# LIGHTING CONTROL PANEL Variotime Twin Timer Programming Instructions

## Setting the day of the week and the time of day

- 1. Set the right-hand slide switch to position **RUN** and press the buttons **h** and **m** simultaneously for approximately 2 to 3 seconds. When colon, between hours and minutes, stops flashing, release the buttons.
- 2. Press the day button 1...7 as many times as necessary and set the day of the week with the day indicator ▲ as follows:

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

3. Set the present time of day via the buttons **h** and **m**. Keeping the buttons pressed for longer than 2 seconds activates the fast setting mode which stops when they are released again. The colon in the time display starts to flash approximately 15 seconds after the setting has been completed and the program timer accepts the time setting.

# Channel indication

The channel which is actively executing an automatic program is displayed as "1" or "2" on the upper right next to the digits indicating the time of day. If both channels are active, they are being displayed side by side as "12".

# Setting the switching points

Variotime Twin can be programmed with 16 switching points per channel (8 ON and 8 OFF). The switching points are numbered as follows:

- Switching points with uneven numbers (1, 3, 5, 7, 9, 11, 13 and 15) are ON points. They are indicated by the light bulb symbol ☆ in the display.
- Switching points with even numbers (2, 4, 6, 8, 10, 12, 14 and 16) are OFF points. The light bulb symbol is off.

In order to avoid errors in the program logic, the switching points should always be programmed in pairs, that is, always an ON point and subsequently the corresponding OFF point.

Switching points can be assign to single days of the week or identical switching points can be assign to a day block 1234567 = daily from Mondays through to Sundays (7 days a week). Some other possible combinations of days may be less practical and difficult to implement.

# Programming Channel 1 or Channel 2

1. Set the right-hand slide switch to position **P1** (channel 1) or **P2** (channel 2). Both channels have to be programmed individually.

The display flashes "12:00", on the top right the (selected) channel is indicated, on the bottom right "I" is indicated (switching point 1 ON). The light bulb symbol  $\Im$  appears.

- 2. Set the time for the switch ON point using the buttons **h** and **m**, then assign it to the days of the week by pressing the day button. The order of the settings is not important.
- 3. Pressing the button **(P)** advances Variotime to the next switching point 2 (OFF).

The display flashes "12:00", on the top right the (selected) channel is indicated, on the bottom right "2" is indicated (switching point 2 OFF).

- 4. Set the time for the switch OFF point using the buttons **h** and **m**, then assign it to the days of the week by pressing the day button. The order of the settings is not important.
- 5. Pressing the button **(P)** advances Variotime to the next switching point 3 (ON).

Repeat steps 1 to 4 until all times for switching ON and OFF have been programmed.

6. Reset the right-hand slide switch to the position **RUN**.

The display reverts to the present time of day and day of the week.

#### To check or change switching points proceed as follows:

- 7. Set the right-hand slide switch to position **P1** or **P2**.
- 8. Select the individual switching points by pressing the button **(P)** repeatedly.
- 9. Set the right-hand slide switch back to the position **RUN**.

#### To cancel individual switching points proceed as follows:

- 10. Set the right-hand slide switch to position **P1** or **P2**.
- 11. Press button **(P)** repeatedly until the relevant switch ON point is selected.
- 12. Now press the skip button  $\rightarrow \leftrightarrow$  and the button (**P**) simultaneously for approximately 2 or 3 seconds. The display flashes "12:00" showing the switching point has been canceled.
- 13. Proceed likewise to cancel the linked switch OFF point to avoid logic errors.
- 14. Set the right-hand slide switch back to position **RUN**.

## **Reset function**

The reset function is recommended for extensive changes in the automatic program. It cancels the previous input entirely and resets the timer into initial power up status.

Proceed as follows:

- 1. Press the button **R**. All indications in the display disappear, it flashes "12:00" and the day indicator ▲ at day 1. The automatic program is canceled completely.
- 2. Now set the present time of day and the day of the week again as described in "Setting the day of the week and the time of day". Variotime is ready for a new program.

# Skip function

The skip function reverses the current operating mode of the panel in which Variotime is installed with immediate effect and is canceled automatically on reaching the next switching point. It serves to override individual switching points without having to change the automatic program.

Example:

1. Press the skip button →↔ once. The channel indicator 1 flashes and the load connected to channel 1 is switched.

Press the skip button  $\rightarrow \leftrightarrow$  twice. The channel indicator 2 flashes and the load connected to channel 2 is switched.

After approximately 3 seconds, the channel indication stops flashing and the skip symbol  $\rightarrow \leftrightarrow$  appears in the display, so does the light bulb symbol  $\Leftrightarrow$  if the load was OFF before, or it disappears if the load was ON before.

This operation mode continues until the next switching point is reached which will be executed according to the program. The skip symbol  $\rightarrow \leftrightarrow$  disappears.

To cancel the skip function press the skip button →↔ again as described above. The skip symbol →↔ disappears and Variotime reverts to the current operation mode according to its programming.

