

BAT2FON+

**Sunnytech BAT2FON+ AA Battery USB Socket
Phone Charger with Torch and Compass**

Product Guide

(Designed to guard your safety when you're outdoor)

(2017.02.15)

BAT₂FON₊

----- Index -----

- 1. **BAT₂FON₊** *Cover*..... page 1
- 2. **BAT₂FON₊** *Index*page 2
- 3. **BAT₂FON₊** *Note*page 3
- 4. **BAT₂FON₊** *Features*Page4
- 5. **BAT₂FON₊** *Design Concept*page 5
- 6. **BAT₂FON₊** *Design Concept in graphic*page 6
- 7. **BAT₂FON₊** *Specification*page 7
- 8. **BAT₂FON₊** *Battery Selection Guide*page 8
- 9. **BAT₂FON₊** *Charge Efficiency*page 9
- 10. **BAT₂FON₊** *Functions & Specialties*page 10

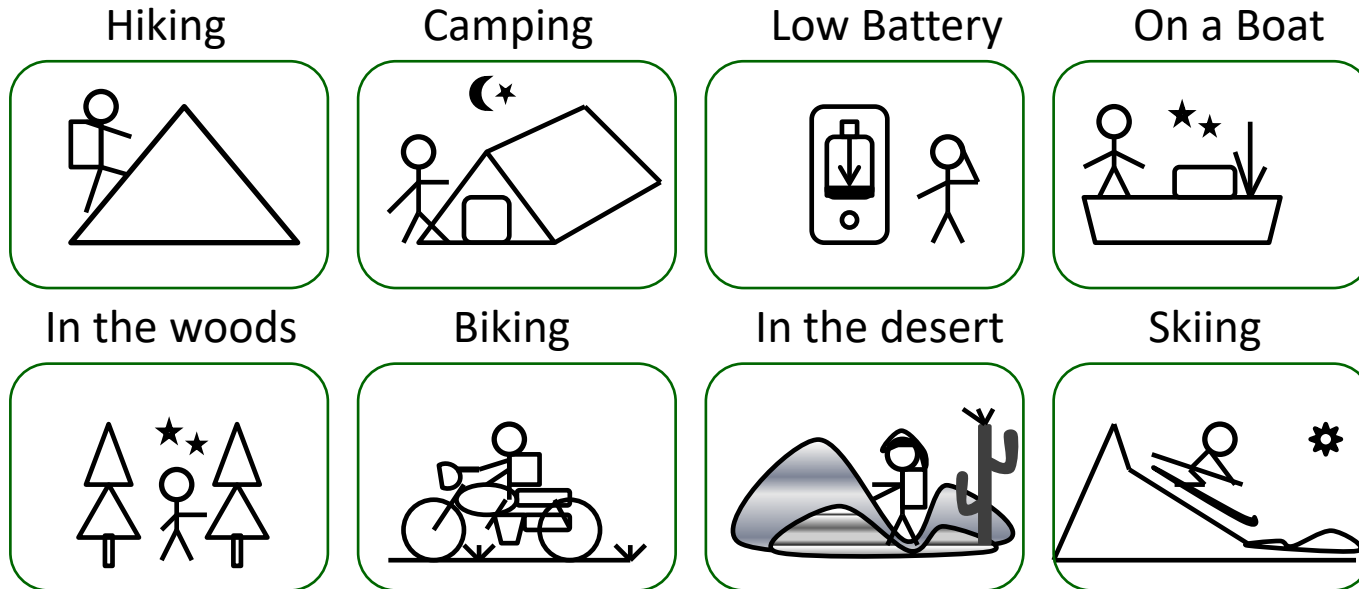
BAT2FON+ = Battery To Phone Plus many useful functions device:

Note:

1. Compass may be influenced when charging or flash light is ON.
2. Recommend using Panasonic or Energizer Alkaline Battery for the best input.
(see page 8 Battery Guide)
3. BAT2FON+ is designed for Mobile phone charging, and is not suitable for tablet or laptop computers.



AA Battery USB Socket Phone Charger with Torch and Compass



Advanced Features:

- Emergency Mobile Phone Power Charger with 2 AA Batteries.
- Torch With Strong Light Applied In the Dark.
- Noctilucent Compass That Guides The right direction.
- No Back Flushes From Phone When Charging.
- IC Controlled Input & Output Voltage Lockout.
- IC Controlled Over-Temperature protection

