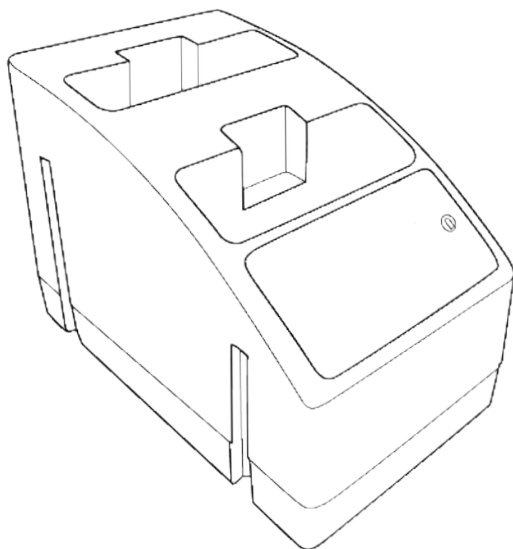




Enova Power Pack Base Station

REF 80100-001

Instructions For Use



Features

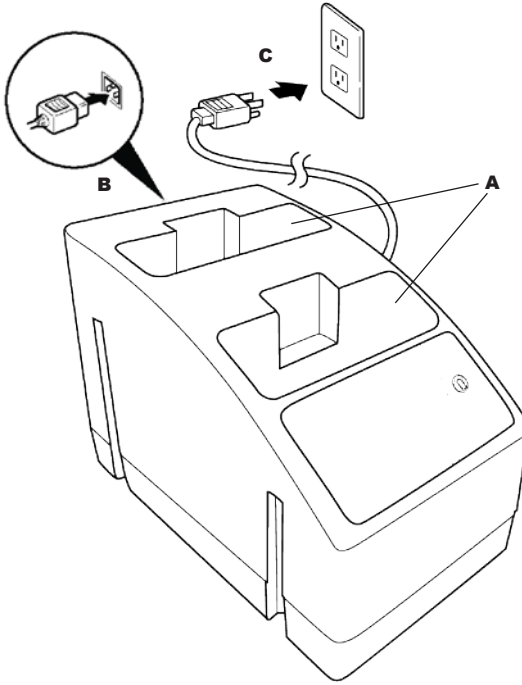


Figure 1

A	Base Station Modules: Each module provides a pocket into which a PP4, PP2, or PP1.5 Power Pack can be placed.
B	Power Cord Receptacle: Connect the provided C-13 Power Cord to the power cord receptacle on the back of the Base Station before connecting to facility power. Always use the appropriate C-13 Power Cord. See the <i>Accessories</i> section.
C	Power Connection: To connect or disconnect the base station to/from facility power, insert or remove the power cord connector to/from the power outlet (mains power).

Introduction

This *Instructions For Use* manual is the most comprehensive source of information for the safe and effective use of your product. This manual may be used by surgeons, dentists, veterinarians, or other healthcare professionals. Keep and consult this reference manual during the life of the product.

The following conventions are used in this manual:

- A **WARNING** highlights a safety-related issue. ALWAYS comply with this information to prevent patient and/or healthcare staff injury.
- A **CAUTION** highlights a product reliability issue. ALWAYS comply with this information to prevent product damage.
- A **NOTE** supplements and/or clarifies procedural information.

If additional information, especially safety information, or in-service training is required, contact your Enova sales representative or call Enova customer service.

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Indications for Use

The Power Pack Charging Base Station is intended to charge up to two Power Packs simultaneously. See Instructions for Use for supplied Power Pack IFU.

Contraindications

No known contraindications.

For Use With



WARNING: ALWAYS use the Power Pack Charging Base Station to charge Enova supplied Power Packs only, unless otherwise specified. Use of other power packs, power cords, or other components may result in malfunction or damages.

For use with rechargeable PP4 Power Pack (80201-001), PP2 Power Pack (80200-001), PP1.5 Power Pack (80203-001), and NA C-13 Power Cord (80150-001) or NA C-13 Hospital Grade Power Cord (80150-002)

User / Patient Safety



WARNINGS:








- Before using any component, or any component compatible with this equipment, read and understand the instructions. Pay particular attention to WARNING information. Become familiar with the components prior to use.
- Only trained and experienced healthcare professionals should use this equipment.
- Upon initial receipt and before each use, inspect each component for damage. DO NOT use any equipment if damage is apparent or the inspection criteria are not met. See the Inspection and Testing section for inspection criteria.
- DO NOT use this equipment in areas in which flammable anesthetics or flammable agents are mixed with air, oxygen or nitrous oxide.
- DO NOT stack or place equipment adjacent to the product. If such a configuration is necessary, observe the configuration to ensure that electromagnetic interference does not degrade performance.
- DO NOT use the product in a magnetic resonance imaging (MRI) environment. Using the product in an MRI environment could affect the function of the system.



NOTE: The expected service life of the Power Pack Base Station is 5 years.

Symbol Definition

The symbols located on the equipment and/or labeling are defined in this section.

