might shorten the life cycle of the product and cause a fire.
4. In cleaning the unit, do not use water or an organic solvents.
   It may give an electric shock and fire.
5. Do not use this unit at place where there are flammable or explosive gas, humidity, direct ray of the sun, radiant heat, vibration and impact etc.
   It may cause a fire or explosion.
6. Do not inflow dust or wire dregs into the unit.
   It may cause a fire or malfunction.
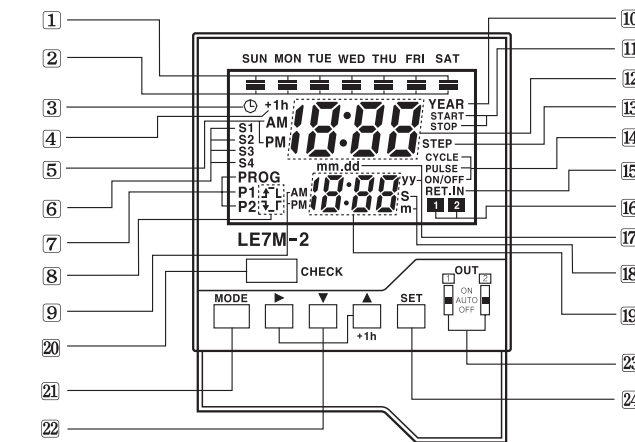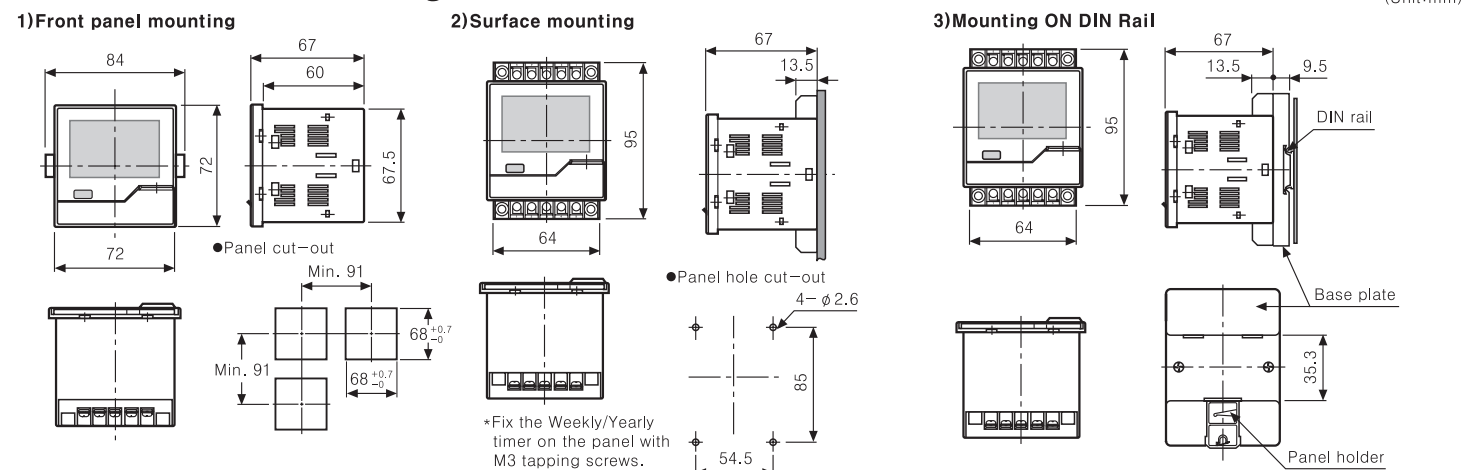
■ Ordering information

L E 7 M — 2

2	2 Relay outputs
M	DIN W72×H72
7	1 week(7 days)
E	Weekly/Yearly Timer
L	LCD Display

■ Connections

OUT2
NC — COM | NO   RETURN INPUT

6	7	8	9	10

1	2	3	4	5

NO — COM | NC
OUT1

CONTACT OUT
250VAC 10A
RESISTIVE LOAD

SOURCE
100~240VAC
50/60Hz 4.2VA

※The above specifications are changeable at anytime without notice.

■ Front panel identification

LE7M-2

SUN MON TUE WED THU FRI SAT
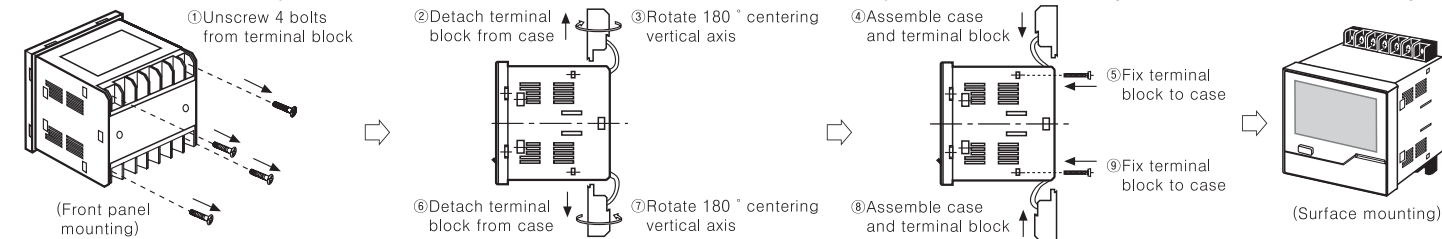
① Day cursor
② Day display
   ●Light : Day is selected.
   ●Light-out : Day is not selected yet.
③ Current time setting display
④ DST display(Daylight Saving Time)
⑤ AM/PM display
⑥ Season display
⑦ Program display
⑧ Display ON time/day, OFF time/day, ON time width, OFF time width
⑨ AM/PM display
⑩ YEAR display : It is lighted when set, check, modify, delete yearly program, set yearly holidays and operate yearly program.
⑪ Yearly START/STOP day display
⑫ Main display
⑬ Remaining step display
⑭ Operation mode display
⑮ Power failure return input display
⑯ Output mode display
⑰ Year, month, date display
⑱ Unit of pulse duration display
⑲ Sub-display
⑳ CHECK Key
㉑ MODE Key
㉒ Operation key
㉓ Output selection switch
   ●AUTO : Control output depending on the set program.
   ●ON : Output is ON.(Operation)
   ●OFF : Output is OFF.
   ※Output 1(OUT1) and Output 2(OUT2) are selected independently.
㉔ SET Key

