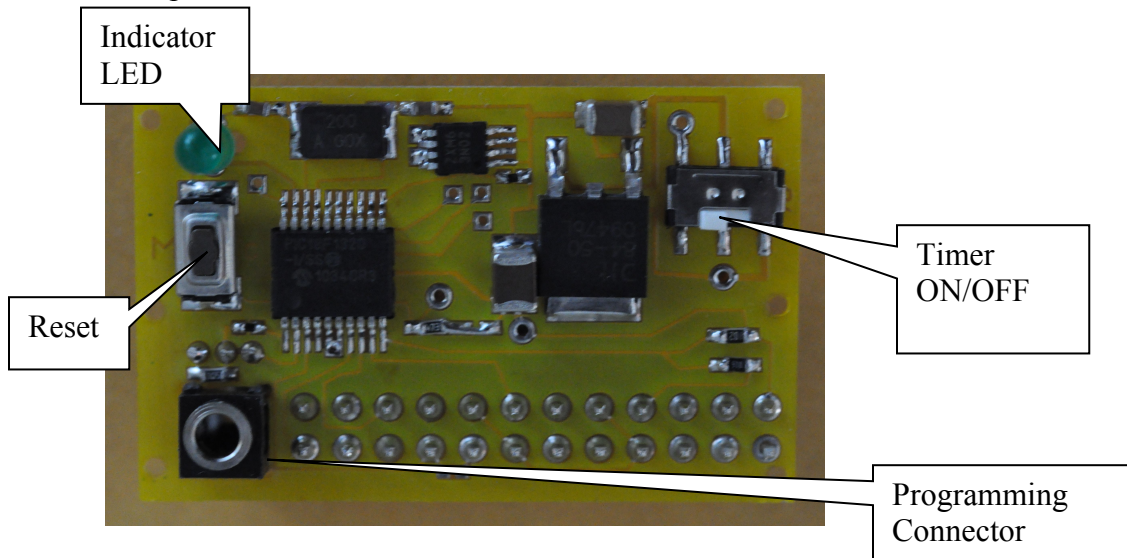


Black Magic Extended Timer

2009 or later Model with .1" or 2.54mm spaces

Features

- Two versions of the timer . standard [green] and V [yellow]. VR regulates the voltage to the servos, standard does not.
- F1A and F1B/F1Q support
- Standard Tow Hook
- Mechanical Relatch Tow Hook
- M&K Style Impulse Hook
- Electronic Relatch Tow Hook
- REN Hook SA
- 4 flight servos plus tow hook servo
- Gust Debounce
- OLA with impulse
- Variable acceleration with other hooks
- Adjust D/T from Tow hook/Start Button
- Radio D/T enabled
- F1Q Start Kill and Long arming period
- F1Q power from BEC



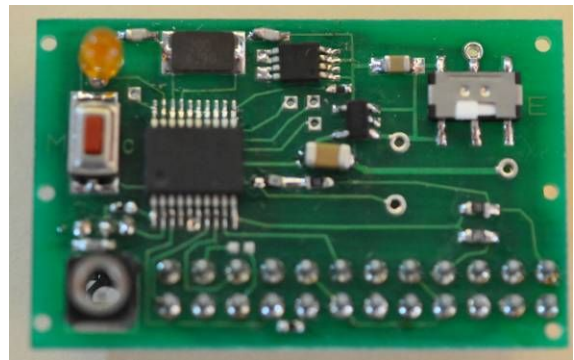
- Programmed by SuperMagic 4.77 or later
- Redundant contacts on power switch
- Beep out of flight time at power up
- Optional beep during tow, flight or D/T
- Optional start Button for F1B/Q
- 10 Timer steps

WARNING. While most Black Magic timers are protected by a diode against connecting a battery the wrong way around, it is very important not to connect a battery to any other set of pins. Doing this can damage the timer and cause the function associated with those pins to no longer work. In particular do not connect a battery across any servo signal and positive pins or any of the hook or start pins.

For the F1Q timer using a motor controller with BEC it must be plugged in the servo 3 position.

On the back the inner row of pins starting on the RIGHT next to the programming jack

+ 5 Volts in
Ground in
Servo 1 signal
Servo 1 positive
Servo1 Ground
Servo 2 signal
Servo 2 positive
Servo2 Ground
Unlatch Switch / tension switch/ electronic hook
Hook Forward Switch/start switch F1B or F1Q
Switch common ground
+5 volts regulated for Hall Effect Switch – only used when switch is Hall Effect



On the second and outer Row from the right

Servo 3 signal – Motor Controller with BEC for F1Q
Servo 3 positive
Servo 3 Ground
Servo h signal – Hook Servo ONLY OR Impulse hook input
Servo h positive
Servo h Ground
Servo 4 signal -
Servo 4 positive
Servo4 Ground
Ground for Radio DT
positive regulated Supply for Radio DT
Signal for Radio DT

If the Timer is hook servo timer Servo h is the hook.

Set the hook Servo from the Hook screen. Start [i.e. closed] and Open position.
The bunt timeout is the time in seconds the hook remains open after the unlatch tension threshold had been crossed back to latch. The hook will then relatch. Be sure to allow enough time for the line to come off on the regular launch.
The unlatch switch is closed when the line tension threshold is passed i.e. when it increases.

Board Layout

Front View

Board size 40 mm X 25.5mm

