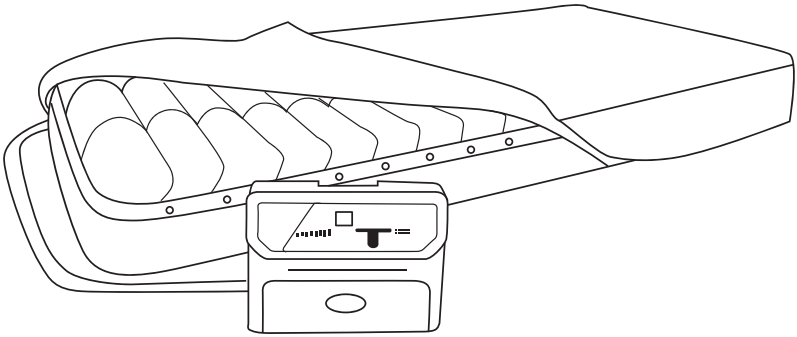
Tuffcare®

HIGHER STANDARD FOR HEALTHCARE ™

COMFY AIRE SERIES® AIR MATTRESS SYSTEM

OPERATION MANUAL



ATTENTION

Before using this Medical Device read this manual. If you are unable to understand, contact your equipment provider for technical support before attempting to use this bed.

TABLE OF CONTENTS

SECTION 1

GENERAL GUIDELINES

NOTE, CAUTION AND WARNING STATEMENTS:

NOTE Indicates helpful tips
CAUTION Indicates correct operating/ maintenance procedures in order to prevent damage or destruction of the equipment or other property.
WARNING Calls attention to a potential danger that requires correct procedures/practices in order to prevent personal injury.

⚠ WARNING **To reduce the risk of electrocution**

1 Always unplug this product immediately while it's not in use.

2 Do not disassemble the pump.

3 Do not place or store product where it can fall or be pulled into a tub or sink.

4 Do not place or drop into water or other liquid. Do not use while bathing.

5 Do not reach for a product that has fallen into water; unplug the product immediately.

⚠ WARNING To reduce the risk of burns, electrocution, fire or injury to persons

1. The system must operate with the mattress connected to the PUMP. Please do not power-off or unplug the PUMP while in use.

2. This product should never be left unattended when plugged in.

3. Close supervision is necessary when this product is used by, on, or near children or invalids.

4. Use this product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.

5. Never operate this product if it has a damaged cord or plug. If it is not working properly, has been dropped/damaged, or dropped into water, return the product to a service center or to the distributor for examination and repair.

6. Keep the cord away from heated surfaces.

7. Never block the air openings of this product or place it on a soft surface, such as a bed or couch, where the openings may be blocked. Keep the air opening free of lint, hair, and other similar particles.

8. Never drop or insert an object into any opening or hose.

9. Connect this product to a properly grounded outlet only (See Grounding Instruction).

10. Avoid dropping or putting any heavy objects on the pump.

11. Put power cord or hose tube at patient's foot area to avoid winding around patient's neck.

12. To avoid electromagnetic interference, the patient's environment should not have strong electro-magnetic or RF-generated equipment nearby.

13. The PUMP will generate minor heat in operation; please do not directly contact the surface continuously for more than 1 minute.

14. The EMC specification is compliant with the regulation requirements (Refer to the EMC information on page 22). A power cord with a ground pin (3-pin type) connected to a properly grounded power outlet will result in a better EMC suppressing effect. The system will still function properly when the power cord is connected to a power outlet without grounding.

15. When the main supply is lost or has temporarily failed, the pump will stop and the power failure alarm will sound within 20 minutes. This is normal and the product will return to work state after the main supply is stable.

16. The connection of Lift-up detection to the PUMP can be performed by the operator. It is not designed for the patient to do the connection.

