

**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**

<u>Problem</u>	<u>Possible Cause/Solution</u>
No Indicator Lights with 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).

Battery is already fully charged.

Battery mounted incorrectly; remove and re-mount battery. Clean battery/charger contacts.

Hissing noise in Charging Mode	Normal operation due to advanced switching circuitry.
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**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-1. 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 1
FUJIFILM	3.7V	Lithium Ion	NP-40/60/80/100/120	Base 1
Hitachi	6V	NiCad/NiMH	VM-BP82/82A/83/84/84A	Base 1
JVC	6V	NiCad/NiMH	BN-V11U/12U/14U/140U/22U/50U/60U	Base 1
JVC	3.6V	Lithium Ion	BN-V20U/25U	Base 1
JVC	3.6V	Lithium Ion	BN-V712/714U	Base 1
Kodak	3.6V	Lithium Ion	KLIC-3000/5000	Base 1
PENTAX	3.7V	Lithium Ion	D-Li2/Li7	Base 1
Panasonic	6V	NiCad/NiMH	PV-BP15/17/18/ VW-VBS1E/S2E	Base 1
RCA	6V	NiCad/NiMH	BB-45/75L/060/120/FB120/1260	Base 2
RCA	3.6V	Lithium Ion	BB-75	Base 2
RICOH	3.6V	Lithium Ion	DB-20/30/40	Base 1
Sharp	6V	NiCad/NiMH	BT-80	Base 2
Sharp	3.6V	Lithium Ion	BT-L1/2/11/12	Base 2
SONY	6V	NiCad/NiMH	NP-55/66/67/68/77/78/98	Base 2
SONY	3.6V	Lithium Ion	NP-FC10/11	Base 2
SONY	3.6V	Lithium Ion	NP-F10/20/30/FS11/21/3	Base 2
TOSHIBA	3.6V	Lithium Ion	NP-100/ PDR-BT1/2/2A/3	Base 1
AA	1.2V	NiCad/NiMH	Minolta, Olympus, Nikon and others.	AA/AAA
AAA	1.2V	NiCad/NiMH	Consult your owner's manual.	AA/AAA

**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 Digital Cameras**

**Model UDC-1**

Works with these digital cameras:  
 Sony                      Kodak  
 Fuji                        Canon  
 Sharp                      Pentax  
 Minolta                    Olympus  
 & more!



**sima**®

[www.simacorp.com](http://www.simacorp.com)  
800-345-7462

**Includes 3 adapter trays to charge Lithium - ion, Ni-Cad and NIMH batteries. Also AA & AAA**

**Includes AC & DC adapters**

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 140 Pennsylvania Ave. Bldg #5 Oakmont, PA 15139  
 800-345-7462 Fax 412-828-9338 [www.simacorp.com](http://www.simacorp.com)  
 PN21700

## Introduction

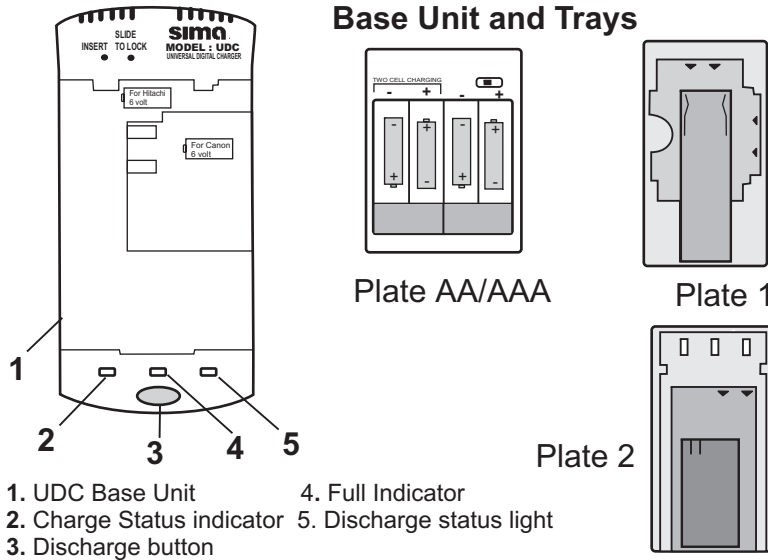
Congratulations on buying the Sima UDC-1, a universal battery charger for digital camera batteries. Using the AC or DC adapters included, you can quickly and easily charge your AA/AAA, Nicad, NiMH or lithium ion batteries at home or in the car. **This package includes: UDC base unit, AA/AAA tray, Tray 1 & 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.

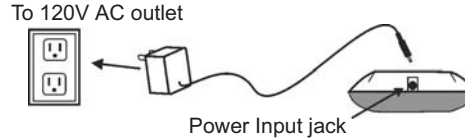
### Technical Specs

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" x .75" 3.1 oz.



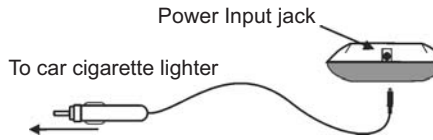
## How to Connect 120V AC Power Supply

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.

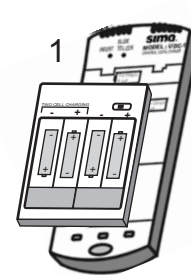


## Mounting the Adapter Plates

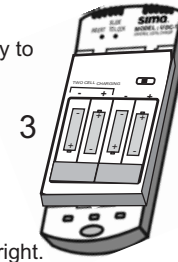
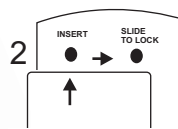
Some battery models will require the use of an adapter plate (AA/AAA, 1 or 2). Consult the battery chart in this manual to determine which adapter plate your camera or camcorder battery requires.

### 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.

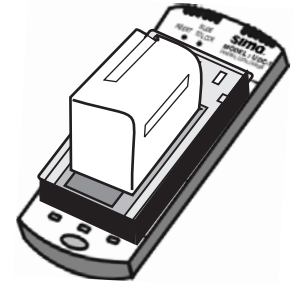
**For AA/AAA** - The AA/AAA tray has a 2 or 4 battery switch located on the top right corner. When set for 2, it only charges the 2 slots on the left hand side. Always charge AA/AAA batteries in matched pairs (either 2 or 4 of the same kind.) Be sure to follow polarity markings on the tray. Charge NiCad, NiMH & AA/AAA batteries only.



**NEVER CHARGE ANY TYPE OF ALKALINE BATTERIES!**

## 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-1 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) If the battery is dead, it may take up to 30 min for the Charge indicator to light up. When charging is complete, the green Full Status indicator will turn on (fig. 2). At this point, the battery can be removed for use. It is recommended that you leave the battery connected to the charger for another 30 minutes to ensure a full or "topped off" charge

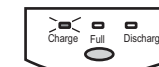


Fig. 1



Fig. 2

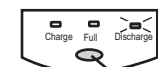


Fig. 3

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.**