

Warranty and Support

For Warranty & Service Information, Call:
1-800-653-5350

Outside North America, contact your local Symbol representative.

Symbol products are warranted against defects in workmanship and materials for a period of one year from the date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

This warranty is limited to repair or replacement at Symbol's option, with reasonable promptness after being returned to Symbol by a carrier selected and paid for by the customer. These provisions do not prolong the original warranty term for any product which has been repaired or replaced by Symbol.

This warranty applies to the original owner and does not extend to any product which has been subject to misuse, neglect, accidental damage, unauthorized repair or tampering. Preventive maintenance activities are not covered by warranty.

If you purchased your Symbol product from a Symbol Business Partner, contact that Business Partner for service.

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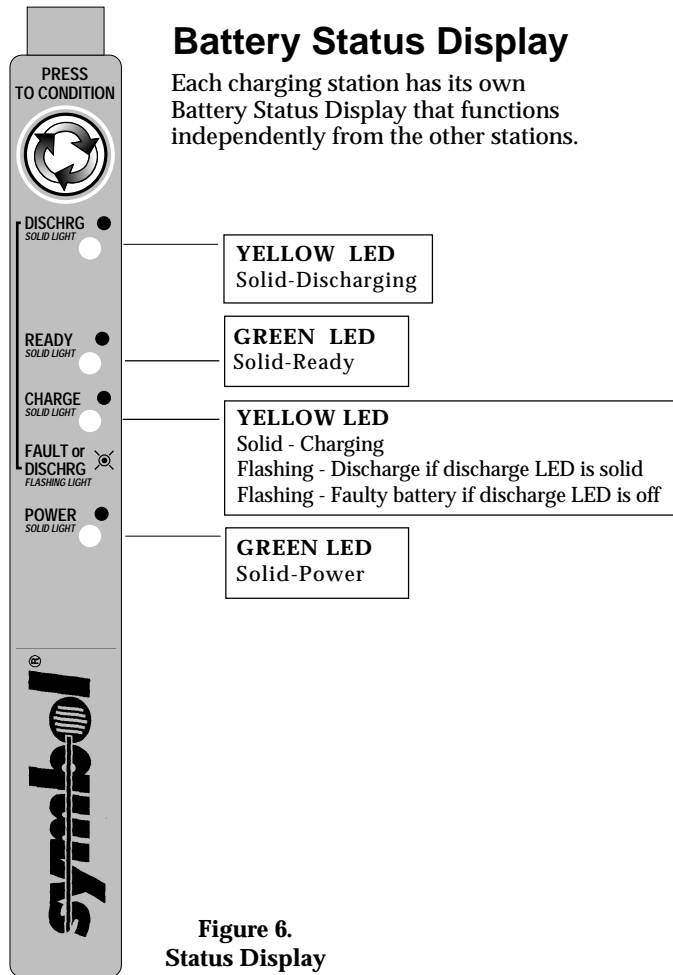


Figure 6.
Status Display

Power Supply Connection

WARNING

Never alter an AC cord or its plug. If it does not fit into your outlet, have a proper outlet installed by a qualified electrician. An improper connection can cause an electric shock.

WARNUNG

Wechselstromkabel bzw. Stecker nicht verändern. Wenn der Stecker nicht in Ihre Steckdose paßt, muß eine neue Steckdose von einem qualifizierten Elektriker installiert werden. Eine unsachgemäße Verbindung kann zu Elektroschock führen.

WARNING

To reduce the risk of electric shock, the charger must be grounded.

WARNUNG

Um das Risiko eines Elektroschocks zu verringern, muß das Ladegerät geerdet sein.

The power supply uses a nominal 115 or 230 volt circuit with a grounding plug that fits one of the outlets shown in Figure 3. Insert the grounding plug into an outlet that is properly installed and grounded, in compliance with all local codes and ordinances.

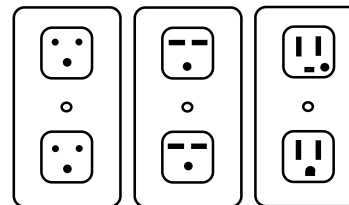


Figure 3.
Grounded Outlets

Upon completion of the charging cycle, the charger switches to "Maintenance Mode" where it maintains the battery at 100% of its rated capacity. All the batteries listed on the Battery/Adapter Reference Card (PN:70-16213-0X) charge in two hours or less.

CAUTION

Do not charge a battery that is below 0°C (32°F). Allow the battery to warm up to room temperature before charging.

ACHTUNG

Batterien unter 0° C nicht aufladen! Vor dem Aufladen muß die Batterie auf Zimmertemperatur gebracht werden.

