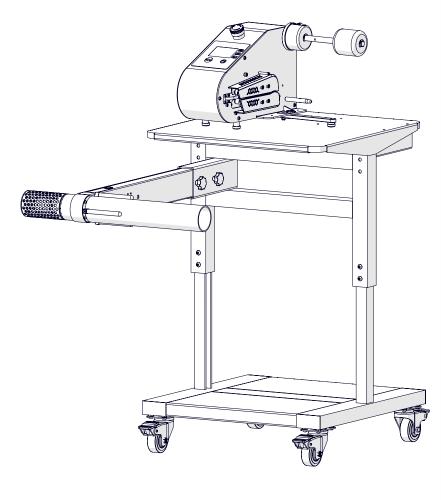


# SET-UP MANUAL BUBBLE WINDER







**REV 1.1 08142024** 

# **USER NOTES**



For all IPG product manuals please visit <u>www.itape.com/systems-manual</u> or use this QR code

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# **GENERAL INFORMATION**

### Preface

This user manual contains information necessary to become familiar with setting up and/or installing the IPG Bubble Winder system. It is intended to be used by the **installer** or **trainer** of the IPG Bubble Winder. It is necessary to read this manual carefully before installing, this manual only applies to the IPG Bubble Winder. If the manual becomes damaged please contact IPG Machinery Support for a new digital copy.

Please refer to the table of contents of this Set-up Manual to locate the information relevant to you. Please be sure to keep this Set-up Manual in a safe and convenient place to refer to it whenever necessary. Do not keep this manual with the machine.

This Set-up Manual is originally written in English. All other languages are translations of the original. For more information, or to order new Set-up Manuals, please contact **Nuevopak**, an **IPG Company**, or an authorized representative.



THIS IPG BUBBLE WINDER SET-UP MANUAL CONTAINS IMPORTANT INFORMATION RELATED TO SAFETY, INTENSION AND MEANING OF THE MACHINE LABELS, MACHINE SET-UP, OPERATIONAL MODES, AND THE GENERAL FUNCTIONS OF THE IPG BUBBLE WINDER AND ITS ACCESSORIES.

#### Machine, Stands and Accessories Set-Up



#### Machine Product Description

The **IPG Bubble Winder** takes the output stream of Bubble-on-Demand (BoD) from the IPG AirSpace A3 Pro<sup>®</sup> system and automatically winds it into an easily movable coil of protective void fill for pack stations that are not in the immediate vicinity of the machine system. It consists of a single gear motor and is designed to integrate with the IPG AirSpace A3 Pro<sup>®</sup> BoD machine without the need for special software.

#### **Technical Support**

If any problems arise with this **IPG Bubble Winder** during the normal course of operation, the end user's properly trained and qualified internal service personnel should be able to repair any issues after consulting the <u>"General Troubleshooting" section on page 26</u>.

Technical Support can be reached via phone in North America by calling 813-845-3070 or by email at machsupp@itape.com

#### Field Service Assistant

For technical information and troubleshooting assistance, contact Technical Support. Internal qualified service personnel; please refer to the attached Business Card or the Identification Plate for contact information.

#### **Definitions**

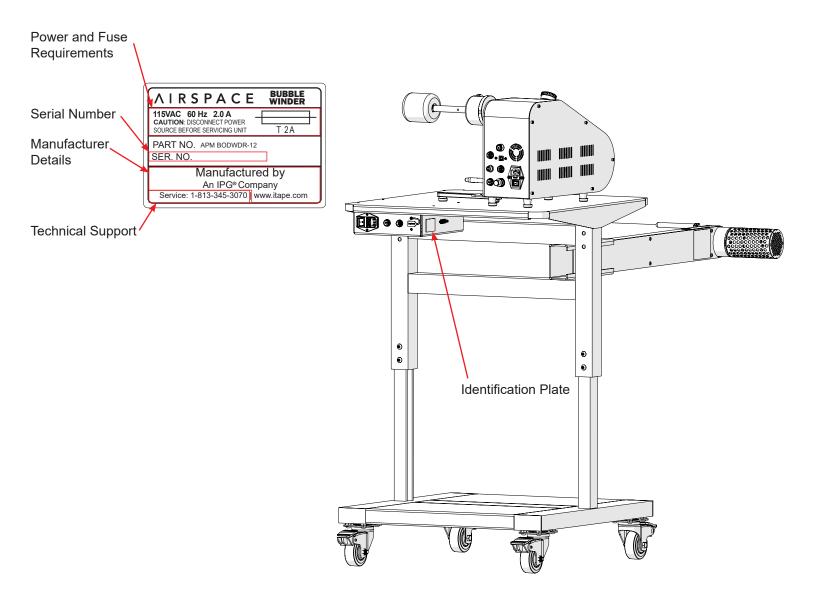
Throughout this manual there are common terms and phrases used. They are listed below:

- 1. The **Bubble Winder** is defined as the IPG Bubble Winder which is manufactured by **Nuevopak**, an **IPG Company**.
- 2. The **Machine System** is defined as the IPG Bubble Winder with the IPG AirSpace A3 Pro<sup>©</sup> installed.
- 3. The **Installer** is defined as that individual, who has been trained by **Nuevopak**, an **IPG Company**, representative and are authorized to install and operate the system as outlined in this User Manual.
- 4. The **Operator** or **User** is defined as that individual, who has been trained by internal qualified service personnel or **Nuevopak**, an **IPG Company** representative and is authorized to Operate the system as outlined in this guide.
- 5. The **Trainer** is the individual, who has been trained by an IPG authorized representative, who is responsible for overseeing all User/Operators of use of the **Bubble Winder**.
- 6. An **Authorized Representative** or **Qualified Service Personnel** are defined as those individuals who are authorized to: install the **Bubble Winder**, operate the **Bubble Winder**, train users, train qualified service personnel, and to perform all maintenance and repair procedures other than outlined in this User Manual.

# MACHINE OVERVIEW

# Machine Identification

The Machine identification is located on the Identification Plate which is attached to the back of the Machine (refer to Figure 1).





#### **Safety Precaution**



THE BUBBLE WINDER IS DESIGNED FOR SAFE USE IN CONFORMANCE WITH THE APPLICATION, CONDITIONS, AND RULES DESCRIBED IN THIS SET-UP MANUAL. ALL USERS MUST READ AND UNDERSTAND THE USER MANUAL BEFORE OPERATING THE BUBBLE WINDER.

