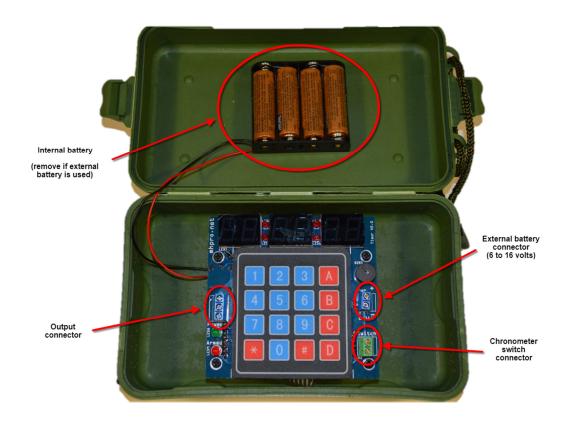# Interactive Countdown Timer and Chrono

Description

Specially designed to interact with external components. The "countdown" mode allows to activate external components as siren, beacon light, strobe, solenoid, relay and many others. Simply connect an internal or external battery from 6 to 16 volts according to the voltage of the element to be run (5 amperes max). Example: You want to run a 12 volt beacon light, just connect a 12 volt battery to the external battery connector. This mode also can activates the accessory for specific programmed duration. Ideal for precise exposure to light or any similar need.
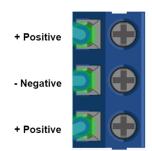
The module has a programmable cancellation code to stop the countdown. This is perfect if you want to use it, for example, for a challenge where one has to stop the count before the end. Developed at the base for Military Tactical Simulation (MilSim) at Paintball. Add challenge to your scenarios!

The "chronometer" mode allows to calculate the time with an external switch. For example: a button of any kind or, in a race context, a start/stop door, a carpet with a contact and many others ...

Module components

Internal battery

(remove if external battery is used)

External battery connector (6 to 16 volts)

Output connector

Chronometer switch connector

Connection of the accessory to the output terminal

+ Positive

- Negative

+ Positive

See the table « Output action according to the programmed mode » for more information.

Operating mode

The module is very simple to use and easy to program.

To turn on the module

To turn on the module, press the « A » key until the display lights up.

- **Programming mode**

To enter in programming mode, after releasing the « A » key to start the module, immediately press the "D" key for 3 seconds. The module will then display "mode" and will suggest modes 1, 2 or 3.

- **« Countdown » mode (mode 1 ou 2)**

Select mode (1 or 2) according to your needs for the output action. See table below.

Output action according to the programmed mode					
Mode	When batteries is connected	At timer startup (Power on)	When Countdown starts	At the end of Countdown	At the end of the alarm duration
1					
2					

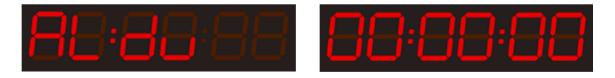After making your selection, the module will display "time" one second then displays the programmed time.

You will then be able to enter the start time of the countdown. After entering the time, the display will flash rapidly for one second indicating that the time is saved. Then it will show you "PrId" for Programming Cancel ID (cancellation code). The display will show you the ID already programmed. You can enter the four digits of the new cancellation code. Again, the display will flash to confirm the code saving.

Then the display will show « bip 0 » or « bip1 ». This indicates the sound configuration
(1 = sound, 0 = no sound). Make your selection and the display will flash to confirm the recording.

Finally, the display will show « AL: du » for « Alarm Duration » and will ask you to enter the alarm duration according to the type of accessory connected. Example: You have connected a siren as an accessory. You may want to make it sound for 5 minutes. So, enter 00:05:00 or if you have connected a trigger to drop a banner, you would then activate the solenoid for 5 seconds. You will enter 00:00:05, and so on.

You are now ready to use the module! You can turn off the module and even disconnect the batteries, the settings remain saved.

To turn off the module

Press the « A » key for 3 seconds. A sound will be emitted to confirming the shut off (if the sound option is set to 1). Note that it is not possible to turn off the module if the countdown is in progress. You must cancel the countdown with the cancellation code, and then turn off the module with the « A » key as mentioned above.

Launching the countdown

After turning on the module or after having programmed it, the display will show -: -: - and the programmed time alternatively. You just have to press the « D » key to start the countdown… and voilà!

Cancelling code

If the correct cancelling code is entered, the counter stopped going down and the remaining time still displayed and the red LED (Armed) will go out. Congratulations, you have succeeded!!! You can then turn off the module by pressing the « A » key for 3 seconds.

End of the countdown

If the cancelling code is not entered before the end of the countdown, the connected accessory will triggered for the programmed duration (mode 1) and the display will blink rapidly announcing the end. Note that to turn off the module after the countdown is complete, you must enter the cancellation code and then press the « A » key for 3 seconds. This is to prevent the losing team, in a game context, from closing the module without the other team knowing it.
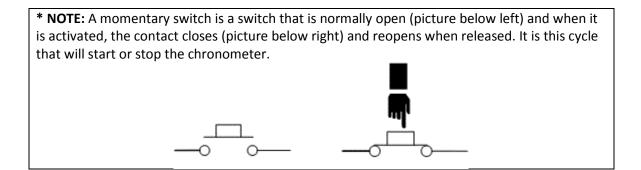
- **Chronometer mode (mode 3)**

After entering in programming mode (see page 3), select mode 3 to activate the chronometer. Connect the desired momentary switch* to the connector marked "switch" (green). Refer to the Module components image (page 2) if necessary.

Trigger your switch to start the chronometer and to stop it. When the chronometer is stopped, you can reset it by pressing the « 0 » key. Otherwise, the time will continue from where it was.

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* NOTE: A momentary switch is a switch that is normally open (picture below left) and when it is activated, the contact closes (picture below right) and reopens when released. It is this cycle that will start or stop the chronometer.

Recommendation: Disconnect the battery when the module is not in use to preserve its charge.