

HT-Air[®] 1200 Air Supply

User Manual

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Symbol Reference



Intended Use and Precautions

The HT-Air[®] 1200 Air Supply provides six airflow options to inflate HoverTech's air-assisted transfer, lift, and positioning devices.

INTENDED CARE SETTINGS

Hospitals, long-term or extended care facilities

INTENDED USE

- The caregiver/operator is the person handling the equipment.
- The patient is not the intended operator.

CAUTIONS

- Route the power cord in a manner to ensure freedom from hazard.
- Avoid blocking the air intakes of the air supply.

- Never leave patient unattended on an inflated device.
- Use this product only for its intended purpose as described in this manual. Only use attachments and/or accessories that are authorized by HoverTech International.
- When using the air supply in the MRI environment, a 25-ft. specialty MRI hose is required (available for purchase).
- Avoid electric shock. Do not open air supply.
- Reference product specific user manuals for operating instructions.
- Warning: To avoid the risk of electric shock, this equipment must only be connected to a supply main with protective earth.
- Warning: The HT-Air is not compatible with DC power supplies.
- Warning: The HT-Air is not intended for use with the HoverJack Battery Cart.

Part Identification



CAUTION: NO USER SERVICEABLE PARTS. Only qualified service personnel shall perform repairs on the HoverTech International Air Supply.

Air Supply Keypad Functions





ADJUSTABLE: For use with HoverTech air-assisted positioning devices. There are four different settings. Each press of the button increases the air pressure and rate of inflation. The Green Flashing LED will indicate the inflation speed by the number of flashes (i.e. two flashes equals the second inflation speed).

All of the settings in the ADJUSTABLE range are substantially lower than the HoverMatt and HoverJack settings. The ADJUSTABLE function is not to be used for transferring.

The ADJUSTABLE setting is a safety feature that can be used to ensure the patient is centered on HoverTech air-assisted devices and to gradually accustom a patient who is timid or in pain to both the sound and functionality of the inflated devices.



STANDBY: Used to stop inflation/air flow (Amber LED indicates STANDBY mode).



HOVERMATT 28/34: For use with 28" & 34" HoverMatts and HoverSlings.



HOVERMATT 39/50 & HOVERJACK: For use with 39" & 50" HoverMatts and HoverSlings and 32" & 39" HoverJacks.

Product Specifications

Dimensions:	12.5 x 7 x 7 inches (31.75 x 17.8 x 17.8 cm)		
Weight:	12.5 lbs (5.67 kg)		
Enclosure Material:	ABS rated UL94V-0/Stainless Steel		
Power Cord Set Length:	UL Certified 15 feet (457 cm) Hospital Grade		
AC Plug Cord Type & Rating:	SJT 16 AWG*3C, C13 Connector, 15A, 125Vac		
Service Life:	5 years		
Power Input:	120Vac, 60 Hz, 10 A (North American version)		

Model #: HTAIR1200 (North American Version) – 120Vac, 60Hz, 10A

LATEX FREE

CLASSIFICATION

Not for use in the presence of flammable anesthetics or in a hyperbaric chamber or oxygen tent.

Type of protection against electric shock:	CLASS I EQUIPMENT		
Degree of protection against electric shock:	TYPE BF APPLIED PART		
Protection against ingress of water:	Ordinary (not protected).		
Mode of operation: CONTINUOUS OPERATIO			
To remove supply mains, unplug equipment from wall.			