# IMPORTANT SAFETY INSTRUCTIONS

### Explanation of Signal Word Consequences



THIS SYMBOL CALLS ATTENTION TO CAREFULLY READ THE STATEMENT AS IT IS CRITICAL FOR MACHINE OPERATION.



#### THIS SYMBOL CALLS ATTENTION TO CONDUCT PROPER LOCK OUT TAG OUT (LOTO) PROCEDURES PRIOR TO CONDUCTING ANY PREVENTATIVE MAINTENANCE OR MACHINE MAINTENANCE.

#### WARNING: INDICATES A POTENTIALLY HAZARDOUS SITUATION, WHICH IF NOT AVOIDED COULD RESULT IN DEATH OR SERIOUS INJURY OR PROPERTY DAMAGE



#### CAUTION: INDICATES A POTENTIALLY HAZARDOUS SITUATION, WHICH IF NOT AVOIDED COULD RESULT IN MINOR OR MODERATE INJURY OR PROPERTY DAMAGE



- 1. To reduce the risk associated with mechanical and electrical hazards:
  - Read, understand, and follow all safety and operating instructions before operating or servicing the Bubble Winder
  - $_{\circ}\,$  Allow only properly trained and qualified personnel to operate and service this equipment
- 2. To reduce the risk associated with pinches, entanglement, and hazardous voltage:
  - Turn electrical supply off and disconnect before performing any adjustments, maintenance, or servicing
- 3. To reduce the risk associated with pinches and entanglement hazards:
  - $\,\circ\,$  Do not leave the Bubble Winder running while unattended
  - Turn the Bubble Winder off when not in use
  - Never attempt to work on any part of the Bubble Winder while the Machine is running
- 4. To reduce the risk associated with hazardous voltage
  - Position electrical cord away from foot traffic and vehicle traffic
  - Do not operate the Bubble Winder with a damaged power cord
- 5. To reduce the risk associated with sharp blades hazards:
  - Keep hand and fingers away from the AirSpace 3 Pro<sup>®</sup> blade, the blade is very sharp
- 6. To reduce the risk associated with fire and explosion hazards:
  - Do not operate this equipment in potentially flammable and/or explosive environments
- 7. To reduce the risk associated with muscle strain:
  - Use proper body mechanics when removing or installing film rolls that are moderately heavy or may be considered awkward to lift
- 8. To reduce the risk associated with mechanical and electrical hazards:
  - Allow only properly trained and qualified personnel to operate and service this equipment
  - Do not operate the Bubble Winder when the electrical box is damaged or removed



- 1. To reduce the risk associated with pinch hazards:
  - Keep hands, hair, loose clothing, and jewelry away from rotating mandrels, moving belts, and heating elements

# Important Safeguards

#### **Operational Safety**

In the event of a defect, or if the operation or installation of the **Bubble Winder** differs from the descriptions in this Set-up Manual, turn the I/O Main Switch to O [OFF] and disconnect the Main Power Cord Plug from the main power until the unit can be inspected by a trained Nuevopak, an IPG Company, representative, or qualified service personnel.

- Make sure that cords cannot be and are not damaged.
- Before moving the **Bubble Winder**, unplug the Main Power Cord Plug, Photo Eye Plug, and other accessories from the **Bubble Winder** back and secure loose cords.
- Make sure the **Bubble Winder** is acclimated for at least 30 minutes when moved from a cold area.
- Do not use cable reels. An extension cable with a wire gauge of at least 14 AWG (1,5mm<sup>2</sup>) with a maximum length of 11.5 ft (3.5m) may be used.

#### **Precautionary Statements**

There are a number of Warning and Caution labels used on the **Bubble Winder**, these labels are placed at different locations on the **Bubble Winder** to warn the Installer, Operator(s) and Service Personnel of possible dangers (Figure 2). Please refer to the User Manual of the **IPG AirSpace A3 Pro**<sup>®</sup> to get familiar with the meaning of the warning and caution labels on that **Machine** before using that **Machine** in conjunction with the Bubble Winder.

#### Warning Label Descriptions

The **Bubble Winder** and the IPG AirSpace A3 Pro<sup>®</sup> are provided with Warning and Caution labels. **Do not remove any** warning or caution labels and keep them undamaged. In case a Warning or Caution label is damaged, contact **Nuevopak**, an **IPG Company**, or an authorized representative for replacement labels.

# Important Safeguards

#### Safety Components



WARNING! DO NOT REMOVE OR TAMPER WITH THE SAFETY COMPONENTS. DO NOT REMOVE THE COVERS. THE ACCESS COVERS MAY ONLY BE REMOVED BY AN AUTHORIZED NUEVOPAK/IPG REPRESENTATIVE OR QUALIFIED SERVICE PERSONNEL THAT HAVE BEEN TRAINED BY A NUEVOPAK/IPG REPRESENTATIVE.

The following is a list (Table 1) and graphic (Figure 2) of the safety components and warning labels which are part of the **Bubble Winder**.

Safety Component	Description
Emergency Stop Button (E-Stop)	This switch, located on the top of the <b>IPG AirSpace A3</b> <b>Pro</b> <sup>©</sup> , interrupts the power to the entire <b>IPG AirSpace A3</b> <b>Pro</b> <sup>©</sup> when pushed.
Bubble Winder Electrical Cover	Electrical box cover prevents the user to access the <b>Bubble</b> <b>Winder</b> interior electrical components.
Bubble Winder Arm Cover	Arm cover prevents the user to access the <b>Bubble Winder</b> interior components.
Fuse	10 amp 250 volt, 5 x 20mm

