



ELORA BATTERY INTERFACE

Owner's Manual



CONTENTS



- 3 **IMPORTANT** READ AND UNDERSTAND THIS MANUAL BEFORE OPERATION INTRODUCTION
- 4 KEY FEATURES AND BENEFITS ORDERING INFORMATION **MOUNTING**
- 7 FUEL GAUGE - BATTERY PAIN SCALE
- SYSTEM SPECIFICATIONS 8
- 12 **PRECAUTIONS**
- 19 WARRANTY



IMPORTANT





READ AND UNDERSTAND THIS MANUAL BEFORE OPERATION!

The ELORA Battery Interface is specifically designed to be operated with current ELORA Series batteries. Do not attempt to use a non ELORA battery or batteries not manufactured by ANTON/BAUER.

Special precautions and handling instructions are contained in this manual and should be strictly adhered to for safe and reliable operation. Contact Anton/Bauer Customer Support Group at (203) 925-4991 or servicesupport@vitecgroup.com with any questions regarding this product.

INTRODUCTION

The Elora Battery Interface is the most advanced and flexible system of its kind, the mount is easily installed onto most mobile work stations, patient monitoring systems or mobile medical devices requiring power. Outputs can be configured to nearly any system. The scalable, small form factor Interface features guides for easy battery installation and removal, as well as a secure battery fit. The Anton/Bauer Elora Battery Interface comes 2 x 120V AC Power - Max 100W configuration. This configuration supports a18V DC power supply which can be purchased separately. This added flexibility allows for the device to operate on either battery power or a standard wall outlet.

Anton/Bauer Customer Support Group servicesupport@vitecgroup.com (800) 541-1667 or (203) 925-4991



KEY FEATURES & BENEFITS



Lightweight - Hot-Swappable - Battery or AC Power -60601 Compliant - Made in the USA - RoHS Compliant -

FEATURES

- 1. Lightweight Battery interface with Lithium-lon backup battery (for HotSwapping batteries without loss of power to the device)
- 2. Battery Pain Scale® 'LCD' This exclusive Anton/Bauer feature graphically displays the remaining battery capacity at all times. No special adapters or set up is required. (See complete explanation in the Battery Pain Scale Fuel Gauge section)
- 3. Gold Mount® Interface Patented Gold Mount connector is compatible with all Anton/Bauer battery mounts and accessories.
- 4. Optional external AC/DC power supply input to bypass battery and provide DC power.







IEC60601-1

ORDERING INFORMATION

F/G Part number	Description
83750191	Elora Battery Interface - AC Output



KEY FEATURES & BENEFITS



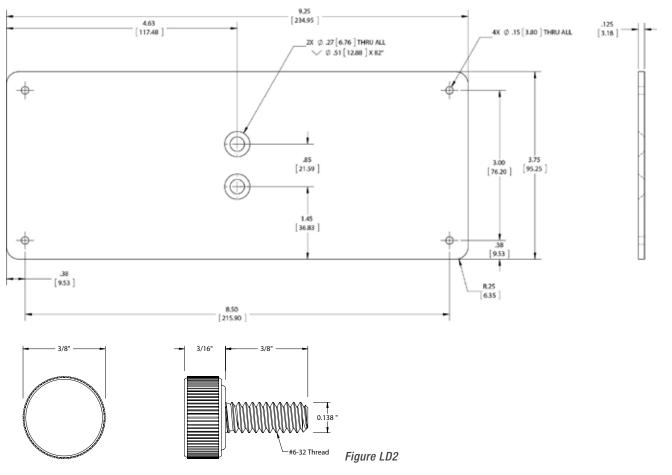
MOUNTING

The Elora Battery Interface comes with a supplied mounting plate for use on most typical applications. Please contact Anton/Bauer Customer Support Group for a list of mounting options or a list of approved Elora resellers that can assist you in retrofitting your device.

