WILL-BURT

POSITION IT™

RACKMOUNT CONTROLLER
OPERATOR'S MANUAL

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Original Instructions

CE

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Warranty

Will-Burt warrants its Rackmount Controller to be free from defects in material and workmanship for a period of two (2) years with such time periods running from the date of shipment by Will-Burt. Will-Burt shall not be responsible for any damage resulting to or caused by its products by reason of failure to properly install, maintain or store the product; use of the product in a manner inconsistent with its design; unauthorized service, alteration of products, neglect, abuse, accident, or acts of God. This warranty does not extend to any component parts not manufactured by Will-Burt; provided, however, Will-Burt's warranty herein shall not limit any warranties by manufacturers of component parts which extend to the buyer.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, AND NO REPRESENTATIONS, GUARANTEES OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, A WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT ARE MADE BY WILL-BURT IN CONNECTION WITH THE MANUFACTURE OR SALE OF ITS PRODUCTS. NO EMPLOYEE, DISTRIBUTOR, OR REPRESENTATIVE IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY ON BEHALF OF WILL-BURT.

Claims for defects in material and workmanship shall be made in writing to Will-Burt within thirty (30) days of the discovery of defect. Failure to provide notice as required hereby shall be conclusive evidence that the product was in conformity with the warranty and Will-Burt shall be released from any and all liability relating to the product. Will-Burt may either send a service representative or have the product returned to its factory at Buyer's expense for inspection. If judged by Will-Burt to be defective in material or workmanship, the product will be replaced or repaired at the option of Will-Burt, free from all charges except authorized transportation.

THE REMEDIES OF BUYER SET FORTH HEREIN ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER REMEDIES. THE LIABILITY OF WILL-BURT WHETHER IN CONTRACT, TORT, UNDER ANY WARRANTY, OR OTHERWISE, SHALL NOT EXTEND BEYOND ITS OBLIGATION TO REPAIR OR REPLACE, AT ITS OPTION, ANY PRODUCT OR PART FOUND BY WILL-BURT TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP. WILL-BURT SHALL NOT BE LIABLE FOR COST OF INSTALLATION AND/OR REMOVAL, OR BE RESPONSIBLE FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

Document History

Document Numbers	Dates	Remarks
TP-5362301-00	April 21, 2016	Initial Release
TP-5362301-A	June 19, 2017	Updated Table 2-1
TP-5362301-B	July 31, 2017	Added Figure 2-3. Updated to include the PositionIt PI-35.
New Manual Created; Document Name Changed in Revision Below		
PM-01005-REV 2	May 26, 2021	ECN 11081; Manual re-written and named for initial release of the new Rackmount Controller

Table of Contents

Table of Figures

Table of Tables

Safety Summary

This section describes safety information for the system. These are recommended precautions that personnel must understand and apply throughout installation, operation, maintenance, and troubleshooting. Be sure to read and understand the entire manual before performing any procedure outlined in this manual. Contact Will-Burt UK with any questions before performing any procedure outlined in this manual.

Signal Word Definitions

⚠ WARNING

Warnings highlight an essential operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to, or death of, personnel or long-term health hazards.

⚠ CAUTION

Cautions highlight an essential operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in damage to, or destruction of, equipment or loss of mission effectiveness.

Note: Notes highlight an essential operating or maintenance procedure, condition, or statement.

General Safety Instructions

The following are general safety precautions that are not related to any specific procedures. These are recommended precautions that personnel must understand and apply throughout installation, operation, transportation, maintenance, storage, and troubleshooting. Additional precautions that apply to specific procedures and steps may be listed with the procedure or step to which they apply.

⚠ DANGER

Electrocution Hazard! Contact with high voltage will result in death or serious injury. Observe general safety precautions for handling equipment using high voltage. Do not locate or operate mast near electrical lines, cables or other unwanted sources of electricity. Be sure to allow sufficient clearance on all sides of the mast to allow for side sway. Do not operate mast in lightning. Be certain electrical cables are undamaged and properly terminated. Always disconnect power before performing service, repair or test operations.

⚠ WARNING

Shock Hazard! Hazardous voltages are present in this equipment and may also be present in any associated items. Observe general safety precautions for handling equipment using high voltage. Always disconnect power before performing repair or test operations. Contact with high voltage will result in death or serious injury.

⚠ WARNING

Resuscitation! Personnel working with or near high voltages should be familiar with modern methods of resuscitation. Such information may be obtained from the Bureau of Medicine and Surgery.

Symbols

The following is a symbol that is used with the system and its meaning. Be sure to resolve any questions before performing any procedure outlined in this manual.

This symbol indicates an electrocution hazard or hazardous voltage hazard. There is AC voltage present inside the Rackmount. Contact with high voltage will result in death or serious injury.

Section 1 Introduction & Intended Use

Review this manual in its entirety. Contact Will-Burt UK with any questions before performing any procedure(s) outlined in this manual. The Rackmount controller is intended to be used by professionals. It is not intended to be used by non-professionals. The Rackmount Controller is designed to both control and power the RX and PositionIt positioners. The Rackmount Controller also offers the ability to integrate other controllers such as the remote joystick controller (P/N: 5098901), panel mount controller, 3rd party controllers and/or laptops for additional control features.

The Rackmount Controller is designed to work with Will-Burt's data-controlled positioner product lines such as:

Accupoint Positioners (Fixed Mount)

- Bowler RX
- Topper RX
- Homburg RX

PositionIT Positioners (Vehicle Mount)

- Bowler RX HD
- PI-35
- PI-75
- PI-150

1.1 Specification Compliance

Refer to the Product page at www.willburt.com for the latest Declaration of Conformity.

1.2 Safety Precautions

Refer to the Safety Summary for precautions to be observed while operating or servicing this equipment.

