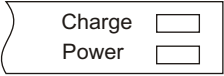
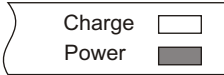
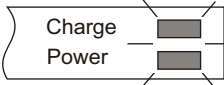


## Trouble Shooting

<u>Problem</u>	<u>Possible Cause/Solution</u>
No Indicator Lights  	Confirm that the AC or cigarette adapter is firmly connected at both ends. Confirm that wall outlet is working. Check fuse in car cord (un-screw tip of the cigarette lighter adapter).
Power Light Only  	<ul style="list-style-type: none"> <li>No battery inserted</li> <li>Battery is already fully charged.</li> <li>Battery mounted incorrectly; remove and remount battery. Clean battery/charger contacts.</li> </ul>
Power and Charge Indicators both Blink  	<p><b>After 8 hrs of Charge -</b> Battery larger than 6000 ma hrs. Defective battery</p> <p><b>Within 1 min. of Charge Start</b> Battery is overcharged. Defective battery</p> <p>(For either condition, see Charging Battery section on other side.)</p>
Hissing noise in Charging Mode	Normal operation due to advanced switching circuitry.

### Technical Specs

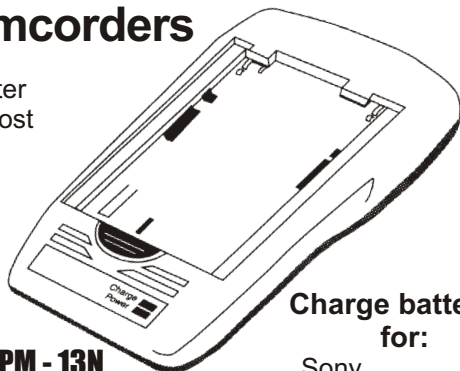
Input:	12V DC
Standby Current:	30mA
Charge Current:	800mA @ constant current mode
Charge Termination:	Fixed voltage (4.2V for 3.6V battery, 8.4V for 7.2V battery)
Size & Weight	5.25" x 2.75" 3.1 oz.

Universal Lithium - Ion Battery Charger Compatibility Chart					
Brand	Battery	Adapter	Brand	Battery	Adapter
Sony	NP-F330	Base Unit	JVC	BN-V615	Plate B
	NP-F500	Base Unit		BN-V712	Plate A
	NP-F520	Base Unit		BN-V714	Plate A
	NP-F530	Base Unit		BN-V812	Base Unit
	NP-F550	Base Unit		BN-V814	Base Unit
	NP-F730	Base Unit		BN-V607	Plate B
	NP-F750	Base Unit		J-1723	Plate B
	NP-F930	Base Unit		BN-V907	Plate B
	NP-F950	Base Unit		BN-V408	Base Unit
	NP-F730H	Base Unit		BN-V416	Base Unit
	NP-F100	Base Unit		BN-V428	Base Unit
	NP-F200	Base Unit		BN-V207	Plate C
	NP-F300	Base Unit		BN-V214	Plate C
	NP-FM50	Base Unit		BN-V507	Plate C
	NP-FM70	Base Unit		BN-V514	Plate C
	NP-FM90	Base Unit	Canon	BP-911	Base Unit
	NP-F10	Plate B		BP-608	Plate A
	NP-F20	Plate B		BP-914	Base Unit
	NP-F30	Plate B		BP-915	Base Unit
Fuji	NP-80	Plate A		BP-941	Base Unit
Panasonic	CGR-D120	Plate B		BP-924	Base Unit
	CGR-D110	Plate B		BP-927	Base Unit
	CGR-D220	Plate B		BP-930	Base Unit
	CGR-D320	Plate B		BP-511	Base Unit
	CGR-V610	Plate C		BP-522	Base Unit
	CGR-V620E	Plate C		BP-617	Plate A
	VW-VBD1/E	Base Unit		NB-1L	Plate C
	VW-VBD2	Base Unit	Sharp	BT-L1	Plate A
	VW-VBD21	Plate B		BT-L2	Plate A
	VW-VBD23	Plate B		BT-L11	Plate A
	VW-VBD24	Plate B		BT-L12	Plate A
Samsung	SB-L160	Base Unit		BT-221	Plate B
	SB-L320	Base Unit		BT-L441	Plate B
	SB-L480	Base Unit		BT-241	Plate B
Hitachi	VM-BPL-13	Base Unit		BT-L41	Plate B
	VM-BPL-27	Base Unit		VR-BL71	Plate A
	VM-E330	Base Unit		VR-BL75	Plate A
	VM-E535	Base Unit		VR-BL81	Plate A
	VM-NP500	Base Unit		VR-BL91	Plate B
	VM-N520	Base Unit		BT-L31	Plate C
				VR-BL72	Plate C
RCA	BB-065L	Base Unit	Sanyo	VM-LC100	Base Unit
	BB-075	Plate A	Toshiba	PDR-BT2	Plate A
	BB-075L	Plate A			