TYPICAL MOUNTING INSTRUCTIONS:

- Attach the mounting plate to your device using two (2) -need to know hardware_
- Use the 4 included mounting screws (#3/8 6-32)(see figure LD2) to attach the battery interface to the device. Attach one screw into each of the 4 UNC thread holes on the rear corner of the battery interface. (See figure LD1)
- Plug the Battery Pain Scale Fuel Gauge into the Elora Battery Interface connector
- Plug the device into the Elora Battery Interface using the appropriate connector for your device

Figure LD1

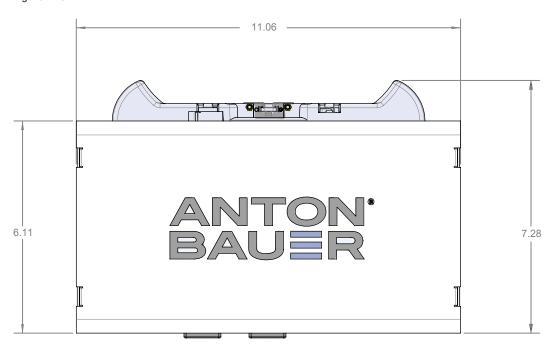




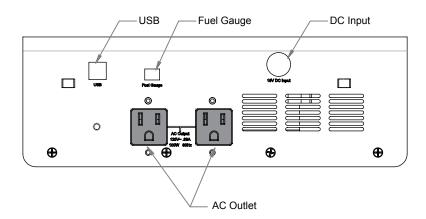
KEY FEATURES & BENEFITS



Figure LD3









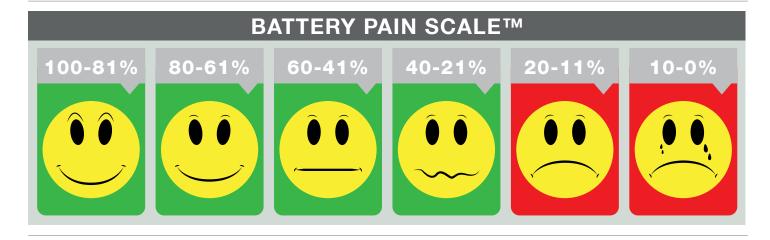
FUEL GAUGE



BATTERY PAIN SCALE® FUEL GAUGE

The Battery Pain Scale fuel gauge employs the pain assessment scale, a method recognized and utilized by caregivers today. The bright LCD is visible from up to 30 feet (9.144 meters) away and can be mounted anywhere on the device via its magnetic backing. This prevents the user from having to constantly look at the battery and attempt to decipher the typical LCD indicator lights found on similar products. The pain scale indicates battery health percentage remaining. When the battery reaches the 10-0 percent is it recommended to change the battery for a completely charged battery.









Indication	Definition	
	Indicates that the main battery is not attached or fully depleted and the unit is being powered by the backup battery. The main battery needs to be replaced with a fully charged battery. The Backup battery will shut down after (approximately) 2 minutes of operation.	
	Indicates that the interface is currently being powered.	
	Indicates that the interface is reading the battery and determining its current capacity.	





SHUTDOWN PROCEDURE

If the Elora Battery Interface were to require shut down, simply disconnect the Elora Series Battery and AC power (if either/both are attached). The backup battery will continue to power the system for approximately two minutes. After which time, the system will shut down all power. This will be visible by the Battery Pain Scale fuel gauge display shutting off. Unplugging the external AC/DC supply from the supply mains will isolate the device from supply mains.

SYSTEM SPECIFICATIONS

Input Power Sources

Unit was designed to operate from Anton/Bauer Elora Series batteries, with an optional DC input from AC/DC power supply.

- Power Supply Input Voltage = 100-240VAC, 50-60Hz, 2A
- Power Supply Output Voltage to system = 18VDC, 8.3A
 - Use only Anton/Bauer approved AC/DC power supply Elpac model: MWA150018A-12A
 - When the optional AC/DC power supply is used, it is specified as part of the ME Equipment.

PURE SINE WAVE OUTPUT		
VOLTAGE	120 VAC ± 3%	
CURRENT	833mA	
FREQUENCY	60 Hz ± 1%	





OPERATING ENVIRONMENT		
TEMPERATURE RANGE	0°C to 30°C / 32°F to 86°F	
RELATIVE HUMIDITY	20-70% non-condensing	
PRESSURE	985 hPa - 1040hPa	
TRANSPORTATION & STORAGE ENVIRONMENT		
TEMPERATURE RANGE	-20°C to 40°C / -4°F to 104°F	
RELATIVE HUMIDITY	20-70% non-condensing	
PRESSURE	985 hPa to 1040 hPa	
Device intended for Indoor Use Only		
Never use flammable or combustible solvents around batteries or chargers.		