#### **Table 1: Safety Components**

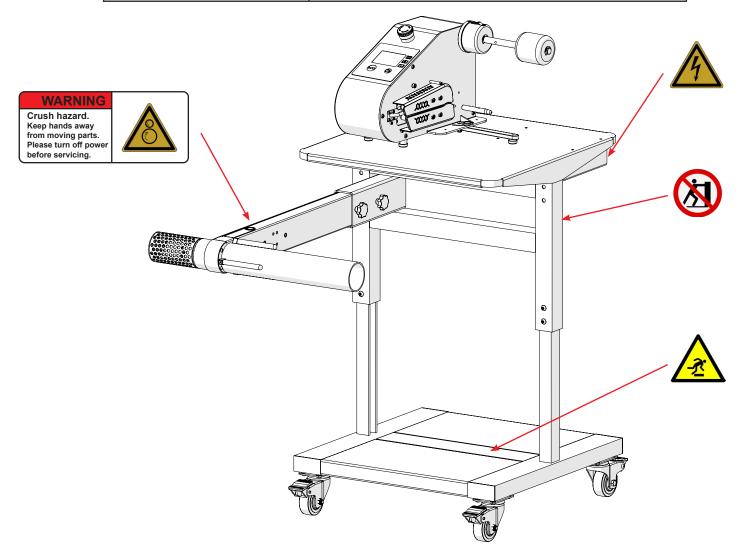


Figure 2: Safety Label Placement

# IMPORTANT SAFEGUARDS

### Warning and Caution Labels

#### Table 2: Warning and Caution Labels

Symbol	Meaning	
	Read the instruction manual/booklet before starting work or before operatio the Machine.	
	Disconnect the main plug for maintenance purposes, in case of malfunction or when the Machine is left unattended.	
<b>A</b> warning         Crush hazard.         Keep hands away         from moving parts.         Please turn off power         before servicing.	Do not put hands into designated openings. Crush hazard.	
	Hot surface. Allow time to cool before servicing.	
	Take care to avoid injury to hands when in the surrounding area of equipment with closing or adjusting mechanical parts.	
	Take care to avoid injury from sharp elements.	
<u>~</u>	Take care when in the surrounding area of a floor that is not level, tripping hazards exist.	
4	Electricity. Take care to avoid coming into contact with electricity.	
	Do not push or lean against the Machine when stationary or attached to any accessories.	
SUSPERICI SIDE	Emergency Stop. Use this button to interrupt the power to the entire Machine.	

Some of the above safety labels will be located on the IPG AirSpace A3 Pro<sup>®</sup>. Please refer to that machine's manual for locations and descriptions on the IPG AirSpace A3 Pro<sup>®</sup>.

# INTENDED USE

### Intended Use of Bubble Winder



CAUTION! USING THE MACHINE BEYOND ITS CAPABILITY, BEYOND THE PHYSICAL USER CONDITIONS, OR WITHOUT FOLLOWING THE SAFETY PRECAUTIONS AS DESCRIBED IN THE SET-UP MANUAL AND THIS USER MANUAL CAN BE CONSIDERED AS MISUSE. READ THIS USER MANUAL BEFORE STARTING WORK OR BEFORE OPERATING THE MACHINE.

- 1. The void fill product created by the **Machine System** are intended to be used only as packaging material.
- 2. Only void fill film products which are intended to be used for the **IPG AirSpace A3 Pro**<sup>®</sup> and which are supplied by an **IPG Authorized Representative** may be used.
- 3. Only accessories which are intended to be used for the **Bubble Winder** and which are supplied by an **IPG Authorized Representative** may be used.
- 4. Connect the **Bubble Winder** to a properly grounded outlet only.
- 5. To disconnect, turn the I/O Main Switch to O [OFF] and disconnect the Main Power Cord Plug from the main power outlet.
- 6. Do not unplug cables by pulling on cord. To unplug grasp the plug, not the cord.

The following applications or acts are not suitable for the **Machine System** and constitute improper use:

- 1. **DO NOT** use a void fill film products other than those produced and supplied by a **Nuevopak** or **IPG Company** representative and intended for use on the **Machine System**.
- 2. **DO NOT** use outside or in humid conditions.
- 3. **DO NOT** use in potentially explosive environments.
- 4. DO NOT wash or clean the Machine System with excessive quantities of water.
- 5. **DO NOT** stand on the **Machine System** or its stand/accessories.
- 6. **DO NOT** place objects against or on top of the **Machine System**.
- 7. DO NOT move the Machine System while the power plug is still connected to the AC power supply.

#### **Disclaimer**

The intended use of the **Machine System** is to convert film, from a wound roll, into void fill material. **Nuevopak**, an **IPG Company**, and its authorized representatives are not responsible for any accidents, damages or errors caused by:

- 1. Not following the instructions and illustrations as described in this **Bubble Winder** user manual.
- 2. Use of components which are not supplied by **Nuevopak**, an **IPG Company**, or an authorized representative.
- 3. Repairs or modifications done by anyone other than a **Nuevopak**, an **IPG Company**, authorized representative or a **Nuevopak**, an **IPG Company**, trained service technician.
- 4. Improper use or alteration to any of the original parts of the Machine System.
- 5. Not keeping the **Machine System** covers attached with the provided tamper-proof screws.



#### WARNING! DO NOT REMOVE OR TAMPER WITH THE SAFETY COMPONENTS. DO NOT REMOVE THE COVERS. THE ACCESS COVERS MAY ONLY BE REMOVED BY AN AUTHORIZED NUEVOPAK/IPG REPRESENTATIVE OR QUALIFIED SERVICE PERSONNEL THAT HAVE BEEN TRAINED BY A NUEVOPAK/IPG REPRESENTATIVE.

# **TECHNICAL SPECIFICATIONS**

Machine Component	hine Component Specification		
Dimensions	48" x 28" x 52" (1220 mm x 712 mm x 1320 mm)		
Weight of Bubble Winder	100 lbs (45.4 kg)		
Weight with machine and film installed	127 lbs (57.6 kg) weight of film may vary based on style		
Maximum sound pressure level	69dB(A) +/- 2.5dB(A)		
Non-ionizing radiation	Not applicable		
IP class	IP 20		
Installation class	Class I		
Supply voltage (U)	100 – 240, 1PH		
Frequency	50-60 Hz		
Current (I)	2.4 A (110VAC)		
Power (P)	0.26KW (110VAC)		
Fuse rating (A)	2 A (250VAC)		
Electric receptacle	15 A (110VAC)		
Color	Blue and Grey		
Construction	Metal		
Accessories mechanical construction	Varies		
Storage temperature	-4 - 122°F (-20- 50°C)		
Operation temperature	41 - 104°F(5 - 40°C)		
Storage humidity	"Dry" ~ 95% (in protective packaging)		
Operating humidity	30 ~ 90%, non-condensing		
The electrical equipment shall be capable temperature of 68°F (20°C).	le of operating correctly when the relative humidity does exceed 90% at a maximum		
Electrical aguinment shall be capable of energing correctly at altitudes up to 6 562 ft. (2,000m) mean and loval			

Electrical equipment shall be capable of operating correctly at altitudes up to 6,562 ft. (2,000m) mean sea level.