# Lithium Ion Battery Charger for Camcorders

With 3 adapter  
trays to fit most  
lithium - ion  
batteries

Includes  
AC & DC  
adapters



**Model SPM - 13N**

**Sima**<sup>®</sup>  
www.simacorp.com  
*Simple, Fun, Affordable*

**Charge batteries  
for:**

Sony	JVC
RCA	Canon
Sharp	Fuji
Hitachi	Samsung
& Panasonic	

**camcorders!**

## Introduction

Congratulations on buying the Sima SPM-13N, a lithium-ion battery charger for use with camcorder batteries. Using the AC or DC adapters included, you can quickly and easily charge your lithium ion batteries at home or in the car.

## Features

- Precision end-of-charge detection assures a full charge every time.
- "Top-off" function trickle charges to maintain a full charge.
- LED indicator displays charger mode.
- Defective battery detection identifies faulty batteries and halts charging.
- Overcharge protection.

## Warranty

Sima Products Corporation ("Company") warrants that if this product proves to be defective to the original purchaser in material or workmanship within 90 days from the date of original retail purchase, the company will, at the company's option, either repair or replace same without charge (but no cash refund will be made).

### What you must do to enforce warranty:

Ship your unit, freight pre-paid, including reasonable proof of date and place of purchase and description of problem to:

**Attn: Customer Service**  
**c/o Sima Products Corporation**  
**140 Pennsylvania Ave. Bldg #5**  
**Oakmont, PA 15139**

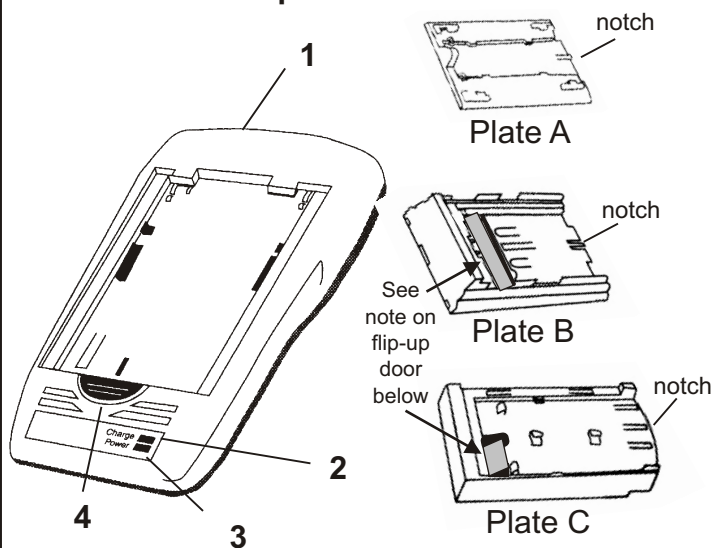
**Exclusions:** This Limited Warranty covers all defects in material and workmanship in the product, except damage resulting from accident, misuse, abuse, attempted repair by anyone other than the Company, neglect or from their normal and ordinary use of the product. The Company accepts no liabilities or obligations for consequential or incidental damage arising out of or in connection with the use or performance of the product. The Limited Warranty provides you with specific legal rights, you may have additional legal rights provided to you under the laws of your state or federal laws.