MAINTENANCE

Daily:

• Ensure all connections between the device, associated components, and accessories are snug and secure.

Weekly, or as needed:

 Clean the device, associated components, and accessories as needed with a damp, non-saturated cloth or paper towel. Do not wet the exposed metal part of the charging unit. Do not use solvents or scouring agents. Examples of approved solvents are Cidex® and Windex®. Consult the Anton/Bauer Customer Support Group for approved list of cleaning agents.

Contact Anton/Bauer Customer Support Group with additional inquiries as to maintenance.

ADDITIONAL INPUTS/OUTPUTS

Refer to Figure LD3 above

- Battery Pain Scale Fuel Gauge connection is for Anton/Bauer approved Fuel Gauge(s) only.
- USB port is for USB 2.0 Type B cable to connect to a computer for Battery Management System (BMS) applications. Contact Anton/Bauer Customer Support Group at (203) 925-4991 or servicesupport@vitecgroup.com with any questions regarding this connection.

MECHANICAL

Maximum weight that the Elora Battery Interface is capable of supporting is 15lbs (6.80389 kg)







WARNING!

Indicates possibility of physical harm to the user in case of non-compliance



CAUTION!

Indicates possibility of damage to the equipment in case of non-compliance



FOLLOW OPERATING INSTRUCTIONS



WARNINGS!

- 1. DO NOT OPEN TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. THERE ARE NO SERVICEABLE PARTS INSIDE REFER TO QUALIFIED SERVICE PERSONNEL
- 2. It is recommended that you return the Elora Battery Interface to a qualified dealer for any service or repair, incorrect assembly may result in electric shock or fire
- **3.** To reduce risk of electric shock, unplug the DC input (battery) before attempting any maintenance or cleaning
- **4.** To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting anything from the unit
- 5. An extension cord should not be used unless absolutely necessary. If an extension cord is used, make sure that is has a 3-prong, male plug (NEMA1-15P and 3-Prong), female receptacle (NEMA1-15R). The size of the current carrying conductors should be such that they are able to carry at least 2.5A for the length of the extension.
- **6.** Place the unit in an area that will allow air to flow freely around the unit. DO NOT block or obstruct vent openings or install the unit in an enclosed compartment.
- 7. Keep the unit away from moisture and water
- 8. Never operate two or more units in parallel

- **9.** AC Unit only: This device is approved for use with 60601-1 non patient contact equipment only. Please consult Anton/Bauer for approved equipment
- 10. WARNING: To avoid risk of electric shock, this equipment must only be connected to a supply mains with protective earth
- 11. Connecting electrical equipment to multiple socket outlets effectively leads to creating an ME SYSTEM, and can result in a reduced level of safety
- 12. WARNING: No modification of this equipment is allowed
- **13. WARNING:** This device is designed to conform to Electromagnetic Compatibility (EMC) standard IEC 60601-1-2 and will operate accurately in conjunction with other medical equipment which also meets this requirement. To avoid interference problems affecting the device, do not use the device in the presence of equipment which does not conform to these specifications.
- **14. WARNING:** The MSO provided with the device shall only be used for powering equipment which forms part of the system.
- **15. CAUTION:** The operator should take precautions to avoid touching the device and the patient at the same time.
- 16. WARNING: After initial equipment setup, if the equipment plugged into the AC outlet is removed, replace the cover originally provided.
- **17. WARNING:** The device is not connected to Protective Earth while powered off of an Elora Series battery.





ELECTROMAGNETIC COMPATIBILITY

- 1. WARNING: All medical electrical equipment must be installed and put into service in accordance with the EMC information provided in this document.
- 2. WARNING: Portable and mobile RF communications equipment can affect the behavior of medical electrical equipment.
- 3. WARNING: The use of cables and/or accessories other than those specified by the Manufacturer may result in increased emissions or decreased immunity of the ME Equipment.
- 4. WARNING: This ME Equipment is not intended to stack or be stacked on any other equipment.

