# INSTALLATION MANUAL

# BLUE GENIUS™ TOUCH CONTROL MASTER CONTROL PANELS



ACTUAL PRODUCT MAY NOT APPEAR EXACTLY AS SHOWN

## **MARNING**

Do not operate or service this product unless you have read and fully understand the entire contents of this manual. Failure to do so may result in bodily injury or death.



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#### 1.0 INTRODUCTION

The following is a quick reference to important procedures that must be followed while using the Control Panel. It is not intended to cover, or suggest that it does cover, all procedures necessary to ensure safe operation. All operators should be aware of and abide by all workplace safety regulations applicable to the operation of the Control Panel . These laws and regulations include but are not limited to:

- The Occupational Safety and Health Act
- Canada Occupational Health and Safety Regulations
- Occupational Safety and Health Acts for Individual States (USA), Provinces, or Territories.

For additional information on these regulations as well as industry standards that may apply to this product, please contact:

American National Standards Institute (ANSI) 1430 Broadway New York, NY 10018 Telephone: 212.642.4900



www.ansi.org

www.mhi.org/lodem

Loading Dock Equipment Manufacturers A Product Section of Material Handling Industry of America A Division of Material Handling Industry 8720 Red Oak Blvd, Suite 201 Charlotte, NC, 28217-3992 Telephone: (704) 676-1190



#### 1.1 WARRANTY INFORMATION

Thank you for purchasing Blue Giant products. We appreciate your business, and are confident that our product will serve you for many years to come. In the event that you experience a problem with our product, our Customer Support Team is here to support the Blue Giant Product(s) that you have purchased.

To validate warranty on recently purchased equipment, please complete and submit your information with our on-line Warranty Registration at www.BlueGiant.com.

For more information about Blue Giant Warranty Support, please contact your Blue Giant Dealer. You may also visit www.BlueGiant.com or phone 1.905.457.3900.

NOTE: All products must be registered to qualify for warranty.

DEALER INFORMATION	
Name:	
Contact:	
Telephone:	

#### 1.2 EXCLUSION OF LIABILITY

The manufacturer assumes no liability for damage or injury to persons or property which occur as a result of defects or faults in or incorrect use of the Control Panel. The manufacturer assumes no liability for lost profits, operating downtimes, or similar indirect losses incurred by the purchaser. Injury to third parties, irrespective of its nature, is not subject to compensation.

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The manufacturer reserves the right to make changes at any time to the modules, components, and accessories, concurrent with its continuing product improvements and development program. Specifications, operating instructions, and illustrations included in this manual are subject to change without notice. Please contact manufacturer for the latest information.

#### 1.3 MANUFACTURER'S NOTE

The Control Panel has been carefully inspected and tested at the manufacturer's plant prior to shipment, but **MUST be checked** upon receipt for transport damage. Any observed transport damage is to be listed on the signed copy of the freight document.

There are many configurations or custom designs whose specifications may not be fully reflected in this manual. Contact your Blue Giant Dealer to obtain the General Arrangement drawing for application specific designs.

Notify the freight forwarder, Blue Giant, and the dealer of any damage WITHIN 24 HOURS.

#### 1.4 INSTALLER'S GUIDELINES

Please read all instructions carefully before installing this Blue Giant dock product. It is the installer's responsibility to comply with the following:

- The installation of Blue Giant dock products should comply with all applicable local or national building codes and regulations, including any that may supersede this manual.
- Site surveys and other applicable install-related documentation must be properly and accurately completed prior to installation. Failure to comply with this requirement may result in an improper install and possible voiding of the warranty.

Only Blue Giant-supplied or approved parts must be used. Any unauthorized parts substitution may void the warranty. Always lock out and tag out any power source before performing any electrical work, in accordance with OSHA regulations and approved electrical codes. The installer is responsible for reading, understanding, and complying with all personal protective equipment (PPE) policies in effect.

## 2.0 SAFETY MESSAGE COLOR IDENTIFICATION

This manual includes color-coded safety messages that clarify instructions and specify areas where potential hazard exists. To reduce the possibility of equipment damage and serious injury or death, please follow the instructions and understand the warnings contained in the messages. If warning decals become damaged or missing, replace them immediately. Avoid accidents by recognizing dangerous procedures or situations before they occur.

# A DANGER

Serious injury or death will likely occur if the instructions are not followed.

# **WARNING**

Serious injury or death may occur if the instructions are not followed.

# **A** CAUTION

Instructions marked caution concern safe operating procedure. Failure to comply may result in personal injury.

#### **NOTICE**

Procedures marked notice must be followed in order to reduce damage to machinery.

#### 2.1 OPERATIONAL SAFETY WARNINGS

These are safety warnings that may be part of a procedure or hardware warning decal.

# **DANGER**

- BEFORE BEGINNING ANY SERVICE PROCEDURES:
  - Disconnect the power and follow all lockout / tagout procedures, as per OSHA requirements. Refer to wiring diagrams.
- Installation must be performed only by trained and authorized personnel.
- Prior to installation, place adequate barriers to prevent vehicle traffic from entering the work area.
- During installation, anchors must be properly torqued to achieve the necessary anchoring strength. DO NOT USE IMPACT DRIVERS.
- Any electrical work must be performed by qualified personnel only.
- Do not remove the wheel chocks until loading / unloading is finished and the truck is cleared for departure and the lights have changed to RED inside and GREEN outside.

# **MARNING**

- Do not ground welding equipment to any electrical components.
- Do not allow the drill to go too deeply into the control box, as damage may occur to the control systems.
- Never use air to blow debris from the control box. Use a vacuum to perform any necessary cleaning.
- Do not connect green ground lead into control box or junction box until all welding has been completed.
- Improper adjustments may cause operational problems with equipment.

# **A** CAUTION

- Only trained personnel should operate or service this equipment.
- Do not operate the Control Panel until the transport vehicle is parked against the dock bumpers.
- Always park the Control Panel after use.
- Conduct routine inspections and maintenance. Failure to do so could cause equipment damage and or personal injury.
- Always call your authorized service representative or manufacturer immediately if a malfunction occurs.

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#### **NOTICE**

- Do not ground welding equipment to any electrical components.
- Do not allow the drill to go too deeply when drilling holes in the control panel. Damage to the control systems may occur.
- Never use air to blow debris from control box. Use a vacuum to remove debris from control box.
- Do not connect green ground lead into control box until all welding has been completed.
- Always keep the work area clean and free of litter.
- Always clean all side openings of dirt and debris.
- Always clean up dry and liquid spills immediately after they occur.
- Always maintain proper lighting in the work area.
- If a procedure is not clearly defined in this manual, contact your Blue Giant Dealer.

## 3.0 LOCKOUT / TAGOUT PROCEDURE AND RULES

In accordance with the rules and regulations of the Occupational Safety and Health Administration (OSHA) and/or local jurisdiction, all affected employees must be notified that the machine or equipment will be shut down and locked out to perform repair or maintenance work.

The work area must be checked to verify that all personnel have been removed or safely repositioned.

The machine or equipment power supply shall be locked in the OFF position or disconnected from the energy source.

Blue Giant strongly recommends that only OSHA-approved and/or local jurisdiction lockout devices and procedures be utilized.

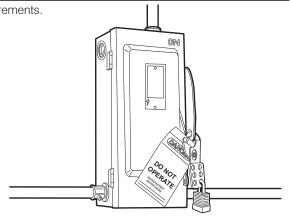
The energy isolating device must bear a prominent warning tag indicating that work is being done on the equipment and the name of the authorized employee responsible for the lockout.

It is mandatory that tagout notices shall **NOT** be susceptible to deterioration or illegibility due to weather conditions, exposure to chemicals and/or moisture.