■ Dimensions & Mounting

(Unit:mm)

1)Front panel mounting

84 / 67 / 60 / 72 / 67.5 / 72
●Panel cut-out
Min. 91 / Min. 91 / 68 +0.7 / 68 +0.7

2)Surface mounting

67 / 13.5 / 95 / 64
●Panel hole cut-out
4-φ2.6
85 / 54.5
*Fix the Weekly/Yearly timer on the panel with M3 tapping screws.

3)Mounting ON DIN Rail

67 / 13.5 / 9.5 / 95 / 64
DIN rail
Base plate
35.3
Panel holder

4)How to change from panel mounting type into surface mounting type

Remove terminals from the body after unscrew terminal screws and then assemble terminals to the body after rotate 180° centering vertical axis terminals as below figure.

①Unscrew 4 bolts from terminal block
②Detach terminal block from case
③Rotate 180° centering vertical axis
④Assemble case and terminal block
⑤Fix terminal block to case
⑥Detach terminal block from case
⑦Rotate 180° centering vertical axis
⑧Assemble case and terminal block
⑨Fix terminal block to case
(Front panel mounting)
(Surface mounting)

■ Specifications

Model	LE7M-2	
Power supply	100~240VAC 50/60Hz	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	4.2VA	
Control Output	Contact type	SPDT(Single Pole Double Contact)
	Contact capacity	250VAC 10A resistive load
	Number of circuits	Independent 2 circuits(1c × 2)
Number of steps	48 steps for weekly, 24 steps for yearly	
Operation mode	ON/OFF mode, Cycle mode, Pulse mode	
Mounting	Front panel mounting, Surface mounting, DIN rail mounting	
Time deviation	±15sec/month(Ta:25℃) (±4sec/week)	
Temperature error	0.01% ±0.05sec	
Memory retention	Over 5 years(at 25℃)	
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	
Relay life cycle	Mechanical	Min. 5,000,000 operations(Switching capacity 30 times/1 minute)
	Electrical	50,000 operations(Switching capacity 20 times/1 minute, at 250VAC 10A(resistive load))
Ambient temperature	−10 ~ +55℃(at non−freezing status)	
Ambient humidity	35 ~ 85%RH	
Storage temperature	−25 ~ +65℃(at non−freezing status)	
Unit weight	Approx. 272g	

■ Functions

◎**Program setting and output operation**
   OUT1 and OUT2 are operated depending on P1 and P2 setting.
◎**Terms**
   ●Record : The standard unit to control output.
   ●Step : The unit constructing Record
◎**Operation mode**
   In case of program operation for Program 1 is Pulse, the operation mode of Program 1 is fixed as Pulse when add program on Program 1.(or Program 2)
   In case of program operation for Program 1 is ON/OFF or Cycle, Pulse mode is not available when add program on Program 1.(or Program 2)
   ●**Weekly ON/OFF mode**
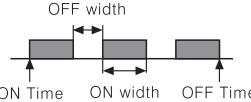   OUT1 or OUT2 are ON at set ON time and OFF at set OFF time.
      ・Min.set time unit : 1 min.
      ・It is able to set ON/OFF day separately.
      ・2 steps(ON day/ON time, OFF day/OFF time) construct one Record.
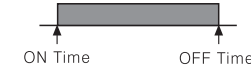
      ON Time   OFF Time

   ●**Weekly Cycle mode**
   Output(OUT1 or OUT2) is ON from ON Cycle operation time to OFF Cycle operation time repeatedly.
      ・Set range of ON/OFF time : 1 min.~12:59
      ・3 steps(ON day/ON time, OFF day/OFF time, ON width/OFF width) construct one Record.

      OFF width
      ON Time ON width OFF Time

   ●**Weekly Pulse mode**
      Output (OUT1 or OUT2) is ON from set ON time for specified time.
      (Pulse width : 1~59sec, 1~60min)
      ・2 steps(ON day/ON time, Pulse width) construct one Record.

      Pulse width (1~59sec, 1~60min)
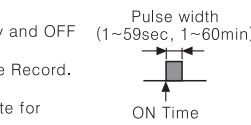
   ●**Yearly ON/OFF mode**
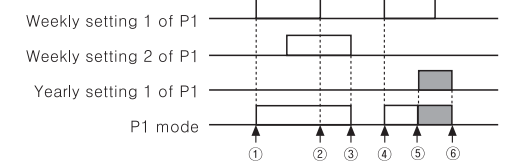   Output is ON at ON time set from START day to STOP day and OFF at set OFF.
      ・3 steps(START/STOP date, ON/OFF time) construct one Record.

   ●**Yearly Pulse mode**
      Output is ON at ON time set from START date to STOP date for specified time repeatedly(Pulse width:1~59sec, 1~60min).
      ・3 steps(START/STOP date, ON time, Pulse width) construct one Record.