1.3 Manual Organization

This manual is organized into the following sections:

Section 1 Introduction

Section 2 Installation

Section 3 Operation

1.4 Additional Documentation

In addition to this manual, see the operator's manual for the appropriate positioner as follows:

- **TP-5129001** – *PositionIt PI-75 and PI-150 Operator's Manual*
- ***TP-5406201*** – *PositionIt PI-35 Operator's Manual*
- ***PM-01001*** – *RX Positioners Bowler RX, Bowler RX HD, Topper RX and Homburg RX*

If necessary, contact Will-Burt UK to obtain the operator's manual. During installation and operation, be sure to follow all appropriate precautions from the operator's manual.

1.5 Specifications

Table 1-1 below lists specifications for the PositionIt Rackmount Controller.

Specifications	
Input Voltage	100 – 240 VAC, 50/60 hz
Output Data	Pelco D over RS485 (half-duplex), 2400 – 256k Baud Rate
Weight	< 2.65 kg (5.8 lb.)
Operational Temperature Range	-20 to 50°C (-4 to 122°F)
Continuous Current	2.5A/115VAC; 1.5A/230VAC

Table 1-1 PositionIt Rackmount Controller Specifications

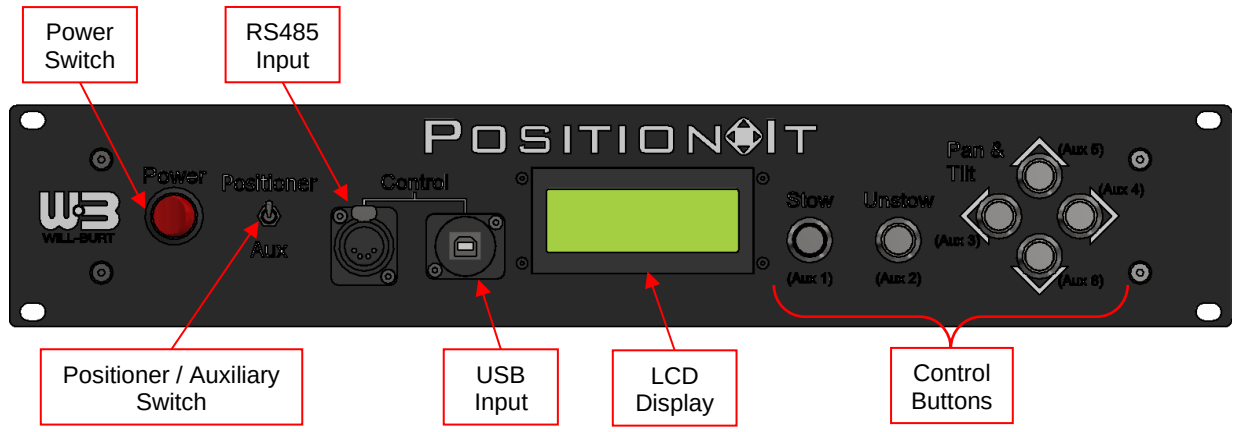

Figure 1-1 Front Panel – Rackmount Controller

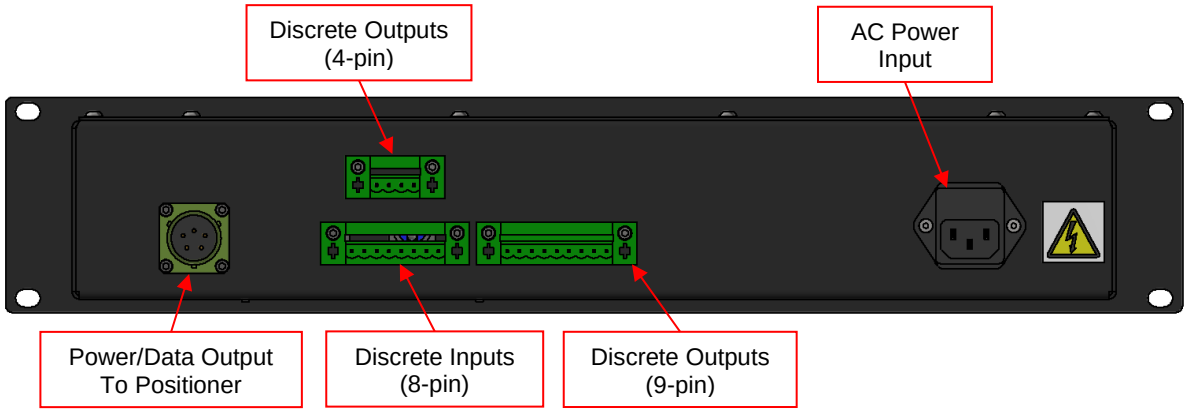

Figure 1-2 Back – Rackmount Controller

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Section 2 Installation

This section describes the installation of the system and provides general procedures that must be followed to ensure a successful installation. Use care to follow all precautions while installing.

2.1 Pre-Installation Check

Before installing the system, ensure:

- That all appropriate precautions from the operator's manual (Section 1.3) are followed.
- That the following warnings are understood and followed:

⚠ WARNING

Safety Instruction – Read Manual! Before attempting any installation, ensure all installers have fully read and understood this manual.

⚠ WARNING

Safety Instruction – Electrical Hazard! The Rackmount Controller is a mains powered device and contains dangerous voltages inside.

⚠ WARNING

Safety Instruction – Installation! Ensure the complete system is safe and unable to move before any installation or maintenance work is carried out on, or around, this system.

⚠ WARNING

Safety Instruction – Qualified Engineers! All electrical and mechanical work must be carried out by a suitably qualified engineer.

2.2 Physical Installation

Figure 2-1 describes the physical dimensions of the Rackmount Controller in “mm [in]”.