## **A**WARNING

Always lockout and tagout any power source before performing any work on any electrical devices or electrical controls according to OSHA regulations and approved local electrical codes. Refer to wiring diagrams.

An example of lockout / tagout. Verify and comply with local codes/regulatory requirements.



#### 3.1 ROTARY DISCONNECT: PLATINUM SERIES

The Platinum Series has a built-in rotary disconnect. The disconnect has two switch positions: ON and OFF, and can be locked in either

position.



## 3.2 ELECTROSTATIC SENSITIVE DEVICE PROTECTION POLICY

This policy applies to static sensitive electronic products primarily printed circuit boards (PCBs) and sensors. Switches, relay, lamps, and wire are not sensitive and do not apply.

If welding near ESD components, correctly protect and ground all necessary equipment.

# **ATTENTION OBSERVE PRECAUTIONS** FOR HANDLING **ELECTROSTATIC** SENSITIVE DEVICES

DO NOT DISCARD. Any components shipped back to Blue Giant must be in their original packaging (along with completed RGA form taped to the OUTSIDE of the static bag) or warranty may be voided. 038-850E

- Prior to handling PCBs, wear a static grounding wrist strap and clip it to an electrical ground. The metal plate on the inside of the wristband must be in contact with the wearers skin.
- PCBs should never be handed to other personnel or set down anywhere.
- Place PCBs in black ESD shielding bags for return or storage. Only one PCB or sensor should be placed in a static bag. Attach paperwork and other items to the outside with adhesive pouches or elastic bands.
- The control boxes protect the PCBs inside from static, and should not be used to store manuals or other accessories.

# **STAGE 1. COMPONENTS**

# 1.1 PRE-INSTALLATION VERIFICATIONS

Use this chart to prepare the site for installation.

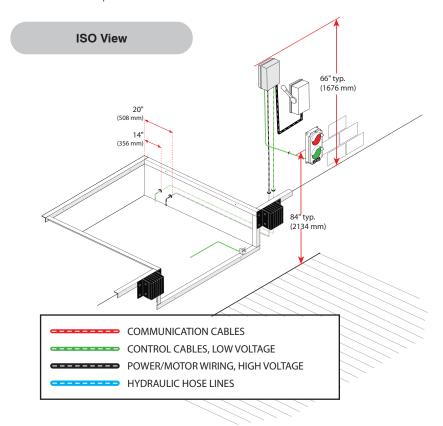
NOTE: If any of the these questions are answered by NO then consult submittal drawings and arrange the correction BEFORE resuming the installation.

<b>▲</b> CAUTION									
• Use ca	Use caution when lifting or moving the Blue Genius Control Panel, the cables, and the mounting equipment.								
		Yes	No	Comments					
1	Review site conditions. Have you completed and reviewed site survey report?								
2	Is there enough room to mount the control panel?								
3	Do the environmental conditions match the specifications on the site assessment/drawings?								
4	Is the facility ready to have the control panel equipment installed?								
5	Is the electrical power present for hook up? i.e. on inside wall near control install location								
6	Are the proper fused voltage and amperage supplied? Check the Blue Giant Website for amperages based on equipment. See 038-899E.								
7	If required, was the conduit(s) installed and properly positioned? (embeded conduit or surface mounted conduit)								
8	When unpacking, were all the parts included? See "1.2 COMPONENTS AS SHIPPED CHECKLIST" on page 13.								
9	Are the products and equipment in good condition and ready for use?								
10	Do you have all the tools needed to complete the job? This includes ladder(s), safety equipment and personal safety devices. See "1.8 TOOLS FOR INSTALLATION" on page 17.								
11	Do you have the anchors for the (optional) exterior driver traffic light, warning sign and control box? <b>Supplied by:</b> You, contractor, or installer								

		Yes	No	Comments
12	Are the walls, stanchion, or pedestals ready for anchoring?			
13	Have you read this installation manual and fully understood it?			
14	Do you have the Blue Giant technical support number? 1.800.872.2583. Before calling, make sure to have the serial # of the equipment.			
15	Do you know what an ESD "Electrostatic Sensitive Device" is and how to handle? See "3.2 ELECTROSTATIC SENSITIVE DEVICE PROTECTION POLICY" on page 10.			
16	Are all conditions met, as listed in the submittal documents and this table?			

# **GENERIC OVERVIEW**

This illustration shows the Isometric view of a possible wall installation.



## 1.2 COMPONENTS AS SHIPPED CHECKLIST

This section displays the shipped hardware components.

# 1.3 COMPONENTS AS SHIPPED CHECK LIST: GOLD SERIES III



V	ITEM	QTY	PART NO.		DESCRIPTION	APPROX. WEIGHT	
	1	1	Dependent on voltage See Section 7.2		Blue Genius™ Gold Series III Control Panel	10 lb	4.5 kg
	2	1	025-G010-1		Mounting Tabs with hardware (1 pkg. of 4)	_	_
				E			
	3	1	038-225	F	Exterior Driver Werning Cian	0.7 lb	0.32 kg
	3	3   1	038-225	S	Exterior Driver Warning Sign	0.7 lb	
				Р			
	4	1	032-806		Exterior Driver Traffic Light	1.3 lb	0.6 kg
	5	1	038-918	Е	Owner's Manual		_
				F			
				S			
	6	1	038-918	EI	Installation Manual	_	_
	0	'		FI	Installation Manual		
				EPL			
	7	1	038-918	FPL	Parts List	_	_
			1 Dependent on model #	Е			
	8	8 1		F	Operation Placard(s)	_	_
				S			

# 1.4 EQUIPMENT COMPONENT ILLUSTRATIONS: PLATINUM SERIES



V	ITEM	QTY	PART NO.		DESCRIPTION	APPROX. WEIGHT	
	1	1	BGP-4-XXXXX-X Dependent on voltage See Section 10.2		Blue Genius™ Platinum Series Control Panel	25 - 35 lb	11 - 16 kg
	2	1	025-G012-1		Mounting Tabs with Hardware (1 pkg. of 4)	_	_
				Е			
	3	1	038-225	F	Exterior Driver Weeping Sign	0.7 lb	0.32 kg
	3	'	038-225	S	Exterior Driver Warning Sign	U.7 ID	0.52 kg
				Р			
	4	1	032-806		Exterior Driver Traffic Light	1.3 lb	0.6 kg
				Е			
	5	1	038-918	F	Owner's Manual	_	_
				S			
	•		200 040	EI			
	6	1	038-918	FI	Installation Manual	_	_
	7	1	038-918	EPL	Parts List	_	_
	,	'	000 010	FPL	Tario List		
-				Е			
	8	8 1	1 Dependent on model #	F	Operation Placard(s)	_	_
				S			

