

OSF v20.1C-4 Initial Setup/Configuration Recommendations - by FLYCUTYCAT

INITIAL NOTE: Only adjust the specified settings below, leaving the rest default. Be sure to make all adjustments while still in SI/Metric Unit Mode, only switching to Imperial as a last step after all other adjustments are made.

Wheel

Max Speed (value set in SI/METRIC KM/H mode ONLY):

- Just under 20MPH, for Class 1 ~ pedal assist only, or Class 2 ~ w/ throttle = **32**
- Just under 28MPH, for Class 3 ~ pedal assist only = **45**
- If not concerned with Class 1, 2, or 3 compliance = **Set as desired**

Circumference (baseline estimates, actual measurements slightly vary by tire width/tread/PSI)

- 20" = **1595mm**
- 24" = **1830mm**
- 26" = **2060mm**
- 27.5" = **2215mm**
- 700C = **2250mm**
- 29" / 26 x 4" / 27.5 x 3" = **2300mm**

Battery

Max Current (limits strongly recommended to avoid overheating):

- Stock TSDZ2 (no mods) = **10a**
- TSDZ2 w/ Cooling Mod (Heatsink Plate + Putty) = **15a**
- Recumbent / Trike Model TSDZ2 w/ Cooling Mod (Heatsink Plate + Putty) = **13a**

Low cut-off (to ensure your battery is not over-drained):

- For 36v Batteries = **30.0**
- For 48v Batteries = **39.0**
- For 52v Batteries = **42.0**

Resistance (resistance of your battery for battery meter and watt hours per mile accuracy):

- Most Batteries (13ah – 20ah ~ Eco Cycles Batteries) = **200**
- Larger Batteries or Lower Quality/Older Batteries (21ah and up ~ Eco Cycles Batteries) = **250**
- Exact Resistance of your Battery = ??? ~ **measure resistance with a multimeter/ohmmeter**

SOC

Calculation = Volts (simply converts current battery voltage to a % shown on the battery meter)

Reset at voltage (set to a bit below max voltage of any nominal voltage, may leave a 5% reserve tank):

- For 36v Batteries = **41.5**
- For 48v Batteries = **54.1**
- For 52v Batteries = **58.3**

Motor

Motor voltage (this isn't a battery voltage setting; it refers to the inside motor core type only):

- For most OSF motors from Eco Cycles, inside motor serial number will start with 'G09' = **48v**
- If opted for 36v inside motor/core, inside motor serial number starts with 'G07' = **36v**

Motor power max (limits strongly recommended to avoid overheating):

- Stock w/o Mod = **450w**
- w/ Cooling Mod (Heatsink Plate + Putty) = **750w**
- Recumbent w/ Cooling Mod (Heatsink Plate + Putty) = **650w**

Motor deceleration = 0 (for instant cutout of motor power upon ceasing of pedaling and/or throttling)

Field weakening (sacrifices some efficiency to make the motor spin faster):

- For up to 90 RPM assist = **disable**
- For up to 120 RPM assist (causes some loss of efficiency, only enable if needed) = **enable**

Motor temperature

Feature (for enabling the input if using a throttle OR temperature sensor ~ you cannot use both):

- if using throttle = **throttle**
- if using temperature sensor = **temperature**
- if using neither = **disabled**

Street Mode

Enable Mode = no

Enable at startup = no

Throttle enable = yes (can set to no if not using a throttle, but it won't matter either way in that case)

Display

Clock: Set to current time

Units:

- For MPH and °F = **Imperial**
- For KM/H and °C = **SI** (Metric)

End Note 1: Short press the power button once or twice to exit the main menu / submenu and go to the main HUD screen. Now hold the power button to turn off the display. Your settings are now saved.

End Note 2: If your CLOCK is not keeping, or you notice you have lost other setting changes upon powering on, turn the 'auto-off' feature to 'off', and leave the display powered on overnight for a few nights. This will recharge the internal battery of the display, allowing it to keep the time and all settings.