

Digital Event Timer 2 Instruction Manual

The DET 2 is a 2 station 2 event digital repeat cycle timer

Where do I plug my equipment in? Plug the first piece of equipment that you wish to time into the left hand power outlets of station 1. Plug the second piece of equipment that you wish to time into the right hand power outlets of station 2. The timer is designed to cycle back and forth from station #1 to station #2, energizing the left hand station #1 first.

Timing your equipment. No programming is necessary! Each station has a set of outlets that are timed by the recessed time switches adjacent to it. Each time switch in both banks has a time value when it is in the ON position. You have hundreds of time settings to choose from (see illustrations on back). 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 DET2 for your convenience. Special Note: There must be at least one time switch in the ON position for each station to maintain the timers 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 and supply constant power!

How long or short of a time can each outlet be powered? Station #1's switch bank will give the shortest time periods. Six seconds is its shortest time period and 1 hour 42 minutes is its longest period. Station #2 will time the longest periods. One minute is its shortest time period and 17 hours is its longest period

If the DET2 is turned off and then back on again which outlet will be powered? The DET2 repeat cycle timer will start timing from the beginning

of the ON cycle at station #1 whenever the power is switched from ON to OFF and back ON again for any reason. In power outages the DET2 memorizes the time settings without the need for battery backup. As soon as power is restored to your facility, the timer will reset itself back to the beginning of the time period in station #1.

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

How easy is it to change 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. Do not change time settings in a station that is actively supplying power to equipment. This will confuse the chips memory and give improper time periods.

Is the DET2 an easy timer to use? Yes! 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. Examples on how to set the DET2's time switches are on the back of this instruction manual.

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 timers outlets by operating or

faulty 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. Check the equipment for conditions of high heat, slow running or burnt smells in a wall outlet before plugging them back into the DET2. By plugging them back into the DET2 one at a time, the reset button will help you check for faulty equipment.

What are my power requirements? The DET2 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 total from each set will activate the reset button. Do not draw more than 10 amps from these outlets.

What kind of applications is the DET2 good for? BY precisely metering water or nutrient solutions top watering plants, timing the injection of carbon dioxide into a growing area, flooding a flood and drain hydroponic table, exhausting a growing area's atmosphere are just a few suggestions.

List of Features

1. Recessed digital dip switches for accurate reliable time setting.
2. Large indicator light turns ON when power to station #1 outlets is present.
3. Large indicator light turns ON when power to station #2 outlets is present.
4. The 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. Two full stations to operate equipment.
10. No battery backup needed. The DET2 memorizes all settings regardless of power outages. The DET2 will reset and start timing at the beginning of the ON cycle at station #1 when power resumes.

Proper Care

Place the Digital Event Timer (DET2) away from running, dripping, or spraying water. Treat the DET2 as you would a thermometer and keep it out of direct heat producing light. Locate the DET2 out of cold or hot drafts that do not represent the actual climate of the growing area. Mount the DET2 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 DET2. Never plug equipment into the DET2 that would draw more than 10 amps. through the cord. The DET2 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.

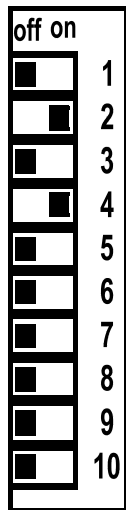
Understanding Time

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 ($1 \times 6 = 6$), and is simply another way of saying 6 seconds. 18 seconds is expressed as .3 minute ($3 \times 6 = 18$) and a minute is expressed as 1. minute ($6 \times 10 = 60$ seconds or one minute. To obtain the total amount of ON /OFF time for your equipment select a switch bank and flip the switches into the ON position. Their combined time value will be how long the station is powered. EXAMPLE: To obtain exactly one minute of ON time flip the switch representing 0.2 (12 seconds $2 \times 6 = 12$) and the switch representing 0.8 (48 seconds $6 \times 8 = 48$) 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 station outlets since the timer cycles back and forth from one station to another.

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 48 continuous 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.

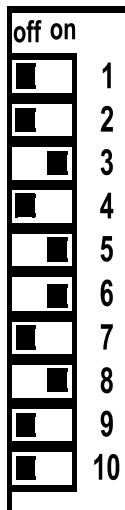
Station #1's set of time switches.



- | | |
|----|----------|
| 1 | .1 MIN |
| 2 | .2 MIN |
| 3 | .4 MIN |
| 4 | .8 MIN |
| 5 | 1.6 MIN |
| 6 | 3.2 MIN |
| 7 | 6.4 MIN |
| 8 | 12.8 MIN |
| 9 | 25.6 MIN |
| 10 | 51.2 MIN |

The example illustration to the left shows the switch bank for station #1. Notice the switches represent fractions of a minutes. The #2 switch is in the ON position and switch #4 is in the ON position. If you add up the two time values you will get a total of 1 minute(.2 + .8 = 1 minute). This is how long station #1's outlets will be energized.

Station #2's set of time switches.



- | | |
|----|---------|
| 1 | 1 MIN |
| 2 | 2 MIN |
| 3 | 4 MIN |
| 4 | 8 MIN |
| 5 | 16 MIN |
| 6 | 32 MIN |
| 7 | 64 MIN |
| 8 | 128 MIN |
| 9 | 256 MIN |
| 10 | 512 MIN |

The example illustration to the left shows the switch bank for station #2. Notice the switches represent whole minutes. The #3, #5, #6 and #8 switch is in the ON position. If you add up the four time values you will get a total of 190 minutes or 3 hours (128 + 32 + 16 + 4 = 190 minutes / 190 minutes divided by 60 minutes = 3 hours). This is how long station #2's outlets will be