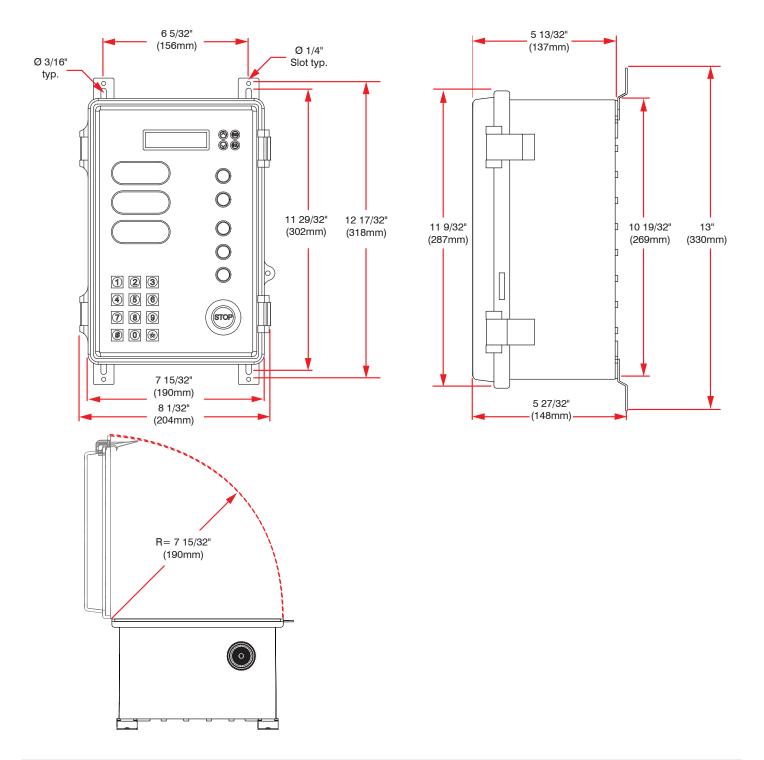
## 1.5 GENERAL DESCRIPTION

See below for names of components. These names will be used throughout the manual

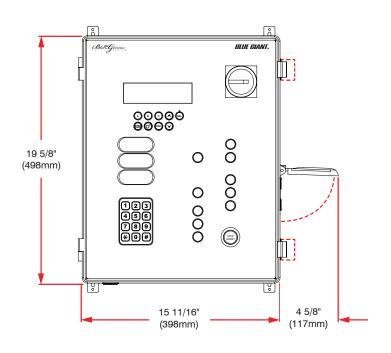
## WARNING

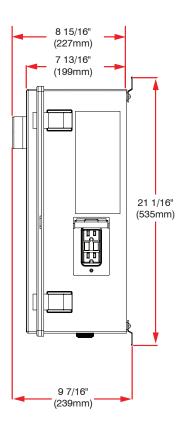
- Do not install, operate, or service this product unless you have read and followed the safety practices, warnings, and installation instructions contained in this manual and owner's manual. Failure to do so could result in death or serious injury.
- Place barricades around the pit on the dock floor and driveway while installing, maintaining, or repairing dock equipment.
- Improper installation of anchoring devices or installation into aged or unsound concrete could result in death or serious injury.

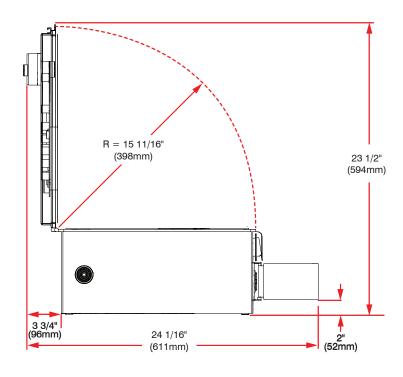
## 1.6 GENERAL DIMENSIONS: GOLD SERIES III



# 1.7 GENERAL DIMENSIONS: PLATINUM SERIES







# 1.8 TOOLS FOR INSTALLATION

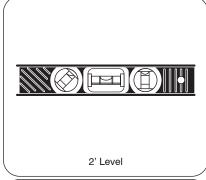
These tools are required for the complete and safe installation of the Interlock Chock. Not all are applicable for every installation.

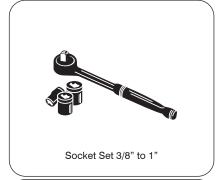


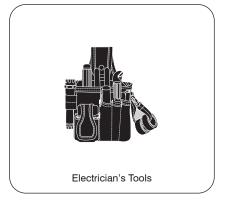
















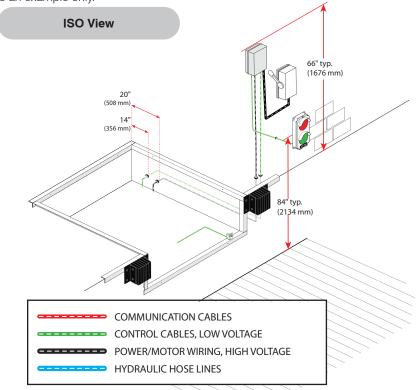
# **STAGE 2. LAYOUT OPTIONS**

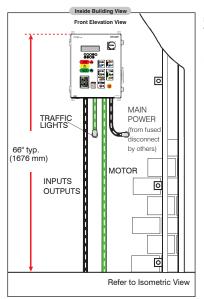
The facility environment will dictate the type of wall or pedestal layout. These illustrations are generic in layout. Refer to drawings for site specific requirements. Each mounting option has separate sections for Control Panel and conduits. Refer to mounting methods in the Stage 2.1 and 2.2.

NOTE: Blue Genius Control Panel installation may vary.

## 2.1 WALL MOUNT

NOTE: Illustration given as an example only.

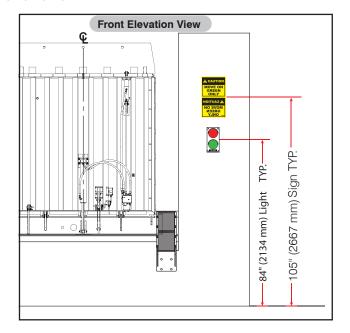




DO NOT: Drill holes in top of control panel box.

NOTE: All conduit entry into control panel from bottom. Arrange wiring to avoid high and low voltage crossing over inside control panel.

Mount 66" (1676 mm) from floor to top of control box

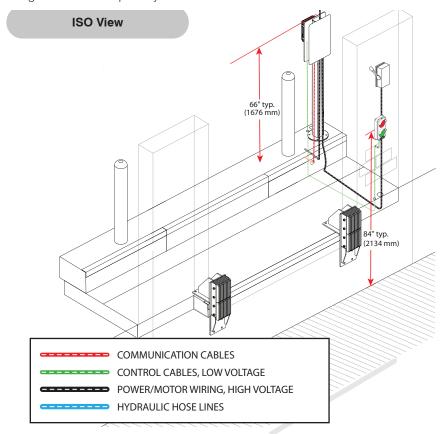


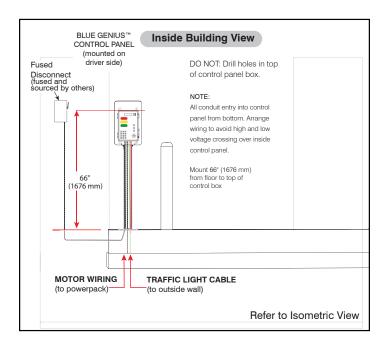
Proceed to "STAGE 3. WALL MOUNT" on page 20

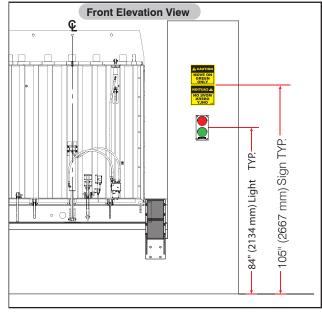
<sup>\*</sup> Drawings not to scale

## 2.2 PEDESTAL MOUNT

NOTE: Illustration given as an example only.







Proceed to "STAGE 4. PEDESTAL MOUNT" on page 26.

# **STAGE 3. WALL MOUNT**

## 3.1 CONTROL PANEL INSTALLATION

This section describes the Control Panel wall mounting. Refer to either "3.3 GOLD CONTROL UNIT" on page 20 or "3.4 PLATINUM CONTROL UNIT" on page 21.

