



# BASESTATION-2

## OVERVIEW



- RPSMA: RP-SMA socket for connection to external antenna (default is 3dBi Rubber duck antenna)
- BAT: Connect to charger to charge internal battery.
- ON/OFF: Toggle to turn unit on and off.
- F1 – Main function – press to select function display
- F2 – Subfunction - press to select subfunctions

NOTE: Basestation-2 has an internal break sensor intrusion detector, opening receiver box voids warranty.

## POSITION

Power on the unit, by default position is shown in Decimal degrees. When 3D lock is established, the altitude is shown (in Feet) and alternates between an airplane icon and Ft symbol. When 3D lock is lost, the characters "-----" are shown.

## SATELLITES

Pressing F1 once displays the Satellites available to the remote receiver as well as their relative signal strength (using a 2 column bar-graph to depict a 1-10 value). Two digits are used for each Satellite and the SVN is shown in hexadecimal above the signal strength indication (to constrain SVN numbers to 2 columns). Currently active US satellites are listed below:

Basestation-1 DEC2HEX(SVN)	Satellite		Freq.			Last Clock Swap		Other Info
	PRN/SVN	Plane	Std #	Block	Launch Date	(or Set Healthy)		
3F	01/63	D2	Cs3	IIF-2	16 July 2011			
3D	02/61	D1	Rb1	IIR	06 November 2004	27 April 2008		
21	03/33	C2	Cs4	IIA	27 March 1996	01 January 2007		
22	04/34	D4	Rb1	IIA	26 October 1993	14 September 1998		
32	05/50	E3	Rb1	IIR-M8	17 August 2009	27 August 2009		
24	06/36	C5	Rb1	IIA	10 March 1994	19 March 2004		
30	07/48	A4	Rb3	IIR-M6	15 March 2008	24 March 2008		
26	08/38	A3	Cs4	IIA	06 November 1997	16 November 2009		
27	09/39	A1	Cs4	IIA	26 June 1993	24 December 2005		
28	10/40	E3	Cs3	IIA	17 July 1996	25 March 2008		
2E	11/46	D2(F)	Rb1	IIR	07 October 1999	21 December 1999		
3A	12/58	B4	Rb3	IIR-M3	17 November 2006	13 December 2006		
2B	13/43	F3	Rb1	IIR	23 July 1997	26 September 1997		
29	14/41	F1	Rb1	IIR	10 November 2000	15 November 2000		
37	15/55	F2	Rb3	IIR-M4	17 October 2007	31 October 2007		
38	16/56	B1	Rb3	IIR	29 January 2003	18 February 2003		
35	17/53	C4	Rb3	IIR-M1	25 September 2005	16 December 2005		
36	18/54	E4	Rb1	IIR	30 January 2001	07 February 2001		
3B	19/59	C3	Rb3	IIR	20 March 2004	05 April 2004		
33	20/51	E1	Rb1	IIR	10 May 2000	17 May 2000		
2D	21/45	D3	Rb3	IIR	31 March 2003	11 April 2003		
2F	22/47	E2	Rb3	IIR	21 December 2003	12 January 2004		
3C	23/60	F4	Rb2	IIR	23 June 2004	09 July 2004		

18	24/24	D5	Cs4	IIA	03 July 1991	07 September 2000	
3E	25/62	B2	Rb1	IIF-1	28 May 2010	27 August 2010	Clock swap, 12 July 2010, from Cs3 to Rb1...
	---						
1A	26/26	F5	Rb1	IIA	07 July 1992	10 March 1998	
1B	27/27	A6	Cs4	IIA	09 September 1992	20 May 2005	Decommissioned 10 August 2011...
2C	28/44	B3	Rb2	IIR	16 July 2000	10 August 2000	
39	29/57	C1	Rb3	IIR-M5	20 December 2007	02 January 2008	
23	30/35	B5	RB1	IIA	---	16 August 2011	Re-set healthy... note NANU 2011061...
	---						
34	31/52	A2	Rb3	IIR-M2	25 September 2006	12 October 2006	
17	32/23	E5	Rb2	IIA	26 November 1990	26 February 2008	Old PRN23/SVN23... Reinstated on 27 June 2007... note NANU 2007081...
	---						
	---						
					UFN - until further notice		
					NET - No Earlier Than		
					TBD - To Be Determined		

The list is updated and maintained by the NGA GPS Division, <http://earth-info.nga.mil/GandG/sathml/satinfo2.html>. WAAS, EGNOS, MSAS, GAGAN, or GLONASS transponders bit in the above list may be used and contribute to the position fix.