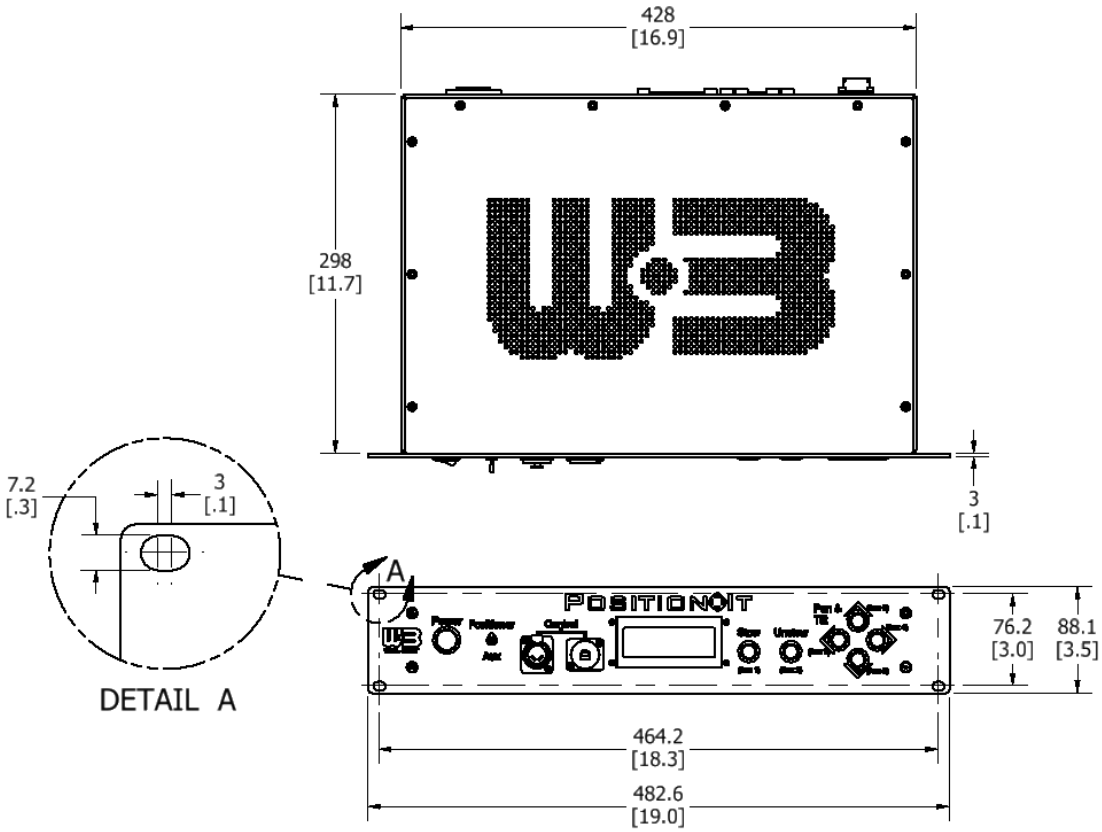

Figure 2-1 Rackmount Controller Dimensions (2U - 19”)

The Rackmount Controller is a 2U profile designed to suit a standard 482.6 (19 inch) Rackmount. Included in the package is a hardware kit which is to be used to install the Rackmount Controller into a Rackmount system.

A hardware pack for mounting the Rackmount controller is provided with the Rackmount controller. Torque the provided M6 hardware to 60-65 in.-lb. when mounting the Rackmount controller.

2.3 Components

The following items are included in the package:

- PositionIt Rackmount Controller
- Mains Lead – IEC connector to wall socket
- (2) Fuse's
- Hardware Pack (for mounting Rackmount Controller)
- Power/Data Output (Circular) Connector
- (3) Terminal block connectors
- User Manual
- QA Documentation

It is important that you retain all these items for future use and reference, even if they are not used in the initial installation.

2.4 Unpacking

Unpack as follows:

1. Carefully open the box(es) and unpack all components
2. Check for any damage from shipping. If damage has occurred, notify the carrier.

2.5 Power and Controls System Overview

This section provides a typical overview of a standard positioner system setup using a Rackmount Controller. The example provided is for systems with 100-240VAC supplied power (to the Rackmount Controller) and 24VDC Positioner (standard). Before setting up your system verify the voltage of your positioner(s) by checking the serial tag located on the positioner. If you are unsure of your positioners voltage rating contact Will-Burt customer service.

⚠ WARNING

Electrocution Hazard! Do not touch live wires. Make sure all power has been disconnected prior to performing installation or maintenance. Make certain that the area is free of overhead power lines and other unwanted sources of electricity. Do not operate the system during an electrical storm. Follow OSHA safety regulations when working near energized power lines. Be sure to allow sufficient clearance on all sides of the mast to allow for side sway. Death or serious injury could result if proper precautions are not performed.

⚠ WARNING

Shock Hazard! Hazardous voltages are present in this equipment and may also be present in any associated items. Observe general safety precautions for handling equipment using high voltage. Always disconnect power before performing repair or test operations. Contact with high voltage will result in death or serious injury.