#### **NOTICE**

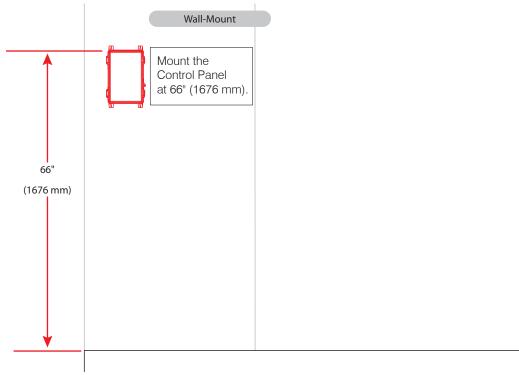
The use of ESD protocol is now needed when handling any controls mentioned hereafter.

# 3.2 WALL MOUNT

A wall mount is the more common type for the Blue Genius Control Panel.

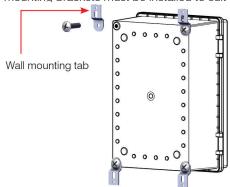
1. Mount the Control Panel on a flat surface. If the wall is uneven, shim to suit.

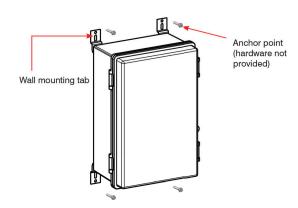
NOTE: Mounting on right hand side is acceptable. However, these instructions are for left hand side only.



## 3.3 GOLD CONTROL UNIT

- Remove the Control Panel from the shipping box.
- Install the wall-mounting tabs on the back of the control panel. The mounting brackets must be installed to suit site / wall conditions.

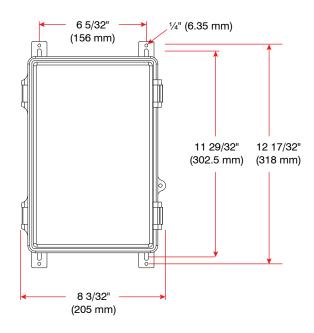




Measure the proposed wall height of the Control Panel relative to the planned location of the Control Panel, which is a recommended height of 66in. (1676 mm), from the typical top of enclosure.

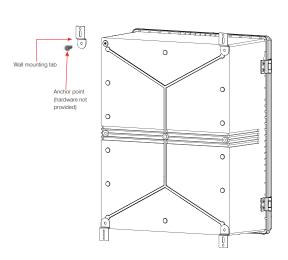
When determining where to position the control panel, please ensure that the bottom of the panel is accessible.

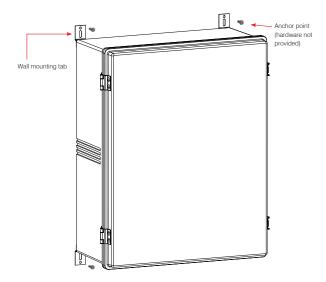
Verify the mounting location and type.



# 3.4 PLATINUM CONTROL UNIT

- Remove the Control Panel from the shipping box.
- Install the wall-mounting tabs on the back of the control panel. The mounting brackets must be installed to suit site / wall conditions.

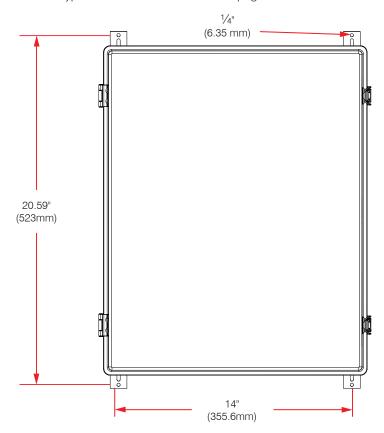




Measure the proposed wall height of the Control Panel, which is a recommended height of 66in. (1676 mm), from the typical top of enclosure.

When determining where to position the control panel, please ensure that the bottom of the panel is accessible.

- Drill a hole of the necessary depth for each anchor.
- Verify the mounting location and type. See "3.2 WALL MOUNT" on page 20.



#### 3.5 CONDUIT INSTALLATION

This section describes the installation of the conduit to the Blue Genius Control Panel.

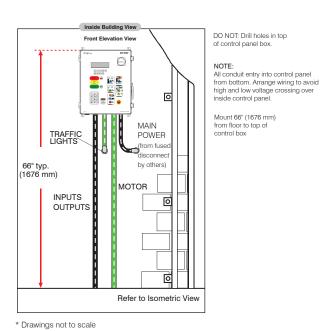
## **WARNING**

All electrical work must be performed by qualified personnel. Do not loop the communication cable excessively, or electrical noise interference may result and create intermittent communication problems. Trim cable(s) to appropriate length during installation. DO NOT WIRE HIGH AND LOW VOLTAGES IN THE SAME CONDUIT. High voltage range is 115V and up. Lower voltages include the communication wiring and 24 VAC devices. Prior to installation, place adequate barriers to prevent vehicle traffic from entering the work area, and follow proper lockout / tagout procedures.

#### 3.6 CONTROL PANEL CONDUIT

This sections describes the conduit running from the control panel to the peripheral devices.

#### Wall Mounted



NOTE: Holes pictured above are drilled at 7/8" for 1/2" trade size conduit. If larger conduit are needed, the minimal 1/2" clearance must be maintained between the hole's bottom to the control board inside the control panel.

- 1. Run ½in. (13 mm)\* conduit from the Power Supply to the Control Panel.
- Run ½in. (13 mm)\* conduit from the Control Panel to the Modules.
- Verify that all fasteners have been tightened and secured.

#### 3.7 ELECTRICAL WIRING INSTALLATION

Refer to the supplied wiring diagrams.

This section describes a general electrical wiring installation. See submittal drawings for specific wiring requirements.

This procedure has general notes for the electrician / installer.

- Run communication wire in separate raceways back to the Blue Genius™ control station, following the control station installation quidelines.
- Communication lines not routed in the raceways must never be tie-wrapped to high-voltage conduits: a minimum separation of 1in. (25 mm) is required (if this procedure is not followed, there can be intermittent communication related issues).
- Ensure that the drain wire is connected to Terminal #3 inside the Blue Genius™ control station, in addition to the black wire from the remote I/O Terminal #3.

NOTE: The drain wire is connected in the Blue Genius™ control station and cut off inside the remote I/O box.

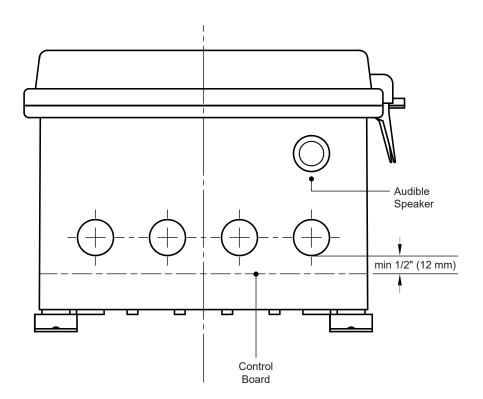
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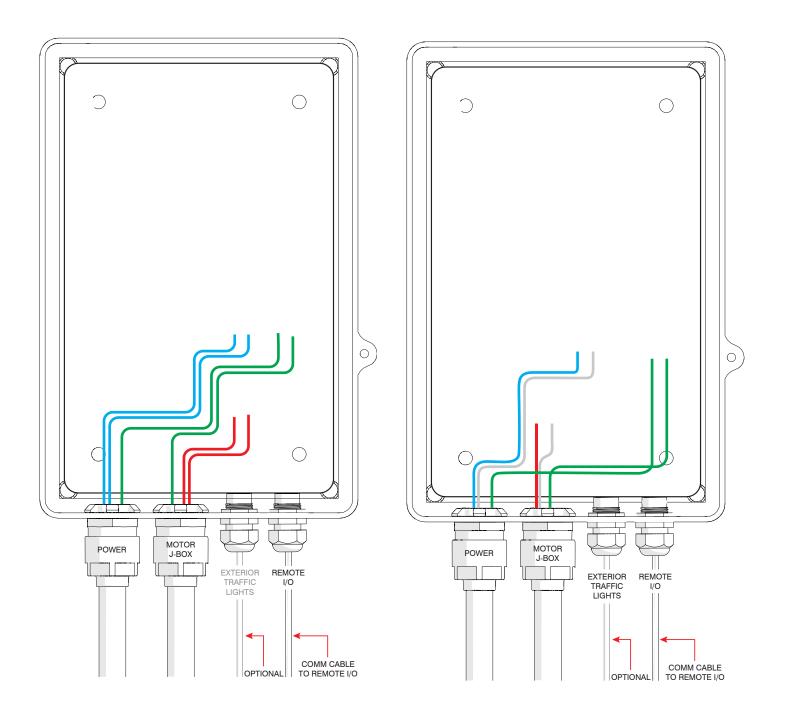
- 4. Ensure that all wires in screw-down terminal connections are inserted and tightened in place. If stranded wire is used, ensure that no loose strands remain.
- 5. Wiring should be neatly performed: excessive and untidy arrangements can cause noise interference.
- 6. The configuration (viewed from left to right on the bottom of the Blue Genius™ control station) must be: Power Feed
  - Motor Wiring
  - Exterior Traffic Lights
  - Control / Communication Cable