## Safety and Maintenance

- DO NOT** use charger inside a drawer, closed cabinet, or cover with a cloth. The charger will become slightly warm in normal use, but if contained, heat may damage the charger and battery pack.
- DO NOT** attempt to open the charger. Doing so will void the warranty.
- DO NOT** allow moisture of any kind to come in contact with the charger. **NEVER IMMERSE IN LIQUID!!!**
- DO NOT** store the charger where it may be exposed to extreme temperatures; avoid placing in direct sunlight. High temperatures can shorten the life of electronic devices, damage batteries and warp metal or plastics.
- DO NOT** short circuit the output terminal or contacts.
- DO NOT** drop the unit ; a severe jolt can cause permanent damage and is not covered by the warranty.

If the charger must be cleaned, be sure it is unplugged. Wipe the body of the unit with a clean cloth, lightly dampened with mild detergent. Use a clean cloth, lightly dampened with rubbing alcohol to clean the metal contacts.

## Parts and Components



1. Base Unit                      3. Power Indicator  
2. Charge Status indicator    4. Batt. Adapter plate latch

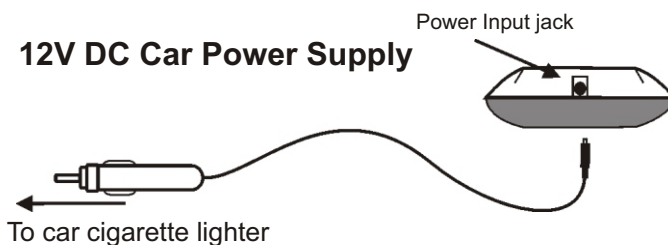
**Note:** Adapter plates B and C each have a flip-up door for use with certain batteries. See flip-up door for listing of battery types.

## Step 1 - Connect to AC Power Supply



Connect the AC adapter plug to the Power Input jack on the rear of the SPM-13N. Plug the AC adapter into any standard 120V AC household outlet. ( See diagram above.) The red Power indicator light will turn on.

## 12V DC Car Power Supply



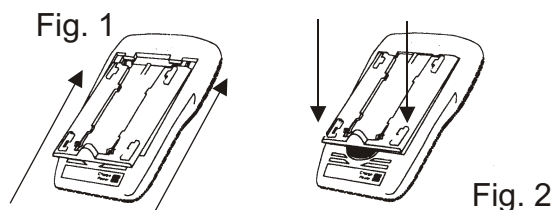
Connect the 12V DC car cord plug to the power input jack on the rear of the SPM-13N. Plug the cigarette lighter adapter into the cigarette lighter socket of the vehicle. (See diagram above.) The red Power indicator light will turn on.

## Step 2 - Mounting the Adapter Plates

Some battery models will require the use of an adapter plate (A, B or C). Consult the battery chart in this manual to determine which adapter plate your camcorder battery requires.

**To install the adapter plates** - slide the central notch on the adapter plate's upper edge into the slot on the upper edge of the charging bay (Fig. 1), then press down firmly on the plate's lower edge (Fig. 2).

The plate will snap firmly in place. Install the battery so the contacts on the battery meet the contacts on the adapter plate. To remove the plate push down on the battery/adapter plate latch.

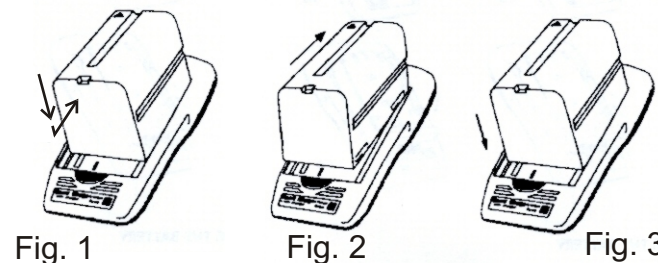


## Step 3 - Mounting the Batteries

**To install the battery** - Align the contacts on your battery with the appropriate contacts on the charger. Typically you can install the battery onto the charger plate the same way you install the battery onto your camcorder. Follow the guides on the battery and the charger.