2.6 Typical System Setup

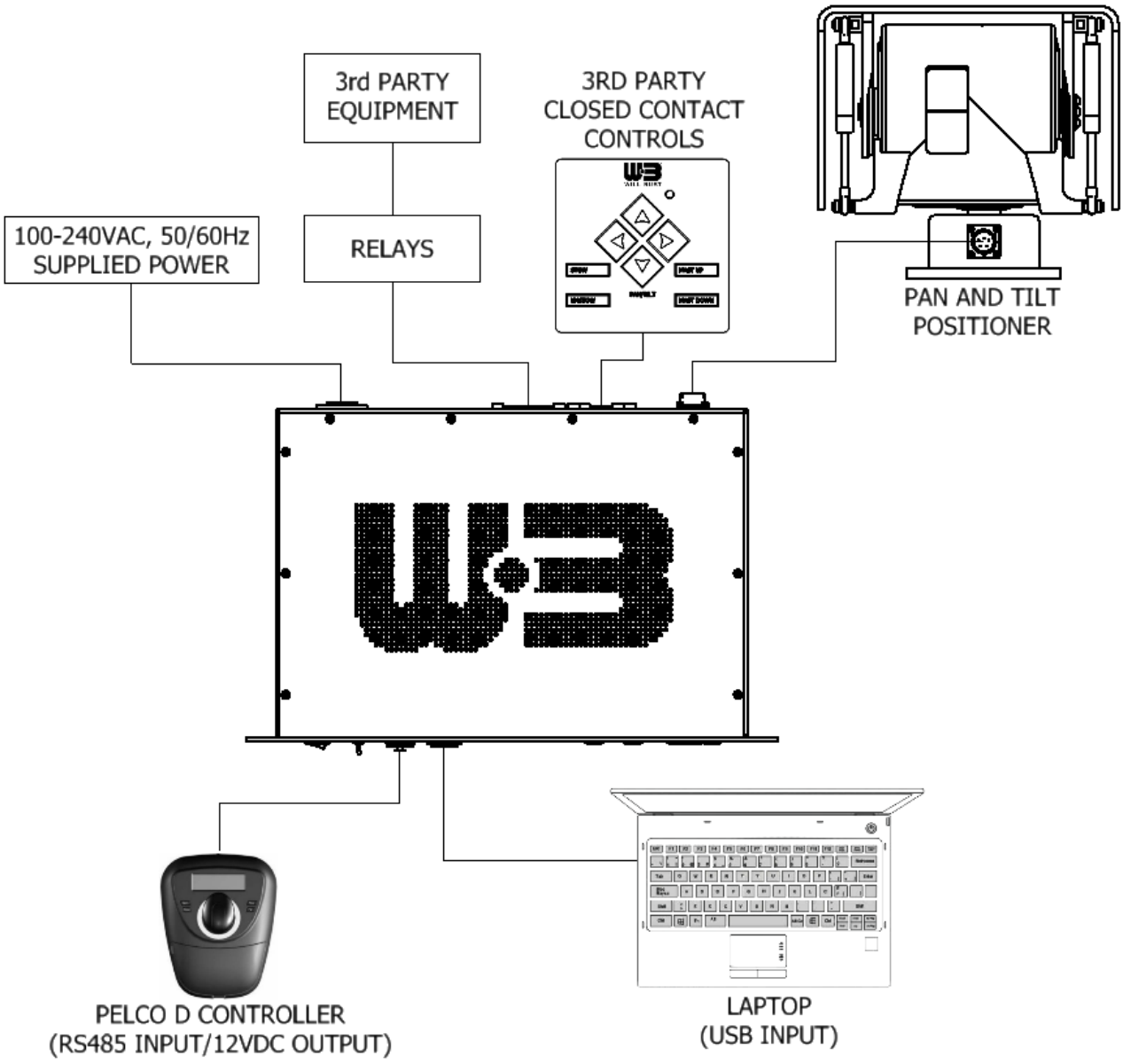

Figure 2-2 Typical System Setup

2.7 System Wiring

The Rackmount controller can be configured to control pan and tilt positioner systems and third-party equipment. This section overviews and describes the electrical wiring and pinouts for the Rackmount Controller.

2.7.1 Data Input Connectors

The Rackmount Controller is equipped with both an RS485 (half-duplex) input and USB input. The RS485 (half-duplex) input connector is a 4way XLR Connector. The USB input connector is a USB type B connector. Both the RS485 and USB connectors accept Pelco D protocol commands for controlling the positioner and discrete outputs. For a list of Pelco D commands compatible with a Will-Burt positioner see the Positioner manual. For a list of Pelco D commands to control/activate the digital discrete outputs from the 9-pin connector on the back of the Rack Mount Controller see Table 3-1 of this manual.

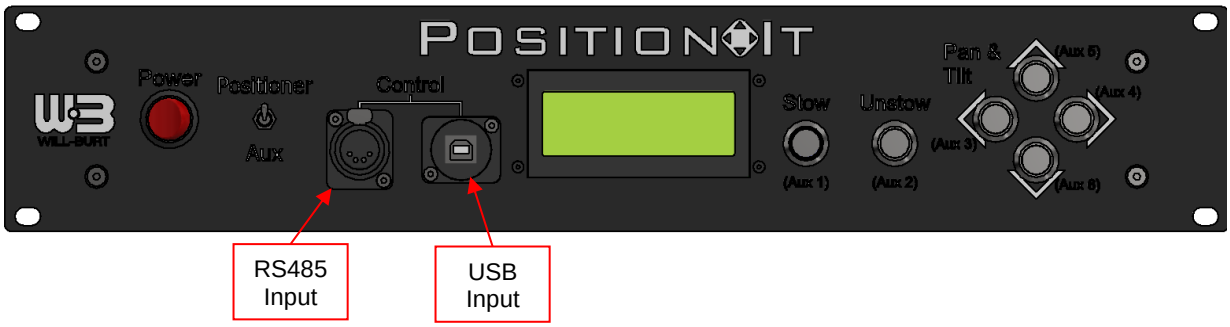

Figure 2-3 Data Input Connectors

RS485 Input	
Pin Number	**Function**
1	Data A
2	Data B
3	12 VDC (Output)
4	0 V

USB Input	
Type	**Function**
Female, Type B	USB Data Input

Table 2-1 Data Input Connectors

2.7.2 Power Input and Power/Data Output Connectors

The Rackmount Controller is equipped with a Power Input connector and Power/Data Output Connector. The Power Input connector provides power to the Rackmount Controller. The Power/Data connector provides power and data to the positioner.