SYMBOLS	DESCRIPTION
	POWER ON
	POWER OFF
	ATTENTION
	DOUBLE ISOLATION
	"BF" SYMBOL: Indicates this is according to the degree of protection against electric shock for type bf equipment
	CAUTION: read instrution before use
	CAUTION: keep away from flammables
IP21	WATER AND DUST PROTECTION CLASSIFICAITON
	FUSE SPECIFICATION
	DISPOSAL OF ELECTRICAL & ELECTRONIC EQUIPMENT (WEEE): This product should be handed over to an applicable collection point for the recycling of electrical and electronic equipment.
	UL CERTIFICATION LOGO (COMPLIACE WITH IEC60601-1) With respect to electrical shock, fire and mechanical hazards only in accordance with STANDARD.
	CB CERTIFICATION LOGO
	CE CERTIFICATION LOGO

SECTION 2

INTRODUCTION

This manual should be used for initial set up of theComfy Aire Series®Air Mattress System and for daily maintenance. Please keep the manual in an accessible area for reference.

INTENDED USE

This product is intended to help and reduce the incidence of pressure ulcers while optimizing patient comfort. It also provides the following purposes:

- Individual home care setting and long-term care of those suffering from pressure ulcers.

- Pain management as prescribed by physician.

The connection of Lift-up detection to the PUMP shall be performed by the operator. It is not designed for the patient to do the connection.

NOTE Equipment not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

PRODUCT DESCRIPTION

The Comfy Aire Series is an alternating mattress replacement system used in the prevention and treatment of pressure ulcers. By using the established principles of alternating therapy, the Comfy Aire Series offers patients a comfortable and relaxing support surface which can both prevent skin breakdown and enhance healing.

The CONTROL UNIT of the Comfy Aire Series is a compact pump with features like an audible and visual low pressure notification, power failure and machine malfunction alarms, and a digital pressure adjustment function. The 19-cell mattress unit provides a unique design which keeps the lower layer of air cells constantly inflated while alternating and deflating the upper layer. The head section of cells remains static. The mattress has a heavy-duty nylon base sheet with a vapor permeable PU coated stretch cover.

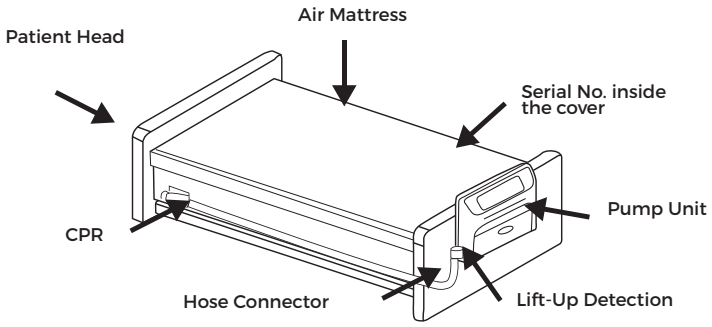
In the event of cardiac arrest, rapid deflation is achieved by using the highly visible CPR facility.

SECTION 3

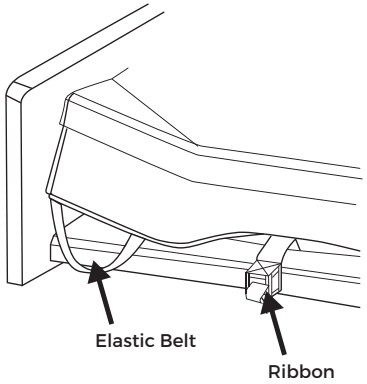
INSTALLATION GUIDE

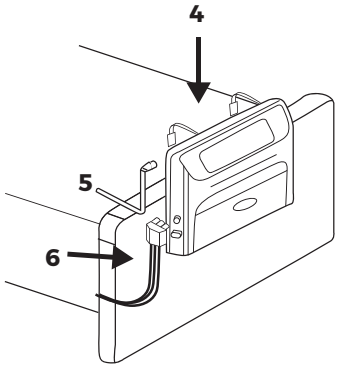
1 While unpacking the box, inspect for any damage that may have occurred during shipment. If there are any damages, please contact your dealer immediately.