B2F+ recommend using Panasonic & Energizer Alkaline Batteries

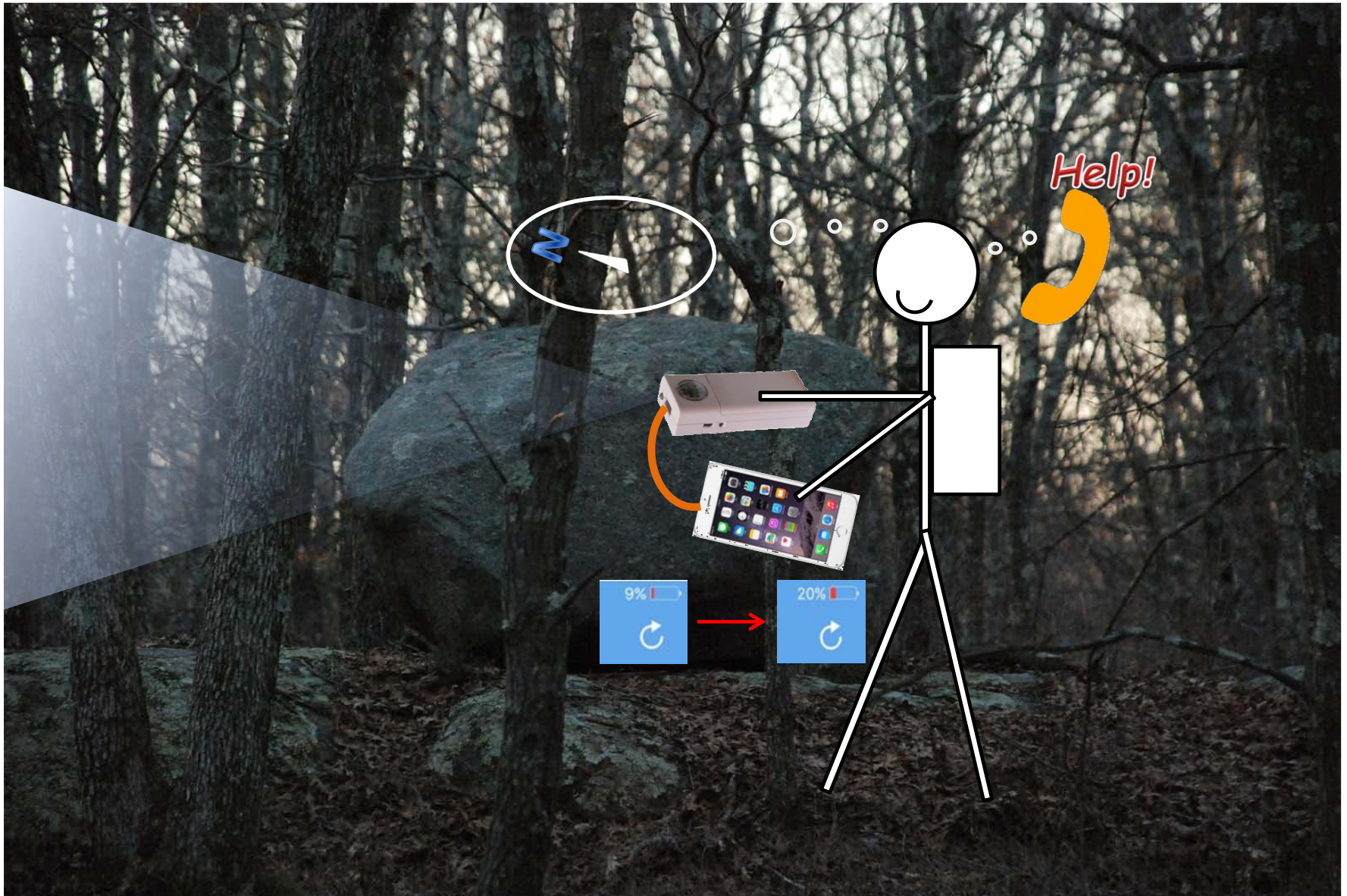
Thinking about one day you are in a mountain side for traveling, you encountered some troubles that you desperately need a rescue by calling someone to help, but your phone battery and power bank has already running out of power.



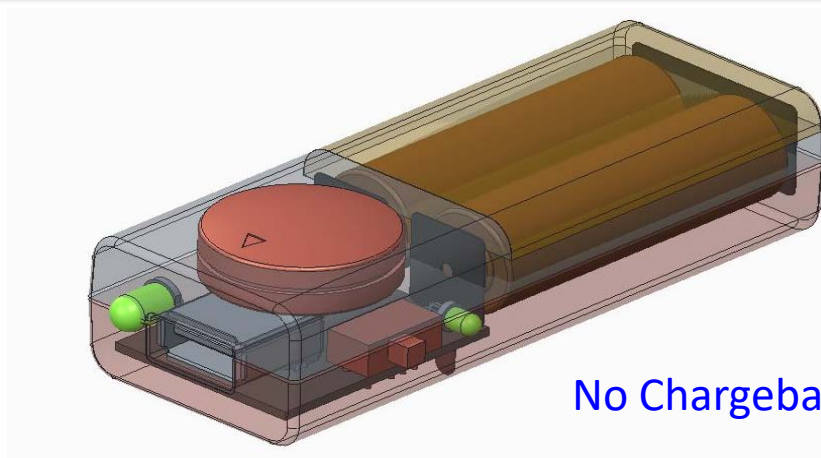
If you have a AA battery charger that can allow you to make a 20 minutes emergency phone call then you can get away from trouble by contact the help. Plus the night is coming soon It will soon be dark and you did not know where you are now and which direction to go.