OPERATING CONDITIONS

Atmospheric Pressure Range:

Use Temperature:	50° to 104° F (10° to 40° C)
Use Humidity:	10% to 70% Non-Condensing
Use Altitude:	6,562ft / 2,000m
Maximum Operation	

700 to 1,060 hPa

STORAGE AND TRANSPORT CONDITIONS

Storage/Shipping Temperature:	-40° to 158° F (-40° to 70° C)
Storage/Shipping Humidity:	10% to 70% Non-Condensing
CIRCUIT BREAKER	
Max Operating Voltage:	32Vdc; 250Vac, 50/60Hz
Current:	12A
Operating speed:	5 to 30 seconds
Size:	(0.54-0.55) inch x (0.625-0.635) inch
Resettable Overload Capacity:	10x12=120(A)

Cleaning

Between patient use, clean and disinfect the surface of the air supply by wiping it down with EPA approved hospital-grade disinfectant wipes or disinfectant cleaner sprayed on a cleaning cloth. Follow disinfectant manufacturer's directions for dwell time and other instructions for use. Using the disinfectant wipes/spray cleaner may degrade the graphics on the control panel over time. Replacement panels can be purchased directly from HoverTech International, if necessary.

NOTE: DO NOT SPRAY CLEANERS/LIQUIDS DIRECTLY ON THE AIR SUPPLY.

PREVENTIVE MAINTENANCE

Prior to use, a visual inspection should be performed on the air supply to ensure the power cord is not frayed or nicked and that there is no visual damage that would render the air supply unusable.

If any damage is found that would cause the air supply not to function as intended, the air supply should be removed from use and returned to HoverTech International for repair.

The air supply has air filters on either side of the motor. These filters can be accessed by removing the small screws holding the filter covers in place. It is recommended that the air filter is assessed per your facility's preventive maintenance schedule or annually. Filter should be cleaned if clogged. Remove the filter from the air supply and hold it under warm running water. Allow the air filters to dry prior to placing back in the air supply.

The filter should be replaced when it is clogged with debris that does not break free when it is washed. The filter should also be replaced if it begins to lose its shape or deteriorate.



NOTE: IF AIR SUPPLY NEEDS TO BE DISPOSED, CHECK YOUR LOCAL / STATE / FEDERAL / INTERNATIONAL GUIDELINES BEFORE DISPOSAL.

INFECTION CONTROL

When a HoverTech air supply is used in a patient room where isolation protocols are being observed, the hospital should employ the same protocols/ procedures it utilizes for other equipment used in that patient room.

Between use with an airborne isolation patient, the air supply filters can be removed and disinfected or replaced if hospital protocol requires. If the air filters are disinfected, allow them to dry prior to placing back in the air supply.

An air hose cover is available. These covers are disposable and come in a box of 25 (Model #ASHC).

Electromagnetic Compatibility Chart

Guidance and manufacturer's declaration - electromagnetic emissions

The HTAIR1200 is intended for use in the electromagnetic environment specified below.

The customer or the user of the HTAIR1200 should assure that it is used in such an environment.

Emission test	Compliance	Electromagnetic environment-guidance	
RF emissions CISPR 11	Group 1	The HTAIR1200 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.	
RF emissions CISPR 11	Class A	The HTAIR1200 is suitable for use in all establishments, including domestic establishment and those directly connected to the public low-voltage power supply network that supply buildings used for domestic purposes.	
Harmonic emissions IEC 61000-3-2	Class A		
Voltage fluctuations /flicker emissions IEC 61000-3-3	Compliance		

Guidance and manufacturer's declaration - electromagnetic immunity

The HTAIR1200 is intended for use in the electromagnetic environment specified below.

The customer or the user of the HTAIR1200 should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge(ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV 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 Not applicable	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1kV line(s) to line(s) ± 2kV line(s) to earth	± 1kV differential mode Not applicable	Mains power quality should be that of 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 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	<5% UT(>95% dip in UT) for 0,5 cycle 40% UT(60% dip in UT) for 5 cycles 70% UT(30% dip in UT) for 25 cycles <5% UT(>95% dip in UT) for 5 s	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50, 60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	The HTAIR1200 power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE: UT is the a.c. mains voltage prior to application of the test level.

Electromagnetic Compatibility Chart

Guidance and manufacturer's declaration - electromagnetic immunity

The HTAIR1200 is intended for use in the electromagnetic environment specified below.