NOTE

The operating temperature of the device is 0°C (32°F) - 40°C (104°F). Charge batteries at room temperature 20°C (68°F) - 25°C (77°F). Batteries that are charged in conditions that are above or below room temperature will exhibit battery life below their rated capacity. This also applies to the temperature of the battery itself. Allow batteries that are below 20°C (68°F) or above 25°C (77°F) to adjust to room temperature before charging.

Parts of the UBC 1000

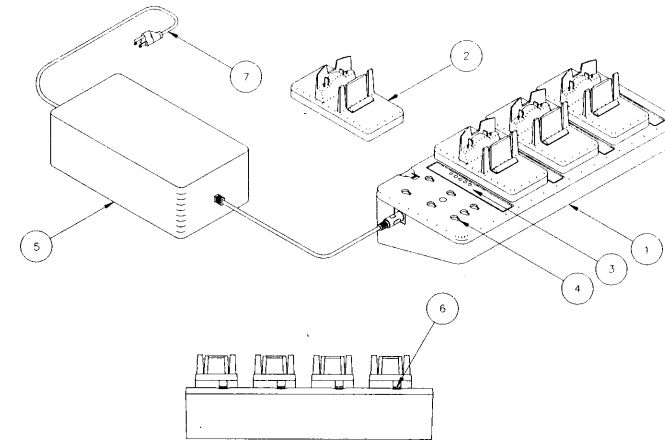


Figure 1.
UBC 1000

Legend

1. Charger Base
2. Battery Adapter (See PN: 70-16213-0X for adapter)
3. Battery Status Display
4. Contacts
5. Power Supply
6. Locking Tab
7. Power Cord

Installation

WARNING

*When securing the power cord, do not pierce rubber insulation.
This may cause damage or personal injury.*

WARNUNG

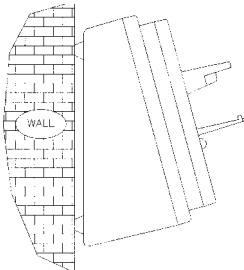
Beim Anbringen des Stromkabels Gummiisolierung nicht beschädigen. Löcher in der Gummiisolierung können Schaden oder Verletzungen verursachen.

Desktop

Place the charger on a solid, level surface that is free of debris (for additional information on Safety Guidelines see page 3). Ensure the power cord is unobstructed to prevent damage, stress or injury.

Wallmount

Place the template included with the charger where the charger is to be mounted and trace. Use the anchors and screws provided to install the charger.



Ensure the power cord is securely attached to vertical service to prevent damage, stress, or injury.

Figure 2.
Wall Mount

Charging the Battery

Insert the battery into its appropriate adapter (See Figure 7.) Ensure the polarity markings on the battery (+, -) match with those of the adapter. When the battery is inserted, the charging system begins the rapid charge cycle. When this cycle is complete, the "READY" indicator on the Battery Status Display turns solid green, and the battery is at 95% of its rated capacity. To attain 100% of its capacity the battery should remain in the charger for 3 hours. A charged battery may be stored in the charger indefinitely.

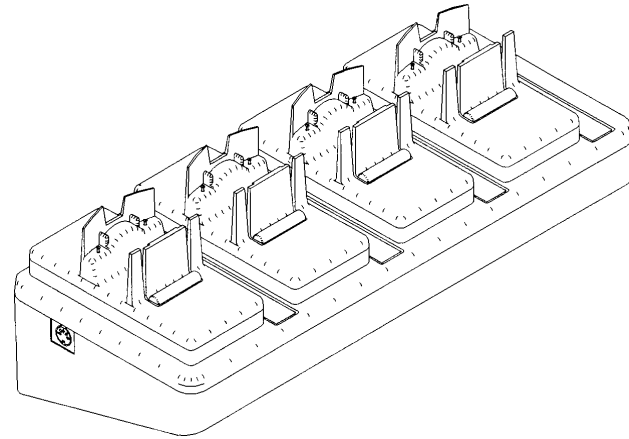


Figure 7.
UBC 1000

A temporary adapter can be used to connect the grounding plug to a properly grounded two-prong outlet. A 115-volt adapter is shown in Figure 4. Connect the grounding plug on the adapter to the outlet box using the cover plate screw. Use the temporary adapter only until a properly grounded, three-prong outlet can be installed by a qualified electrician.

WARNING

Before using an adapter, ensure that the outlet box is grounded. If you are not sure the box is grounded, have it checked and repaired, if necessary, by a qualified electrician.

WARNUNG

Vor der Verwendung des Adapters muß sichergestellt werden, daß die Steckdose geerdet ist. Wenn Sie sich nicht sicher sind, ob die Steckdose geerdet ist, muß diese überprüft und ggf. von einem qualifizierten Elektriker repariert werden.