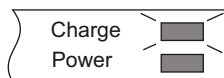
**TIP:** For some battery models, you will press the battery straight down and then slide it up, away from the indicator light, (Fig. 1). On others you will slide the battery up and press it down (Figs.2 and 3).

Either way the battery should slide easily into place. If it does not, do not force the battery into place. Realign the guides and try again.

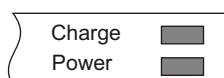


## Step #4 - Charging the Battery

As soon as the battery is properly mounted, charging begins as indicated by the green blinking light on the Charge Status indicator. When charging is complete, the Charge Status indicator stops flashing and remains solid green. At this point, the battery can be removed for use. Removing the battery at this point will not harm it.



Charging (flashing)



Charged (steady)

It is recommended, however, that you leave the battery connected to the charger for another 30 minutes to ensure a full or "topped off" charge.

**Warning: For use with lithium ion batteries only!**  
**DO NOT use with Nickel Cadmium (NiCd) or Nickel Metal Hydride (NiMH) batteries**

## Defective and Overcharged batteries

The charger has a built-in defective battery detection sensor. If the battery does not attain a full charge within 8 hours, it may be overcharged or fully discharged. If so, the Power and Charge Status indicators will flash. However, if your battery is larger than 6,000 ma hrs. it may require more than 8 hours to charge. Remove battery and charge again.

To determine if the battery is overcharged or defective, place it on the camcorder and turn the camcorder on. If the camcorder does not come on, the battery is probably defective. If the camcorder does operate, leave the power on for 30+ minutes, then remove the battery and put it on the charger. The charger should go into the charge mode indicated by the blinking green Charge Status indicator.

Works with these Camcorder Brands and Models	
<b>Sony</b>	<b>7.2V</b> TRV – 15 / 25 / 35 / 75 / 85 / 95 / 99 DCR – VX1000 / VX700 / PC7 / PC10 / TRV8 / TRV10 QVA – 500, TR-67 / 87 / 940 <b>3.6V</b> DCR – PC1 and more
<b>JVC</b>	<b>7.2V</b> GR – DVL9000U / DVL9500U / DVL9800U GR – DVM1, GR – VBM1, GR – DVL series, GR – DV3U, GV – HT1U, GR – DVX Series, GR – DVF11 / 21 / 21U / 31 / 31U, GR – DVM5U, GR – DVM50 / 70 / 90 <b>3.2V</b> GR – DV1, GR – DVXU, GR – DVX1 and more
<b>Panasonic</b>	<b>7.2V</b> VM – DS5 / DS7, NV – DEC, NV – DA1EN, PV – DV200 / 400 / 600 / 710 / 800 / 910 / 950 / 951 AG – EZ30U and more
<b>Sharp</b>	<b>7.2V</b> VL – H860U / 870U / 875U / 880U / 890U <b>3.6V</b> VL – DC1 / 1U, VL – D5000, VLDX10U VL – H410U / 450U / 450 / 500 / 520U / 550
<b>Canon</b>	<b>7.2V</b> ES – 520A / 4000 / 5000 / 6000 / 6500 / 7000 / 8000, Canon ZR, Elura,
<b>Hitachi</b>	<b>7.2V</b> VME – 340A / 535LA / 545LS / 555LA / 635A 645LA / 755LA / 855LA
<b>RCA</b>	<b>7.2V</b> RPO – V730 / 742
<b>Samsung</b>	<b>7.4V</b> SB – L160 / L320 / L480
<b>Toshiba</b>	<b>3.6V</b> PDR – M70
<b>Fuji</b>	<b>3.6V</b> MX – 1700 / 2700 / 2900