DO NOT deviate from this order.

- 7. When drilling holes in the bottom of the Blue Genius™ control panel box, ensure that the outside edge of each hole is at least ½in. (13mm) from the power board.
- 8. Run the cable for the exterior traffic lights to terminals 12, 13 and 14 making sure the black (COM) wire is connected to terminal 14, terminal 12 for the red light and terminal 13 for the green light. See submittal drawings for specific wiring requirements.
- 9. If any optional equipment is added (such as overhead door interlock), ensure that all 24VDC devices are entering the Blue Genius™ control panel on the right-hand side. To prevent noise interference, keep low voltage away from high voltage within the Blue Genius™ control panel. See submittal drawings for specific wiring requirements.

**NOTE:** Holes pictured above are drilled at 7/8" for 1/2" trade size conduit. If larger conduit are needed, the minimal 1/2" clearance must be maintained between the hole's bottom to the control board inside the control panel.





Blue Genius™ control panel wiring layout for 115V single phase only.

Blue Genius™ control panel wiring layout for 208-240V single phase.

NOTE: Audible not shown connected for clarity purposes.

## **STAGE 4. PEDESTAL MOUNT**

#### 4.1 CONTROL PANEL INSTALLATION

This section describes the Control Panel pedestal mounting. Refer to either "4.3 GOLD CONTROL PANEL" on page 26 or "4.4 PLATINUM CONTROL PANEL" on page 27.

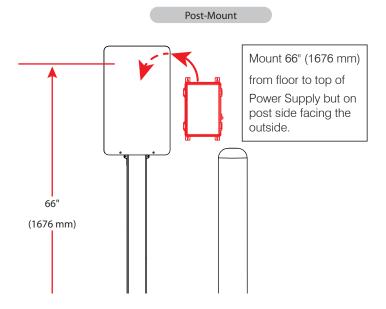
#### **NOTICE**

The use of ESD protocol is now needed when handling any controls mentioned hereafter.

#### 4.2 PEDESTAL MOUNT CONTROL PANEL

A pedestal mount is the less common type and usually found in continuous pit installations or where wall space is limited. The Control Panel side should face into the facility.

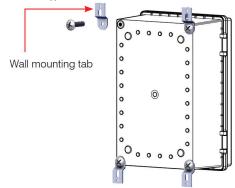
Mount the Control Panel on a flat surface. If the wall is uneven, shim to suit.
 NOTE: Mounting on right hand side is acceptable. However, these instructions are for left hand side only.

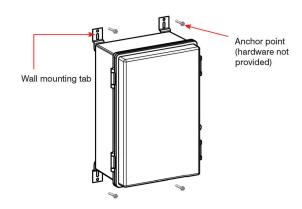


#### **4.3 GOLD CONTROL PANEL**

- 1. Remove the Control Panel from the shipping box.
- 2. Install the wall-mounting tabs on the back of the control panel.

  The mounting brackets must be installed to suit site / wall conditions.

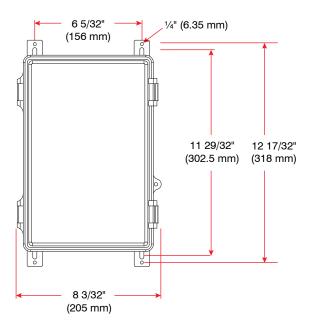




Measure the proposed wall height of the Control Panel, which is a recommended height of 66in. (1676 mm) from the typical top of enclosure.

When determining where to position the control panel, please ensure that the bottom of the panel is accessible.

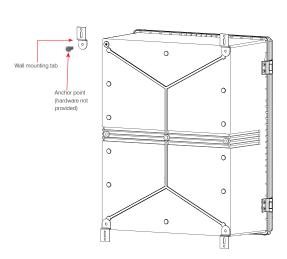
Verify the mounting location and type.

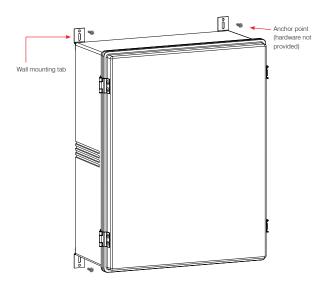


- Drill a hole of the necessary depth for each anchor.
- Mount the Control Panel on a flat surface using an appropiate anchor.

#### 4.4 PLATINUM CONTROL PANEL

- Remove the Control Panel from the shipping box.
- Install the wall-mounting tabs on the back of the control panel. The mounting brackets must be installed to suit site / wall conditions.

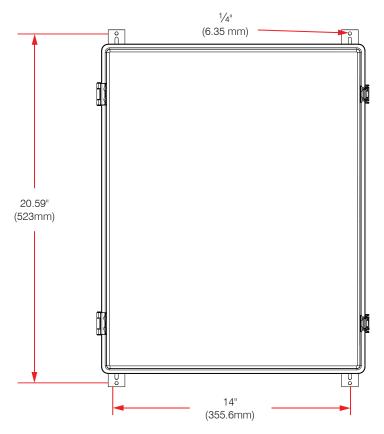




Measure the proposed wall height of the Control Panel, which is a recommended height of 66in. (1676 mm) from the typical top of enclosure.

When determining where to position the control panel, please ensure that the bottom of the panel is accessible.

Verify the mounting location and type. See "4.3 GOLD CONTROL PANEL" on page 26.



- Drill a hole of the necessary depth for each anchor.
- Mount the Control Panel on a flat surface using an appropiate anchor.

#### 4.5 CONDUIT INSTALLATION

This section describes the installation of the conduit to the Blue Genius Control Panel.



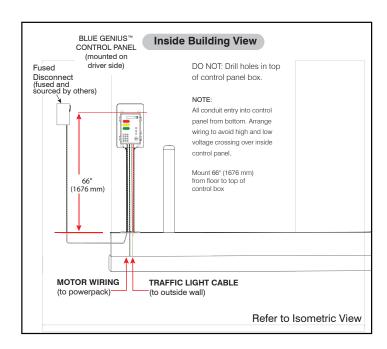
All electrical work must be performed by qualified personnel. Do not loop the communication cable excessively, or electrical noise interference may result and create intermittent communication problems. Trim cable(s) to appropriate length during installation.

DO NOT WIRE HIGH AND LOW VOLTAGES IN THE SAME CONDUIT. High voltage range is 115V and up. Lower voltages include the communication wiring and 24 VAC devices. Prior to installation, place adequate barriers to prevent vehicle traffic from entering the work area, and follow proper lockout / tagout procedures.