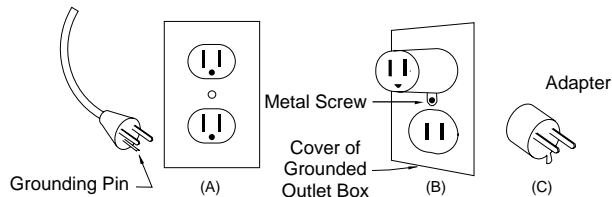


Figure 4.
Temporary 115-Volt Adapter

The UBC 1000 power supply manages and conditions the power input to the charger. This device negates the need for a resettable or replaceable fuse. If a power surge occurs the power supply temporarily interrupts the current supply until the condition is corrected. If the power light on the power supply fails to light an extreme surge may have occurred, and the power supply may trigger an internal fuse that must be serviced by the manufacturer. Return the power supply for repair or replacement immediately.

Battery Adapter Installation

To install the battery adapter:

1. Align and insert the adapter into battery adapter slots of the charger.
2. Slide the adapter downward, locking it into place.

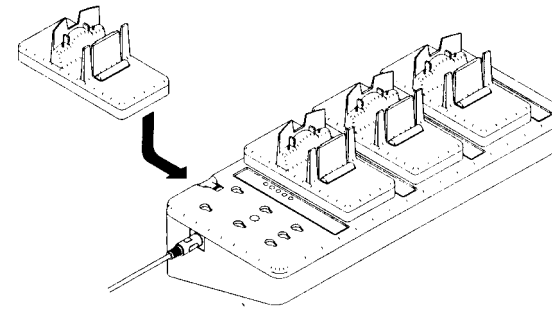


Figure 5.
Adapter Installation.

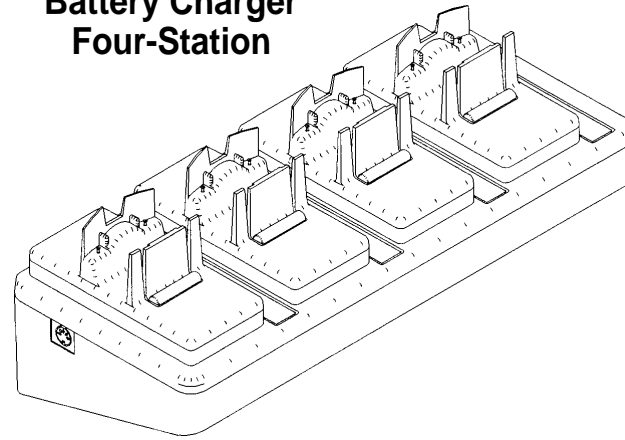
Battery Adapter Removal

Hold the locking tab up and slide the adapter upward to remove from the charger.



UBC 1000

**Universal
Battery Charger
Four-Station**



70-16212-02
Revision A - August 1997

Product Guide

WARNUNG

Um das Verletzungsrisiko möglichst gering zu halten, sollte das Ladegerät nur mit autorisierten Symbol-Produkten verwendet werden. Andere Batterien oder Adapter können explodieren und Verletzungen bzw. Schaden verursachen.

- Das Ladegerät nicht Regen, Schnee oder direktem Sonnenlicht aussetzen.
- Das Ladegerät nur bei einer Zimmertemperatur von 20°C-25°C verwenden.
- Das Ladegerät in einem gut belüfteten Raum aufbewahren, in dem es keinen Fremdmaterialien oder Verschmutzung ausgesetzt ist.
- Um die Gefahr eines Elektroschocks zu verringern, das Ladegerät vor dem Reinigen oder Auswechseln der Adapter aus der Steckdose ziehen.
- Verbrauchte Batterien nur gemäß örtlicher Gesetze für gefährliche Arbeitsstoffe entsorgen.
- Batterien, Ladegerät oder andere damit verbundene Komponenten nicht auseinandernehmen, anzünden, ändern oder kurzschließen.
- Vor der Verwendung an allen Nickel-Kadmium-Batterien einen Konditionierungszyklus durchführen, um sicherzugehen, daß die Batterie richtig und vollständig geladen ist.

Conditioning the Battery

To condition a battery exhibiting a decrease in life, insert the battery into the charger and hold down the "CONDITION" cycle button at the top of the Battery Status Display for 2 seconds (see Figure 6.) The charger performs a complete (100%) discharge of the battery and recharges it to full capacity, eliminating conditions that may cause it to perform below its rated capacity. This deep discharge cycle may take 12-13 hours to complete.

Note: This cycle should only be used once every several weeks. Performing the conditioning cycle on a daily or weekly basis shortens the usable life of the battery.

If conditioning the battery fails to eliminate this condition, your battery may have exceeded its usable life and may need replacement. Most batteries have a usable life of approximately 500 charge/discharge cycles. This number varies depending on use and battery cell manufacturer.