Symbol	Definition (Indication Color)	Symbol Color
	General Warning Sign (Yellow)	Yellow
	Refer to Instruction Manual / Booklet (Blue)	Blue
	Alternating Current (AC)	-
	Direct Current (DC)	-
	Protective Earth	-
	MRI Unsafe	Red
	Non-ionizing	-

Power Pack Charging Status

LIGHT BARS	POWER PACK CHARGE
1 Green Light	10-19%
2 Green Lights	20-39%
3 Green Lights	40-59%
4 Green Lights	60-94%
5 Green Lights	95-99%
1 Green Light in the middle	100%

Accessories

This section describes components that may be ordered to replace original equipment that is damaged, worn, or must be replaced. This section may also contain optional components used with the equipment.



WARNINGS:

- Use only Enova-approved components and accessories, unless otherwise specified. Failure to comply may result in fire, electric shock, or injury.
- Using other electronic components and accessories may result in increased electromagnetic emissions or decreased electromagnetic immunity of the system.
- DO NOT modify any component or accessory, including the ground of the base station power cord.

The following Enova-approved accessories are sold separately:

DESCRIPTION	REF
PP4 Power Pack	80201-001
PP2 Power Pack	80200-001
PP1.5 Power Pack	80203-001
NA C-13 Hospital Grade Power Cord	80150-002

NOTE: For a complete list of accessories, contact your Enova sales representative or call Enova customer service

User/Patient Safety



WARNINGS:

- ALWAYS perform the recommended inspection and testing as indicated in the *Inspection and Testing* section.
- This equipment is suitable to use in a professional healthcare facility environment.
- ALWAYS operate the equipment within the specified environmental conditions. See the *Specifications* section.
- ALWAYS operate the equipment at the specified nominal voltage. See the *Specifications* section.
- To avoid the risk of electric shock, ALWAYS connect this equipment to a hospital-grade, facility power receptacle with protective ground.
- ALWAYS position the equipment so that the power cord may be easily disconnected as required.
- ALWAYS place the power cord away from personnel traffic areas to eliminate a trip hazard and cord damage.
- DO NOT touch the power pack receptacle terminals of the base station module, especially with metal objects.

To Set Up the Base Station

1. Position the base station so that the power cord may be easily connected and disconnected as required.
2. Install the non-metallic, C-13 plug of the power cord into the power cord receptacle on the back of the base station.
3. Install the other end of the power cord into a facility power receptacle.

To Charge the Power Packs



WARNINGS:

- ALWAYS make sure the power packs are dry BEFORE charging.
 - DO NOT charge a power pack that gives off an odor, generates heat, becomes discolored, or leaks.
 - DO NOT touch the base station's voltage output terminals. Failure to comply may result in electric shock.
1. Insert a clean, dry power pack into a Power Pack Charging Base Station module. The Power Pack is properly seated in the module when the LED Battery Life Indicator lights come on and the battery beeps once.
 2. Once charged, it is safe to store the power packs in the base station for up to three months. See Power Pack IFU for long-term storage instructions.

To Turn Off the Base Station

CAUTION: To reduce the risk of damage to the power cord, ALWAYS grasp and pull the (mains) connector and plug when disconnecting the power cord from the base station and facility power.

1. Remove power cord plug from the the facility power receptacle.
2. Remove the power cord C-13/non-metallic end connector from the power cord receptacle (appliance inlet) on the base station.

NOTE: If the base station is disconnected from facility power, remove the power packs from the modules to prevent discharge.

Inspection and Testing



WARNINGS:

- Use only Enova-approved components and accessories, including power packs, unless otherwise specified.
- Upon initial receipt and before each use, inspect each component for damage. DO NOT use any equipment if damage is apparent or the inspection criteria are not met.
- DO NOT disassemble or service this equipment, unless otherwise specified. Failure to comply may result in electric shock or fire.

NOTE: For service, contact your Enova sales representative or call Enova customer service.

INTERVAL	INSPECTION CRITERIA	ACTION
Before Each Use	Check equipment for damage, wear, or missing components.	If damage is apparent, replace the equipment
	Check power cord for cuts or bent pins.	
	Check power cord receptacle or base station module for bent pins.	
	Check base station housing and power pack housing for cracks. A cracked power pack housing has the potential to leak electrolytes and cause chemical burns.	

NOTE: If any component must be discarded, see the *Disposal/Recycle* section.

Cleaning



WARNINGS:

- Before cleaning the base station, ALWAYS disconnect the base station from facility power to reduce the risk of electric shock.
- Before cleaning the power pack, ALWAYS disconnect the power pack from the battery cable and remove from PP Base Station.
- DO NOT immerse any component in liquid, including the power pack.
- DO NOT sterilize any component, including the power pack.
- DO NOT use disinfectants with a pH level higher than 7.5 on the power pack. See the Safety Data Sheet of the disinfectant to verify the pH range. Failure to comply may cause the power pack housing material to crack and leak.

CAUTIONS:

- DO NOT use solvents, lubricants, or other chemicals, unless otherwise specified.
- DO NOT allow liquids or moisture into any electrical connections, including the power cord receptacle.
- DO NOT allow water to collect in the base station modules or on top of the base station.
- ALWAYS dry the power pack before installation into the base station. Failure to comply may result in damage to the power pack and base station.