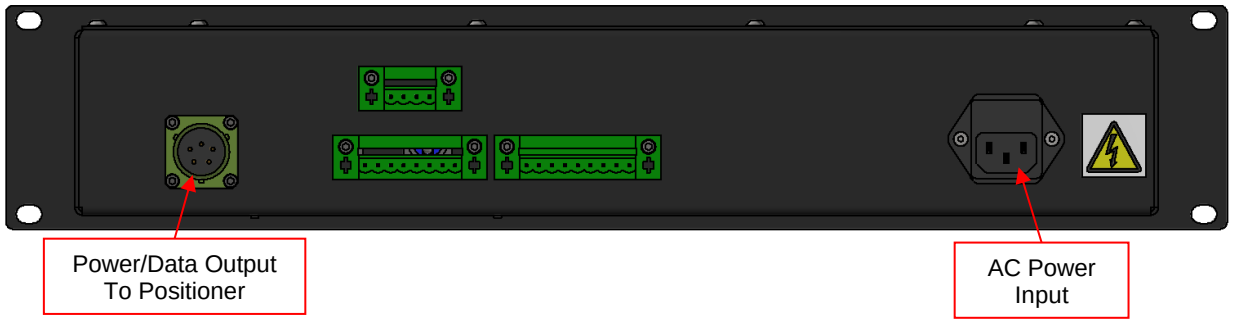

Figure 2-4 Power Input & Power/Data Output Connectors

Power/Data Output to Positioner	
Pin Number	**Function**
A	Data A
B	Data B
C	+24VDC
D	0V
E	Ground

AC Power Input	
Voltage	100-240VAC
Fuse	2A

Table 2-2 Power Input & Power/Data Output Connectors

2.7.3 Discrete Input and Output Connectors

The Rackmount Controller is equipped with 4-pin, 8-pin and 9-pin terminal block connectors. The 4-pin terminal block connector is designated for, but not limited to, interlock purposes. The 8-pin terminal block connector has a series of discrete inputs which can both control the positioner or the digital discrete outputs from the 9-pin terminal block connector depending on the position of the Positioner/Auxiliary Switch (see Section 3.6).

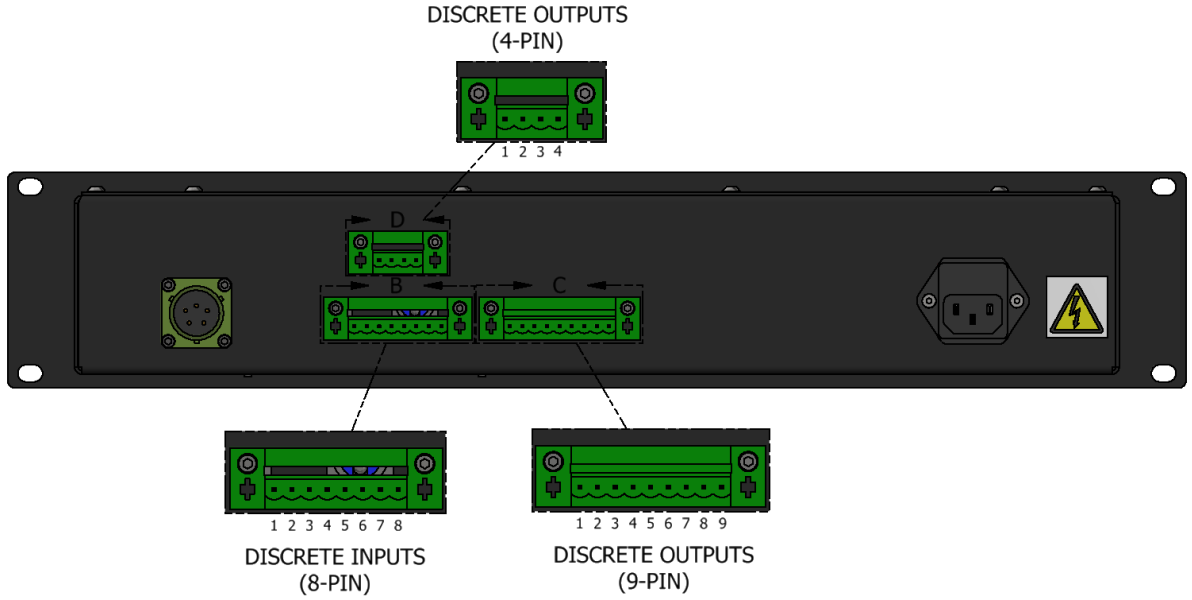

Figure 2-5 Discrete Input & Output Connectors

Discrete Outputs (4-pin)		
Pin Number	**Function**	**I/O Type**
1	+24Vdc/0.8 A*	Power
2	Do2	Output
3	Stow Conf.	Output
4	0V	Common

Positioner Control / Discrete Inputs (8-pin)		
Pin Number	**Function**	**I/O Type**
1	Stow / Di1	Input
2	Unstow / Di2	Input
3	Left / Di3	Input
4	Right / Di4	Input
5	Up / Di5	Input
6	Down / Di6	Input
7	Activates Do2	Input
8	0Vdc	Neutral

Discrete Outputs (9-pin)		
Pin Number	**Function**	**I/O Type**
1	+24Vdc/0.8 A*	Power
2	Do8	Output
3	Do7	Output
4	Do6	Output
5	Do5	Output
6	Do4	Output
7	Do3	Output
8	Do2	Output
9	0V	Common

*See Sections 2.8.1 and 2.8.2 for I/O details.

Table 2-3 Discrete Input & Output Table

2.8 I/O Map

The I/O Maps in Sections 2.8.1 and 2.8.2 detail the Rackmount controller's control configuration when the Positioner/Auxiliary Switch is in both the "Positioner" position and the "Aux" position, respectively. See Section 3.6 for more details.