2 Place the mattress on top of the bed frame. See note for the foot end.



3 Fasten the mattress onto the bed frame.



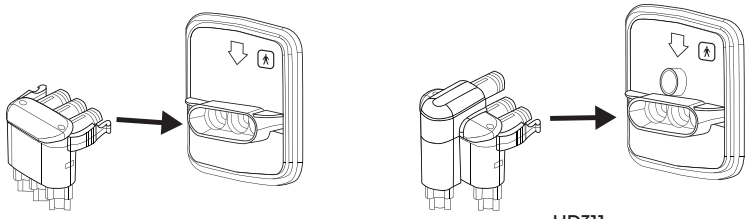


4 Hang the pump onto the bed rail (food-end). The hangers will tightlygrip the bed rail automatically.

5 Unplug the cover of the hose connector and connect the hose connector to the pump unit.

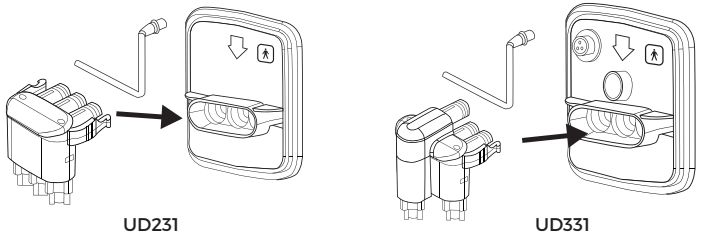
6 Connect the Lift-Up detection cable to the pump unit.

Note: There are two combinations of hose connectors via the pump's side panel displayed as following (UD211, UD311).A clicking sound will be heard when connection is made.

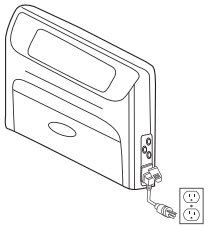


UD211 UD311

Directions for detection cable to pump unit connection



UD231 UD331

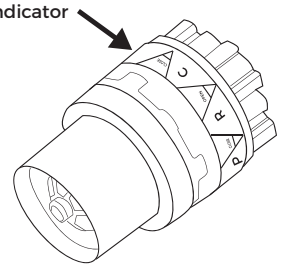


7 Plug the power cord into an electrical outlet.

NOTE: Make sure the pump unit is suitable for the local power voltage.

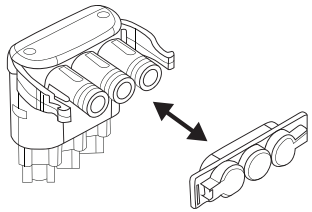
CAUTION: The pump can only be applied to the mattress recommended by the manufacturer. Do not use it for any other purpose (applied part: air mattress).

CPR Position Indicator

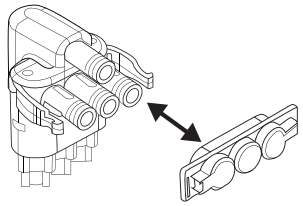


8 Make sure the pull type CPR tape is set to the mattress CPR position before turning on the power switch. Pull the CPR to release the air at emergency or for packaging.

9 Put on the hose connector cover during transportation, the mattress will retain pressure for up to 24 hours.



No direction for cover

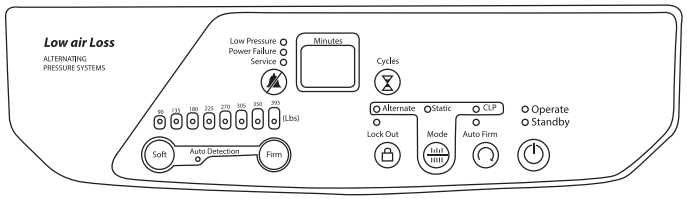


No direction for cover

SECTION 4

PANEL DISPLAY AND OPERATION GUIDE

UD panel



- Alarm Mute and Alarm Indicator
    - Low Pressure Alarm Indicator
    - Power Failure Alarm Indicator
    - Service (Malfunction) Alarm Indicator
- Alternate Cycle Time or Warning Code Display
- Operating or Standby
- Auto-Firm
- Function Mode Selection (Alternate/Static/Constant Low Pressure)
- Panel Lock-out
- Comfort Control
- Auto Detection

ALARM MUTE

Press alarm mute button to temporarily suspend the Low-Pressure/ Power Failure/Service alarms. Should the situation not be resolved and the fault conditions continue, the alarm will resume notifying the patient/caregiver.

