

The DET 4 is a 4 station clockwise rotation 7 event digital timer with photo period control

CONTROL WIZARD™ Portland, Oregon 1-800-433-6805 Digital Event Timer 4 Instruction Manual

Where do I plug my equipment in?

Plug the first piece of equipment that you wish to time into the upper left hand outlets of station 1 designated 1a or 1b power outlets. Plug the second piece of equipment that you wish to time into the upper right hand outlets of station 2 designated 2a or 2b. Plug the third piece of equipment that you wish to time into the lower right hand outlets of station 3 designated 3a or 3b. Plug the fourth piece of equipment that you wish to time into the lower left hand outlets of station 4 designated 4.

Outlets 1a, 2a, 3a and 4 are energized from the timer's main power cord.

Outlets 1b, 2b and 3b get their power to energize equipment plugged into them from their own power cords (the Outlet Off Power Cords). This allows you to plug 1b, 2b and 3b power cords into separate 24 hour timers to turn these outlets off at night if need be.

Timing your equipment. No programming is necessary! Each of the 4 stations has a set of outlets that are timed by the recessed time switches next to it. Each time switch has a time value when it is in the ON position. You have hundreds of time settings to choose from. Simply flip any number of time switches to the ON position and add their values together for the total length of time the station outlet will be powered. The time values for each dip switch have been silkscreened on the front cover of the DET4 for your convenience. **Special Note:** 1. **There must be at least one dip/time switch in the ON position for each station outlet to maintain the timer's ability to cycle from one station outlet to the next station outlet.** If there is no time chosen, the timer will stop at that station outlet and supply constant power to that station outlet!
2. **Do not change a station's time while it is being powered.** This will confuse the timer and it will not proceed to the next station.

How long or short of a time can each outlet be powered? Lets focus on station #1 and its corresponding set of time switches and outlets. How long each station outlet is powered is determined by the station's set of time switches and its corresponding range switch (short or long). If we wish to operate a piece of equipment in station outlet #1 and we wish the shortest ON time (6 seconds), we must flip the #1 time switch to the ON position while switches #2 thru #10 are switched to the OFF position. Next, flip the corresponding range switch to the ON or UP position as the ON/UP position is the station outlets short time range. The longest ON time is 17 hours. To accomplish this we must flip the #10 switch to the ON position while switches #1 thru #9 are in the OFF position. Then flip the corresponding range switch to the OFF or DOWN position as this is

the station outlets long time range. For times in between, note the time values of each time switch. Add them up for your total desired ON time and then flip the corresponding time switches to the ON position. OFF time for each of the station's outlets is the total time it takes to cycle through the other 3 stations.

Does the timer have a battery back up? No battery backup is needed for this timer! Once you have set the ON times you want, whether the unit is turned off by you or there is a power outage, the settings will remain digitally locked into the timer's memory!

If the DET4 is turned off and then back on again which outlet will be powered? The DET4 repeat cycle timer will start timing from the beginning of the ON cycle at outlet #1a/b whenever the power is switched from ON to OFF and back ON again for any reason.

How do I know the outlet has power? Large indicator lights clearly show which set of outlets have power and therefore which piece of equipment should be operating. Note: The exception of course would be if a indicator light burned out.

How much power can each station supply? There are four stations. Do not plug equipment into the DET4 that would draw more than 650 watts per station. If you need more power, use the DET4 to energize the coil and thus close the contacts of an external high ampere single pole double throw relay. If you wish to build your own external relay, contact your dealer for instructions to do so.