#### **Film Specifications**

The Bubble Winder is intended for use with only Bubble-on-Demand. The IPG AirSpace A3 Pro<sup>®</sup> is capable of processing a variety of film and film types, this includes BoD. Use only IPG approved void fill film in the AirSpace 3 Pro. See the set up document for more details on the film settings.

# **MACHINE OPERATIONS**

### **Component Layout**

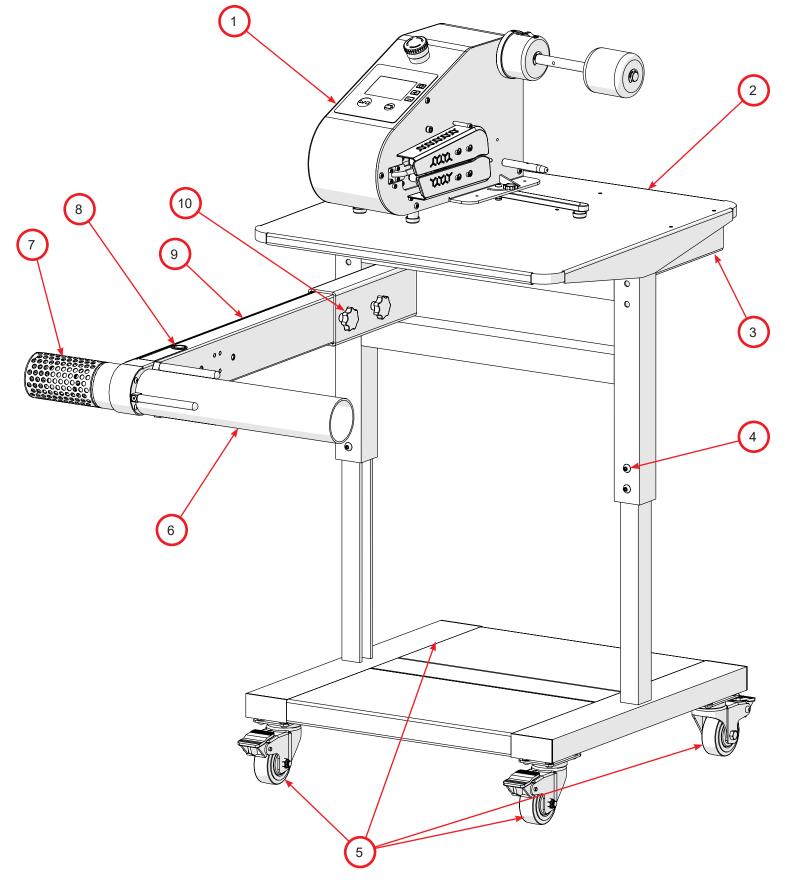


Figure 3: Component Layout

# MACHINE OPERATIONS

## Component Layout

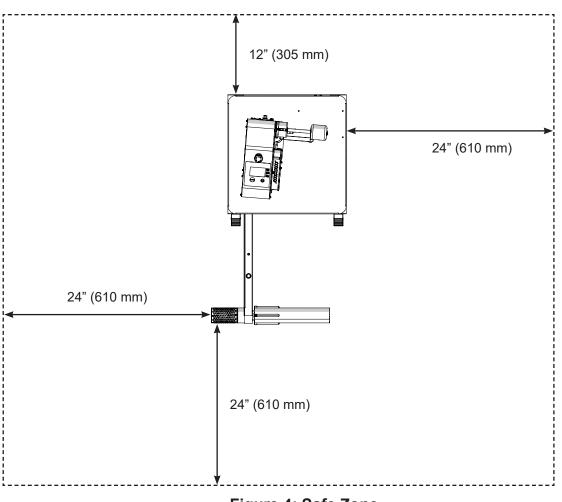
Legend	
Item No.	Description
1	IPG AirSpace A3 Pro <sup>©</sup>
2	Upper Stand Weldment
3	Electrical Box Assembly
4	Leg Locking Screws
5	Locking Casters
6	Winder Mandrel
7	Motor/Motor Cover
8	User Operation Button
9	Arm Assembly
10	Grip Knobs

## MACHINE SET-UP Machine Operational Limits

The **Bubble Winder** can be set up by an IPG technician or an IPG Authorized Trainer.

Required for safe use of the **Bubble Winder** by the Operator, ensure the **Bubble Winder** gets installed according to the Operational limits as shown below.

# WARNING! MAKE SURE THERE IS ONLY ONE PERSON PRESENT IN THE WORK AREA WHEN THE MACHINE IS OPERATED.







WARNING! FAILURE TO PROPERLY GROUND THE SYSTEM COULD CREATE AN ELECTRICAL SHOCK HAZARD.

A qualified electrician should be consulted if there is any doubt as to whether an Main Power wall Socket is properly grounded.

Do not use outdoors.



# MACHINE SET-UP

### **Receiving and Handling**

The IPG Bubble Winder is shipped to the customer fixed to a pallet. The machine is enclosed by pallet wrap. The sequence below is step by step instructions to remove all packing materials. An Authorized IPG Representative or trainer must be present when removing the machine from the pallet.

# PRIOR TO SIGNING FOR THE MACHINE INSPECT IT FOR ANY DAMAGE THAT MAY HAVE OCCURRED DURING SHIPPING

- 1. Remove the external wrap from the machine
- 2. Cut any banding securing the Bubble Winder to the pallet
- 3. Inspect the machine for any damage that may have occurred during shipping
- Remove any boxes and/or items shipped with the Bubble Winder that are not attached to the main body of the machine
   This will typically include the IPG AirSpace A3 Pro<sup>®</sup>
- 5. Following proper lifting techniques conduct a team lift of the Bubble Winder to remove it from the pallet
  - Do not attempt to solo lift the Bubble Winder at any time.
- 6. Position the machine near in its desired location
- 7. Remove any remaining tie wraps and shipping materials
- 8. Complete the set-up procedure
- 9. Position the machine in its desired location
- 10. Lock all four (4) of the casters

After unpacking the Bubble Winder, look for any damage that may have occurred during shipping. Should the Bubble Winder be damaged, file a claim with the transport company and notify your IPG representative as soon as possible.

# MACHINE SET-UP

#### <u>Set-up</u>

The **Bubble Winder** can be set up by an IPG technician or an IPG Authorized Trainer.

The Bubble Winder is shipped in a collapsed position with the mandrel partially disassembled for ease of transport.