ALTERNATE CYCLE TIME DISPLAY

Alternating Cycle Time can be selected from 10-30 minutes on 5minute intervals by pressing the CYCLE button

OPERATE OR STANDBY

Press this button to start operating or go into standby.

NOTE: The power switch on the side of pump must be turned on. Power on the unit will resume in the state before last power-off.

INFLATE/AUTO-FIRM

The PUMP will go into Inflate mode (flashing LED lights) every time the OPERATE mode is triggered. This insures the mattress is able to reach its maximum operating pressure. Once the maximum pressure level is reached, the pump will automatically switch into the previous selected mode and comfort level. User can also use this function for full mattress inflation during patient sit-up or ingress/egress for better support.

FUNCTION MODE SWITCH

- **ALTERNATE** –The mattress will operate on alternating mode: the air cells of the mattress will be proportionally deflated to reduce the surface pressure. The alternating cycle will continue at the selected cycle time until another mode is selected.
- **STATIC** - This mode allows the mattress to maintain the selected pressure.

- **CLP**-The PUMP will go into STAIC mode; the mattress will maintain 50% of the selected pressure.

PANEL LOCK-OUT

Should the panel remain untouched for 30 seconds or the Lock-Out button is pressed, the lock-Out feature will lock the screen to prevent an unintentional setting change. To unlock, press and hold the Lock-Out button for 3 seconds.

COMFORT LEVEL

Comfort level controls the air pressure output. When pressing the FIRM button, the output pressure will increase. This higher pressure output will support a heavier weight user. For decreasing air pressure, vice versa. Check to see if the suitable pressure is selected by sliding one hand between the air cells and the patient to feel patient's buttocks. Users should be able to feel the minimum contact. Always leave at least 1 inch space between user's buttock areas and air cells under to prevent bottoming out.

AUTO DETECTION

When pressing the SOFT and FIRM button together, the pump will automatically detect the weight of the patient and set the appropriate pressure output for patient comfort.

SECTION 5

OPERATION GUIDE

GENERAL OPERATION

NOTE: The power switch is located on the side of pump.

Press to turn on the unit. All indicators, including STANDBY, on the control panel will illuminate accompanied with a beep for 2 seconds (You can also check the indicator for failure if any).If the pump was turning off at OPERATE, it will automatically go to OPERATE.

To test if the battery is working properly, press to turn off the power. Power failure alarm should be triggered. If not, please call customer service.

When the OPERATE button is pushed, the system will start inflation and the "AUTO-FIRM" indicator will begin flashing.

The mattress should be fully inflated within 60 minutes, and automatically enter the last operating mode. Otherwise, the low pressure alarm will be triggered.

According to the weight of the patient, adjust the pressure setting to the most suitable level without bottoming out. User can determine an appropriate pressure by adjusting the Comfort Level. Please consult with your physician for a proper setting.

CPR

When CPR needs to be performed, quickly pull the CPR tape and disconnect the hose connector from the PUMP at the same time to speed up the air release.

AUDIBLE AND VISIBLE ALARMS

Power Failure

When electrical shortage occurred or power cord has been unplugged without turning off the pump, the "POWER FAILURE" indicator will light up along with buzzer. Check to ensure power cord is connected properly.

NOTE: When the PUMP has not been used for more than 3 months, it might need 6hours of operating time or more for the Alarm to function properly.

