

Safety and Maintenance
DO NOT use charger inside a drawer, closed cabinet, on a carpet 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, there are no serviceable parts. 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 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 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 unit with a clean cloth, lightly dampened with mild detergent. Use a clean cloth, lightly dampened with rubbing alcohol to clean the metal contacts.

Trouble Shooting	
Problem	Possible Cause/Solution
No Indicator Lightswith battery mounted	Confirm 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 cigarette lighter adapter).
	<ul style="list-style-type: none">Battery is already fully charged.
	<ul style="list-style-type: none">Battery mounted incorrectly; remove and re-mount battery. Clean battery/charger contacts.

Hissing noise in Charging Mode	Normal operation due to advanced switching circuitry.
--------------------------------	---

**If you have trouble installing your battery
or if it is not listed on this chart,
do not call the store where you purchased the UDC-2.
Call Sima customer service at 800-345-7462**

Battery Chart				
Brand	Volt	Batt. type	Model Number	Tray
Canon	6V	NiCad/NiMH	BP-E77/711/714/718/722/729	Base
Canon	7.2V	Lithium Ion	BP-80/85	A
Canon	7.2V	Lithium Ion	BP-608/617	C
Canon	7.2V	Lithium Ion	BP-911/914/915/924/927/930/941/945	C
Hitachi	6V	NiCad/NiMH	VM-BP82/82A/83/84/84A	Base
Hitachi	7.2V	Lithium Ion	VM-BPL13A/27A/30A/60A	A
Hitachi	7.2V	Lithium Ion	DZ-BP16/28	C
JVC	6V	NiCad/NiMH	BN-V11U/12U/14U/140U/22U/50U/60U	Base
			BN-V20U/25U	Base
JVC	7.2V	Lithium Ion	BN-V607/615U	A
JVC	7.2V	Lithium Ion	BN-V812/814U	A
Panasonic	6V	NiCad/NiMH	PV-BP15/17/18/ VW-VBS1E/S2E	Base
Panasonic	7.2V	Lithium Ion	VW-VBD1/PV-BP5/AG-BP25	A
Panasonic	7.2V	Lithium Ion	CGR-D120/220/320/S602/	C
			PV-BP8A/VW-VBD20	C
			CGA DU07/14/21	C
RCA	6V	NiCad/NiMH	BB-45/75L/060/120/FB120/1260	Base
RCA	7.2V	Lithium Ion	BB-55L/65L/85L	A
Sharp	6V	NiCad/NiMH	BT-80	Base
Samsung	7.2V	Lithium Ion	SB-L110/220	C
Samsung	7.2V	Lithium Ion	SB-L160/320/480	C
SONY	6V	NiCad/NiMH	NP-55/66/67/68/77/78/98	Base
SONY	7.2V	Lithium Ion	NP-FF50/70	A
SONY	7.2V	Lithium Ion	NP-F100/200/300	A
SONY	7.2V	Lithium Ion	NP-F330/530/550/730/730H/750/750	A
			SP/930/950/960	A
SONY	7.2V	Lithium Ion	NP-FM30/50/70/90/91/QM50/70/90	A

Warranty Statement
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).
To enforce this 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.

**Universal Battery Charger for
use with Camcorders**

Model UDC-2

Works with these
camcorders:
Sony JVC
RCA Canon
Sharp Hitachi
& more!



sima®

www.simacorp.com
800-345-7462

**Includes 3 adapter trays to charge
Lithium - ion,
Ni-Cad
and NIMH batteries**

Includes AC & DC adapters

©2004 Sima Products Corporation
140 Pennsylvania Ave. Bldg #5 Oakmont, PA 15139
800-345-7462 Fax 412-828-9338 **www.simacorp.com**
PN217001

Introduction

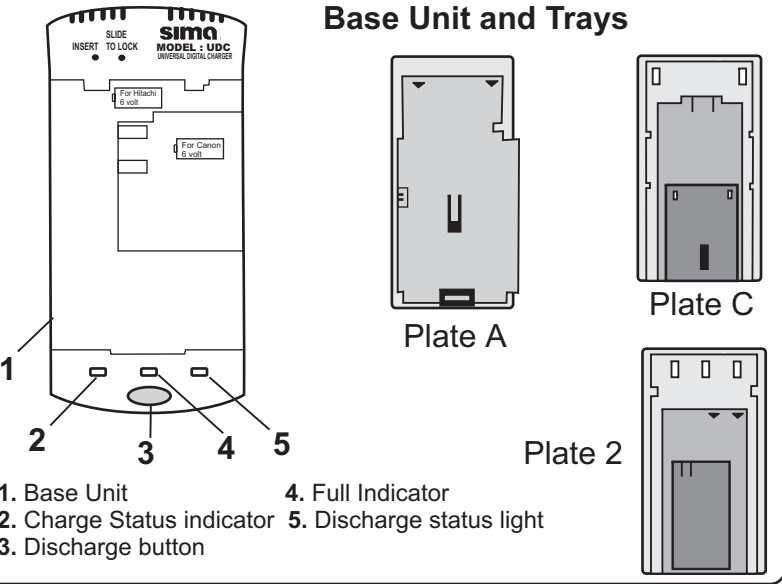
Congratulations on buying the Sima UDC-2, a universal battery charger for use with digital camera batteries. Using the AC or DC adapters included, you can quickly and easily charge your Nicad, NiMH or lithium ion camcorder batteries at home or in the car. **This package includes: UDC base unit, TrayA, Tray C & Tray 2, 120V AC adapter, 12V DC car adapter and this instruction manual.**

