


## Operation and installation manual for the DC-40T-UP-VEH

(Drive over air hose controlled count up timer)



### Description:

- The DC-40T-UP-VEH is a count up timer controlled by driving over air hoses to start, stop, and reset the display - proudly made in the USA!
- **Display:** 4 digits, each 7 segment 4" red led bar style ~640nm 270mcd
- **Lens:** 2423 red acrylic, .118" thick
- **Power:**
  - 12VDC @ 700mA via the included wall adapter (2.1mm x 5.5mm )
  - 24VDC @ 300mA via the internal terminal
- **Time interval:** Digit Shift to a maximum of 99 hours, 59 minutes
- **Time base:** Crystal Oscillator +/- 2 minutes per year (factory calibrated)
- **Mounting:** Wall mount
- **Viewing distance:** 200 feet – maximum recommended viewing distance
- **Enclosure:** All aluminum measuring 16.25" x 6.75" x 3" with a textured black powder coat finish.
- **Weight:** ~ 5lbs (display)
- **Controls:** (2) DC-Pneumatic switches



### DC-Pneumatic (Drive over air hose switches)

- Complete switch, 25ft. hose, anchor
- Internal terminal block for wire connections
- Contact closure output
- Connects to DC-Digital timers-counters-clocks
- Heavy duty construction

## Connections:

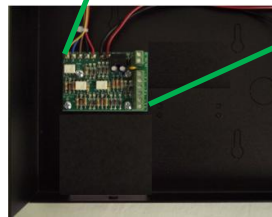


**Terminal Power Option:**  
24VDC (max 2% ripple)

### Terminal Controls:

Terminal 3: Not Connected  
Terminal 2: Stop  
Terminal 1: Reset & Start

These terminal connections  
may be dry contact or 5-  
30VDC PNP input.



← Inside the DC-40 enclosure, mounted to the back case.



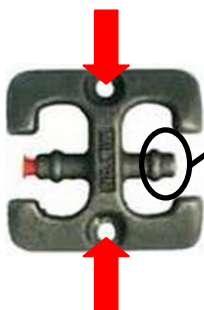
To access the terminals on the DC-Pneumatic  
switch, remove the (4) screws and remove the  
panel.



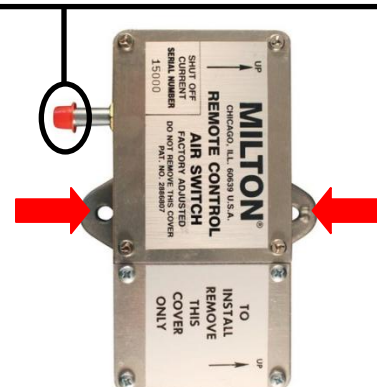
Terminal 3

Terminal 2 (Not connected)

Terminal 1



Slide the air hose onto the air hose switch housing and the anchor. We suggest using a  
zip tie or hose clamp to secure the hose on both ends – to ensure the hose is not pulled  
off. Both the hose anchor and the air switch have (2) anchor points to secure the  
housings (identified by the arrows).



## **Connections: (Continued)**


For the DC-Pneumatic switch controlling the Reset & Start:

