



# Super Buddy 21ä

## Features and Specifications

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The Super Buddy 21 is more than just another satellite identification and peaking meter. It has a range of features designed to assist in installation, trouble-shooting and testing of many different satellite systems. The Super Buddy 21 has all of the features of the standard Super Buddy satellite meter, plus an internal 21 volt module that allows it to power the new DIRECTV SWM LNBS.

### Mechanical

- Field Replaceable F - connectors (barrel connectors)
- Rugged durable aluminum case with rubber shock guards and weatherproof gaskets
- Current Limit Level of 750 mA
- Quick charge battery with universal AC or vehicle 12 VDC
- USB Computer interface for upgrading via Internet
- Audible tone for signal lock and peak

### Satellite Database

- Positive ID multi-lock algorithm eliminates false positives
- Field Guide holds ALL satellites and ALL their transponders for your region
- Software updates are available as free downloads from [www.appliedin.com](http://www.appliedin.com)
- Manual tune screen allows entry of custom satellites using front panel keypad

### Zip Code Lookup

Enter a U.S. Zip Code, Canadian Postal Code, or Latitude and Longitude coordinates to use the following features:

- Display azimuth, magnetic heading, elevation and polarization offset for any satellite
- Display skew or tilt for DIRECTV or Dish Network multi-sat dishes
- Access Wild Blue beam definitions and display arm angle and APA settings

### Measurements

- Tunes to individual transponders
- Calibrated Signal Level (dBm, dBmV or dBµV) with present and peak bar graph
- Signal Quality (displayed with familiar IRD value with present and peak bar graph or as C/N, Eb/No, or Es/No)
- Bit Error Rate (Post-FEC, Reed Solomon)
- Voltage supplied by IRD
- Current drawn by LNB
- LNB frequency deviation (kHz) to check for LNB drift

### Switch Control

- DiSEqC (both committed and uncommitted)
- 22 kHz
- DIRECTV™ B-Band converter
- Dish Legacy
- DishPro
- Zinwell 6x8
- And more...

### Advanced Testing

- Proof of Performance Test: scan all transponders, save readings and then upload to your PC
- DiSEqC command monitor – monitors DiSEqC command codes from IRD or other device
- Noise Scan – test the frequency response of a cable network (similar to a sweep test)
- Limit Scan – quick test of up to 5 transponders per satellite with pass/fail indication

## Compatible Systems

In addition to the standard DSS, DVB-S, and Digicipher 2 systems, the Super Buddy is compatible with the following:

- Low Ku Band FSS Satellites (i.e., Globecast / Telstar 5 / IA5 / Galaxy 25 / Galaxy 19)
- Bell ExpressVu
- C-Band
- DIRECTV™ Slimline, MFH-1, MFH-2, SWM and SWM-ODU systems (signal level only for Ka band signals)
- Dish Network™ (including Eastern Arc and 118.7 and 129 satellites with locking on 8PSK HD signals)
- DTN
- HughesNet Ku (also displays cross-pol data from modem)
- StarBand
- Star Choice
- Tachyon
- VSAT systems
- Ka Band (Wild Blue™ - includes signal level and zip code look up of beam information)
- Glorystar
- Home2US
- Sky Mexico
- Skyway USA

## Specifications

Frequency range	950 to 2150 MHz
Tuning resolution	Individual Transponders
Signal level range	-70 to -10 dBm (-21 to +39 dBmV) (+39 to +99 dBμV)
Level accuracy	+/- 2 dB typical, 3 dB max
Signal lock formats	DSS, DVB-S, Digicipher 2, 8PSK Turbo
Impedance	75 Ohm
LNB power	13 VDC for V/R, 18 VDC for H/L, 21 VDC for DIRECTV SWM LNBs, Current limited at 750 mA
Switch control	22 kHz, DiSEqC, DISH Legacy
Battery	Rechargeable NiMH 7.2V, 3.0 Ah
Run time/charge	3 hours for a single LNB (depends on LNB current draw)
Universal AC charger	100 to 240 VAC, 50/60 Hz, fast charge and then trickle
Vehicle Charger	12 VDC
Computer interface	USB
RF Connector	Double-F barrel field replaceable
Size (W x H x D)	6.8" x 6.4" x 3.2"
	(17.3cm) x (16.3cm) x (5.8cm)
Weight	2.9 lbs. (1.3 kg)
Operating temperature	0°F to 125°F (-17°C to 51°C)

## Standard Accessories

- Shoulder strap
- Cordura protective flap
- AC Line Cord for charging battery (Universal 100 to 240 VAC Transformer is built into the meter)
- Automobile cigarette-lighter adapter battery charge cord
- PC Download cable (USB)
- Operation Manual
- Training video (DVD format)

## Optional Accessories

- Blue Bunny - voltage converter for Wild Blue installations – tech can align dish before hooking up modem
- NS-1 Broadband Noise Generator – for use with Super Buddy Noise Scan feature to check coax cable integrity