      ON Time

◎Program operation

Weekly setting 1 of P1
Weekly setting 2 of P1
Yearly setting 1 of P1
P1 mode

① ~ ② : Operated by weekly setting 1 of P1.
② ~ ③ : Operated by weekly setting 2 of P1.
④ ~ ⑤ : Operated by weekly setting 1 of P1.
⑤ ~ ⑥ : Operated by yearly setting 1 of P1.
(When it is changed as yearly program "START day AM 12:00(⑤)" during weekly program operation, weekly program is stopped and yearly program mode will be available. When it is changed as yearly program "Next day of STOP AM 12:00(⑥)", yearly program will be stopped.)

◎**Display and change of next mode**
   ●The next mode day of program1(P1) or program2(P2) is lighted on day display position and next mode time is displayed on second display part. Press SET + CHECK in RUN mode it is changed from program1 to program2 or from program2 to program1.
   ●It operated as ON/OFF or Cycle, mode start(ON) time and mode end(OFF) time is displayed as next mode and Pulse mode start(ON) time as next mode, in case of Pulse mode.

◎**Power failure return mode**
   After select Auto("Rt") or Normal("nor") by ▲ or ▼ keys in power failure return selection LEVEL2 of setting group 2("rEt" is lighted, "Rt" or "nor" are flashed.), press SET key to select power failure selection.
   ●In case of select as Auto("Rt")
      Output(OUT1, OUT2) is operated depending on set program when power is ON after power failure.
   ●In case of select Normal("nor")
      Output(OUT1, OUT2) is OFF and "RET.IN" is flashed in front panel when power is ON after power failure. When power failure return is ON, "RET.IN" is lighted off and output(OUT1, OUT2) is operated depending on set program.
      ・Power failure return input
         Input contact signal to external "Return Input terminal(⑨~⑩)" by switch or relay or press SET key over 3sec in RUN mode. Use reliable contacts enough to flow 0.1mA of current at 5VDC when using switch or relay.

◎**Season switching mode**
   After select ON("on") by ▲ or ▼ keys in season switching selection LEVEL2 of setting group 2("SEn" is lighted, "oFF" are flashed.), press SET key to select season switching selection. The previous program 1(P1) and program 2(P2) can be deleted when season switching mode is "oFF" or "on".
   ●In case of select as ON("on")
      Weekly program is switched automatically by season switching.
      ・Period setting per season
         ①Press SET key in period setting per season mode of setting group 2. ("SEn" is flashed, season with preset period is lighted and "START" and "STOP" are lighted.)
         ②Advance to the flashing position of season selection among S1, S2, S3, S4 by ▲ or ▼ keys and press SET key.
         ③After set START month, date per season and press SET key.
         ④SET key is pressed after set STOP month, date per season, it is advanced to LEVEL1 of period setting per season. Add or adjust the period setting by SET key.
   ●Season switching selection is not available when it is set as OFF("oFF").

◎**Daylight Saving Time**
   After select Auto("Rt") or Normal("nor") by ▲ or ▼ keys in power failure return selection LEVEL2 of setting group 2("dSt" is lighted, "Rt" or "nor" are flashed.), press SET key to select Daylight Saving Time.
   ●In case of select as Auto("Rt")
      Current time will be faster as an hour when it is started and will be slower as an hour when Auto mode is finished.
      ・Automatic Daylight Saving Time period setting
         ①Automatic Daylight Saving Time period setting LEVEL 1 of setting group 2.
            ("dSt" is flashed and "START" and "STOP" are lighted.)
         ②Set START date(Month, date) of automatic Daylight Saving Time mode and press SET key.
         ③Set START time(AM/PM, Hour) of automatic Daylight Saving Time mode and press SET key. But, the minute will be fixed as 00.
         ④Set STOP date(Month, date) of automatic Daylight Saving Time mode and press SET key.
         ⑤Set STOP time(AM/PM, Hour) of automatic Daylight Saving Time mode and press SET key. But, the minute will be fixed as 00.
   ●In case of select as Normal("nor")
      Press +1h key over 3sec in RUN mode, "+1h" is lighted and current time is faster as an hour and "+1h" is lighted out, current time will be slower as an hour when press +1h key over 3sec again.

◎**Current time setting**
   (Ex)Set the current time as 10, Mar, 2008, 5:10 PM.
   ①Advance to the current time setting mode
      MODE + SET keys are pressed over 3sec in RUN mode, it is advanced to current time setting of setting group 2 and clock will be flashed and t.AJ will be lighted in second display part, press SET key.
   ②Set Year, Month, Date
      Press ▲ or ▼ keys to set 08(year 2008) and move the flashing digit to position month by ▶ key. Press SET key after then ▲ or ▼ keys to set date 10.
   ③Set current time(AM, PM)
      Press ▲ or ▼ keys to select PM and move the flashing digit to position hour by ▶ key.
   ④Set current time(Hour, Min.)
      Press ▲ or ▼ keys to set 5 PM and move the flashing digit to position min. by ▶ key. Press ▲ or ▼ keys to set 10min and press SET key and it is returned to RUN mode when press MODE key over 3sec.
   ●When power is ON, it is advanced to ①Current time setting mode and set current time as the above ②~④ by SET key.
   ●Current time is set up to 31, Dec, 2099.
   ●Check current year/month/date in RUN mode
      When ▶ key is pressed over 3sec in RUN mode, it is advanced to current year/month/date display. After display current year/month/date for 3sec, it is returned to RUN mode displaying current display.