### **TEMPERATURE (LOCAL/REMOTE)**

Local and remote temperature is displayed in Fahrenheit and Celcius when button F1 is pressed three times.

### **SYSTEM UPTIME**

System uptime in HH:MM format is displayed when button F2 is pressed once.

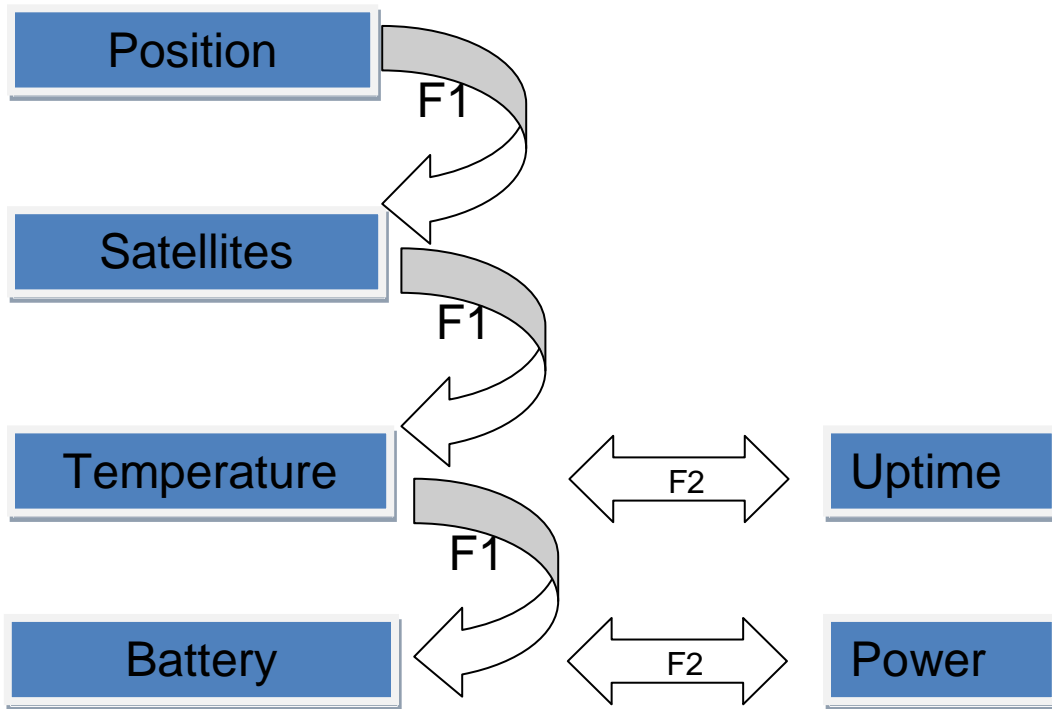
### **BATTERY (LOCAL/REMOTE)**

Local and remote battery voltage and current consumption is shown when button F1 is pressed four times.

### **CURRENT (LOCAL/REMOTE)**

Power consumption and battery resistance is shown when button F2 is pressed.

**MENU FLOWCHART**



## **BATTERY**

The Basestation-2 includes a 9.6V 2500mAh battery pack. In normal operation, this battery should provide for up to 8 hours or longer use. Note that discharging the battery pack completely is not recommended.

If the battery is completely discharged, the smart charger may not detect any voltage and therefore not charge the battery. If this problem occurs, power off the unit, and using an external 9V battery, apply voltage to the base-station connector for 1-2 seconds to “jump-start” the battery. Now reconnect the charger and check whether the charging LED appears. Repeat this process until your smart charger recognizes the battery. NOTE: do NOT leave the 9V battery connected for more than a few seconds per try to avoid damage to the battery.