CAUTION

The conditioning function is not suitable for Lithium Ion type batteries. Use of this function will shorten the usable life and may cause damage to the battery.

ACHTUNG

Die Konditionierungsfunktion eignet sich nicht für Lithium-Ionen-Batterien. Konditionieren dieser Batterieart kann die Lebensdauer der Batterie verringern oder Schaden an der Batterie verursachen.

Introduction

The UBC 1000 four-slot battery charging system is designed to charge/condition different battery chemistries and configurations currently supported by Symbol portable products. This includes Nickel-Cadmium (NiCd), Nickel-Metal Hydride (NiMH) and Lithium-Ion (LiIon) battery packs. For a complete list of supported batteries, see the Battery/Adapter Reference Card (PN: 70-16213-0X). The UBC 1000 allows you to use one charging device to charge your different battery types simultaneously - truly a "Universal" approach.

About this Guide

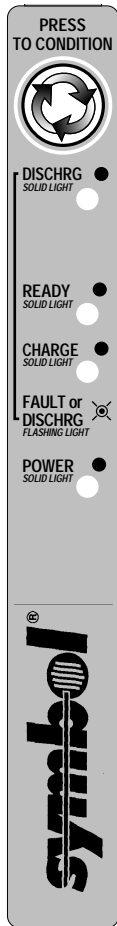
This guide presents the setup, use, maintenance and troubleshooting of the UBC 1000 charger along with a method to optimize your batteries.

New Batteries

When charging battery packs that are new or have been on a shelf for an extended period of time, the charger may prematurely switch to ready. If this occurs remove the battery from the charging bay and reinsert. This may take 3-4 cycles to adequately form battery pack.

Troubleshooting

<i>Symptom/Situation</i>	<i>Probable Cause</i>	<i>Corrective Action/Solution</i>
Power indicator (charger base) is not lit/displayed. (All stations)	AC power supply cord not connected to wall outlet. Power supply cord not connected to battery charger. Bad power supply.	Check power supply connections. Replace power supply.
Power indicator (charger base) is not lit/displayed. (Single station/Fault)	Bad station. Faulty LED.	Do not use station. Return for repair.
Battery Rejected indicator is displayed. (Yellow flashing)	Faulty condition identified. Over discharge of battery. Defective Battery.	Remove battery from adapter and reinsert. Re-seat Adapter. Allow to sit in charger for 15 minutes, then reinsert. Replace battery.
Station goes to ready in a short period of time. (10-15 minutes)	Battery is fully charged. Faulty battery.	Try conditioning battery. Replace battery. Remove battery from holder and reinsert. This may take 3-4 cycles to adequately form battery pack.
Station will not go into Charge mode. (Yellow solid indicator)	Holder not seated correctly. Bad holder. Defective battery. Battery too cold or hot. Faulty LED.	Re-seat holder. Replace holder. Replace battery. Allow to adjust to ambient room temperature. Send in for repair.
Station will not go into Condition mode. (Yellow solid indicator)	Battery too hot. Battery already discharged. Faulty LED.	Remove battery. Allow battery to charge and try condition again. Send in for repair.
Battery becomes hot	Defective battery.	Immediately remove battery from charger and replace.
Power supply shuts down temporarily	Power line surge.	Power will automatically reset.



Battery Rejection

If the Fault indicator on the Battery Status Display flashes and is not in discharge, the battery is faulty or damaged. This battery should be removed immediately and disposed of properly. If the battery is still within its warranty period, contact your local Symbol Representative or Symbol Support Center for replacement information.

Figure 8.
Status Display

Safety Guidelines

Before using the battery charger, read all instructions and cautionary markings on the battery charger, battery, and on any product that uses the battery.

WARNING

To reduce risk of injury, use this charger only with authorized Symbol products. Other batteries or adapters may explode causing personal injury and/or damage.

- Do not expose the charger to rain, snow or direct sunlight.
- Use the charger at room temperature 20°C (68°F) - 25°C (77°F).
- Place the charger in a well-ventilated area free of foreign objects/matter.
- To reduce risk of electric shock, unplug the charger from the outlet before cleaning or changing adapters.
- Dispose of dead batteries in accordance with local hazardous material laws.
- Do not disassemble, incinerate, modify or short circuit batteries, charger or related components.
- Perform a battery conditioning cycle on all new NiCd batteries before use to ensure the battery is completely and properly charged.

This Appliance is a Class 1 LED Device

FCC Requirements

This equipment complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation. This Class A digital apparatus meets all requirements of the Canadian interference-causing equipment regulations. Cet appareil numérique de la classe A respecte toutes les exigences du règlement sur le matériel brouilleur du Canada.

Note: This equipment has been tested and has been found to comply with the limits for Class A digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by Symbol Technologies could void the user's authority to operate.

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