■ Program setting

◎ Setting group 1

RUN mode

Press **MODE** key for 3sec ← → Press **MODE** key for 3sec

(Setting group 1)

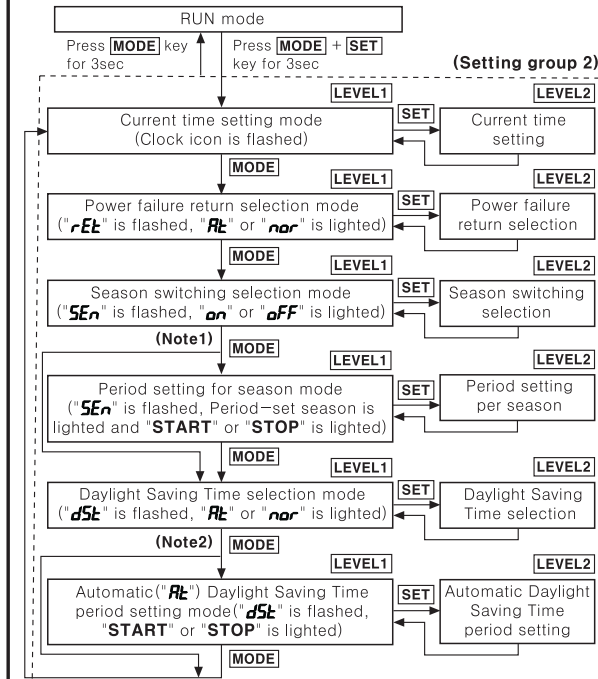|	LEVEL1		LEVEL2
Program1 Weekly program setting mode ("PROG P1" is flashed)	**SET** →	Program1 Weekly program setting	

MODE

Program2 Weekly program setting mode ("PROG P2" is flashed) — **SET** → Program2 Weekly program setting

MODE

Program1 Yearly program setting mode ("PROG P1 YEAR" is flashed) — **SET** → Program1 Yearly program setting

MODE

Program2 Yearly program setting mode ("PROG P2 YEAR" is flashed) — **SET** → Program2 Yearly program setting

MODE

Program1 Weekly program delete mode ("PROG P1 CLr" is flashed) — **SET** → Program1 Weekly program delete

MODE

Program1 Weekly program delete mode ("PROG P2 CLr" is flashed) — **SET** → Program2 Weekly program delete

MODE

Program1 Yearly program delete mode ("PROG P1 YEAR CLr" is flashed) — **SET** → Program1 Yearly program delete

MODE

Program2 Yearly program delete mode ("PROG P2 YEAR CLr" is flashed) — **SET** → Program2 Yearly program delete

MODE

Weekly day change mode ("C.dY" is flashed) — **SET** → Standard day, change day setting

MODE

Yearly holiday operation mode ("Hd.Y", "YEAR" is flashed) — **SET** → Yearly holiday operation mode setting

MODE

- When it is advanced to setting group 1 in RUN mode, output (OUT1, OUT2) will be OFF.
- It is returned to previous setting group 1 when power of time switch is ON again in setting group 1.
- When **MODE** key is pressed in LEVEL2 of setting group 1, current setting will be canceled and it is returned to previous LEVEL1.
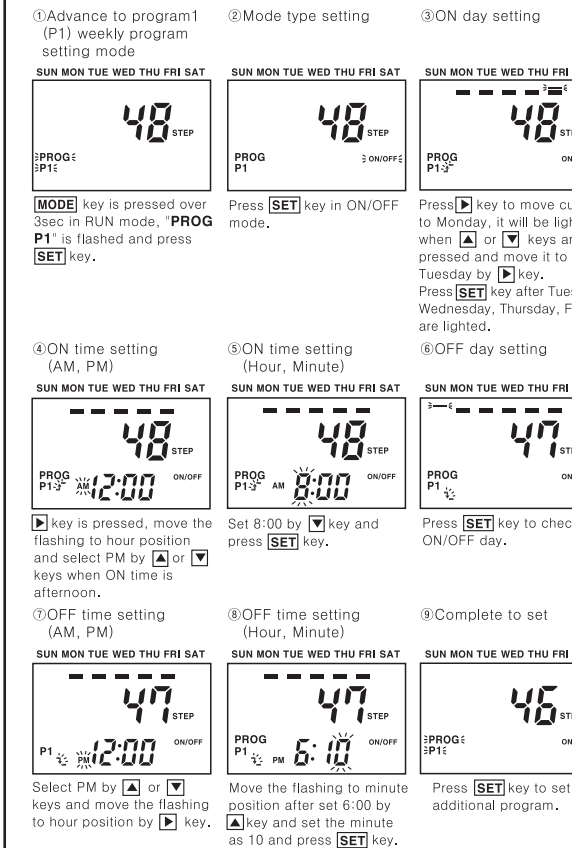
◎ Setting group 2

RUN mode

Press **MODE** key for 3sec ← → Press **MODE** + **SET** key for 3sec

(Setting group 2)

	LEVEL1		LEVEL2
Current time setting mode (Clock icon is flashed)	**SET** →	Current time setting	

MODE

Power failure return selection mode ("rEt" is flashed, "At" or "nor" is lighted) — **SET** → Power failure return selection

MODE

Season switching selection mode ("SEn" is flashed, "on" or "oFF" is lighted) — **SET** → Season switching selection

(Note1) MODE

Period setting for season mode ("SEn" is flashed, Period—set season is lighted and "START" or "STOP" is lighted) — **SET** → Period setting per season

MODE

Daylight Saving Time selection mode ("dSt" is flashed, "At" or "nor" is lighted) — **SET** → Daylight Saving Time selection

(Note2) MODE

Automatic("At") Daylight Saving Time period setting mode ("dSt" is flashed, "START" or "STOP" is lighted) — **SET** → Automatic Daylight Saving Time period setting