## **4.6 CONTROL PANEL CONDUIT**

This sections describes the conduit running from the control panel to the peripheral devices.

## **Pedestal Mounted**



**NOTE:** Holes pictured above are drilled at 7/8" for 1/2" trade size conduit. If larger conduit are needed, the minimal 1/2" clearance must be maintained between the hole's bottom to the control board inside the control panel.

- 1. Run ½in. (13 mm)\* conduit from the Power Supply to the Control Panel.
- 2. Run ½in. (13 mm)\* conduit from the Control Panel to the Modules.
- 3. Verify that all fasteners have been tightened and secured.

#### 4.7 ELECTRICAL WIRING INSTALLATION

This section describes a general electrical wiring installation. See submittal drawings for specific wiring requirements.

This procedure has general notes for the electrician / installer.

- Run communication wire in separate raceways back to the Blue Genius<sup>™</sup> control station, following the control station installation guidelines.
- 2. Communication lines not routed in the raceways must never be tie-wrapped to high-voltage conduits: a minimum separation of 1in. (25 mm) is required (if this procedure is not followed, there can be intermittent communication related issues).
- 3. Ensure that the drain wire is connected to Terminal #3 inside the Blue Genius™ control station, in addition to the black wire from the remote I/O Terminal #3.

NOTE: The drain wire is connected in the Blue Genius™ control station and cut off inside the remote I/O box.

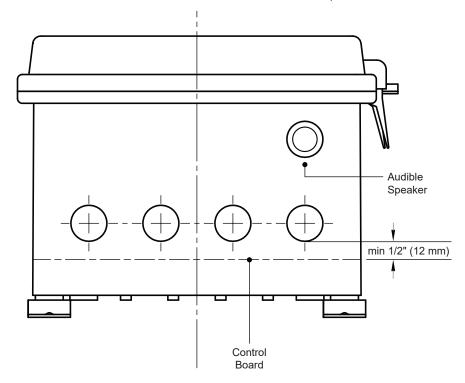
#### BLUE GENIUS™ TOUCH CONTROL MASTER CONTROL PANELS—INSTALLATION MANUAL

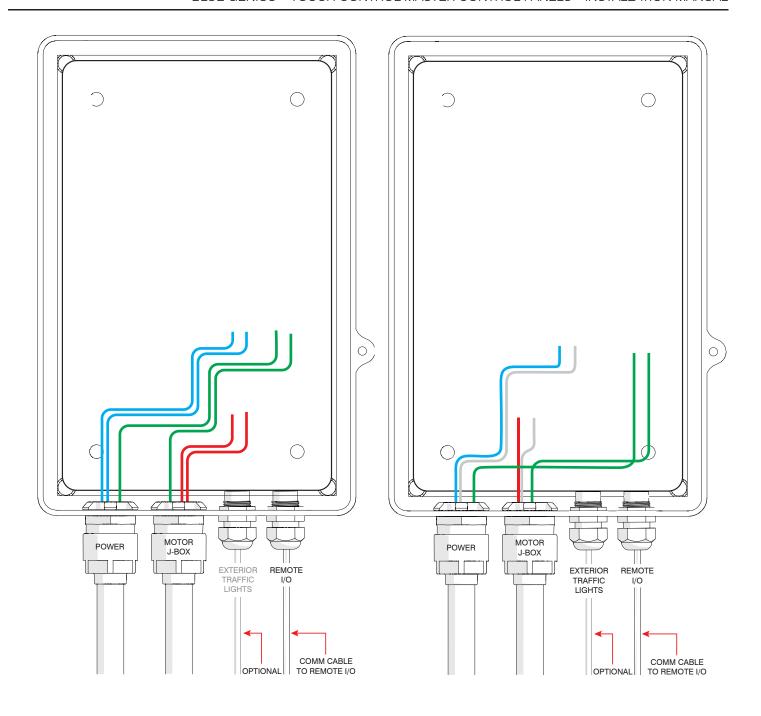
- 4. Ensure that all wires in screw-down terminal connections are inserted and tightened in place. If stranded wire is used, ensure that no loose strands remain.
- 5. Wiring should be neatly performed: excessive and untidy arrangements can cause noise interference.
- 6. The configuration (viewed from left to right on the bottom of the Blue Genius™ control station) must be: Power Feed
  - Motor Wiring
  - Exterior Traffic Lights
  - Control / Communication Cable

DO NOT deviate from this order.

- 7. When drilling holes in the bottom of the Blue Genius™ control panel box, ensure that the outside edge of each hole is at least ½in. (13mm) from the power board.
- 8. Run the cable for the exterior traffic lights to terminals 12, 13 and 14 making sure the black (COM) wire is connected to terminal 14, terminal 12 for the red light and terminal 13 for the green light. See "3.12 WIRING DIAGRAMS" on page 35 for further information on wiring.
- 9. If any optional equipment is added (such as overhead door interlock), ensure that all 24VDC devices are entering the Blue Genius™ control panel on the right-hand side. To prevent noise interference, keep low voltage away from high voltage within the Blue Genius™ control panel.

**NOTE:** Holes pictured above are drilled at 7/8" for 1/2" trade size conduit. If larger conduit are needed, the minimal 1/2" clearance must be maintained between the hole's bottom to the control board inside the control panel.





Blue Genius<sup>™</sup> control panel wiring layout for 115V single phase only. NOTE: Audible not shown connected for clarity purposes.

Blue Genius<sup>™</sup> control panel wiring layout for 208-240V single phase.

# STAGE 5. VERIFICATIONS

- 1. Perform the post-installation inspection. Refer to "5.1 POST-INSTALLATION INSPECTION CHECKLIST" on page 32.
- When all of the checklist entries are confirmed completed then proceed to the start up. Refer to "5.2 COMMISSIONING AND START-UP PROCEDURES" on page 32.
- 3. The start up should display either that there are no peripherals installed (i.e. dock leveler, restraint, door seal) or all currently connected peripherals are properly detected and identified.
- 4. Other screens displayed.

#### 5.1 POST-INSTALLATION INSPECTION CHECKLIST

Before using the Control Panel, complete the pre-commissioning inspection checklist.

# **A** DANGER

- When repairing or conducting maintenance procedures on electrical components, perform lockout / tagout steps according to OSHA regulations and approved electrical codes.
- Prior to installation, place adequate barriers to prevent unauthorized personnel and vehicle traffic from entering the work area.

## **MARNING**

All repairs and maintenance work are to be conducted by trained and authorized personnel ONLY.

INSTRUCTIONS FOR USE: Indicate "OK for USE" with a check mark ✓ in the appropriate box of each inspection point.

BEFORE POWERING ON THE UNIT:	AFTER POWERING ON THE UNIT
Are the junction boxes properly wired and closed?	☐ If equipped, are the keyed lock and/or E-Stop on the push button controls in good working order
☐ Is the wiring diagram inside the control panel?	
☐ Is the control panel wiring positioned away from sources of physical damage?	
Press each button on the control panel to ensure they return to home position and that there is no damage to the cord or body of the control panel	
Are all safety decals in place?	
☐ Is the Owner's Manual located near the control panel?	

#### 5.2 COMMISSIONING AND START-UP PROCEDURES

Before commissioning the unit, do a final check to verify the following:

- Work site is clean and ready by ensuring all welds have been cleaned and painted.
- All lag bolts have been tightened to the specified torque for the restraint, control panel, exterior lights, and signs.
- Hydraulic hoses and electrical conduits, if used, are run in a straight and neat configuration.
- All electrical connections are tight and properly terminated.

The restraint arm must be completely lowered and no obstructions, such as a parked trailer, must be present.