#### Mandrel Installation

- 1. Lock the four (4) casters
- 2. Verify the mandrel hub is fixed to the motor shaft and contains three (3) mandrel screws
- 3. Remove the three (3) mandrel screws
- 4. Slip the mandrel over the hub, this will be a tight fit
- 5. Secure the mandrel to the hub with the screws, the screws will pass through the mandrel fingers

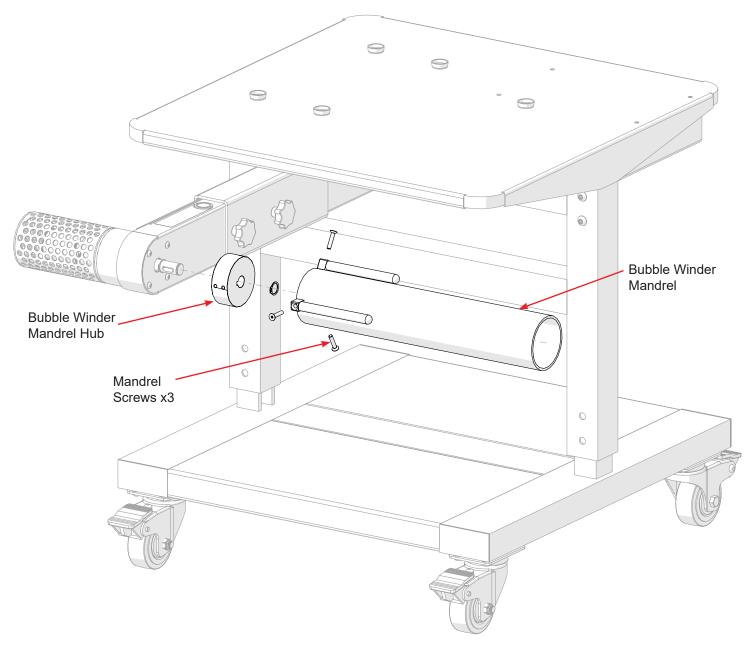


Figure 5: Air Winder Mandrel

# MACHINE SET-UP

### Expanding the Bubble Winder

6. Unscrew the eight (8) locking screws, front and back, securing the upper section of the Bubble Winder to the lower

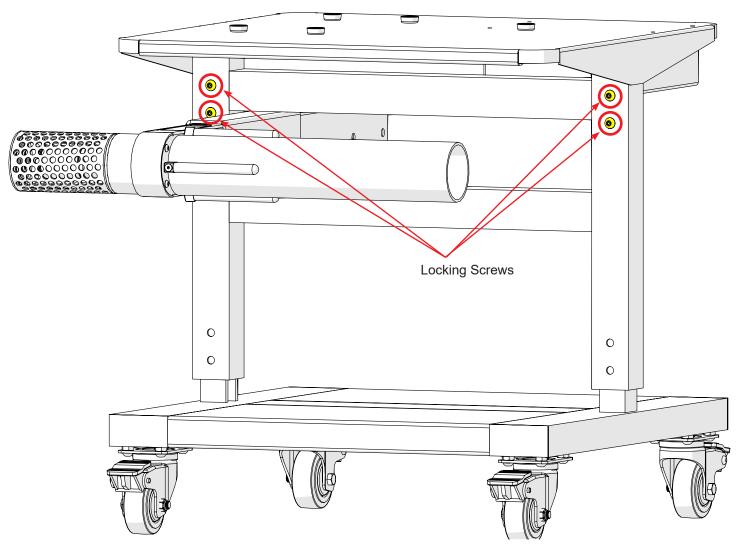


Figure 6: Locking Screws Collapsed Position

section



CAUTION! DO NOT LIFT THE UPPER SECTION SOLO. USE PROPER TEAM LIFTING TECHNIQUES TO REDUCE STRAIN.

# MACHINE SET-UP Expanding the Bubble Winder

- 7. The upper section can now slide freely to its expanded position.
- 8. Using two or more people lift the upper section until the lower mounting points are aligned with the mounting points on the bottom section.
- 9. Tighten the eight (8) screws. front and back. securing the upper and lower sections of the Bubble Winder in the