Can I run lighting systems? Yes! For instance, there is much talk about the testing of plant growth in a 18 hour day instead of the normal 24 hour day. Determining which plant species can perform well adapting to these shortened day periods will be significant when speculating their increased yields over the standard 24 hour day. The DET4 can turn lighting systems ON for 12 hours and OFF for 6 hours for vegetative crops and then switch to 9 hours ON 9 hours OFF for bloom. Plug the lighting system into station outlet # 1a, 2a, 3a or outlets 4. For instance, for vegetative growth flip the dip/time switches to total 12 hours on station 1a. Flip the dip/time switches on station 2 to total 2 hours. Flip the dip/time switches on station 3 to total 2 hours. Flip the dip/time switches on station 4 to total 2 hours. 6 hours will have elapsed since the ending of the 12 hour period on station 1a for a total of 18 hours. *The DET4 is not capable of timing a 24 hour period. The DET4 is not a clock, therefore, cycles may not start and stop exactly at the same time every day.*

How easy is it to change the the time switch settings? The time switches have been recessed so the time settings can not be changed accidentally by walking by or brushing up against the timer. Even though the switches are small they are easy to flip.

Is the DET4 an easy timer to use? Instructions for easy operation have been placed on the front of the timer. Also, the face of the timer has been silk screened with green enamel paint. The contrast of green on white makes the timer instructions easy to read and pleasing to the eye.

What is the Reset button for? The reset button resets the timer into operating condition in the event that too much power was being pulled out of one of the timer's outlets or by operating a faulty piece of equipment. It works very much like a fuse. If the timer does not function after being plugged into a wall outlet with known power, check the reset button. If it is pushed out more than 1/4 inch, chances are that it needs to be pushed back in. Do this after all the equipment plugged into the timer has been unplugged. Plug them back in one at a time to check for faulty equipment. Check the equipment for conditions of high heat, slow running or burnt smells before plugging them back into the equipment.

What are the Outlet Off Power Cords For? At some point you will want to power a piece of equipment only during the day or night. The Outlet Off Power Cords are for just that. Lets say that you want two exhaust fans to operate for 10 minutes every 2 hours. However, you want one to operate for 10 minutes every 2 hours all 24 hours long and the other to operate 10 minutes every 2 hours during daylight periods only. Plug the exhaust fan that will cycle ON for 10 minutes and OFF every 2 hours all 24 hours into outlet # 2a and then plug the exhaust fan that you wish to operate 10 minutes ON every 2 hours only during daylight periods into outlet #2b. Now, plug Outlet Off Power Cord #2b into a 24 hour timer set for daylight periods only, (for example 8am to 8pm). Then plug the 24 hour timer into a wall outlet. The 24 hour timer will cut power to the exhaust fan plugged into outlet 2b from 8 pm to 8 am while the exhaust fan plugged into 2a will have power to operate 10 minutes every 2 hours for all of the 24 hours.

What are my power requirements? The DET4 must operate on 120 volts and each set of outlets are rated for a total of 10 amps. Trying to power equipment that draws more than 10 amps will activate the reset button on outlets #1a,2a,3a,4. Outlets that will not

activate the reset switch when being overpowered are outlets #1b,2b and 3b. Do not draw more than 10 amps from these outlets.

List of Features

1. Recessed digital dip switches for accurate reliable time setting.
2. Large indicator light turns ON when power to outlet is present.
3. Large indicator light turns ON when power to all four outlets on the right hand side is present.
4. ON/OFF switch allows you to easily reset the timer and start timing from the beginning by simply switching the timer OFF, make setting corrections, and then back ON.
5. Grounded heavy duty power cord with 15 amp. draw capabilities.
6. High rise housing assures proper cooling for years of service.
7. Instructions on the face of the timer makes it easy to use and understand. The green lettering is also very pleasing to the eye.
8. Powder coated white enamel paint reflects light and resists moisture.
9. Four full stations to operate equipment.

Outlet OFF Power Cords

These cords can be plugged into small 24 hour timers to give outlets 1b, 2b and 3b the ability to be turned OFF at night or for any length of time and come back on during the day. Use your imagination!

Proper Care

Place the Digital Event Timer (DET4) away from running, dripping, or spraying water. Treat the DET4 as you would a thermometer and keep it out of direct heat producing light. Locate the DET4 out of cold or hot drafts that do not represent the actual climate of the growing area. Mount the DET4 to a wall or structure that is not conducting heat or cold from other areas. Wipe the housing surface clean with a soft cloth and keep lint, debris, spider webs, etc. from collecting in and on the dip switches and outlets. Do not attempt to stick objects into the timer for diagnostic purposes. Make sure your electrical wiring can carry the amp. load of the equipment you plug into the DET4. Never plug equipment into the DET4 that would draw more than 10 amps. through the cord. The DET4 will give years of faithful service with careful use. Disassembling the timer for diagnostic purposes will void the warranty. Please check the written warranty or contact your dealer for repair procedures.