**NOTE:** The following procedure assumes the powerpack motor is running the correct direction. If rotation needs to be reversed, either interchange any two motor leads (three phase power units only) or consult motor rotation tag (single phase power units).

Do not change main power leads as this will reverse all the motors. Three phase motors only.

Leave a copy of the electrical schematic in the control box, verify that the Operations Placard is mounted within the operator's line of vision, and the Owner's Manual is given to the appropriate person.

Clean up the entire work area and apply touch-up paint to all welds, scratches and burns.

- 1. Verify that no debris or personnel are in the operating path of the Control Panel .
- 2. Check the Control Panel for proper and safe operation.
- Test-operate the unit through several full cycles of operation. If problems are noted, refer to the "5.3 BLUE GENIUS™ LCD MESSAGES" on page 33 and Owner's Manual (038-918E) for Troubleshooting and Control Panel Messages.
- Store this Installation Manual in a secure place for easy access.

## 5.3 BLUE GENIUS™ LCD MESSAGES

Use this section to help diagnose issues if the Control Panel is not operating as specified.

## DANGER

Failure to properly Lock Out and Tag Out the Control Panel prior to working on it may result in bodily injury, or death.

# **WARNING**

- Do not attempt to install, make repairs, or adjustments. Only a trained and authorized service technician should perform the installation process, make repairs, or make adjustments. Contact your Blue Giant Dealer for assistance.
- Do not service this equipment until you have read and understood all of the safety information and instructions contained herein. Failure to adhere to recommended safety practices in this manual and on the equipment warning labels could result in death or serious injury.
- Do not conduct maintenance or repairs until adequate barriers have been placed to keep warehouse and vehicle traffic away from
- Before doing any electrical work, verify that the power is disconnected and properly tagged or locked out, in accordance with OSHA regulations and approved electrical codes.

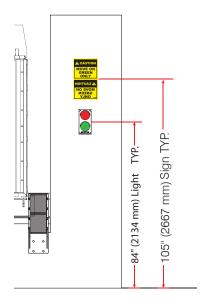
The following description of operating principles is intended as a guide when trouble shooting and making adjustments or repairs. If no fault can be found and equipment fails to operate properly, contact your Blue Giant Dealer.

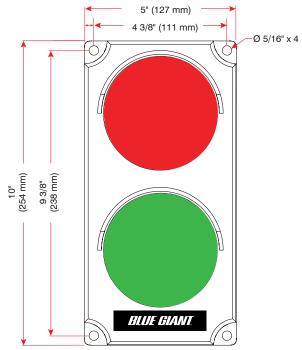
MESSAGE	EXPLANATION
Ready to Raise Deck	Restraint has been engaged or bypassed; dock leveler may now be deployed. (Applies to combo units with pit-style dock levelers only)
Ready to Lower Deck	Restraint has been engaged or bypassed; dock leveler may now be deployed. (Applies to combo units with vertical dock only)
Deck Raising	The 'Deck' button is tapped: the deck is now rising from the deployed position.
Deck Lowering	The ' <b>Down</b> ' button is tapped: the deck is now lowering.
Deck Moving	The deck is in motion: either deploying or lowering to the parked position. This message appears when the 'Deck' button has been released.
Deck Deployed	The dock leveler has been successfully deployed onto the truck bed or into the below level position.
Lip Raising	The ' <b>Lip</b> ' button is being tapped or the operator has held the ' <b>Deck</b> ' button until the lip has been deployed. This message also appears when the 'Deck' button is held until the vertical dock has reached the home position.
Lip Lowering	The 'Lip' button has been tapped, causing the lip to lower for below level loading.
Dock Leveler Restored	The dock leveler is parked with the lip in the lip keepers.

# 5.4 EXTERIOR DRIVER TRAFFIC LIGHT INSTALLATION (OPTION)

This procedure describes the wall mounting of the exterior traffic light

1. Mount the exterior traffic light approximately 84in. - 96in. (2134 - 2438mm) above the driveway surface on the right hand side of the loading bay entrance and easily viewed in the driver's rear view side mirror.





Exterior driver traffic light, part # 032-806.

- Ensure that the traffic light is both square and level.
- Add shims to the back if needed. Do not over-tighten the fasteners.
- Drill the hole for the cable. Ensure that the hole is thoroughly deburred (cleaned out) so that accidental damage does not occur when the cable is pulled through during and after installation.

NOTE: Mount to a flat surface. DO NOT deform light housing with irregular wall surface.

# 5.5 EXTERIOR DRIVER WARNING SIGN INSTALLATION (OPTION)

This procedure describes the mounting of the exterior warning sign for drivers.

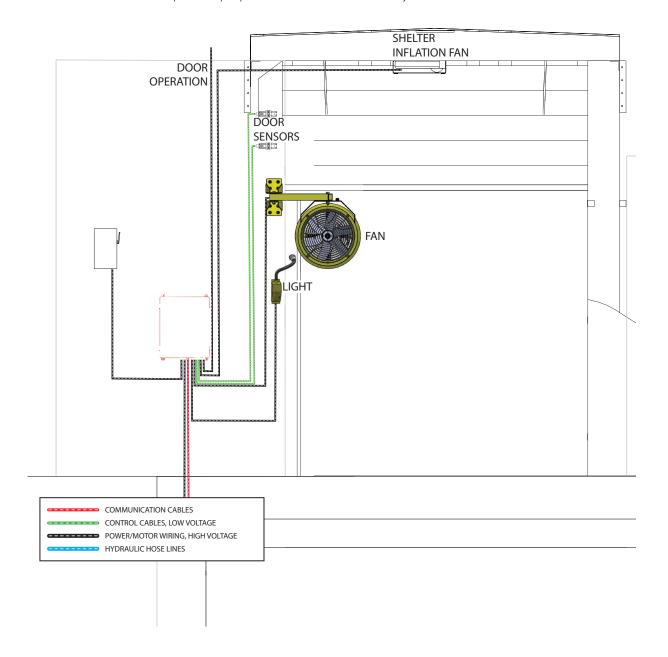
NOTE: When fastening the sign to the wall, do not warp or twist the sign while tightening the anchors. (Use shim washer if needed.) Do not over-tighten fastenings, as damage to the sign may occur.

- Position the driver warning sign near or below the exterior traffic light and verify that the sign is easily viewed by drivers. As the sign comes without mounting holes, drill a minimum of four holes, no less than 3/8in. (10mm) (see detail), from the sign's edge. Ensure that the mounting holes exceed the width of the anchor device shaft for expansion reasons (i.e. for a 1/4in. anchor use a 5/16in.
- Verify that the sign is level, and centered beneath/near the traffic light.



# **5.6 DOCK PERIPHERALS**

This section describes some of the possible peripherals that a dock location may have installed.



BLUE GENIUS™	TOUCH CONTRO	L MASTER CONTRO	)L PANELS-	-INSTALLATION M	IANUAL

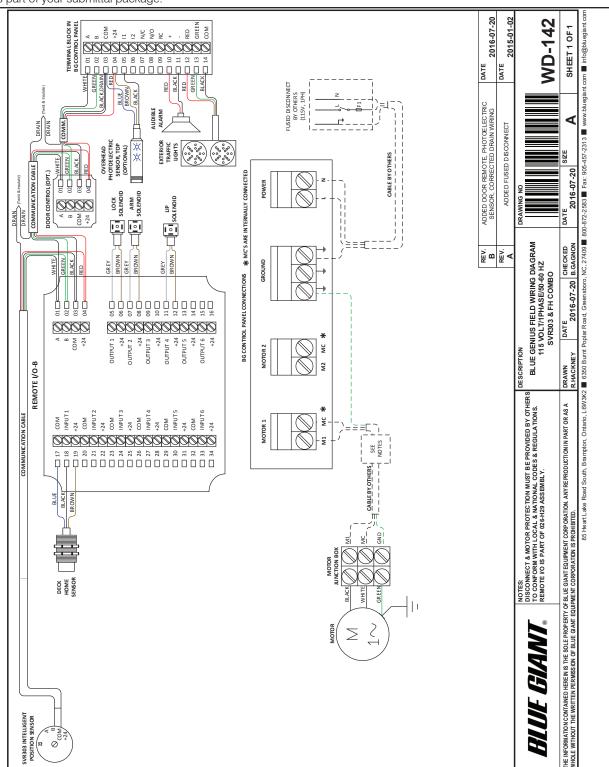
## STAGE 6.

