

BMK E36+

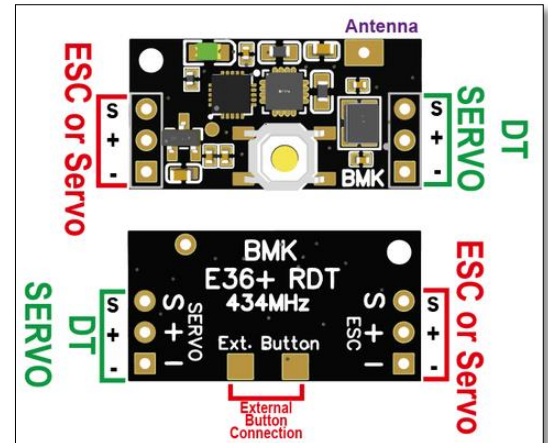
Dual Output Timer with Integral Remote DT

E36+ is a light-weight(<1g) RDT/timer solution with dual outputs.

Notice: The multi-function, Interval Toggle and Servo Toggle features are added on 29 January 2021. Ignore these sections in the document, if you have ordered your timer before this date.

Features

- Function Timers resolution : 0.2s and 0.5s configurable
- DT Timer resolution: 10s
- Maximum Function Time: 60s @0.2s / 20s @0.5s
- Input Voltage: 3-6v (use compatible servo)
- Consumption: ~10mA @ Receiving
- RDT Frequency: 434Mhz
- RDT Range: 2750m (in a good conditions)
- RDT Modulation: Digital Unique ID
- Low Battery Warning: <3.0v (double flashes @idle)
- Dimensions: 24mm x 12.5mm x 5mm
- Weight : <1.0g (without pin headers)



Wiring Examples

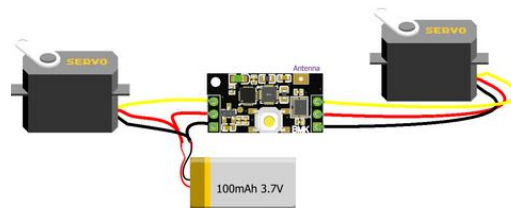
Brushless ESC Wiring

for the most Electric models



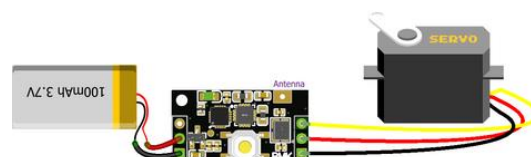
Dual Servo Wiring

the left servo output will mimic the brushless ESC output.



Single Servo Wiring

for the all models except the electric flight



CONFIGURING A NEW TIMER

Binding with a B1 RDT Transmitter



1. Press and hold the timer button before plugging the battery.
2. Plug the battery/ESC when holding the timer button, then release the button
3. The Receiver LED will flash continuously at 5Hz.
4. Click the Transmitter DT Button.
5. The Receiver LED will turn solid RED to show the binding process completed successfully.
6. Remove battery/ESC and plug again to use.

Youtube Video: <https://www.youtube.com/watch?v=HZC7O9ZFdXo>

Changing the time increments (0.2 / 0.5 seconds) (since 29 January 2021)



1. Press and hold the button and plug the battery
2. Keep holding and the light will blink once every half second after 10 seconds. this indicated you are now in the time increment toggle menu.
3. release the button.
4. The timer will toggle between 0.2 and 0.5 seconds modes. If it's on the 0.2s mode before, it will switch to the 0.5s mode. or in reverse.
5. The LED will blink continuously to show the process completed successfully.
6. Remove battery/ESC and plug again to use.

Changing the modes (Standard E36 / Multi-Function) (since 29 January 2021)



1. Press and hold the button and plug the battery
2. Keep holding and the light will blink once every half second after 10 seconds. this is the time increment toggle menu(details above) don't release the button.
3. Keep holding and the light will blink twice every half second after another 10 seconds. this indicated you are now in the mode toggle menu.
4. release the button.
5. The timer will toggle between the Standard E36 and Multi-Function modes. If it's on the Standard E36 mode before, it will switch to the Multi-Function mode. or in reverse.
6. The Receiver LED will blink continuously to show the process completed successfully.
7. Remove battery/ESC and plug again to use.

Changing the servo direction (since 29 January 2021)

1. Press and hold the button and plug the battery
 2. Keep holding
 3. the light will blink 1x every half second after 10 seconds.
 4. then, blink 2x every half second after 10 seconds.
 5. then, blink 3x every half second after 10 seconds.
 6. release the button.
 7. The servo direction will change.
 8. The Receiver LED will blink continuously to show the process completed successfully.
 9. Remove battery/ESC and plug again to use.
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Single Page Field Manual for Standard E35 Mode

How To Set the motor and DT timers?