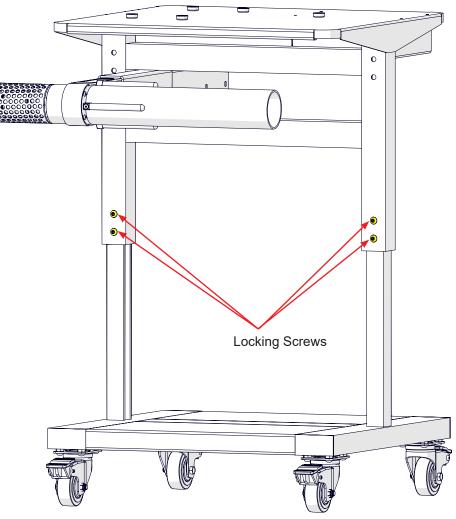


Figure 7: Locking Screws Extended Position

# MACHINE SET-UP Expanding the Bubble Winder

extended position

10. Loosen the hand nuts on the mandrel arm allowing it to slide freely.

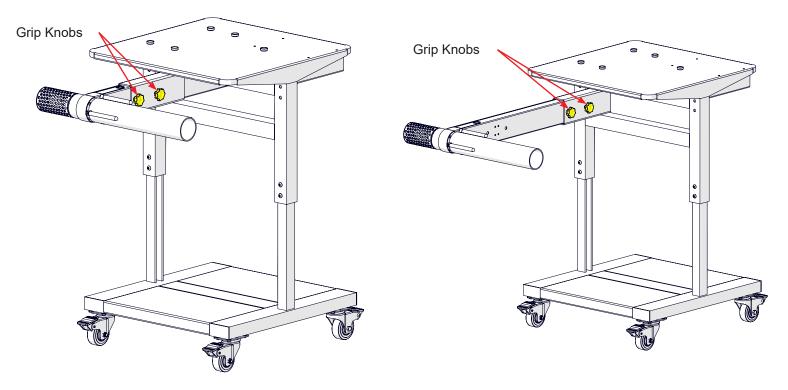


Figure 8: Mandrel Arm Extension

11. Position the mandrel arm in its extended orientation and re-secure the hand nuts locking it into position.

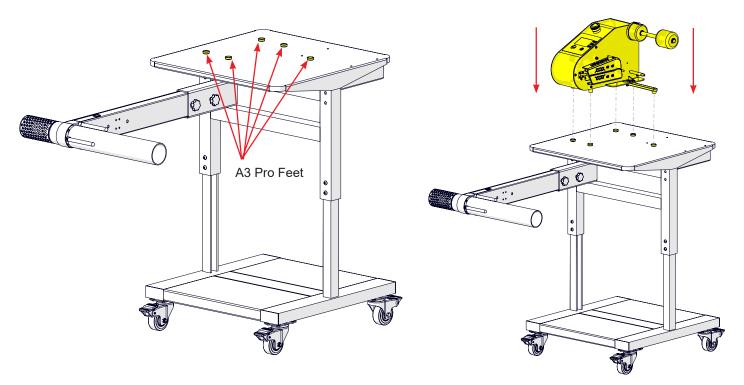


Figure 9: AirSpace A3 Pro Installation

# MACHINE SET-UP Connecting Utilities

- 12. Place the AirSpace A3 Pro into the feet that are pre-mounted onto the top of the Bubble Winder.
- 13. Connect the AirSpace A3 Pro to the Bubble Winder utilizing Port 1 (red) and the Port 3 (blue).
  - These connectors are also easily identifiable by the numbers of pins. 2 for Port 1 and 6 for Port 3. This makes them impossible to connect incorrectly.

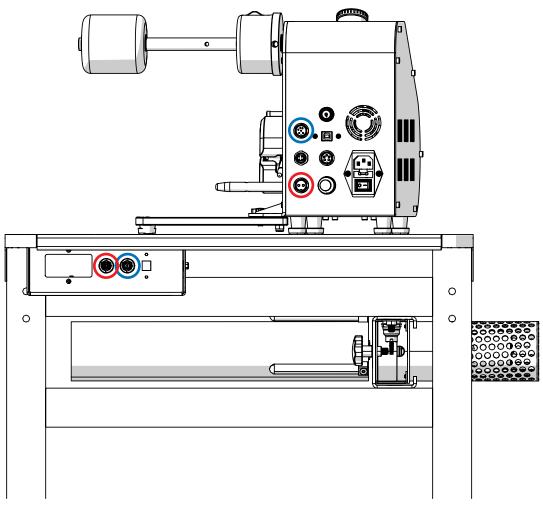
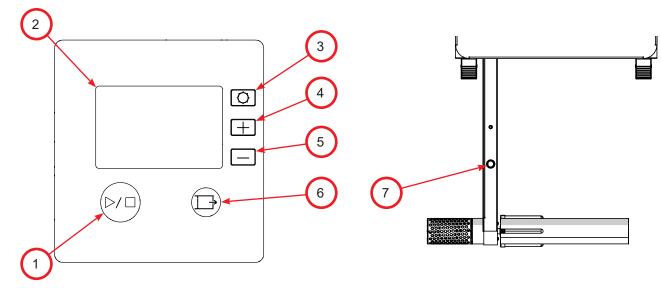


Figure 10: Bubble Winder Data Connection

- 14. Connect both the AirSpace A3 Pro and the Bubble Winder to power.
- 15. Install a roll of Bubble-on-Demand (BoD) film onto the Air 3 Pro (reference the AirSpace A3 Pro User Manual for proper film loading).

# MACHINE CONTROLS



#### Figure 11: Machine System Controls

LEGEND				
Item No.	Description			
1	Start/Stop Button – This button will begin the normal function of the <b>IPG AirSpace A3 Pro</b> <sup>®</sup> , processing film and turning it into Void Fill Pillows			
2	LCD Screen – This will display all current settings			
3	Setting Button – When in Service Mode this button will change the selected option on the screen.			
4	(+) Button – When in Service Mode use this button to increase the value of the selected option on the screen			
5	(-) Button – When in Service Mode use this button to decrease the value of the selected option on the screen			
6	Film Advance Button – Press and hold to advance the belts for loading film			
7	Multifunction Bubble Winder Operation Button and Status Light			

# MACHINE CONTROLS

The **Bubble Winder** only uses a single touch capacitive button for the operator. This button is multi-colored to allow the operator to quickly identify the status of the **Bubble Winder** as well as any potential errors. The **Bubble Winder** will automatically communicate with the **IPG AirSpace A3 Pro**<sup>®</sup>. The **IPG AirSpace A3 Pro**<sup>®</sup> will need to be set up in Continuous Mode, please refer to the User Manual of the **IPG AirSpace A3 Pro**<sup>®</sup> for its set up and operating modes.

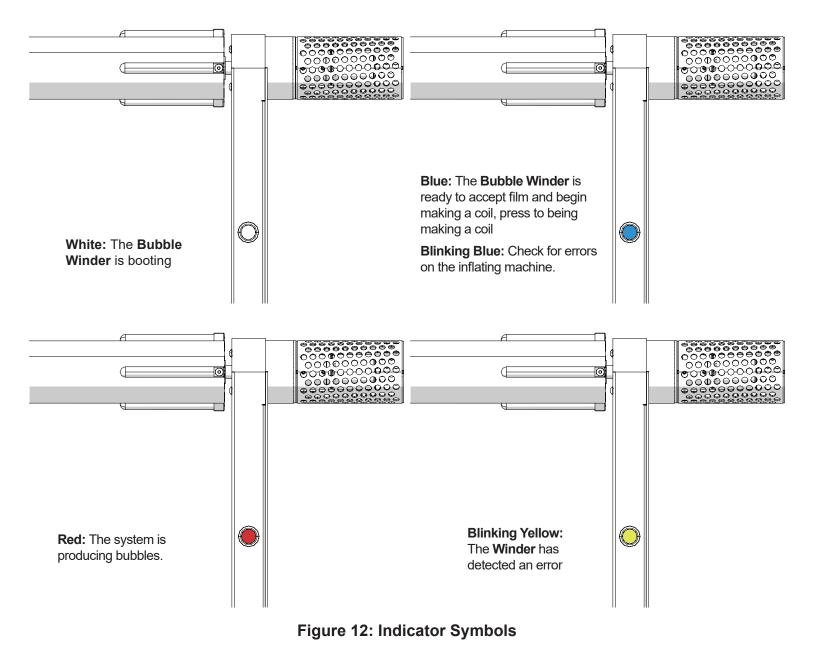
#### White: The Bubble Winder is booting

Blue: The Bubble Winder is ready to accept film and begin making a coil, press to being making a coil

Red: The Bubble Winder is actively making a coil, press to stop making a coil

Blinking Yellow: The Bubble Winder has detected an error

Blinking Blue: The Bubble Winder has lost communications with the IPG AirSpace A3 Pro®



# MACHINE CONTROLS

### Machine Modes of the IPG AirSpace A3 Pro<sup>®</sup> Machine used with the Bubble Winder

The **IPG AirSpace A3 Pro**<sup>®</sup> is designed to operate in several modes with a variety of accessories and is able to be adjusted to accept a wide variety of film, including Bubble-on-Demand (BoD). Some adjustments may need to be made to accommodate small discrepancies in film manufacturing from batch to batch. The setting on the **IPG AirSpace A3 Pro**<sup>®</sup> should be set to: Type16, Air at 14 or 15, Temperature at 10 or 11, and length to 0000. Some mild adjustment to temperature and air may be needed.