## **6.1 WIRING DIAGRAMS**

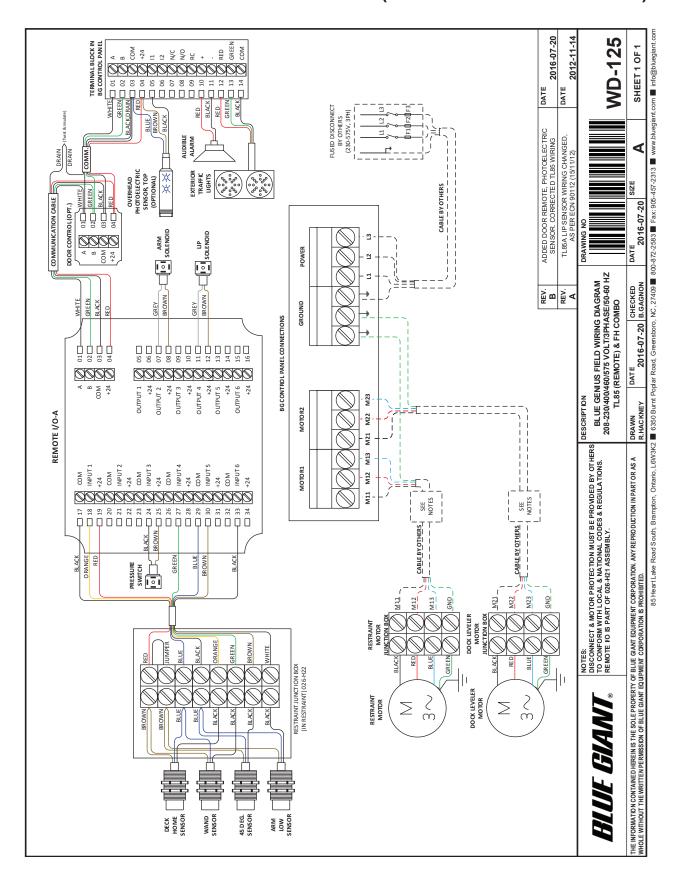
# 6.2 115V SINGLE PHASE: GOLD SERIES III (SVR303 & FH COMBO)

#### Notice

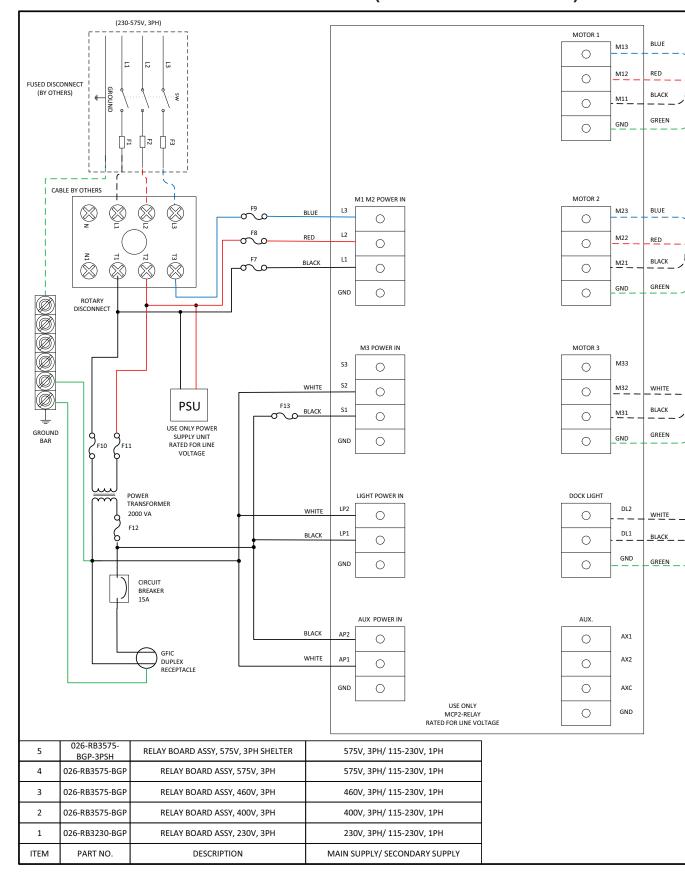
The following wiring diagrams are sample configurations only. Wiring diagrams specific to your needs will be provided inside the control panel and/or as part of your submittal package.

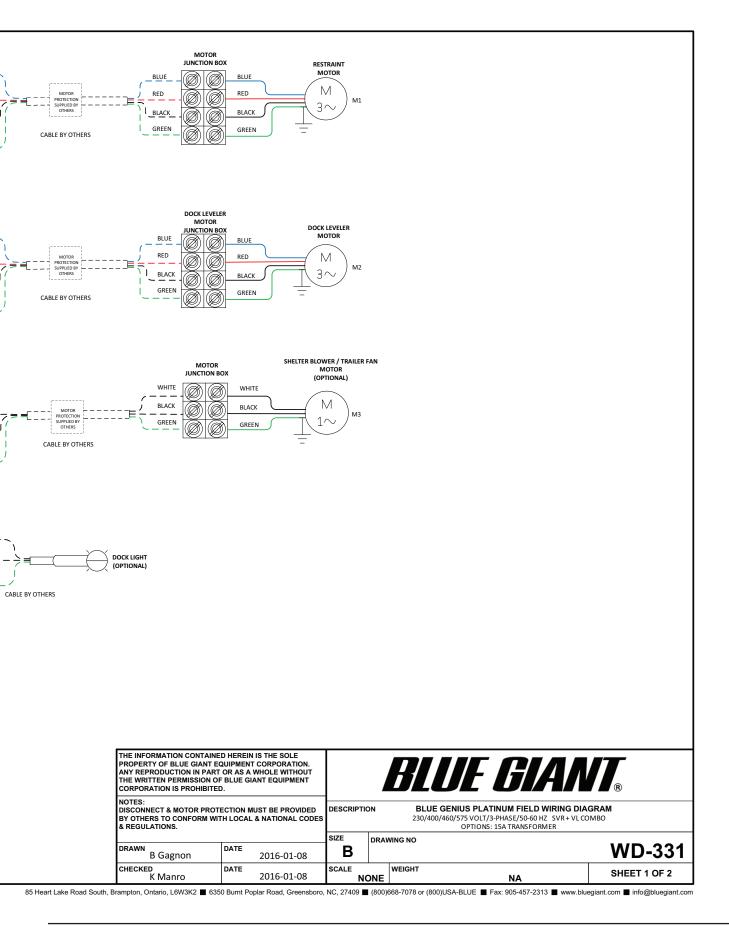


# 6.3 230V SINGLE PHASE: GOLD SERIES III (TL85 REMOTE & FH COMBO)



# 6.4 230 - 575V THREE PHASE: PLATINUM SERIES\* (SVR303 & VL COMBO)





# 6.5 230 - 575V THREE PHASE: PLATINUM SERIES (SVR303 & VL COMBO)