So we think we need to have the following functions embedded to assist you,
1. A mobile phone charger using AA battery, 2. Flash Light,
3. Noctilucent Compass, 4. Must be small and light for you to carry.

Then the ideas will be integrated like the following:



BAT₂FON+ Specifications



No Chargeback/Back Flush

General Specifications

Dimension:	9.4cm(Length) x 3.2cm(Width) x 2.5cm (height)
Weight:	41g (without battery installed)
Flash Light Illumination:	13CD/164 Lm
Compass:	2cm x 2cm
USB Socket:	1 (charging cable is not included)
AA batteries slots:	2 (recommend using Panasonic and Energizer Alkaline Battery for best result)
Operation Temperature:	-30 °C ~ 50 °C
Storage Temperature:	-30 °C ~ 80 °C
Battery Charging Efficiency:	>87%
V_{IN} :	1.8V~3.2V
V_{OUT}	5V
F_{SW}	500KHz
I_{OUT}	0.3A

Protection

OCP:	Cycle by-cycle current limitation (1A)
OTP:	Over-temperature protection (160°C)
UVP:	Input Under Voltage Lockout (1.8V)
OVP:	Output Over Voltage Protection (6V)
SCP:	Output Short Protection

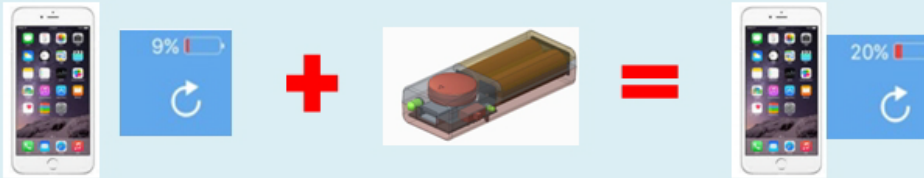
BAT2FON+ Battery Selection Guide







BATTERY Selection Guide

Major Alkaline
AA size batteries

Test in BAT2FON+
LAB

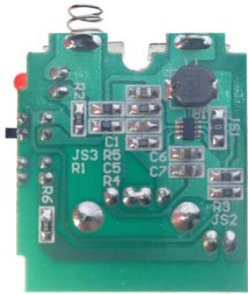
Mobile phone charged by BAT2FON+ Using AA size Alkaline Battery Increment by Battery Gauge



	Battery Name	Battery Picture	HTC M7 (2300 mAh)	Iphone 6 plus(2915 mAh)
1	Panasonic		+17%	+12%
2	Energizer		+19%	+9%
3	Toshiba (Gold)		+14%	+10%
4	GP+		+11%	+6%
5	Toshiba (Silver)		+13%	+9%
6	Duracell		+10%	+2%

**BAT2FON+ has the best efficiency rate to
Convert 2 x AA battery power into your mobile phone.**

BAT2FON+
Charge Board



BAT2FON+ Charge Board Efficiency with DC input				
V _{in} (V)	I _{in} (A)	V _o (V)	I _o (A)	EFF(%)
3.20	0.65	4.62	0.40	0.89
3.10	0.68	4.60	0.40	0.88
3.00	0.70	4.59	0.40	0.87
2.90	0.72	4.56	0.40	0.87
2.80	0.75	4.54	0.40	0.86
2.70	0.78	4.52	0.40	0.86
2.60	0.81	4.49	0.40	0.86
2.50	0.84	4.45	0.40	0.84
2.40	0.88	4.45	0.40	0.85
2.30	0.92	4.42	0.40	0.84
2.20	0.97	4.40	0.40	0.83
2.10	1.02	4.37	0.40	0.81
2.00	1.08	4.36	0.40	0.81
1.90	1.16	4.35	0.40	0.79

BAT2FON+

Product is made for Emergency charge for mobile phone power, illumination and direction finding.

Functions:

2 x AA Battery to power major brand smart phones thru USB socket.

High performance electric torch for illumination

Noctilucent sensitive compass for orientation.

Safety feature:

Special control board with advance IC to prevent Charge Back from phone to battery and maintaining power stable charging voltage safety protections.

Ease of Usage:

All AA battery accepted and Alkaline AA battery is recommended for more power.

3 stages switch: O for charging, L for light turn on, F for non active operations.

Occasion of use:

Emergency helping tool on Camping, Traveling, Mountain Climbing, or in harsh conditions like desert, bog, swamp, bayou, sea, disaster, black out and make emergency calls from mobile phone.



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