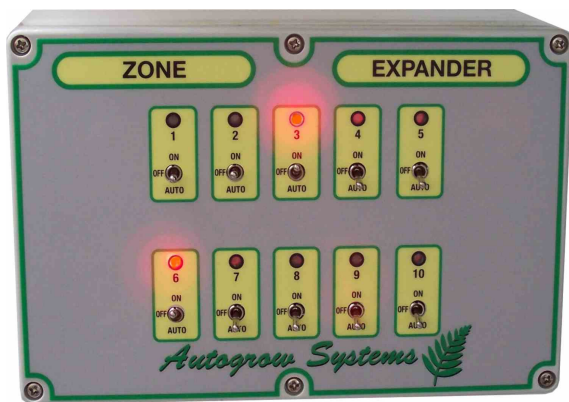


# Universal Timer

## PC controlled distributed timer system

- Dump reservoir tanks
- Inhibit dosing
- Switch off fans and start fogger
- In fact, any repetitive task

The Autogrow universal system is based around the Compugrow software that supports our greenhouse controllers together with, up to, 16 Output Modules that each have 10 outputs.



The user friendly software allows you to set complex on/off programmes for each output of each of the Timer Output Modules with a resolution of just one minute. The 24V AC outputs are programmed by day-of-week and by time-of-day and can have as many as 10 on/off cycles for each of 10 programmes. In addition, each output has a local indicator LED and a manual override switch allowing you to force it ON, OFF or AUTOMATIC. If an OFF time is set to be earlier than the corresponding ON time, the controller assumes that the OFF time is on the day following. This is useful

for some lighting applications where, for example, a car-park light is required to come ON in the evening and go OFF the following morning.

ON periods cannot exceed 24 hours although it would be possible to stack programmed times, one after the other, to achieve longer periods.

The failsafe condition is all outputs off and after a power failure or on losing communications with the PC all outputs revert to this state. If you require the opposite to be true then this is easily achieved by the use of a relay.



Timer	Enabled	01	02	03	04	05	06	07	08	09	010
T1	Y	Red									
T2	Y										
T3	Y				Red						
T4	Y										
T5	No										
T6	No										
T7	No										
T8	No										
T9	No										
T10	No										
T11	No										
T12	No										
T13	No										
T14	No										
T15	No										
T16	Y	Red									

Program	Day	01	02	03	04	05	06
1	Wed	09:00 On	16:10 Off	09:15 On	10:00 Off	09:05 On	09:06 Off
2		...	...	...	...	...	...
3		...	...	...	...	...	...
4		...	...	...	...	...	...
5		...	...	...	...	...	...
6		...	...	...	...	...	...
7		...	...	...	...	...	...
8		...	...	...	...	...	...

## Setting up

### FOR A NEW INSTALLATION

In Compugrow go to “setup/system setup/new” then give the system a name and select controllers.

### FOR AN EXISTING COMPUGROW INSTALLATION

Make sure you have the latest compugrow software – you can download this from [www.autogrow.com](http://www.autogrow.com). In Compugrow go to “setup/system setup/configure/system name”

In the controller setup window give each timer a short name and select timer. Enter an address such as 100. This is actually not important and is not used – the timers have a fixed address which is built in to them and into Compugrow.

If you have more than one timer module connected you will need to open them to set their internal addresses on the small 4 way “dip switch”.

All switches OFF =	Timer 1; Default position
Switch 1 ON =	Timer 2
Switch 2 ON =	Timer 3
Switch 1 AND 2 ON =	Timer 4
Switch 3 ON =	Timer 5
Switch 1 AND 3 ON =	Timer 6
Switch 2 AND 3 ON =	Timer 7
Switch 1,2 AND 3 ON =	Timer 8
Switch 4 ON =	Timer 9
Switch 1 AND 4 ON =	Timer 10

etc to a maximum of TIMER 16

Referring to the screen picture on page one; double click on the Timer button in the left hand column. Then, in the day column, select daily, weekend or a specific day of the week for each for any of the 10 available programs. Then for each program set the on and off time for each of the 10 outputs in the row. After pressing Save you will return to the main timer screen where each of the 10 available programs for that timer can be enabled or disabled.

Note that the timer will only switch on outputs when it is on-line to the PC. When off-line all outputs are automatically turned off.