Low Pressure

When an abnormal low pressure has occurred in the body section for 2.5 minutes after the pressure is below the abnormal pressure threshold, the "Low Pressure" indicator will flash and beep every 4 seconds. The Low Pressure alarm will continue until alarm mute button is pressed. Should the situation not be resolved and faulty conditions continue, the alarm will resume.

Service(Malfunction)

When faulty conditions occur, the "SERVICE" indicator will light up along with buzzer. Reference to Table 2 for Warning code and call the agent or distributor for service.

ALARM MUTE

When alarms are triggered, both the LED light and buzzer will sound off to warn the patient/caregiver. By pressing the button, it will temporary mute the buzzer so the caregiver may check for possible causes. Should the situation not be resolved and faulty conditions continue, the alarm will resume. When in Power Failure situation, pressing alarm mute will cease the buzzer and turn off the "Power Failure" indicator.

WEIGHT AND COMFORT LEVEL REFERENCE TABLES

ALM831T UD SERIES PUMP + 35"MATTRESS (ILAL/2-1ALTERNATE)

COMFORT CONTROL (AUTO-DETECTION)	PUMP OUTPUT PRESSURE (MMHG)	PATIENT WEIGHT (LBS/KGS)
		90 135 180 225 270 305 350 395 (LBS)
		40 60 80 100 120 140 160 180 (KGS)
●○○○○○○○	25	
●●○○○○○○	30	
●●●○○○○○	35	
●●●●○○○○	40	
●●●●●○○○	45	
●●●●●●○○	50	
●●●●●●●○	55	
●●●●●●●●	60	

ALM842T UD SERIES PUMP + 48"MATTRESS (ILAL/2-1ALTERNATE)

COMFORT CONTROL (AUTO-DETECTION)	PUMP OUTPUT PRESSURE (MMHG)	PATIENT WEIGHT (LBS/KGS)
		175 220 265 310 375 440 505 570 (LBS)
		80 100 120 140 170 200 230 260 (KGS)
●○○○○○○○	25	
●●○○○○○○	30	
●●●○○○○○	35	
●●●●○○○○	40	
●●●●●○○○	45	
●●●●●●○○	50	
●●●●●●●○	55	
●●●●●●●●	60	

WEIGHT AND COMFORT LEVEL REFERENCE TABLES

INDICATOR LED		AUDIBLE OUTPUT MODE	CONDITION OF OUTPUT	WARNING DESCRIPTION	REMARKS
N/A	N/A	ONCE	Not in System Shutdown	Key Tone	Key Tone from Functional Button
Power Failure	S.d.	ONCE	Power-Off	System Shutdown	
ALL LED	8.8.	ONCE	Operate Or Standby	Power-On	All Indicators Light On
N/A	N/A	ONCE	Operate Or Standby	State/Mode Switching	
AutoFirm	I.E.	ONCE	Operate	Mattress Inflation Completion	Inflation Ended
AutoFirm	A.E.	ONCE	Operate	Auto-Firm Completion	Auto-Firm Ended
Static	S.E.	ONCE	Operate	Static Completion	Static Ended
Power Failure	N/A	REPEAT (cycle 4 sec.)	Power-Off	Power Failure Alarm	No Display
Low Pressure	I.F.	REPEAT (cycle 4 sec.)	Operate Or Standby	Power-On Inflation Failure Alarm	
Low Pressure	L.P.	REPEAT (cycle 4 sec.)	Operate Or Standby	Auto-Firm Failure Alarm	
Low Pressure	H.t.	REPEAT (cycle 4 sec.)	Operate Or Standby	Low Pressure Overtime Alarm	
Service	H.P.	REPEAT (cycle4.5sec.)	Operate Or Standby	High Pressure Overtime Alarm	
Service	H.t.	REPEAT (cycle4.5sec.)	Operate Or Standby	High Ambient Temperature Alarm	Environment Temperature Over Specification Limit
Service	U.1	REPEAT (cycle4.5sec.)	Operate Or Standby	Air Valve 1 Positioning Failure Alarm	Air Valve 1 failure
Service	L.b.	REPEAT (cycle15sec.)	Operate Or Standby	Battery Low Alarm	Battery would need to be replaced
NONE	C.U.	NONE	Factory Calibration Mode	Calibration Not Completed	
NONE	C.C.	NONE	Factory Calibration Mode	Calibration Completed	

SECTION 6

CLEANING

Wipe the PUMP UNIT with a damp cloth pre-soaked in a mild detergent and keep it away from dust. If other detergent is used, choose one that has no chemical effects on the surface of the plastics case on the pump unit. .