### Installing Film Onto the IPG AirSpace A3 Prog and Operating the Bubble Winder

- 1. Lock all casters.
- 2. Ensure all cables are properly connected to the **IPG AirSpace A3 Pro**<sup>®</sup>'s rear panel (Ports 1 & 3).
- 3. Ensure the Main Power Connection is properly connected to both the **IPG AirSpace A3 Pro**<sup>®</sup> and **Bubble Winder** as well as the wall socket.
  - Verify the power cords are not damaged
- 4. The **Emergency Stop button** on the inflating machine is not pressed.
- 5. Turn the **Bubble Winder ON** by switching the **I/O Main Switch** on the rear of the **Machine** to the **[I]** position.
  - The button on the **Bubble Winder** will be white while the system boots and will change to blue when the machine is ready and at idle.
- 6. Turn the IPG AirSpace A3 Pro<sup>®</sup> ON by switching the I/O Main Switch on the rear of the Machine to the [I] position.
- 7. Verify the **IPG AirSpace A3 Pro**<sup>®</sup> settings are set to the desired settings for your film.
- 8. Place the **Roll of Bubble-on-Demand Film** over the mandrel and verify it is fully seated.
  - Film should peel off the roll over the top towards the rear of the **IPG AirSpace A3 Pro**<sup>®</sup> follow the Film Threading Path for details, Figure 10 should be used for Bubble-on-Demand (BoD).
- 9. Place the film air channel over the nozzle of the IPG AirSpace A3 Pro<sup>®</sup>.
- 10. Use one hand to pull the film while simultaneously holding the "Jog Film" button (Figure 9) to advance the film through the belts of the **IPG AirSpace A3 Pro**<sup>®</sup>. Stop once the film has exited the belts.
- 11. Press the start/stop button and allow the **IPG AirSpace A3 Pro**<sup>®</sup> to dispense bubbles until one (1) fully inflated sheet has extended beyond the mandrel of the **Bubble Winder** then press the start/stop button again to stop the production of bubbles.
- 12. Carefully slip at least two full rows of fully inflated bubbles under the fingers of the Bubble Winder mandrel.
   Finger should rest in the gap between rows two and three of the film (Figure 11).
- 13. Press the blue capacitive touch button on the mandrel arm of the **Bubble Winder**.
- 14. The **Bubble Winder** will begin to rotate the mandrel and once proper tension has been achieved the **IPG AirSpace A3 Pro**<sup>©</sup> will automatically start. The button on the **Bubble Winder** will turn red when it is in operation. If too much film has been initially produced the Bubble Winder may time out.
- 15. Once the **Bubble Winder** has created a full coil of bubbles it will automatically stop and simultaneously stop the **IPG AirSpace A3 Pro**<sup>®</sup> the operator will need to manually separate the bubbles and remove the coil from the **Bubble Winder** mandrel.

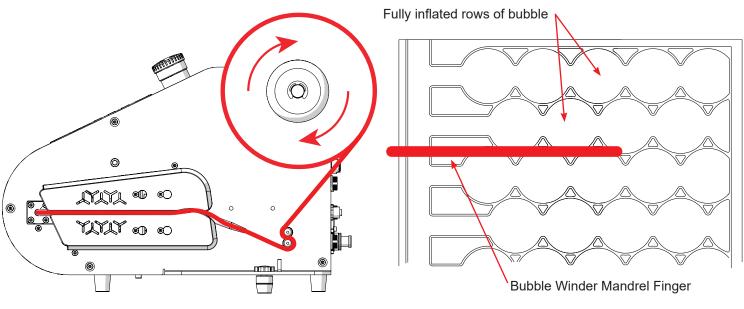


Figure 13: Film Threading Path for BoD

#### Figure 14: Mandrel Finger Placement

# MAINTENANCE

#### Inspection, Maintenance, and Repair



WARNING! THE OPERATOR MAY NOT PERFORM ANY MAINTENANCE OR REPAIR PROCEDURES OTHER THAN THOSE THAT ARE WRITTEN AND SPECIFIED UNDER "<u>OPERATOR WEEKLY INSPECTION INTERVAL</u>" AND IN THE SECTION "<u>TROUBLESHOOTING</u>" WHICH ARE SPECIFICALLY POINTED OUT TO THE OPERATOR IN THIS USER MANUAL.



CAUTION! IN THE EVENT OF A DEFECT, OR IF THE OPERATION OF THE MACHINE DIFFERS FROM THE DESCRIPTIONS IN THIS USER MANUAL, TURN THE I/O MAIN SWITCH TO O [OFF] AND DISCONNECT THE MAIN POWER CORD PLUG FROM THE MAIN POWER UNTIL THE UNIT CAN BE INSPECTED BY A TRAINED NUEVOPAK, AN IPG COMPANY, REPRESENTATIVE, OR QUALIFIED SERVICE PERSONNEL.

#### **Operator Weekly Inspection Interval**

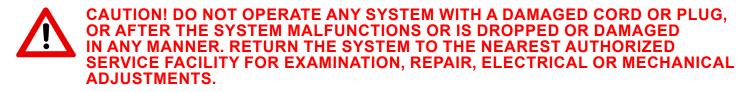
This section contains the following **Operator** procedures:

1. Weekly Inspection Interval



Check if:

- Covers are properly fixated and not damaged.
- Bubble Winder and IPG AirSpace A3 Pro<sup>®</sup> cables are not cut, broken, or damaged.
- Cords or plugs are not damaged.
- Machine and accessories components are fixated well.
- All controls and indicators function properly.



