



## GateCrafters.com Universal Digital Gate Timer

### Mounting:

Mounting option include: inside dwelling, in a gate opener control box or outdoor rated electrical box. Do not mount where it will be exposed to weather – unit is not Weatherproof.

Standard Mounting - To mount use a section of din rail either inside the control box or on the wall (din rail is available at most home stores).



Alternate Mounting - Use Velcro (available at most home stores) on the top and bottom of the backside of the timer; mount to the inside of the control box.

### Wiring:

**Power:** Using 12 or 24VDC apply power to terminals 1 and 2 on the timer. There is no polarity (positive and negative do not have a specified side).

Draw when active: 20 Milliamps      Draw when inactive: less than 10 milliamps

*\*Power can be drawn from many gate opener accessory outputs or gate opener batteries. See gate opener specific wiring exclusively provided by GateCrafters.com.*

### ***Gate Opener Accessory / Gate Opener interaction wiring:***

***To make an accessory active or inactive*** - One use of the timer is to make accessories inactive during off hours. For example, many gates have automatic entry or exit through loop or auto-sensor. During evening hours some users wish to have this automatic access off. To achieve this do the following:

- Power the accessory as normal. Accessory will always be active - communication with gate opener is what is disrupted by timer.
- Identify on the accessory the wires or terminals that will be activating the gate opener, this will be two wires or terminals. (Normally Open and Common in most cases).
- Connect the Normally Open terminal from the accessory directly to the gate opener in the location specified for normal use.
- Connect the Common from the accessory to terminal 5 of the timer. Connect terminal 4 of the timer to the location the Common of the accessory normally is directed to.

*How this works: The accessory will always be active and be able to be activated. However, when off the timer will be interrupting the connection to the control board of the gate opener - not allowing the activation of the accessory to activate the gate opener. When the timer is on the connection will be present as normal and the accessory will activate the gate opener.*

**Make a gate open at a particular time and close at a particular time - this should only be used when proper safety devices are installed to protect both vehicles and pedestrians from entrapment AND where warning signs are in place for clear gate automation awareness. If the gate opener is equipped with audible or visual (lights) notifications of gate actuation this must also be used in conjunction with the timer usage. Use in this manner at your own discretion: GateCrafters.com is not responsible for any damage, bodily or property, caused by automatic activation of a gate with or without safety precautions.**

The following instructions detail if you want the gate to open at a preset time and close at a preset time. The timer allows for this to be either: weekday only, 7-days a week, single day or a combination of the three. To achieve your preset time setting, do the following:

- Identify the terminals on the gate opener that an automatic exiting device is normally wired to.
- Connect the terminal 5 from the timer to the automatic exit terminal.
- Connect the terminal 4 of the timer to the common paired with the automatic exit terminal.
- Auto-reclose **MUST** be turned on in order to achieve closing.
- Set any parameters that the particular gate opener needs in order to have an automatic exiting device (sometimes referred to as free exit) continually reset the pause time.

*How this works: The time that you set for the timer to be ON is when the gate will open. The timer will close the circuit and hold the circuit closed. In the open position the timer will still continue to hold the circuit closed, perpetually resetting the pause time. The time you set for the timer to turn off is when the timer will release the circuit. At this time the timer will turn OFF. Once the circuit is released the auto-reclose will count down like normal and the gate will close. Please note: not all gate openers have the ability to have the auto-reclose time perpetually reset - for those gate openers a "managers opening/auto-close" may be an alternate possibility to be used.*

**"Manager Opening / Auto-Reclose" to allow a manager to open the gate at a particular time with the gate remaining open until a preset auto-close time - this should only be used when proper safety devices are installed to protect both vehicles and pedestrians from entrapment AND where warning signs are in place for clear gate automation awareness. If the gate opener is equipped with audible or visual (lights) notifications of gate actuation this must also be used in conjunction with the timer usage. Use in this manner at your own discretion: GateCrafters.com is not responsible for any damage, bodily or property, caused by automatic activation of a gate with or without safety precautions.**

The following instructions detail if you want the gate to open *only* after an authorized individual has activated the gate but subsequently after close at a particular time. The timer allows for this to be either: weekday only, 7-days a week, single day or combination of the three. This function is great for weekends at home because the home owner can open the gate when they would like to open their yard to visitors, enable travel in and out in the morning, yet still have it close automatically after dusk for security. It is also great for professional properties. The gate will remain closed until an authorized

manager has arrived, yet still close automatically at the close of business to secure the property from after hour guests or intruders. To achieve this do the following:

- Identify the terminals on the gate opener that closing safety device is normally wired to.
- Connect the terminal 5 from the timer for Normally Open Safety gate openers OR terminal 3 from the timer for Normally Closed Safety gate openers to the closing safety terminal.
- Connect the terminal 4 of the timer to the common paired with the safety terminal.
- Auto-reclose MUST be turned on in order to achieve closing.
- Set any parameters that the particular gate opener needs in order to have an automatic closing after release of safety.