Features

- ★ Precision end-of-charge detection assures a full charge
- ★ "Top-off" function trickle charges to maintain a full charge.
- ★ LED indicator displays charger mode.
- ★ Defective battery detection.
- ★ Overcharge protection.

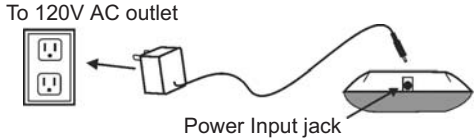
Technical Specs

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



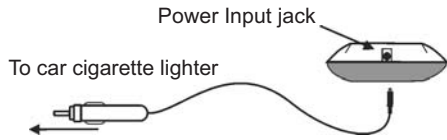
How to Connect 120V AC Power Supply

Connect the AC adapter plug to the Power Input jack on the rear of the UDC base. Plug the AC adapter into any standard 120V AC household outlet. (See diagram at right.) The green Full indicator light will blink once.



How to Connect 12V DC Car Power Supply

Connect the 12V DC car cord plug to the power input jack on the rear of the UDC base. Plug the cigarette lighter adapter into the cigarette lighter socket of the vehicle. (See diagram at right.) The green Full indicator light will blink once.

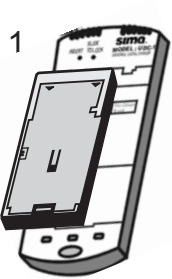


Mounting the Adapter Plates

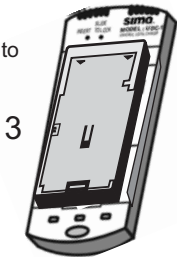
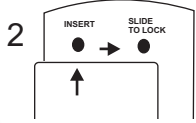
Some battery models will require the use of an adapter plate (AA/AAA, 1 or 2). Consult the battery chart in this manual to determine which adapter plate your camera or camcorder battery requires.

To install the adapter trays

Step 1. Place the adapter tray onto the base unit.



Step 2. Align the arrow on the tray to the INSERT dot on the base unit.

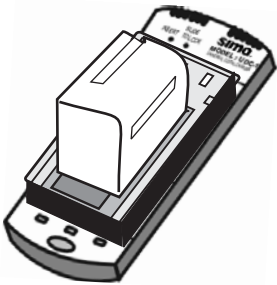


Step 3. Slide the tray to the right. It will snap firmly in place.

To remove the tray, slide it to the left.

Mounting the Batteries

To install the battery - Typically, you can install the battery onto the charger plate the same way you install the battery onto your camcorder. Align the contacts on your battery with the appropriate contacts on the charger. Follow the guides on the battery and the charger. The battery should slide easily into place. If it does not, do not force the battery into place. Realign the guides and try again. The UDC-2 will automatically detect the battery type and voltage from the tray.



Charging the Battery

As soon as the battery is properly mounted, charging begins as indicated by the steady red light on the Charge Status indicator.(Fig. 1 below) When charging is complete, the green Full Status indicator will turn on (fig. 2). At this point, the battery can be removed for use. Removing the battery at this point will not harm it. It is recommended that you leave the battery connected tot he charger for another 30 minutes to ensure a full or "topped off" charge

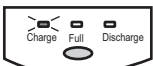


Fig. 1

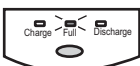


Fig. 2

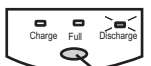


Fig. 3

Press to discharge

Discharging the Battery

To maximize the full power of your NiCad and NiMH batteries, we recommend discharging before recharging. To discharge, mount the battery on the tray and press the Discharge button. (Fig. 3 above). The yellow Discharge Status indicator will turn on. When discharging is complete, the battery will automatically begin to recharge and the red Charge Status indicator will turn on (Fig. 1). Depending on the amount of charge left in the battery, this may take several hours. **Note: Lith-ion batteries do not require discharging.**