⚠ **CAUTION:** Do not immerse or soak pump unit.
By using a single use wipe, clean the MATTRESS COVER with a solution of neutral detergent and lukewarm water. Rinse thoroughly with clean water and use a damp single use wipe to rinse detergent.

DISINFECTING THE COVER

If the cover is heavily soiled or has been exposed to bodily fluids such as blood, it will require a more thorough cleaning procedure.

Wipe the cover using a single-use wipe dampened with a 0.1% Chlorine Solution (1,000ppm) and cold water. If necessary, a 1% Chlorine Solution (10,000ppm) and cold water can be used. Rinse thoroughly with a single-use wipe dampened with clean water. Make sure the cover is completely dried before refitting to the mattress.

Frequent or prolonged exposure to higher concentration disinfectant solutions may prematurely age the fabric cover of mattresses. Surfaces must be protected during use and rinsed and thoroughly dried after the application of a disinfectant.

LAUNDERING

Mattress covers should be completely removed before laundering.
Mattress covers can be laundered as follows:

- Pre -wash 140˚Ffor 15 minutes
- Main wash 140˚Ffor15 minutes
- Cold rinse and extraction.

DRYING

Mattress covers should be hung from a line or bar to air-dry in a clean indoor environment. Covers must be completely dried before refitting to the mattress.

Mattress covers can be tumble-dried on a low heat setting for 90 minutes. Drying temperature must not exceed 140˚F as exceeding the temperature when drying can cause significant damage to the mattress cover.

⚠ **CAUTION:** Do not use phenol-based product for cleaning.

⚠ **CAUTION:** After cleaning, dry the mattress without direct exposure of sunlight.

SECTION 7

STORAGE

1. To quickly vacuum air out from mattress for storage, pull the CPR tape and disconnect the hose connector to release the air.

2. Lay the mattress out flat and upside-down.
   Roll from the head end towards the foot end

3. Foot-end strap can then be stretched around the rolled mattress to prevent unrolling.

4. The power cord could be wrapped around the pump bumper or disconnected for storage.

SECTION 8

MAINTENANCE

GENERAL

- Check main power cord and plug if there are abrasions or excessive wears.

- Check mattress cover for signs of wear or damage. Ensure mattress cover and tubes are stubbed together correctly.

- Check the air hoses for any kink or break. For replacement, please contact your local dealers.

FUSE REPLACEMENT

- Disconnect the plug from main power when a blown fuse is suspected.

- Remove the cover of the fuse holder with a small screwdriver.

- Insert a new fuse with the correct rating in and replace the cover of the fuse holder. The fuse rating should comply with the requested specification.

AIR FILTER REPLACEMENT

- Replace the air filter located at the back of the pump.

- The filter is reusable and can be washed gently with a mild detergent and water. Dry the filter before use.

- Check and replace air filter regularly if environment is dirty.

THE DISPOSAL OF AIR MATTRESS

When the air mattress is broken or no longer functional, the mattress and the pump may be discarded for recycle.