MODE

- **(Note1)** Season switching selection is "oFF".
- **(Note2)** Automatic switching selection of Daylight Saving Time is Normal ("nor").
- If it is advanced to setting group 2 in RUN mode, output(OUT1, OUT2) will be OFF.
- When power of time switch is ON again in setting group 2, it is returned to previous setting group 1.
- Front **MODE** key is pressed in LEVEL2 of setting group 2, it is returned to previous LEVEL1.
- When season switching selection is changed from "oFF" to "on" or "on" to "oFF", previous set weekly program will be deleted.
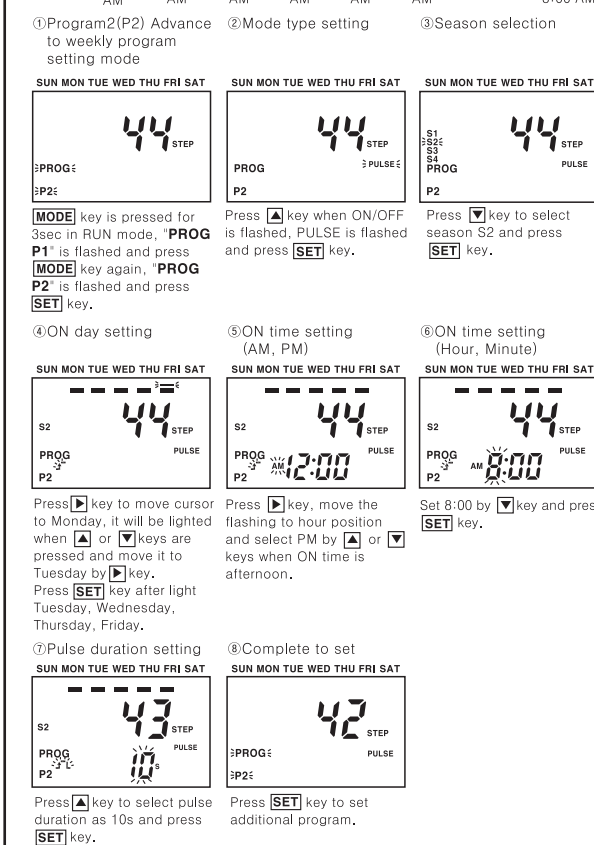

◎ Weekly program setting
● Weekly ON/OFF mode

(Ex)Output1(OUT1) is ON from Monday to Friday at 8:00 AM and OFF at 6:10 PM.

	SUN	MON	TUE	WED	THU	FRI	SAT
		8:00 6:10	8:00 6:10	8:00 6:10	8:00 6:10	8:00 6:10	
		AM PM	AM PM	AM PM	AM PM	AM PM	

①Advance to program1 (P1) weekly program setting mode

②Mode type setting

③ON day setting

MODE key is pressed over 3sec in RUN mode, "PROG P1" is flashed and press **SET** key.

Press **SET** key in ON/OFF mode.

Press ▶ key to move cursor to Monday, it will be lighted when ▲ or ▼ keys are pressed and move it to Tuesday by ▶ key. Press ▶ key after Tuesday, Wednesday, Thursday, Friday are lighted.

④ON time setting (AM, PM)

⑤ON time setting (Hour, Minute)

⑥OFF day setting

▶ key is pressed, move the flashing to hour position and select PM by ▲ or ▼ keys when ON time is afternoon.

Set 8:00 by ▼ key and press **SET** key.

Press **SET** key to check ON/OFF day.

⑦OFF time setting (AM, PM)

⑧OFF time setting (Hour, Minute)

⑨Complete to set

Select PM by ▲ or ▼ keys and move the flashing to hour position by ▶ key.

Move the flashing to minute position after set 6:00 by ▲ key and set the minute as 10 and press **SET** key.
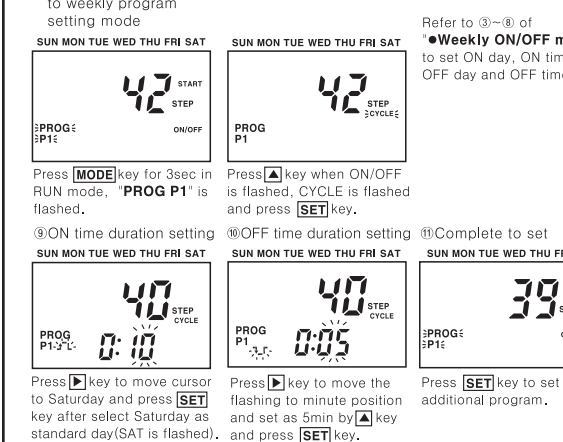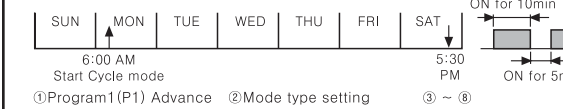
Press **SET** key to set additional program.

● Weekly Pulse mode

Output2(OUT2) is ON for 10sec at 8:00AM from Monday to Friday during S2 season in case, period of S1, S2, S3, S4 is set.

SUN	MON	TUE	WED	THU	FRI	SAT
	8:00 AM	8:00 AM	8:00 AM	8:00 AM	8:00 AM	

ON for 10sec / 8:00 AM

①Program2(P2) Advance to weekly program setting mode

②Mode type setting

③Season selection

MODE key is pressed for 3sec in RUN mode, "PROG P1" is flashed and press **MODE** key again, "PROG P2" is flashed and press **SET** key.

Press **SET** key when ON/OFF is flashed, PULSE is flashed and press **SET** key.

Press ▼ key to select season S2 and press **SET** key.

④ON day setting

⑤ON time setting (AM, PM)

⑥ON time setting (Hour, Minute)

Press ▶ key to move cursor to Monday, it will be lighted when ▲ or ▼ keys are pressed and move it to Tuesday by ▶ key. Press **SET** key after light Tuesday, Wednesday, Thursday, Friday.