2.8.1 Positioner/Auxiliary Switch – "Positioner"

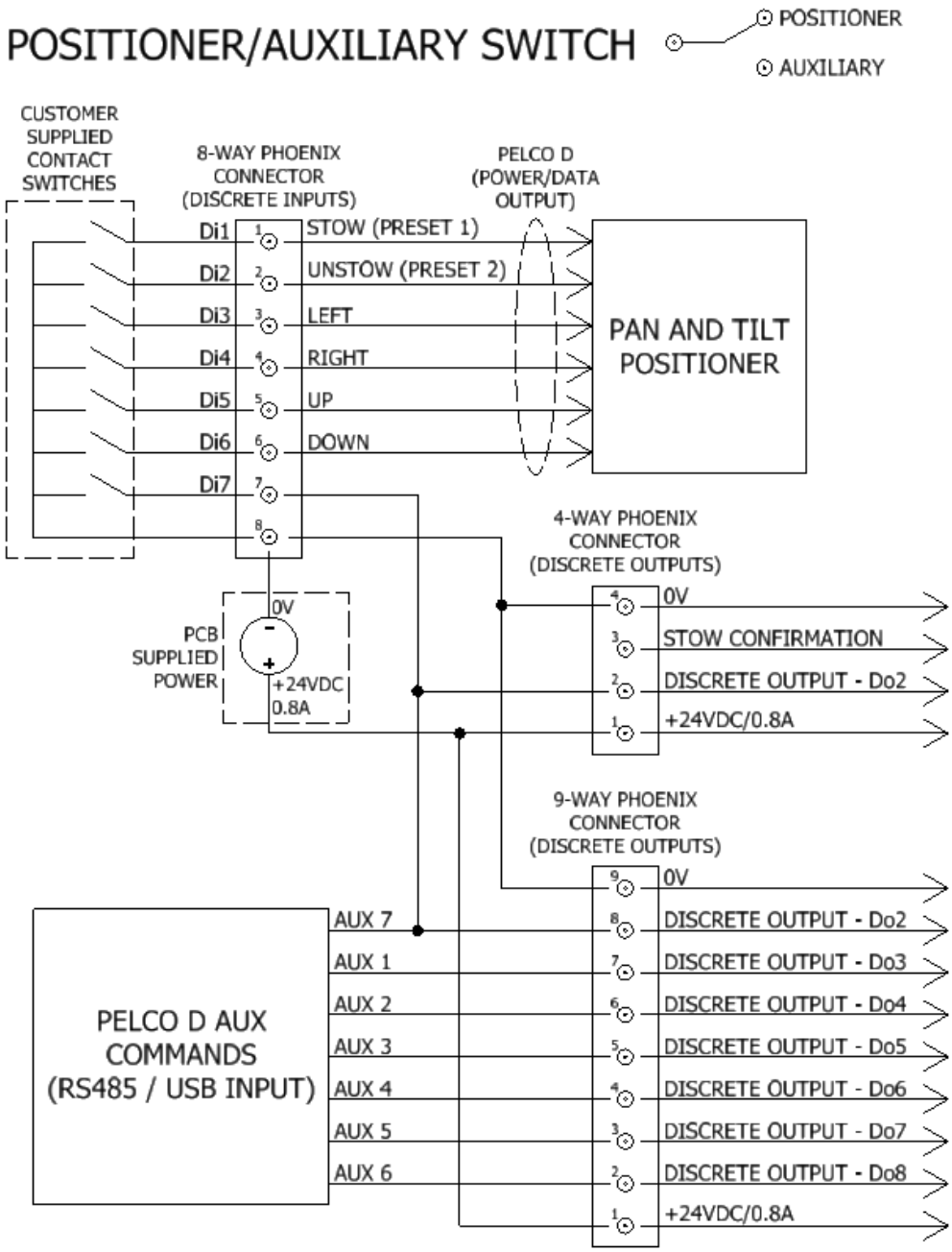

Figure 2-6 Control Configuration - "Positioner" Position

2.8.2 Positioner/Auxiliary Switch – “Aux”

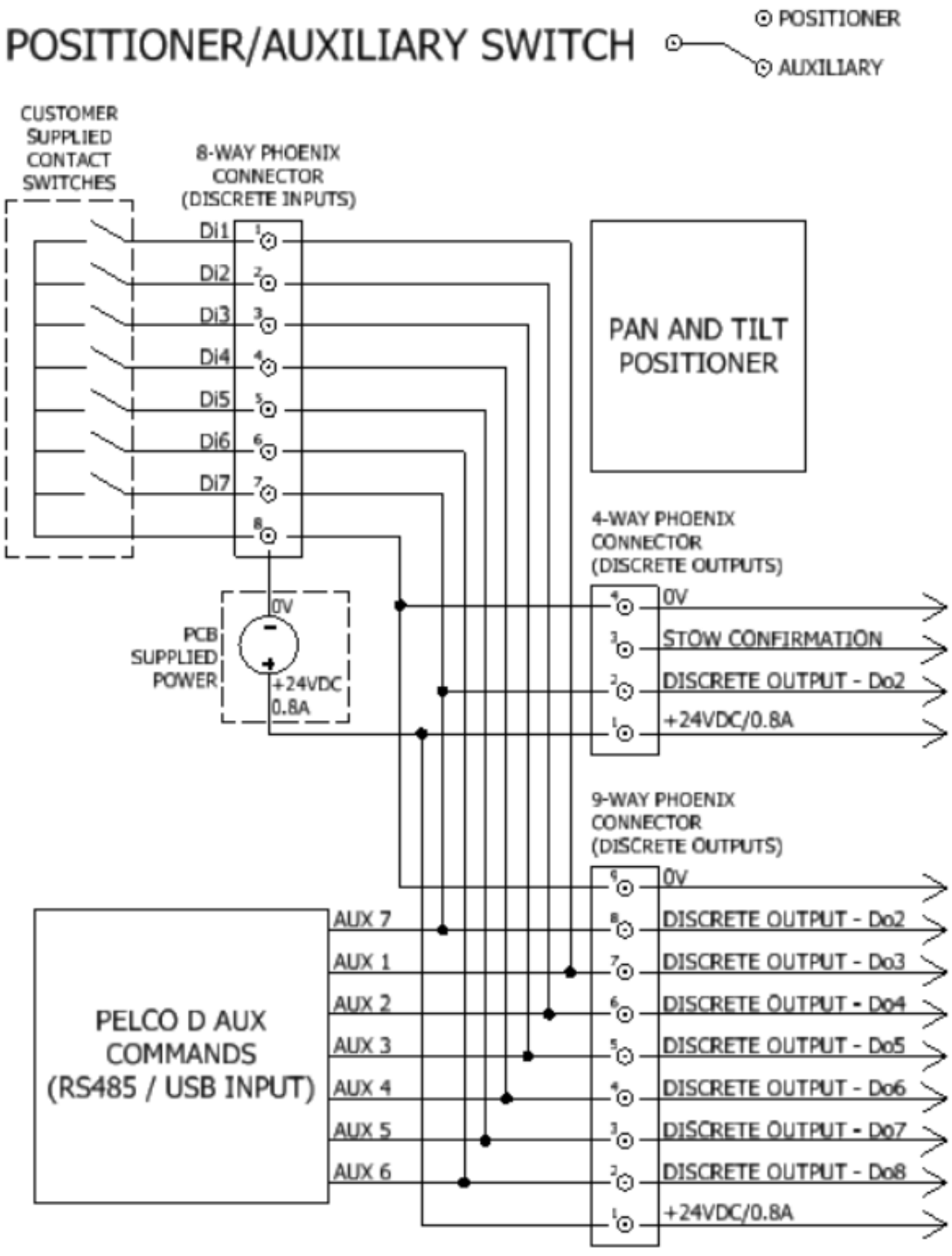

Figure 2-7 Control Configuration - "Aux" Position

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Section 3 Operation

This section describes the operation of the system. Use care to follow all precautions while operating.

3.1 Pre-Operation Check

Before operating the system, ensure:

- That all appropriate precautions from the operator's manual (Section 1.3) are followed.
- Ensure that the following warnings are understood and followed:

⚠ WARNING

Safety Instruction – Installation! Ensure all aspects of the installation have been carried out correctly and are safe before attempting to operate the system.

⚠ WARNING

Safety Instruction – Operation! Before moving the positioner, the operator must first make sure it is safe to do so.

3.2 Switching on the System

The illuminated Power Switch (Figure 3-1) on the front panel of the Rackmount controller turns power on for both the Rackmount Controller and the positioner.

Once switched on, wait for (10) seconds before attempting any control inputs. This will allow the system to fully initialize.

Power down the Rackmount controller system when the vehicle is in motion.

Figure 3-1 Power Switch

3.3 Push-Button Control

The positioner system can be manually driven using the (4) arrowed buttons labelled Pan and Tilt on the front panel. These are momentary push-button controls. To control the positioner, push and hold the related direction button and release when the desired position is reached. When using the push-button controls or digital discrete inputs to drive the positioner the movement speed ramps up to max speed over 2 seconds. Use quick momentary button presses to achieve accurate small incremental movements.

The push-button controls also control a series of discrete outputs on the 9-pin terminal block connector on the back of the rack mount controller when the Positioner/Auxiliary Switch is in the “Aux” position. See Section 3.6 for details on the Positioner/Auxiliary Switch.

