

## FUTABA FP-DT1 TACHOTIMER INSTRUCTION MANUAL

### SPECIFICATIONS:

Dimensions	2.5x6.1x9.9"	64x155x22.5mm	
Weight:	4 oz	115g	(without battery)
Power:	3.0v		(2 AA batteries)
Current Drain:	1mA		
Display:	LCD, 4 digit		
Integrating Meter	0-60 hours		(minimum units displayed: min.)
Up Timer	0-60 minutes		(minimum units displayed: sec.)
Down Timer	60-0 minutes		(minimum units displayed: sec.)
Oper. Temp Range:	32 to 104°F	0 to 40°C	
Storage Temp Range:	-4 to 131°F	-20 to 55°C	

### Functions:

- Tachometer 2 blade propeller specifications
  - Low Range: 100 to 30,000 RPM
    - Error +/- 100 RPM
  - High Range: 100 to 60,000 RPM
    - Error +/- 200 RPM

### Features:

- Built-in microprocessor
- Four functions
- Alarm
- Low current drain
- Long battery life

## NOMENCLATURE AND FUNCTIONS:

### ON THE LEFT SIDE:

- REV RANGE switch selects RPM range
  - Low Range: 100-30,000 RPM
    - Error +/- 100 RPM
  - High Range: 100 to 60,000 RPM
    - Error +/- 200 RPM
- INTEG TIME switch
  - starts (COUNT) and stops (HOLD)
- POWER switch



### ON THE RIGHT SIDE

- MODE SEL push button scrolls through and selects:
  - INTEGRATING TIMER
  - UP TIMER
  - DOWN TIMER
  - TACHOMETER
  - Press MODE again to return to INTEGRATING TIMER.
- TIME SET switch sets the alarm time when used as an UP or DOWN timer. Steps in one minute steps each time pressed. Set in five minute steps when pressed and held continuously for 2+ seconds. (Alarm begins to beep 10 seconds before the set time. The elapsed time is indicated by a beep every minute.)
- ENTER switch.
  - View UP and DOWN timer's memory, start, stop, clear timers.

### CENTER:

- MODE DISPLAY
  - Arrow indicates mode selected. Arrow blinks when counting and stops blinking when stopped.

## OPERATING INSTRUCTIONS:

- INTEGRATING TIMER:
  1. INTEG TIME switch set to:
    - COUNT: timer counts. Arrow blinks next to IT.
    - HOLD: temporarily holds the counter.
    - When set to HOLD, counting stops but setting is remembered. When switched back to COUNT, continues counting.
  2. ENTER push button used to:
    - BEGIN count if not currently counting.
    - CLEAR the integrating timer setting.
  3. DISPLAY: indicates the time in hours:minutes. If the display shows 0:03, three minutes have elapsed. May be started and stopped even when unit is set to an additional function as long as power remains on.
- UP TIMER:
  1. MODE SEL pushbutton pressed once to move cursor to UT mode.
  2. ENTER push button:
    - First press starts timer.
    - Second press stops timer.
    - Third press clears timer.
  3. TIME SET button to set time, and ENTER push button to confirm time setting if alarm is desired.
  4. DISPLAY: indicates time in minutes:seconds.
- DOWN TIMER:
  1. MODE SEL pushbutton pressed twice to move cursor to DT mode.
  2. ENTER push button:
    - First press starts timer.
    - Second press stops timer.
    - Third press clears timer.
  3. TIME SET button to set time, and ENTER push button to confirm time setting if alarm is desired.
  4. DISPLAY: indicates time in minutes:seconds.
- TACHOMETER:
  1. MODE SEL pushbutton pressed three times to move cursor to TACH mode.
  2. SENSOR: hold 8-12" ( 200–300mm) from propeller.
  3. NOTE: There is extreme danger when measuring RPM. Use extreme caution. Refer to WARNING.

## **WARNING: EXERCISE EXTREME CAUTION WHEN USING THE TACHOTIMER TO MEASURE RPM. THERE IS DANGER OF SERIOUS INJURY OR DEATH.**

1. When starting the engine, keep spectators away (20+ ft.) and out of the path of the rotating propeller.
2. Keep face and body away from the path of the propeller when you start and run engine.
3. Make all engine adjustments from behind propeller.
4. Do not run engine in loose gravel or sand which maybe thrown into your eyes or face by the propeller.
5. Keep loose clothing, shirt sleeves, ties, scarves, and loose objects away from propeller.

## PRECAUTIONS:

- Make all tachometer measurements outdoors in natural light. Indoor measurements will be inaccurate.
- Use only in the temperature range listed. If below, display will respond slowly. If above, the life of the unit will be shortened. Temperatures exceeding 131°F will drastically shorten the life of the unit.
- Do not place the timer in direct sunlight for long periods of time. This will shorten the life of the LCD.
- Never leave the TACHOTIMER in the rain. Moisture damage cannot be repaired. Handle with care.
- If the TACHOTIMER will not be used for a long period of time, remove the batteries.

- Do not subject the timer to severe shock.