GUIDE AND MANUFACTURER'S DECLARATION—ELECTROMAGNETIC EMISSIONS

The Elora Battery Interface is intended for use in the electromagnetic environment specified below. The customer or the user of the Elora Battery Interface should assure that it is used in such an environment.

EMISSIONS TEST	COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT—GUIDANCE
RF Emissions CISPR 11	Group 1	The Elora Battery Interface uses RF energy only for its internal function. Therefore, it's RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	
Harmonic emissions IEC 61000-3-2	IEC 61000-3-2	The Elora Battery Interface is suitable for use in all establishments other than domestic and those directly connected to the public low voltage power supply network that supplies
Voltage fluctuations/flicker emissions IEC61000-3-3	Complies	buildings used for domestic purposes.





GUIDANCE AND MANUFACTURER'S DECLARATION—ELECTROMAGNETIC IMMUNITY

The Elora Battery Interface is intended for use in the electromagnetic environment specified below. The customer or the user of the Elora Battery Interface should assure that it is used in such an environment.

IMMUNITY TEST	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT—GUIDANCE	
Electrostatic discharge (ESD)	±6kV contact ±8kV air	±6kV contact ±8kV air	Floors 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 for power supply lines ±1kV for input/ output lines	±2kV for power supply lines ±1kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.	
Surge IEC 61000-4-4	±1kV line(s) to line(s) ±2kV line(s) to earth	±1kV line(s) to line(s) ±2kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.	
Voltage dips, short interrupts and voltage variations on power supply input lines IEC 61000-4-11	>95% dip for 0.5 cycle 60% dip for 5 cycles 30% dip for 25 cycles 95% dip for 5 seconds	>95% dip for 0.5 cycle 60% dip for 5 cycles 30% dip for 25 cycles 95% dip for 5 seconds	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Elora Battery Interface requires continued operation during power mains interrupts, it is recommended that the Elora Battery Interface be powered from an uninterruptible power supply or a battery.	
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.	





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IMMUNITY TEST	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT—GUIDANCE
Conducted RF IEC 61000-4-6	3 Vrms 150kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the Elora Battery Interface, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	transmitter. Recommended separation distance d = 1.2 √P d = 1.2 √P 80 MHz to 800 MHz d = 2.3 √P 800 MHz to 2,5 GHz where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and "d" is the separation distance in metres (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey³, should be less than the compliance level in each frequency range.¹ Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

^a Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Elora Battery Interface is used exceeds the applicable RF compliance level above, the Elora Battery Interface should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Elora Battery Interface.

^b Over the frequency range of 150 kHz to 80 MHz, field strengths should be less than 3 V/m.



Recommended separation distances between portable and mobile RF communications equipment and the Elora Battery Interface.

The Elora Battery Interface is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Elora Battery Interface can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Elora Battery Interface as recommended below, according of he maximum output power of the communication equipment.

RATED MAXIMUM OUTPUT	SEPARATION DISTANCE ACCORDING TO THE FREQUENCY OF TRANSMITTER M			
POWER OF TRANSMIT- TER W	150 KHZ TO 80 MHZ D = 1.2 √P	80 MHZ TO 800 MHZ D = 1.2 √P	800 MHZ TO 2,5 GHZ D = 2.3 √P	
0,01	0.12	0.12	0.23	
0,1	0.38	0.38	0.73	
1	1.2	1.2	2.3	
10	3.8	3.8	7.3	
100	12	12	23	

For transmitters rated at a maximum output power not listed above, the recommended separation distance "d" in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where "P" is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absoption and reflection from structures, bojects and people.







ENVIRONMENTAL HAZARD

Contains Lithium-Ion.

Disposal:

 DO NOT dispose of the Elora Battery Interface and its associated components and/or accessories in municipal waste at the end of their expected service life. Consult the Anton/Bauer Customer Support Group for information on disposal/recycling of the Elora Battery Interface and its associated components and/or accessories.

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device 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 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 their own expense. This equipment has been approved by one or more agencies. All changes and/or modifications not expressly approved by the Vitec Group could void the users' warranty and authority to operate this equipment. There are no serviceable parts in this equipment.