## Continuous operation mode

In this mode, both channels can be set to continuous operation independently. Possible combinations are:

- Channel 1 in continuous operation mode and channel 2 unchanged
- Channel 2 in continuous operation mode and channel 1 unchanged
- Both channels in continuous operation mode

Proceed as follows:

- 1. Set the left-hand slide switch to position **I**.
- Press the skip button →↔ to select the desired channel:
  Pressing the skip button →↔ once selects channel 1. The channel indicator 1 flashes. After approximately 3 seconds, 1 stops flashing and the light bulb symbol ☆ appears.

Pressing the skip button  $\rightarrow \leftrightarrow$  twice selects channel 2. The channel indicator 2 flashes. After approximately 3 seconds, 2 stops flashing and the light bulb symbol  $\Leftrightarrow$  appears.

The order of setting the channels is not important. If both channels are in continuous operation mode, the display will show "12" and the light bulb symbol  $\stackrel{\leftrightarrow}{\hookrightarrow}$  steadily.

3. Terminate the continuous operation mode of <u>both</u> channels by setting the slide switch to the position AUTO.

The timer resumes the automatic program and displays the present status accordingly.

## Automatic mode

In the automatic mode, the panel in which Variotime is installed is being controlled according to the inputted program. The display shows the present status. During normal program execution, the left-hand slide switch is in position AUTO and the right-hand slide switch is in position RUN.

## **Programming charts**

The programming charts may be used as an aide to program Variotime Twin Timer.

Program data P1 for channel 1:

			Day	of the W	eek				
P1 switching point	MO (1)	TU (2)	WE (3)	TH (4)	FR (5)	SA (6)	SU (7)	Switching time	<b>CH1 load</b> (ON/OFF)
1									ON 🌣
2									OFF
3									ON 🌣
4									OFF
5									ON 🌣
6									OFF
7									ON 🌣
8									OFF
9									ON 🌣
10									OFF
11									ON 🌣
12									OFF
13									ON 🌣
14									OFF
15									ON 🌣
16									OFF

Program data P2 for channel 2:

			Day						
P2 switching point	MO (1)	TU (2)	WE (3)	TH (4)	FR (5)	SA (6)	SU (7)	Switching time	<b>CH2 load</b> (ON/OFF)
1									ON 🌣
2									OFF
3									ON 🌣
4									OFF
5									ON 🌣
File-name: Products	ile-name: Products:\LCPANEL\RETROFIT\VARIOTIME_PROGRAM Page 4							File No.	2-420, Rev. 0

6					OFF
7					ON 🌣
8					OFF
9					ON 🌣
10					OFF
11					ON 🌣
12					OFF
13					ON 🌣
14					OFF
15					ON 🌣
16					OFF

The following are the examples of filled out Programming charts according to typical lighting schedule operation with Photo Control. In the morning, the lights will come ON according to the program and they will go OFF by Photo Control, during the day. In the evening, the lights will come back ON by Photo Control and they will go OFF according to the program, at night.

Program data P1 for channel 1, Road Sign and exterior store lights (an example):

From Sunday to Thursday CH1 should come ON at 5:00 AM and go OFF at 11:00 PM, Friday and Saturday CH1 should come ON at 5:00 AM and go OFF at 12:00 AM (the next day).

			Day						
P1 switching point	MO (1)	TU (2)	WE (3)	TH (4)	FR (5)	SA (6)	SU (7)	Switching time	<b>CH1 load</b> (ON/OFF)
1	1							5:00 AM	ON 🔆
2	1							11:00 PM	OFF
3		2						5:00 AM	ON 🌣
4		2						11:00 PM	OFF
5			3					5:00 AM	ON 🔆
6			3					11:00 PM	OFF
7				4				5:00 AM	ON 🔆
8				4				11:00 PM	OFF
9					5			5:00 AM	ON 🌣
10						6		12: AM	OFF
11						6		5:00 AM	ON 🔅
12							7	12:00 AM	OFF
13							7	5:00 AM	ON 🌣
14							7	11:00 PM	OFF

15					ON 🌣
16					OFF

Program data P2 for channel 2, Parking Lot Lights only (an example):

From Sunday to Thursday CH1 should come ON at 4:00 AM and go OFF at 12:00 AM (the next day), Friday and Saturday CH1 should come ON at 4:00 AM and go OFF at 1:00 AM (the next day).

			Day	of the W	eek				
P2 switching point	MO (1)	TU (2)	WE (3)	TH (4)	FR (5)	SA (6)	SU (7)	Switching time	CH2 load (ON/OFF)
1	1							4:00 AM	ON $\updownarrow$
2		2						12:00 AM	OFF
3		2						4:00 AM	ON 🌣
4			3					12:00 AM	OFF
5			3					4:00 AM	ON 🌣
6				4				12:00 AM	OFF
7				4				4:00 AM	ON 🌣
8					5			12:00 AM	OFF
9					5			4:00 AM	ON 🌣
10						6		1:00 AM	OFF
11						6		4:00 AM	ON 🌣
12							7	1:00 AM	OFF
13							7	4:00 AM	ON 🌣
14	1							12:00 AM	OFF
15									ON 🌣
16									OFF

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