#### Preventative Maintenance Interval

Preventative maintenance/inspection should be conducted every six months or 50 rolls of film, whichever comes first. The qualified service personnel will inspect and replace any damaged components. Only **qualified service personnel** are permitted to conduct general maintenance and repairs on the **Machine System**. Those trained by qualified service personnel, referred to as **trainers** are permitted to conduct the following preventative maintenance on the **Machine System**. A service manual with notated **trainer** approved processes can be provided upon request.

General preventative maintenance includes:

- Inspecting belts for wear, replacing when necessary
- Inspecting blade, replacing when necessary
- Inspecting the drive rollers for wear, replacing when necessary
- Verifying the nozzle tip is smooth and free from sharp edges
- Verifying the Bubble Winder mandrel rotates freely
- Verifying the locking caster on the Bubble Winder are functioning correctly



PREVENTATIVE MAINTENANCE INSPECTIONS ARE DONE TO MAKE SURE THE MACHINE PREFORMS AT ITS EXPECTED LEVEL. THEY ARE PERFORMED AT INTERVALS OF EVERY 6 MONTHS OR AFTER USAGE OF 50 ROLLS OF FILM.

# MAINTENANCE

### Preventative Maintenance Interval



#### WARNING! ONLY QUALIFIED SERVICE PERSONNEL WHO HAVE BEEN TRAINED BY A NUEVOPAK OR IPG COMPANY REPRESENTATIVE ARE ALLOWED TO PERFORM MAINTENANCE AND REPAIR PROCEDURES. BEFORE ANY MAINTENANCE: SWITCH THE I/O MAIN SWITCH TO O [OFF] POSITION AND DISCONNECT THE MAIN POWER CORD PLUG FROM THE MAIN POWER.



BEFORE PERFORMING MAINTENANCE PROCEDURES READ AND THOROUGHLY UN-DERSTAND THE SAFETY INSTRUCTIONS IN THIS USER MANUAL. QUALIFIED SERVICE PERSONNEL WILL HAVE A SERVICE MANUAL ON THE MACHINE.

- 1. The void fill air pillows created by the Machine System are intended to be used only as packaging material.
- 2. The operator may not perform any maintenance or repair procedures other than specified in **OPERATOR WEEKLY INSPECTION INTERVAL.**
- 3. Changes or modifications not expressly approved by **Nuevopak**, an **IPG Company**, could void the user's authority to operate the equipment.
- 4. In the event the maintenance required is beyond the scope outlined in this user manual, contact **Nuevopak**, an **IPG Company**, support for a qualified service technician.

# TROUBLESHOOTING

### **General Troubleshooting**

The **Machine System** is intended to be used for converting rolls of film into void fill air pillows. Repairs or modifications should be done by a **Nuevopak**, an **IPG Company**, authorized representative or **Nuevopak**, an **IPG Company**, trained Service Technician; refer to <u>Technical Support</u>.

Problem	By Whom	Possible Causes	Solutions
There is no power to the Controls – <b>the LCD screen</b> <b>does not light up.</b>	Operator	1. The <b>I/O Main Switch</b> is positioned to the <b>O [OFF]</b> position.	The <b>I/O Main Switch</b> to the <b>[I] ON</b> position.
		2. IEC Main Power Cord Connection or Power Cord Plug is unplugged from the back of the Machine or at the Wall Socket.	Verify the IEC Main Power Cord connection is plugged into the Machine and the Power Cord Plug is plugged into properly rated Wall Socket.
		3. The <b>Emergency Stop</b> is engaged.	Rotate the emergency Stop button 1/4 turn clockwise to disengage.
	Service Technician	4. <b>Main Fuse</b> is defective.	Turn the <b>I/O Main Switch</b> to the <b>O [OFF]</b> position. Disconnect the <b>Main Power</b> <b>Cord Plug</b> from the main power. Replace with a 10A 250V 5X20mm (3/16" X 3/4") fuse.
		5. A <b>cable reel</b> is in use.	Replace the cable reel with an extension cable with a wire gauge of at least 14 AWG (1,5mm <sup>2</sup> ) with a maximum length of 11.5 ft. (3.5 m).
		6. Electrical or Mechanical defect.	Contact your authorized distributor or <b>Nuevopak</b> , an <b>IPG Company</b> representative.
		7. Display shows <b>B1 Error</b> .	Engage the Emergency Stop and disconnect from all energy sources and contact your authorized distributor or <b>Nuevopak</b> , an <b>IPG Company</b> , representative.
Air Pillows are not being produced. <b>C1 Error.</b>	Operator	1. The <b>film roll</b> has been depleted.	Reload the <b>Machine</b> with a new <b>Roll</b> of <b>Film</b> . Follow the film threading path (Figure 6) for proper threading.
		2. A film jam has occurred.	1. Remove the film from between the belts. Reload the film.
			2. If jam continues to occur, contact your authorized <b>distributor</b> or <b>Nuevopak</b> , an <b>IPG Company,</b> representative.
	Service Technician	3. The nozzle is not aligned to the encoder wheel.	Follow the procedure to reset the nozzle. Contact <b>Technical Support</b> if unable to complete.

# TROUBLESHOOTING

Problem	By Whom	Possible Causes	Solutions
The Bubble Winder is spinning but not making a coil – the button on the arm is BLINKING YELLOW.	Operator	1. The film has slipped off of the Bubble Winder Mandrel.	Slip the film under the mandrel finger (Figure 17), tear the excess material, restart the coil process by pressing the button.
		2. The <b>Bubble Winder</b> mandrel is not secured to the motor shaft or mandrel hub. It will spin freely with no resistance.	Contact your authorized distributor or <b>Nuevopak</b> , an <b>IPG Company</b> representative.
	Service Technician	3. The <b>Bubble Winder</b> mandrel is not secured to the motor shaft or mandrel hub. It will spin freely with no resistance.	Follow the set-up procedures in the Set- up manual for proper installation.
The Bubble Winder has stopped working and the button is blinking blue – the button on the arm is BLINKING BLUE.	Operator	1. Communication between the Bubble Winder and the <b>IPG</b> <b>AirSpace A3 Pro</b> <sup>®</sup> .	<ol> <li>Check the cable connections and verify all are properly seated.</li> <li>Verify that power has not been lost to the IPG AirSpace A3 Pro<sup>®</sup>.</li> </ol>