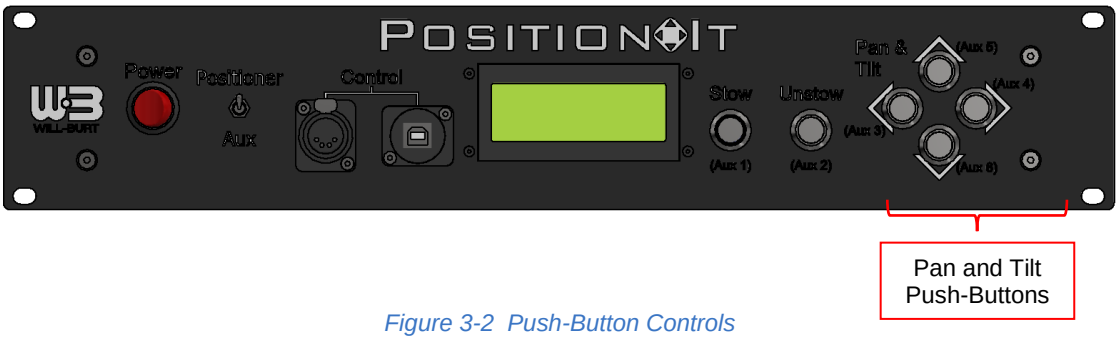

Figure 3-2 Push-Button Controls

3.4 Stowing and Unstowing the Positioner

To Stow the positioner, press the momentary push-button labelled “Stow” on the front panel of the Rackmount Controller. The unit will drive itself to the pre-programmed stow position. The stow button is equipped with a Blue LED indicator light that turns on as an indicator that the positioner reached the stow position. To unstow the positioner, press the momentary push-button labelled “Unstow” on the front panel of the Rackmount Controller. The unit will drive itself to the pre-programmed Unstow position. If any other control inputs are sent to the positioner before either the Stow or Unstow actions are completed they will override the Stow/Unstow commands and stop the positioner from finishing the stow or unstow process.

In conjunction with the Blue LED there is a digital discrete output signal that becomes active on the 4-pin terminal block connector when the positioner reaches the stow position. This is a stow confirmation output that can be used as an interlock when integrating a positioner and controller into a larger system. See Section 3.7 for more details. The Stow and Unstow push-button controls also control a series of discrete outputs on the 9-pin terminal block connector on the back of the Rackmount controller. See Section 3.6 for more details.

Figure 3-3 Stow/Unstow Push-Button Controls

3.5 Alternate Positioner Control Options

The Rackmount Controller allows for third party controls to be integrated into the system through the RS485 input, the USB input, or the 8-pin terminal block connector. The RS485 and USB inputs are both data-controlled inputs (see Section 2.7.1) and require a Pelco D compatible device/GUI to control the positioner. The 8-pin terminal block connector is a series a digital discrete inputs that can control the positioner through a customer supplied closed contact switch (see Section 2.7.3).

A full list of Pelco D supported commands that are compatible with Will-Burt positioners are detailed in the positioner's product manual. Additional Pelco D Auxiliary commands for controlling the discrete outputs are detailed in Table 3-1.