Understanding Time

This timer uses digital binary circuitry breaking time down into minutes and tenths of a minute, making this timer a precision tool unequalled in performance and reliability. One tenth of a minute is expressed as .1 minute, and is simply another way of saying 6 seconds. 30 seconds is expressed as .5 minute and a minute and a half is expressed as 1.5 minutes. To obtain the total amount of ON /OFF time for your equipment, combine the switches in the ON position. EXAMPLE: To obtain exactly one minute of ON time flip the switch representing 0.2 (12 seconds) and the switch representing 0.8 (48 seconds) to the ON position. The combined total of the two switches in the ON position is 1 minute (60 seconds). The OFF time of a stations outlet is represented by how much total ON time you have set for the other three stations of outlets since the timer cycles clockwise from one station to another. This of course would change if outlets 1a, 2a or 3a are controlled by a separate 24 hour timer.

Timer Ranges

Each set of time switches have a range switch that tells the time switch to be in long range or short range. This is important because it allows the DET4 to time equipment to operate a minimum of 6 seconds or for as long as 17 hours!

off on	SHORT	LONG
	1 .1 MIN	1 1 MIN
	2 .2 MIN	2 2 MIN
	3 .4 MIN	3 4 MIN
	4 .8 MIN	4 8 MIN
	5 1.6 MIN	5 16 MIN
	6 3.2 MIN	6 32 MIN
	7 6.4 MIN	7 64 MIN
	8 12.8 MIN	8 128 MIN
	9 25.6 MIN	9 256 MIN
	10 51.2 MIN	10 512 MIN

NOTE: .1 MIN. = 6 SECONDS

OUTLET 'OFF' POWER CORDS

PLUG CORD INTO TIMED POWER SOURCE TO TURN OUTLET OFF

1B

2B

3B

Warrantee

This product manufactured by **CONTROL WIZARD** is warranted for a period of 1 year on parts and a lifetime warranty on labor for all original customers with receipt of purchase. **CONTROL WIZARD**, having made the determination that indeed said equipment is faulty and has determined that faulty parts or workmanship was to blame, has the right to replace or repair the equipment and the choice will be made solely by **CONTROL WIZARD**. This is a repair warranty and **CONTROL WIZARD** will not exchange defective equipment unless it is returned to an authorized dealer within 30 days of purchase and it is verified by the dealer that is not working properly. Proof with date of purchase from an authorized dealer must accompany any warrantee return or the warrantee claim will be considered invalid. A return merchandise authorization number must be issued by **CONTROL WIZARD** and plainly written on the outside of the shipping box. This warrantee does not cover neglect or abuse in any form and only **CONTROL WIZARD** can determine abuse. This equipment is not water proof or water resistant and must be kept out of direct sunlight and sprays of water. Equipment not under warranty will be repaired at the going shop rate at the time of return. **CONTROL WIZARD** will not perform any repair unless written permission to do so accompanies the defective equipment. **CONTROL WIZARD** will pay for ground shipping (within the continental United States) from the factory to the customer or store if the returned equipment has been determined to be under warrantee. Customers assume all liability for shipment of products to **CONTROL WIZARD**. All warrantee and repair shipping will be done through United Parcel Service exclusively. A basic shipping charge will apply to all repaired equipment not under warrantee. All repair work will be performed the following work day after being received at the factory and permission of repair has been confirmed. This warrantee does not cover other dealer warrantees or guarantees expressed or implied.

EACH OUTLET HAS A SET OF TIME SWITCHES. THE EXAMPLE SHOWS SWITCH 2 AND 4 ARE IN THE ON POSITION. THE TOTAL TIME THE OUTLET WILL BE POWERED IS 1 MINUTE SHORT RANGE OR 10 MINUTES LONG RANGE.