▶ key is pressed, move the flashing to hour position and select PM by ▲ or ▼ keys when ON time is afternoon.

Set 8:00 by ▼ key and press **SET** key.

⑦Pulse duration setting

⑧Complete to set

▲ key to select pulse duration as 10s and press **SET** key.

Press **SET** key to set additional program.

● Weekly Cycle mode

(Ex)Output1 (OUT1) is ON for 10min and OFF for 5min from Monday 6:00AM to Saturday 5:30PM.

SUN	MON	TUE	WED	THU	FRI	SAT
	6:00 AM Start Cycle mode					5:30 PM

ON for 10min / ON for 5min

①Program1 (P1) Advance to weekly program setting mode

②Mode type setting

③ ~ ⑧
Refer to ③~⑧ of ● Weekly ON/OFF mode to set ON day, ON time, OFF day and OFF time.

Press **MODE** key for 3sec in RUN mode, "PROG P1" is flashed.

Press ▲ key when ON/OFF is flashed, CYCLE is flashed and press **SET** key.

⑨ON time duration setting

⑩OFF time duration setting

⑪Complete to set

Press ▼ key to move cursor to Saturday and press **SET** key after select Saturday as standard day(SAT is flashed).

Press ▲ key to move the flashing to minute position and set as 5min by ▲ key

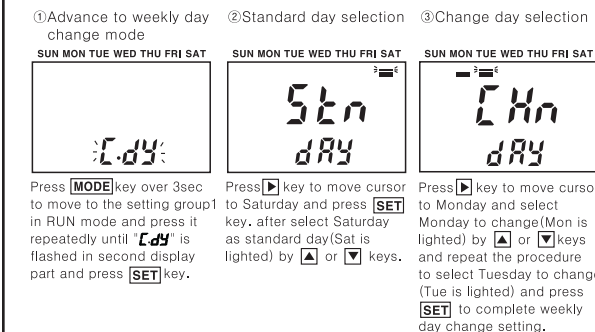Press **SET** key to set additional program.

◎ Weekly day change

When the specified day mode is required to install in other day, it is started from the set day and returned to previous program setting automatically when it is finished.
It is applied to program1(P1) and program2(P2).

● Weekly day change cancellation
①Change current year, month, date in current time setting mode
②Change standard day
③Delete all program in program1(P1) and program2(P2)
④Season switching

● Setting
Output1(OUT1) is ON in Saturday at 9:00AM and OFF at 12:00PM and it is ON 8:30AM and OFF at 6:00PM from Monday to Friday and the mode of Monday and Tuesday is operated temporarily as Saturday(standard) program.
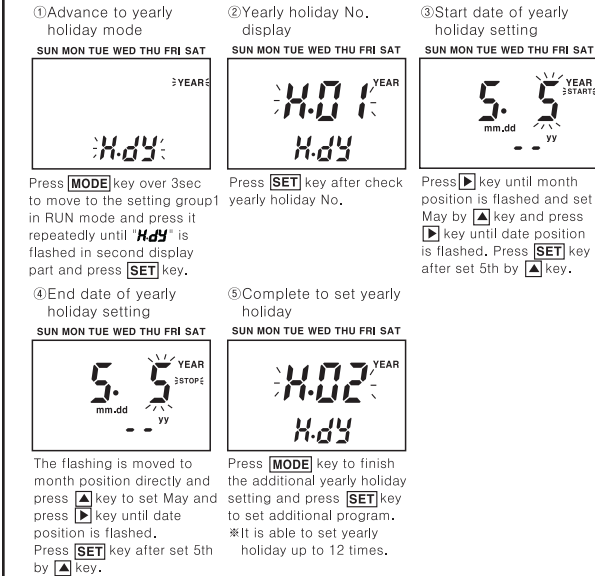
①Advance to weekly day change mode

②Standard day selection

③Change day selection

"C.dY" — "Stn dAY" — "CHn dAY"

Press **MODE** key over 3sec to move to the setting group1 in RUN mode and press it repeatedly until "C.dY" is flashed in second display part and press **SET** key.

Press ▲ key to move cursor to Saturday and press **SET** key after select Saturday as standard day(Sat is lighted) by ▲ or ▼ keys.

Press ▲ key to move cursor to Monday and select Monday to change(Mon is lighted) by ▲ or ▼ keys and repeat the procedure to select Tuesday to change (Tue is lighted) and press **SET** to complete weekly day change setting.