To Clean the Base Station and Modules

1. Disconnect the base station power cord from the power cord receptacle and facility power.
2. Wipe the surfaces of the base station and modules with a soft cloth dampened with 70% isopropyl alcohol or mild soap. After cleaning, wipe the area with a lint-free soft cloth moistened with water to remove any residue from cleaning products.
3. Allow the surfaces of the base station to air dry completely before reconnecting to facility power.

User/Patient Safety

CAUTION: ALWAYS store the equipment within the specified environmental conditions throughout its useful life. See the *Specifications* section.

To ensure the longevity, performance and safety of this equipment, use of the Enova Composite Carrying Case (80034-001) or watertight packaging is recommended when storing or transporting this equipment.

Disposal / Recycle



WARNINGS: ALWAYS follow the current local recommendations and/or regulations governing environmental protection and the risks associated with recycling or disposing of the equipment at the end of its useful life.

Troubleshooting



WARNINGS: DO NOT disassemble or service this equipment, unless otherwise specified.

NOTE: For service, contact your Enova sales representative or call Enova customer service.

PROBLEM	CAUSE	ACTION
The power pack becomes unusually hot during use or while charging.	The power pack is damaged.	Replace the power pack. See the For Use With section.
	The base station is not functioning properly.	Discontinue use and Contact Enova Customer Service.
The power pack will not charge.	The base station does not have power	Check power cord connection to base station.
	The power pack is not functioning properly.	Try another power pack; if issue is resolved, dispose of original power pack and replace.
	The base station is not functioning properly.	Discontinue use and contact Enova Customer Service.

NOTE: For service, contact your Enova sales representative or call Enova customer service.

Specifications



Model	REF 80100-001 Power Pack Base Station
Electrical Input	100V - 240V ~ 50/60Hz 1.5A
Electrical Output	DC 10V, 1.4A
Terminal Nominal Voltage	Open Circuit 20 V ----
Power Cord	NA C-13 Power cord
Ground Type	Protective Earth
Means of Isolation from Supply Mains	Disconnect the power cord connector from the power cord receptacle (appliance inlet)
Dimensions	5.75"(H) x 9.75"(W) x 15.0"(L) / 146(H) x 248(W) x 381(L) mm
Ingress Protection (IP)	IPX0
Mass	260 g
US FDA [Equipment] Classification	Class I Medical Electrical (ME) Equipment
Mode of Operation	Continuous

Environmental Condition:	Operation	Storage and Transportation
Temperature:		
Humidity:		
Atmospheric Pressure:		

Guidance of Electromagnetic Immunity

The PP-Base Station is intended for use in the electromagnetic environment specified below. The customer or user of the PP-Base Station should assure that it is used in such an environment.

NOTE: The values provided in the table below follow IEC 60601-1-2 : 2014 requirements.

IMMUNITY TEST	IEC 60601-1-2 TEST LEVEL	ELECTROMAGNETIC ENVIRONMENT GUIDANCE
Electrostatic discharge (ESD) IEC 61000-4-2	±8kV contact ±2kV, ±4kV, ±8kV, ±15kV air	Floor should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/ burst IEC 61000-4-4	±2kV at 100kHz repetition frequency for power supply lines ±1kV at 100kHz repetition frequency for input / output lines	Main power source should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±0.5kV, ±1kV line(s) to line(s) at 0°, 90°, 180°, 270° ±0.5kV, ±1kV, ± 2kV line(s) to earth at 0°, 90°, 180°, 270°	Main power source should be that of a typical commercial or hospital environment.
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	3 A/m, 30 A/m at 50Hz and 60Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 0% UT (100% dip in UT) for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, 315° 0% UT (>100% dip in UT) for 1 cycle at 0° 70% UT (30% dip in UT) for 25 & 30 cycles at 0° <5% UT (>95% dip in UT) for 5 seconds 0% UT (100% dip in UT) for 250/300 cycle	Main power source should be that of a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3V 0.15MHz – 80MHz 6V in ISM bands between 0.15MHz and 80MHz 80% AM at 1kHz	 WARNING: Portable and mobile RF equipment should be used no closer than 30cm to any part of the PP-Base Station, including cables. Otherwise, degradation of the performance of this equipment could result. Interference may occur in the vicinity of equipment marked with the following symbol:  (Non-ionizing electromagnetic radiation)
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2.7GHz, 80% AM at 1kHz 27 V/m 385 MHz, pulse modulation 18Hz Maximum power = 1.8W 28 V/m 450MHz, FM ±5kHz deviation, 1kHz sine Maximum power = 2W 9 V/m 710, 745, 780, 5240, 5500, 5785MHz, pulse modulation 217Hz Maximum power = 0.2W 28 V/m 810, 870, 930MHz, pulse modulation 18Hz Maximum power = 2W 28 V/m 1720, 1845, 1970, 2450MHz, pulse modulation 217Hz Maximum power = 2W	

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