The customer or the user of the HTAIR1200 should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the HTAIR1200 including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
	3 Vrms		Recommended separation distance:
Conducted RF	150 KHz to	3 Vrms	d = 1,2 √P
IEC 61000-4-6	80 MHz		d = 1,2 √P 80MHz to 800 MHz
			d = 2,3 √P 800MHz to 2,5 GHz
Radiated RF	3 V/m	3 V/m	Where P is the maximum output power rating of the transmitter in watts (W) according to the transmit-
ILC 01000-4-5	2,5 GHz		ter manufacturer and d is the recommended separation distance in metres (m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. ^b
			Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE1: At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE2: 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 HTAIR1200 is used exceeds the applicable RF compliance level above, the HTAIR1200 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the HTAIR1200.

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

Electromagnetic Compatibility Chart

Recommended separation distance between portable and mobile RF communications equipment and the HTAIR1200

The HTAIR1200 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the HTAIR1200 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the HTAIR1200 as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m			
	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.

NOTE1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Warranty Statement

HoverTech International Air Supplies are warranted to be free from defects in materials and workmanship for (1) one year. Warranty begins on date of in-service by a HoverTech International representative or shipment date. In the unlikely event that a problem arises as a result of a defect in materials or workmanship, we will promptly repair your item or replace it if we feel that it cannot be repaired – at our expense and discretion using current models or parts performing the equivalent function – upon receipt of the original item to our repair department.

Lead time for repairs is approximately 2 weeks. Please refer to the Returns and Repairs section of this Manual for return instructions.

This warranty is not an unconditional guarantee for the life of the product. Our warranty does not cover product damage that may result from use contrary to Manufacturer's instructions or specifications, misuse, abuse, tampering, or damage due to mishandling.

Equipment that has been neglected, improperly maintained, repaired or altered by someone other than an authorized representative of Manufacturer, or operated in anyway contrary to the operating instructions, shall void this warranty.

This warranty does not cover normal "wear and tear." Component parts, particularly any optional equipment, valve caps, their attachments and cords, will show wear with use over time and eventually may need to be

refurbished or replaced. This normal type of wear is not covered by our warranty, but we will provide prompt, high quality repair service and parts at a nominal cost.

HoverTech International's liability under this warranty and on any claim of any kind for any loss or damage arising out of, connected with, or resulting from the design, manufacture, sale, delivery, installation, repair or operation of its products, whether in contract or tort, including negligence, shall not exceed the purchase price paid for the product and upon expiration of the applicable warranty period, all such liability terminates. The remedies which this warranty provides are exclusive and HoverTech International shall not be liable for any incidental or consequential damages.

There are no warranties, expressed or implied, which extend beyond this warranty statement. The provisions of these warranty clauses are in lieu of all other warranties, expressed or implied, and of all other obligations or liabilities on HoverTech International's part and they neither assume nor authorize any other person to assume for HoverTech International any other liability in connection with Manufacturer sale or lease of said products. HoverTech International makes no warranty of merchantability or fitness for a particular purpose. By accepting the goods, the buyer acknowledges that buyer has determined the goods are suitable for the buyer's purposes.

MANUFACTURER'S SPECIFICATIONS ARE SUBJECT TO CHANGE.

Returns and Repairs

All products being returned to HoverTech International (HTI) must have a Return Goods Authorization (RGA) number issued by the company. Please call 800-471-2776 and ask for a member of the RGA Team, who will issue you an RGA number.

HTI's warranty covers manufacturer's defects in material and workmanship. If a repair is not covered under warranty, a repair fee of \$40 per hour, for each item, plus parts, will be assessed. The return shipping charge will also be added. A Purchase Order for the repair charge should be provided by the facility at the time the RGA number is issued, should the repair not be covered under warranty. Lead-time for repairs is approximately 1-2 weeks, not including shipping time.

> Returned products should be sent to: HoverTech International 4482 Innovation Way Allentown, PA 18109 Attn: RGA number______ Phone: 800-471-2776

Phone: 800-471-2776 Fax: 610-694-9601



4482 Innovation Way Allentown, PA 18109

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