◎ Yearly holiday mode

It is used to off the output without program adjustment during previously set yearly holiday period available from present year to 31, Dec of the next year.
Designate the start date of yearly holiday and year of end date as every year("−−") to repeat the holiday mode for specified in every year.
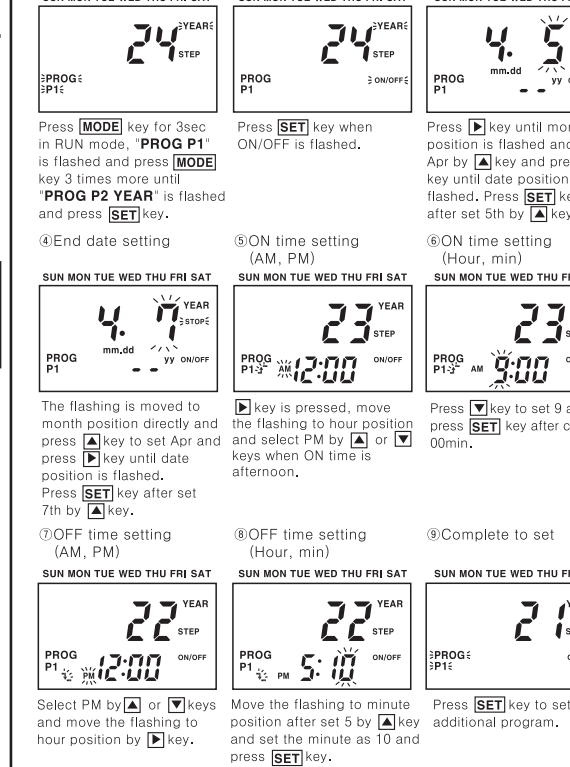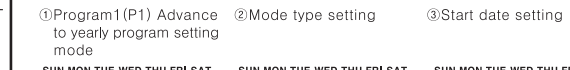
● Setting
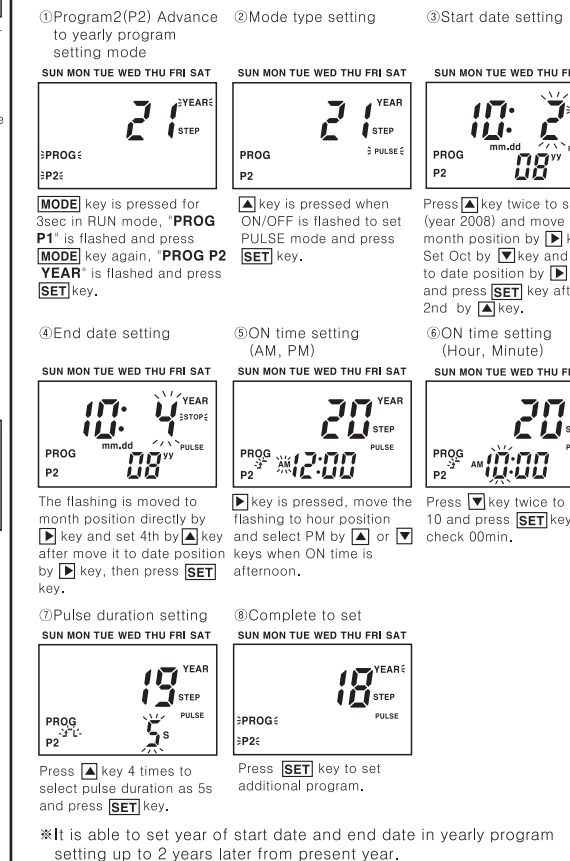Set every year 5, May to off the output(OUT1, OUT2).

①Advance to yearly holiday mode

②Yearly holiday No. display

③Start date of yearly holiday setting

"H.dY" — "H.01 H.dY" — "5. 5"

Press **MODE** key over 3sec to move to the setting group1 in RUN mode and press it repeatedly until "H.dY" is flashed in second display part and press **SET** key.

Press **SET** key after check yearly holiday No.

Press ▶ key until month position is flashed and set May by ▲ key and press ▶ key until date position is flashed. Press **SET** key after set 5th by ▲ key.

④End date of yearly holiday setting

⑤Complete to set yearly holiday

"5. 5" — "H.02 H.dY"

The flashing is moved to month position directly and press ▲ key to set May and press ▶ key until date position is flashed. Press **SET** key after set 5th by ▲ key.

Press **MODE** key to finish the additional yearly holiday setting and press **SET** key to set additional program.
- It is able to set yearly holiday up to 12 times.

◎ Yearly program setting
● Yearly ON/OFF mode

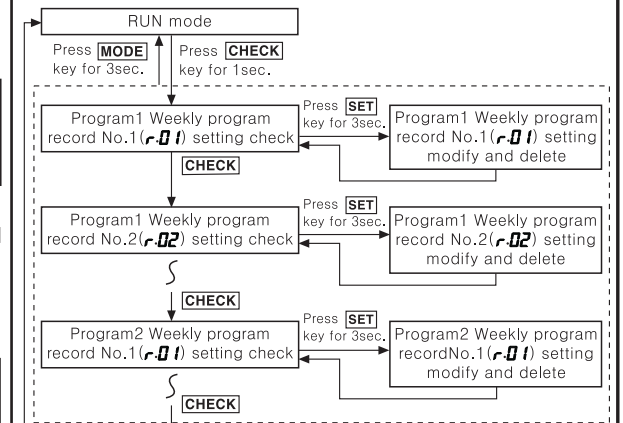(Ex)Output1(OUT1) is ON for every 5, Apr to 7, Apr at 9:00AM and OFF 5:10PM.

①Program1(P1) Advance to yearly program setting mode

②Mode type setting

③Start date setting

Press **MODE** key for 3sec in RUN mode, "PROG P1" is flashed and press **MODE** key 3 times more until "PROG P2 YEAR" is flashed and press **SET** key.

Press **SET** key when ON/OFF is flashed.

Press ▶ key until month position is flashed and set Apr by ▲ key and press ▶ key until date position is flashed. Press **SET** key after set 5th by ▲ key.

④End date setting

⑤ON time setting (AM, PM)

⑥ON time setting (Hour, min)

The flashing is moved to month position directly and press ▲ key to set Apr and press ▶ key until date position is flashed. Press **SET** key after set 7th by ▲ key.

▶ key is pressed, move the flashing to hour position and select PM by ▲ or ▼ keys when ON time is afternoon.

Press ▼ key to set 9 and press **SET** key after check 00min.

⑦OFF time setting (AM, PM)

⑧OFF time setting (Hour, min)

⑨Complete to set

Select PM by ▲ or ▼ keys and move the flashing to hour position by ▶ key.

Move the flashing to minute position after set 5 by ▲ key and set the minute as 10 and press **SET** key.

Press **SET** key to set additional program.

● Yearly Pulse mode

(Ex)Output2(OUT2) is ON from 2, Oct, 2008 to 4, Oct, 2008 at 10:00AM and OFF after 5sec. (Present is 2007.)