1. Press and hold the timer button before plugging the battery/ESC. (like the binding process)
2. Plug the battery when holding the timer button, then release the button
3. The Receiver LED will flash continuously at 5Hz.

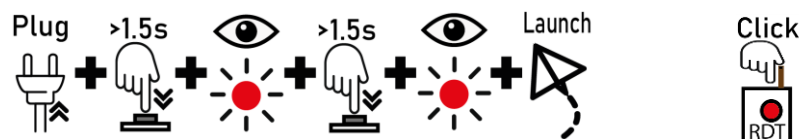
-- MOTOR TIMER DURATION --

4. Press and hold the button and count the LED blinks.
5. Each Blink adds 0.5(or 0.2) seconds to the timer. For example, 10 blinks = 5 seconds @ 0.5s interval.
6. Release the button when you reach the desired timer duration.
7. The LED will fast flash 3 times when saving the timer duration. Then stop blinking
8. You can continue for the DT duration setting or remove the battery if you don't want to change the DT timer duration.

-- DT TIMER DURATION --

9. Press and hold the button and count the LED blinks.
10. Each Blink adds 10 seconds to the timer. For example, 6 blink = 60 seconds.
11. Release the button when you reach the desired timer duration.
12. The LED will fast flash 3 times when saving the timer duration. Then turns to solid RED.
13. Remove battery/ESC and plug again to use.

Using Your Timer



1. Press and hold the timer button for 2 seconds. (LED: continuous light)
2. Release the button. (LED: fast flashing) (disarm automatically in 10 seconds if you don't follow the process below)
3. Press and hold the timer button for 2 seconds. (LED: continuous light) The motor will smoothly throttle up in a second.
4. Release the button, or launch your model..
5. The motor will stop after the motor timer duration ends.
6. DT servo will turn to DT position after the DT timer countdown is completed.

CANCEL or RDT

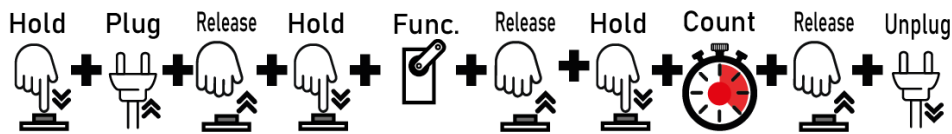
- Just single click the onboard button to return the disarmed position at any stage.
- Or overwrite with the RDT Tx button.

Notes:

- The timer will switch to FIND-ME mode (2hz short blinks) if RDT is activated. Click the onboard button to return disarmed mode before arming it again.
- Short click the timer button and the servo will turn to the start position automatically if it's on DT position from the previous flight

Single Page Field Manual for Multi-Function Mode

How To Set the timers individually? (for Multi-Function Mode)



1. Press and hold the timer button before plugging the battery(like the binding process)
2. Plug the battery when holding the timer button, then release the button (LED: fast flash)

FUNCTION/POSITION SELECTION --

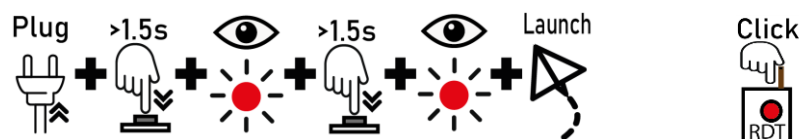
3. Press and hold the button and watch the servo, it will move to the release position of the selected function.
4. Release the button when the servo reaches the release position.
5. The LED will turn OFF and the device will wait for the time settings.

*If you have passed the desired function, you can remove the battery and start from the first line.

TIMER DURATION --

6. Press and hold the button and count the LED blinks.
 - * If you don't want to use a position, release the button before the first blink. It will set zero and pass this position when the timer is running.
7. Each Blink adds 0.5 seconds to the selected function.
 - * Example: 6 blink = 3 seconds for the function 1-3 , 60 seconds for the function 4(DT). @ 0.5s interval.
8. Release the button when you reach the desired timer duration.
9. The device will record the time settings immediately and the LED will fast flash continuously.
10. Remove the battery and plug again to use.

Using Your Timer



1. Press and hold the timer button for 2 seconds. (LED: continuous light)
2. Release the button. (LED: fast flashing) (disarm automatically in 10 seconds if you don't follow the process below)
3. Press and hold the timer button for 2 seconds. (LED: continuous light) The motor will smoothly throttle up in a second.
4. Release the button, or launch your model..
5. The motor will stop after the motor timer duration ends.
6. DT servo will turn to DT position after the DT timer countdown is completed.

CANCEL or RDT

- Just single click the onboard button to return the disarmed position at any stage.
- Or overwrite with the RDT Tx button.

Notes:

- The timer will switch to FIND-ME mode (2hz short blinks) if RDT is activated. Click the onboard button to return disarmed mode before arming it again.
- Short click the timer button and the servo will turn to the start position automatically if it's on DT position from the previous flight

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