*How This Works: The ON time in the morning should be set to a time earlier than the earliest time you might open the gate that day. When the authorized individual activates the gate via remote keypad or any other device the timer should already be ON. The authorized individual will open the gate via an entry device and the gate will go open and count down the auto-reclose time. At the end of auto-reclose time the gate opener will not be able to close because the timer will be triggering the closing safety as if there is an obstacle. After the timer turns OFF at the preset time the safety will be back to operational mode and the gate will be allowed to close as normal automatically. Please note: not all gate openers have a closing only safety which will not allow this function to be used.*

For complete gate lockout times - Use this function of the timer to make the gate opener access completely disabled during off hours without shutting down the system and possibly losing programming. During evening hours some users wish to have all access off limits through a particular gate, such as an auxiliary gate (*be aware - this should not be a gate that has emergency vehicle access - this will disable all entry including emergency access*). To achieve this setting do the following:

- Power the gate opener as normal. Gate opener will always be active - ability to activate is what is limited by the timer.
- Identify the terminals on the gate opener that opening safety device is normally wired to.
- Connect the terminal 5 from the timer for Normally Open Safety gate openers OR terminal 3 from the timer for Normally Closed Safety gate openers to the opening terminal.
- Connect the terminal 4 of the timer to the common paired with the safety terminal.

*How this works: If the opening safety is being triggered by the timer opening will not be possible when the timer is ON. As long as the opening or stop safety is trigger no entry devices at all will be able to override this and open the gate. When access to the gate is to be allowed again the timer should turn OFF.*

## **Programming:**

### ***To set the time:***

Time is in military time, hours 0 to 24. Press and hold the "Clock" button. While holding the clock button press "D+" to change the day to current day, (H+) to change to current hour, (M+) to change to current minute. Release the "Clock" button when finished.

### ***To program timer ON / OFF:***

There are 16 possible events, an event is an on and off. Not all have to be used, if not using an event leave it blank.

Press the (P) button to access the ON time and date for the 1st event.

Press the (D+) button to change the day(s) of the week you wish for the event to occur.

Press the (H+) & (M+) to set the time that you wish the timer to turn on for the first event.

Press the (P) button to move to the OFF time and date for the 1st event.

Press the (D+) button to change the day(s) of the week you wish for the event to occur.

Press the (H+) & (M+) to set the time that you wish the timer to turn off for the first event.

Press (P) button to move to the ON for the 2nd event and repeat the above steps if multiple events are desired.

Once all events are programmed press the (Clock) button to exit the programming.

### ***Manual Button:***

The manual button can manually turn the timer on and off and override the programmed switching. It can also be used to put the timer back on auto.

You will notice as you press the manual button it toggles auto - on - auto - off - auto.

If you toggle the timer to on and then back to auto the timer will stay on until the first scheduled event OFF.

If you toggle the timer to off and then back to auto the timer will remain off until the first scheduled event ON.

If the manual button is toggled to on or off and left in that position the programmed times will be ignored.

*How this works: An example is the best way to demonstrate this. Imagine you are programming this timer for a business gate to open at 9am and close at 5pm (hour 17) for all weekdays. You are doing this programming on a Tuesday at 10am and you wish the gate to stay open starting immediately and close Tuesday night and continue on its normal schedule the rest of the week. When you are done with your programming you will press the (Manual) button to toggle to on and then back to auto. This will turn the timer on immediately and leave it on (subsequently opening the gate) but setting the time to react to the next OFF programmed in and allow the gate to close at 5pm in the evening.*

### ***Clearing Programming:***

There are two ways to do this:

You may reset the timer to factory settings by pressing the reset button. This will clear all programming and the main time.

If you wish to clear just one event without resetting the timer simply set the ON and OFF for that event to the same time and same date.

*Example 3rd event made inactive from active: 3ON: MTWTF 00:00, 3OFF: MTWTF 00:00*

## **Troubleshooting:**

Timer ON light will not come on and gate will not trigger:

- The main power is absent. The display is done through battery however the relay requires the incoming power source. The display can display the manual setting to ON or the timer programming event should have turned ON with just the battery, however without main power the Red ON light will not show and the timer will not flip the relay and turn on.
- Settings are not correct. A common mistake is setting up your programming while in the middle of an event but not manually turning on and then moving back to auto. To test for programming issues toggle (Manual) button to the ON position. If the relay clicks and the red light comes ON then your programming is not set properly or you are in the middle of an event and have missed the ON triggering for that event.

Gate will not close after OFF for event:

- If the Red ON light is still lit then the manual override is set to ON, another event has triggered it on again, or the dates may not be matched for your ON and OFF for an event.
- If the Red OFF light is not lit then the gate opener may not have auto-reclose on, May have a safety device tripped preventing closing, may have another opening device triggered holding it open as well (check automatic devices such as exit probe), May not be able to be used in this fashion and the auto-reclose has expired.

Gate Opener using "Manager Opening / Auto-close" usage or Gate Disable usage is working opposite programming. Meaning when the timer is off the gate opener is reacting as it should when the timer is ON, or vice-versa.

- The gate opener safety terminals are opposite what they were thought to be, meaning if device is wired for Normally Open but the gate opener is actually Normally Closed on the safety terminals, or vice-versa. Switch the wire that is in 3 or 5 to the opposite empty terminal.

## **For further help:**

Instructions for wiring this timer to a particular gate opener:

[www.gatecrafters.com/accessories\\_instruction\\_accu-choice.aspx](http://www.gatecrafters.com/accessories_instruction_accu-choice.aspx)

Click on the gate opener and this accessory for instructions.

For technical troubleshooting support via phone:

Call 1-800-537-4283, 7 days, 9am - 9pm EST

*Please note, technician will request you have wiring instructions in hand for clarity purposes. Please retrieve the gate opener specific instructions from the website prior to calling.*