2, Oct	3, Oct	4, Oct
8:00 AM	8:00 AM	8:00 AM

ON for 5sec / 10:00AM

①Program2(P2) Advance to yearly program setting mode

②Mode type setting

③Start date setting

MODE key is pressed for 3sec in RUN mode, "PROG P1" is flashed and press **MODE** key again, "PROG P2 YEAR" is flashed and press **SET** key.

▲ key is pressed when ON/OFF is flashed to set PULSE mode and press **SET** key.

Press ▲ key twice to set 08 (year 2008) and move to month position by ▶ key.

④End date setting

⑤ON time setting (AM, PM)

⑥ON time setting (Hour, Minute)

The flashing is moved to month position directly by ▶ key and set 4th by ▲ key after move it to date position by ▶ key, then press **SET** key.

▶ key is pressed, move the flashing to hour position and select PM by ▲ or ▼ keys when ON time is afternoon.

Press ▲ key twice to set 10 and press **SET** key after check 00min.

⑦Pulse duration setting

⑧Complete to set

Press ▲ key 4 times to select pulse duration as 5s and press **SET** key.

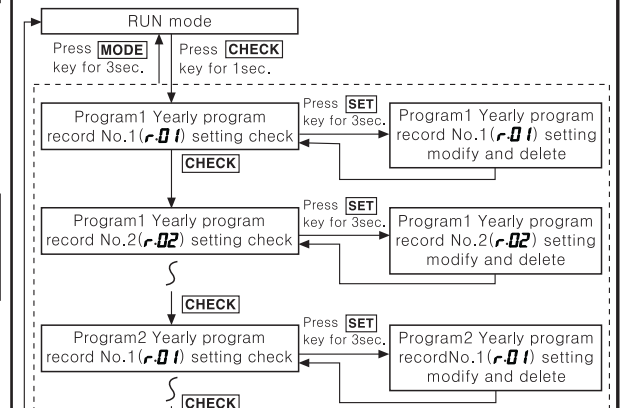Press **SET** key to set additional program.

※It is able to set year of start date and end date in yearly program setting up to 2 years later from present year.

■ Program check, modify and delete

◎ Weekly program check, modify and delete

RUN mode

Press **MODE** key for 3sec ← → Press **CHECK** key for 1sec.

Program1 Weekly program record No.1(r-01) setting check — Press **SET** key for 3sec. → Program1 Weekly program record No.1(r-01) setting modify and delete

CHECK

Program1 Weekly program record No.2(r-02) setting check — Press **SET** key for 3sec. → Program1 Weekly program record No.2(r-02) setting modify and delete

CHECK

Program2 Weekly program record No.1(r-01) setting check — Press **SET** key for 3sec. → Program2 Weekly program recordNo.1(r-01) setting modify and delete

CHECK

◎ Yearly program check, modify and delete

RUN mode

Press **MODE** key for 3sec ← → Press **CHECK** key for 1sec.

Program1 Yearly program record No.1(r-01) setting check — Press **SET** key for 3sec. → Program1 Yearly program record No.1(r-01) setting modify and delete

CHECK

Program1 Yearly program record No.2(r-02) setting check — Press **SET** key for 3sec. → Program1 Yearly program record No.2(r-02) setting modify and delete

CHECK

Program2 Yearly program record No.1(r-01) setting check — Press **SET** key for 3sec. → Program2 Yearly program recordNo.1(r-01) setting modify and delete

CHECK

※"YEAR" is lighted when check, modify or delete yearly program.

- If any key is untouched for 60sec, it is returned to RUN mode in weekly or yearly program check.
- In weekly or yearly program check, it controls output depending on program setting and output is OFF in modify or delete mode.
- When **MODE** key is pressed in weekly or yearly program record modify, delete stand by or delete mode, current work is cancelled and it is returned to check mode.
- Weekly or yearly program record modify and delete
  (1)Program record modify
  ①When press **SET** key over 3sec in program check, "Edt" is flashed in second display part, press **SET** key.
  ②It is returned to check mode when finish the modify same as the above procedure.
  (2)Program record delete
  ①When press **SET** key over 3sec in program check, " Edt " is flashed in second display part, press ▲ or ▼ keys until "CLr" is flashed in second display part and press **SET** key.
  ②Press **SET** key over 3sec when "CLr" is lighted in second display part, it is returned to program check.

■ Caution for using

1. Please use within the rated power and apply or cut the power at once to prevent from chattering.
2. When test dielectric voltage and insulation resistance of the control panel with this unit installed.
   ①Please isolate this unit from the circuit of control panel.
   ②Please make all terminals of this unit short−circuited.
3. When control a heater, please install the thermostatic switch at load circuit.
4. Installation environment
   ①It shall be used indoor   ②Altitude Max. 2000m
   ③Pollution Degree 2   ④Installation Category Ⅱ.
   ※It may cause malfunction if above instructions are not followed.

■ Major products

■ PROXIMITY SENSOR ■ PHOTOELECTRIC SENSOR ■ AREA SENSOR
■ FIBER OPTIC SENSOR ■ DOOR/DOOR SIDE SENSOR
■ PRESSURE SENSOR ■ ROTARY ENCODER ■ COUNTER
■ TIMER ■ TEMPERATURE CONTROLLER
■ TEMPERATURE/HUMIDITY TRANSDUCER
■ POWER CONTROLLER
■ PANEL METER
■ TACHO/LINE SPEED/PULSE METER
■ DISPLAY UNIT
■ SENSOR CONTROLLER
■ SWITCHING POWER SUPPLY
■ GRAPHIC PANEL
■ STEPPING MOTOR & DRIVER & CONTROLLER
■ LASER MARKING SYSTEM (CO2, Nd:YAG)

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