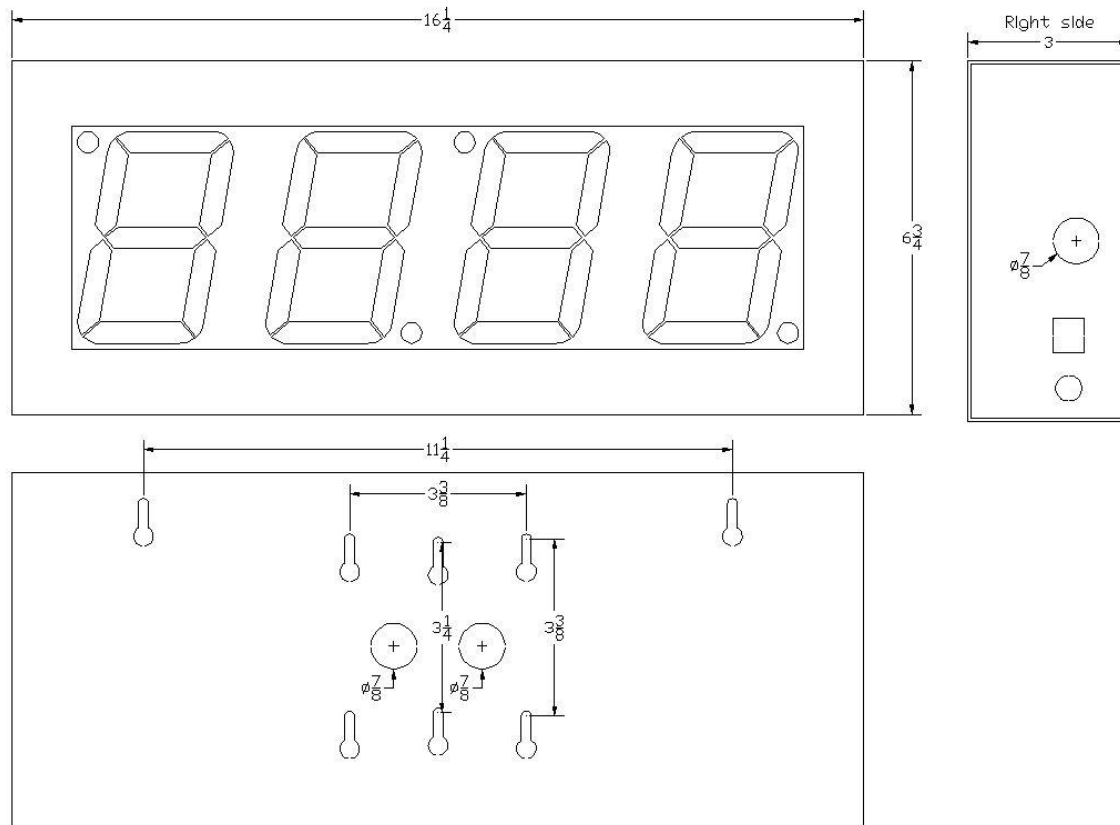
- Connect Terminal 1 of the air switch to Terminal 1 (+) of the DC-40 display.
- Connect Terminal 3 of the air switch to Terminal 1 (–) of the DC-40 display.

For the DC-Pneumatic switch controlling the Stop:

- Connect Terminal 1 of the air switch to Terminal 2 (+) of the DC-40 display.
- Connect Terminal 3 of the air switch to Terminal 2 (–) of the DC-40 display.

## **Operation:**

- When the DC-40T-UP-VEH is first powered on, each of the digits will count up from 0 through 9 as a power on digit/segment test, finally resting at 00:00
- 
- Assuming the DC-Pneumatic air hose switches are wired correctly, triggering the *Reset & Start* switch will start the timer incrementing from 00:00.
    - **Digit Shift Technology:** The DC-40T-UP-VEH will always display the most significant digits. That means it will start out displaying seconds and hundredths of second until 60 seconds is reached. When one minute is reached, it will display minutes and seconds until one hour is reached. When one hour is reached, the unit will display a maximum of 99 hours 59 minutes.
      - The unit will roll over after 99 hours 59 minutes.
  - Triggering the *Stop* switch will stop the timer – and the unit will display that time until the *Reset & Start* switch is triggered again.



- **Mounting:** Mount the DC-40T-UP-VEH in clean, dry and dust free area. The display can be viewed up to 200 feet. There are (6) keyhole mounting knockouts for easy attachment to an electrical handy-box or an electrical 4 square box or simply to several screws secured to a wall. We also supply (4) adhesive backed rubber feet that can be adhered to the enclosure bottom for table or desk top mounting.

**Any questions? Please feel free to contact us:**

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**Web: [www.dc-digital.com](http://www.dc-digital.com)**

**Thank you for choosing for your timing needs!**