SECTION 9

TROUBLESHOOTING

PROBLEM	SOLUTION
The mattress is not able to connect with the PUMP	Check if the mattress model (model no. located inside the cover at the foot end) xxAAAxxx matches with the PUMP model xxBBB-xxx. AAA should be the same as BBB. If not, please contact an agent or distributor. Check if the connector cover is removed and make sure the connector is not broken.
The pump is not indicating it is working	Check if the plug is connected to main power. Check if the main power switch is in the ON position. Check for any blown fuses.
Power Failure Alarm Failure	If pump is in operation but the power failure alarm is not working at power down, please call customer service.
The low pressure light is constantly flashing and the alarm has sounded	Check if the CPR is in the CLOSE position. Check if the power was suddenly shut down. Check if the connection between air tube to pump unit is tightly secured. Check if all coupling connections along mattress are secured.
The pump is on but the mattress is not alternating	Make sure mattress inflation is completed On the pump control panel, ensure that the ALTERNATE light is on. If not, switch it to ALTERNATE Check if the SERVICE alarm indicator is on with the buzzer. If so, contact the dealer or agent for further investigation.
The pump is operating noisily	Make sure the pump is resting against a solid surface If the noise becomes louder, contact a dealer or agent for further investigation.
Patient is bottoming out (without alarm triggering)	Pressure setting might be inadequate for the patient, adjust comfort level to FIRM and wait a few minutes for better comfort.

If the above information does not solve the problem, please contact your local dealer or agent for further support.

SECTION 10

TECHNICAL DATA

PRODUCT SPECIFICATION

PUMP UNIT

MODEL	UD Series Pump
DIMENSION(in)	13(W)x10(D)x5(H)
WEIGHT(kg)	3.5
CYCLE TIME (minutes)	10/15/20/25/30
STATIC TIME (minutes)	30
AUTO FIRM TIME (minutes)	20
PUMP OUTPUT FLOW RANGE (LPM)	> 8(@120V) Note: The flow rate may be varied because of the fluctuation of input voltage
PUMP OUTPUT PRESSURE RANGE (mmHg)	25 to 60 (±5)
POWER	AC120V 60Hz
CURRENT	0.25 AMAX (@132V~)
FUSE RATING	T1AL 250VAC
CLASSIFICATION	Class II
	Type BF
WARRANTY	1 year
SHELFLIFE	1 year

AIR MATTRESS

MODEL	8"Mattress Series	
	ALM831T	ALM842T
DIMENSION(in)	35(W)x79(L)x8(H)	42(W)x79(L)x8(H)
WEIGHT (lb/kg)	13.2 / 6	15.4 / 7
CELL MATERIAL	Nylon TPU	
NO. OF AIR CELL	18 CELLS	
COVER MATERIAL	Polyester with PU coated	
BOTTOM MATERIAL	Polyester with PU coated	
MAX WEIGHT (lb/kg)	395 / 180	570 / 260
MAX PRESSURE (mmHg)	103.5	
WARRANTY	1 year	
SHELFLIFE	1 year	

ENVIRONMENTAL CONDITIONS

OPERATION	41°F~104°F (5°C ~40°C)
ENVIRONMENT	15%RH ~ 93%RH(no condensation)
STORAGE	-13°F~158°F (-25°C~70°C)
ENVIRONMENT	≦93%RH(no condensation)
ENVIRONMENT	70 kPa-101.3kPa
PRESSURE	≦3000m

EMC INFORMATION

GUIDANCE & MANUFACTURER'S DECLARATION:
ELECTROMAGNETIC EMISSIONS

The GD311-301 is intended for use in the electromagnetic environment specified below. The customer or user of the GD311-301should assure that it is used accordingly.

EMISSION TEST	COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT GUIDANCE
RF emissions CISPR 11	Group 1	The GD311-301 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference with nearby electronic equipment.
RF emissions CISPR 11	Class B	The GD311-301 is suitable for use in all establishments including domestic establishments and those directly connected to a low-voltage public power supply network used in buildings serving domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Compliance	

GUIDANCE& MANUFACTURER'S DECLARATION:
ELECTROMAGNETIC IMMUNITY

The GD311-301 is intended for use in the electromagnetic environment specified below. The customer or the user of the GD311-301should assure that it is used in such an environment.