Anton/Bauer Customer Support Group servicesupport@vitecgroup.com (800) 541-1667 or (203) 925-4991



WARRANTY



This warranty for the product specified in this document ("Product") is given by Vitec Videocom, Inc. ("Anton/Bauer"), 14 Progress Drive, Shelton, Connecticut 06484. If you (the purchaser of the Product from Anton/ Bauer, or the person for whom the Product was purchased, if it was a gift) have any questions regarding Product applications, Product specification, or to obtain warranty service on this or any Anton/Bauer product, contact the company at the address above.

THIS PRODUCT MUST BE REGISTERED WITH ANTON/BAUER WITHIN **30 DAYS OF PURCHASE** TO ASSURE WARRANTY COVERAGE.

REGISTER ONLINE AT www.antonbauer.com

Warranty registration, including the serial numbers of Anton/Bauer chargers used with this battery, must be supplied to Anton/Bauer. Anton/Bauer will warranty the Product only against defects in material and workmanship for the period as follows from the date of purchase, in accordance with the terms set forth below, and then, only if the Product is used exclusively in conjunction with compatible Anton/Bauer chargers. If this battery interface is returned to Anton/Bauer for warranty service it will be required that you provide model names and serial numbers of compatible Anton/Bauer chargers with which this product was used.

ELORA BATTERY INTERFACE

0-24 months: Anton/Bauer will repair or replace the Product at Anton/Bauer's option and cost.

This warranty shall be effective only if Anton/Bauer receives notice of such defects in materials or workmanship during the period of the warranty.

The liability of Anton/Bauer hereunder is expressly limited to a claim for repair or replacement of the Product or as otherwise stated herein at Anton/Bauer's sole discretion. Notice of any claim under this warranty shall be delivered to Anton/Bauer during the period of the warranty and the Product shall be returned with its packaging promptly, at your expense, to an Anton/Bauer Customer Support Center or to the address above. Upon receipt of the Product and a record of your compliance with the conditions of this warranty, Anton/Bauer will repair or replace the Product and return it to you, or issue a credit, as applicable. You are responsible for all shipping and handling charges to and from authorized facility.

THIS WARRANTY DOES NOT APPLY TO AND IS VOID IN THE CASE OF DEFECTS OR DAMAGE RESULTING FROM ACCIDENTS, DISASTER. NEGLECT, MISUSE, IMPROPER INSTALLATION, IMPROPER OR UNAUTHORIZED SERVICE OR MAINTENANCE, UNAUTHORIZED REPLACEMENT PARTS OR ATTACHMENTS; OR DYSFUNCTION OR MALFUNCTION OF, OR CAUSED BY, ANY OTHER PRODUCT OR DEVICE. Misuse includes any use of the Product in other than its intended application, including the use of this Product with any charging device or accessory not manufactured by and/or specified by Anton/Bauer. This warranty does not cover, and Anton/Bauer assumes no responsibility for, any equipment or devices used in conjunction with the Product.

ANTON/BAUER DISCLAIMS ANY LIABILITY FOR INCIDENTAL OR CON-SEQUENTIAL DAMAGES FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY OF THE PRODUCT, UNDER NO CIRCUMSTANCES WILL ANTON/ BAUER BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL OR CONSE-QUENTIAL DAMAGES.

This Warranty is to be construed and enforced in accordance with the law of the State of Connecticut, including the provisions of the Uniform Commercial Code as adopted and from time to time amended in the State of Connecticut, and not the Convention for the International Sale of Goods. This choice of Connecticut law is exclusive of any Connecticut law that would require reliance on any law foreign to Connecticut. Should any action of law or in equity be brought by any person under this Warranty, such action shall be brought only in the United States District Court for the District of Connecticut, or in any Superior Court in Fairfield County, Connecticut, USA. Some states do not allow limitations on how long a warranty lasts, so the time period limitation herein may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other legal rights which may vary from state to state.

Use of unauthorized equipment in conjunction with Anton/Bauer products constitutes misuse under our warranties and may limit or void those warranties. Anton/Bauer does not authorize, condone, recommend, or otherwise assume any liability or responsibility result-ing from the use of any battery, charger, or accessory made by Anton/Bauer with any battery, charger or accessory not manufactured, produced or sold by Anton/Bauer. Anton/Bauer only authorizes the use of original Anton/Bauer products with this Product. Use only original Anton/Bauer equipment with this Product.





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