F-POD batteries & running times

The F-POD standard version takes either 12x D-cells in 2 stacks of 6 or 10x D-cells in 2 stacks of 5 in the older version. D-cells can be of any type *except rechargeable lithium D-cells* - these contain an electronic circuit to reduce the voltage, and this makes them electrically extremely noisy which interferes with the F-POD and severely reduces its ability to record acoustic clicks.

F-POD D12 (12x D-cell)

Each stack of 6 cells must consist of cells of the same type and age. Types:

1. Alkaline (1.5v/cell)
    a. Recommended good quality cells: Energizer Industrial, Procell
    b. Typical capacity >15,000mAh
    c. Last a minimum of 4.5 months and often over 6 months

2. Rechargeable Ni-MH (1.2V/cell)
    a. Recommended good quality cells: Amazon Basics HR20
    b. Typical capacity 10,000mAh
    c. Last a minimum of 2.3 months
    d. Beware: there are some low capacity Ni-MH D-cells are AA cells in a D-cell housing!

3. Primary Lithium (=non-rechargeable) cells (3.6V/cell)
    a. Recommended good quality cells: EVE ER34615
    b. Typical capacity 19,000mAh
    c. Should last a minimum of 10.5 months

F-POD D10 (discontinued 10x D-cell)

Each stack of 5 cells must consist of cells of the same type and age. Types:

1. Alkaline (1.5v/cell)
    a. Recommended good quality cells: Energizer Industrial, Procell
    b. Typical capacity >15,000mAh
    c. Last a minimum of 4 months and often over 5 months
2. Rechargeable Ni-MH (1.2V/cell)
    a. Recommended good quality cells: Amazon Basics HR20
    b. Typical capacity 10,000mAh
    c. Last a minimum of 2 months
    d. Beware: there are some low capacity Ni-MH D-cells are AA cells in a D-cell housing!
3. Primary Lithium (=non-rechargeable) cells (3.6V/cell)
    a. Recommended good quality cells: EVE ER34615
    b. Typical capacity 19,000mAh
    c. Should last a minimum of 9 months

Mixing cell types: a stack of 6 primary lithium cells (or 5 for older F-PODs) can be combined with a stack of alkaline or NiMH cells. The default switch-over voltage for alkaline is used, and the lower voltage stack (i.e. not the lithium cells) will be used first and the lithiums will then be used until they are exhausted. This gives **>7 months running time for 12x D-cell and >6 months for 10x D-cell F-PODs.**

F-POD R25 (25x rechargeable lithium 21700 cells)

Takes 25x 21700 lithium cells which are housed in our custom battery pack. Running time is greater than 8.5 months with the best cells (Samsung 58E cells).

LF-POD R10 (10x rechargeable lithium 21700 cells)

Takes 10x 21700 lithium cells which are housed in our custom battery pack. Running time is greater than 4 months with the best cells (Samsung 58E cells).

Silica Gel

The silica gel packs provided are to stop condensation internally if the POD is closed in a humid environment and immersed in a colder sea. The long narrow packs can be inserted alongside the batteries.

The gel rapidly absorbs water vapour from the air and is quickly saturated which is shown by a change to a greenish colour. To avoid this always have an airtight sealing polythene bag, jar or similar available when you open PODs so you can put the gel immediately into that.

If the gel becomes saturated you can restore its water-absorbing capacity be placing several packs on a piece of corrugated cardboard and warming them in a microwave oven for about 15 minutes on a DEFROST setting.

NB: Full power is too much and can cause burning.

For the rechargeable F-POD a smaller silica gel pack is provided and can go in the lid.