IMMUNITY TEST	IEC60601 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	+ 2kVfor power supply lines + 1kVfor input/ output lines	+ 2kVfor power supply lines Not applicable	Main power quality should be that of atypical commercial or hospital environment.
Surge IEC 61000-4-5	+ 1kVline(s) to line(s) + 2kVline(s) to earth	+ 1kV differential mode Not applicable	Main power quality should be that of atypical 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) or 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	Main power quality should be that of atypical commercial or hospital environment. If the user of theGD311-301 requires continued operation during main power interruptions, it is recommended that the GD311-301be powered fro man uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC61000-4-8	3A/m	3A/m	The GD311-301power frequency magnetic fields should be at levels of a typical location in atypical commercial or hospital environment.

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

GUIDANCE& MANUFACTURER'S DECLARATION:

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The GD311-301 is intended for use in the electromagnetic environment specified below. The customer or the user of the GD311-301 should assure that is used in such an environment.

IMMUNITY TEST	IEC60601 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT-GUIDANCE
			Portable and mobile RF communications equipment should be used no closer to any part of the GD311-301 including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Conducted RF IEC 61000-4-6	3 Vrms 150 KHz to 80 MHz	3 Vrms	**Recommended Separation Distance:** d = 1,2√P d = 1,2√P80MHz to 800 MHz d = 2,3√P800MHz to 2,5 GHz
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2,5 GHz	3 V/m	According to the transmitter manufacturer is the maximum output power rating of the transmitter in watts (W) and is the recommended separation distance in meters(m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

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

NOTE: 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/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 theGD311-301is used exceeds the applicable RF compliance level above, theGD311-301 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating theGD311-301.

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

RECOMMENDED SEPARATION DISTANCE BETWEEN PORTABLE AND MOBILE RF COMMUNICATIONS EQUIPMENTANDTHEGD311-301

The GD311-301 is intended for use in an electromagnetic environment where radiated RF disturbances are controlled. The customer or user of the GD311-301can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and theGD311-301 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 TRANSMIT TERM		
	150KHZ TO 80MHZ d =1,2√P	80MHZ TO 800MHZ d =1,2√P	800MHZ TO 2,5GHZ 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

According to the transmitter manufacturer; or transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters(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).

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

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

SECTION 7

LIMITED WARRANTY

The warranty below has been drafted to comply with Federal Law applicable to products manufactured after July 4, 1975. This warranty is extended only to the original purchaser/consumer (or dealer non-consumer who does not buy for resale).

Tuffcare® warrants that its proprietary Comfy Aire Air Mattress System will be free from defective workmanship and materials for a period of one (1) year following the date of original manufacture with the following exceptions: All parts of mattress and electronics system on the air mattresses are warranted for one (1) years. The warranty period commences on the original manufacture date. If within such warranty period any such product proven to Tuffcare® satisfaction to be defective, such product will be repaired or replaced at Tuffcare® option.

Tuffcare® sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement. This warranty does not include any labor charges incurred in replacement parts installation. Freight charges to factory are at the expense of consumer or seller. Return freight charges will be prepaid by Tuffcare®. For warranty service, please contact the authorized dealer from whom you purchased your Tuffcare® products. In the event you do not receive satisfactory warranty service, please write directly to Tuffcare®. DO NOT RETURN PRODUCTS WITHOUT PRIOR AUTHORIZATION.

LIMITATIONS AND EXCLUSIONS: The foregoing warranty shall not apply to products subjected to negligence, abuse, misuse, improper operation, improper maintenance, improper storage, or damages beyond Tuffcare® control. The evaluation will be solely determined by Tuffcare®. The warranty shall not apply to problems arising from normal wear, or failure to follow instructions, or if parts not manufactured by Tuffcare®, or not comply with original equipment specifications are added to a Tuffcare® product.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. Tuffcare® SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state. Some states do not allow the exclusion or limitations of incidental or consequential damage, or limitation on how long an implied warranty lasts, therefore, the above exclusion and limitation may not apply to you.

NOTES:

Tuffcare®

HIGHER STANDARD FOR HEALTHCARE ™

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