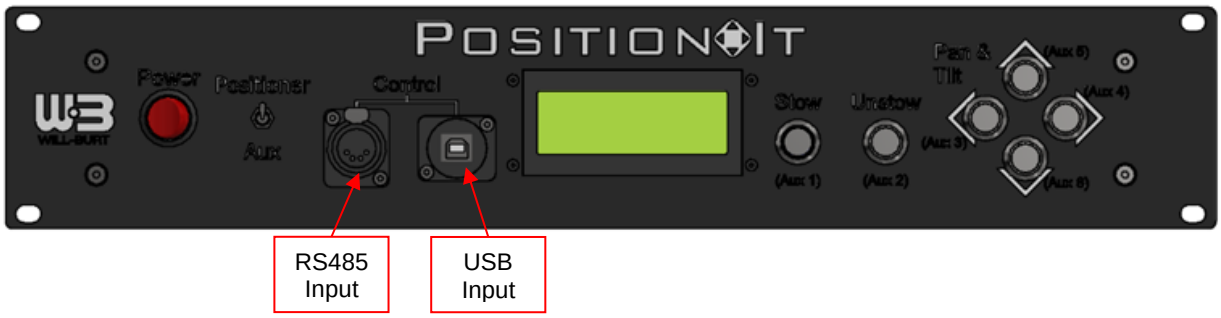

Figure 3-4 Data Input Controls

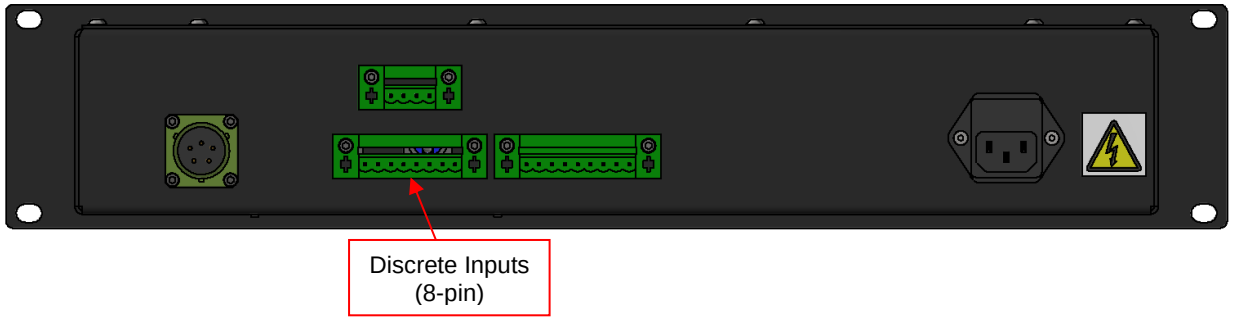

Figure 3-5 Back – Discrete Input Controls

Command	Op Code	Hex Code	Decimal Code
Auxiliary On	09	FF 01 00 09 00 nn xx	255 001 000 009 000 nnn xxx
Auxiliary Off	0B	FF 01 00 0B 00 nn xx	255 001 000 011 000 nnn xxx

** "nn" Variable Hexidecimal Aux number value; "nnn" Variable Decimal Aux value*
*** ""xx" Variable Hexidecimal Checksum value; "xxx" Variable Decimal Checksum value*

Table 3-1 Pelco D Auxiliary Command List

3.6 Positioner/Auxiliary Switch

The Positioner/Auxiliary Switch allows users to switch between controlling the positioner and third-party equipment (via digital discrete outputs). When the Positioner/Auxiliary Switch is in the “Positioner” position the push-button controls will send movement commands to the positioner. When the Configuration Switch is in the “Aux” position the push-button controls will control digital discrete outputs through the 9-pin and 4-pin terminal block connectors (See Sections 2.8.1 and 2.8.2).

Figure 3-6 Front Panel

3.7 Stow Confirmation & Optional I/O Interlock

A stow confirmation signal is provided through the 4-pin terminal block connector. Once a stow command is sent to the positioner, the positioner will move to its pre-programmed stow position. When the positioner reaches the stow position the LED on the Stow push-button will illuminate and a digital discrete output on the 4-pin terminal block connector will become active. (See Sections 2.8.1 and 2.8.2).

There is an additional digital discrete input on the 4-pin terminal block connector that activated directly by a discrete digital discrete input on the 8-pin terminal block connector. These can be used as an I/O interlock (see Sections 2.8.1 and 2.8.2).

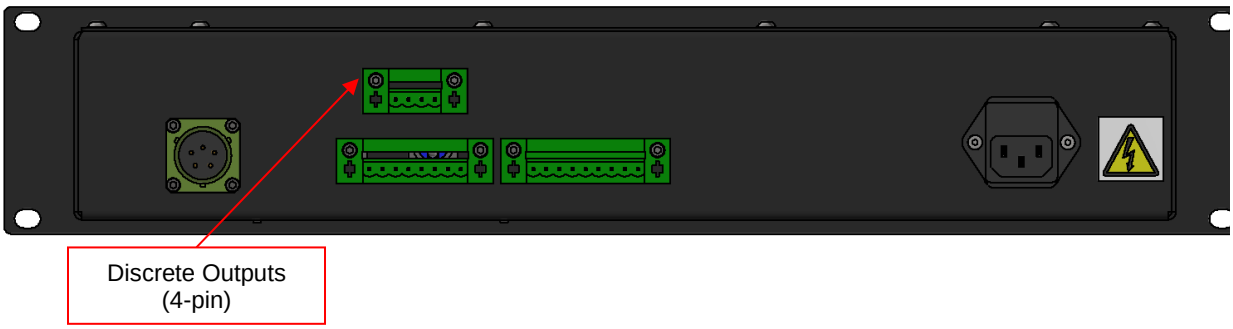

Figure 3-7 Discrete Outputs

3.8 Digital Discrete Outputs

The Rackmount Controller is equipped with a series of digital discrete outputs. The digital discrete outputs can be used to verify the positioner is in the stow position (see Section 3.7), for interlock purposes (see Section 3.7) or to control third party equipment (typically by incorporating relays). The digital discrete outputs can be control via Pelco D Auxiliary commands (see Table 3-1) or through the push-button controls when then the Positioner/Aux Switch is in the “Aux” position (see Section 3.6).

3.9 LCD Display – Home Screen

The Home Screen on the LCD displays various positioner information which gives the user real-time positioner feedback. See the following section for more details on the information provided on the Home Screen.

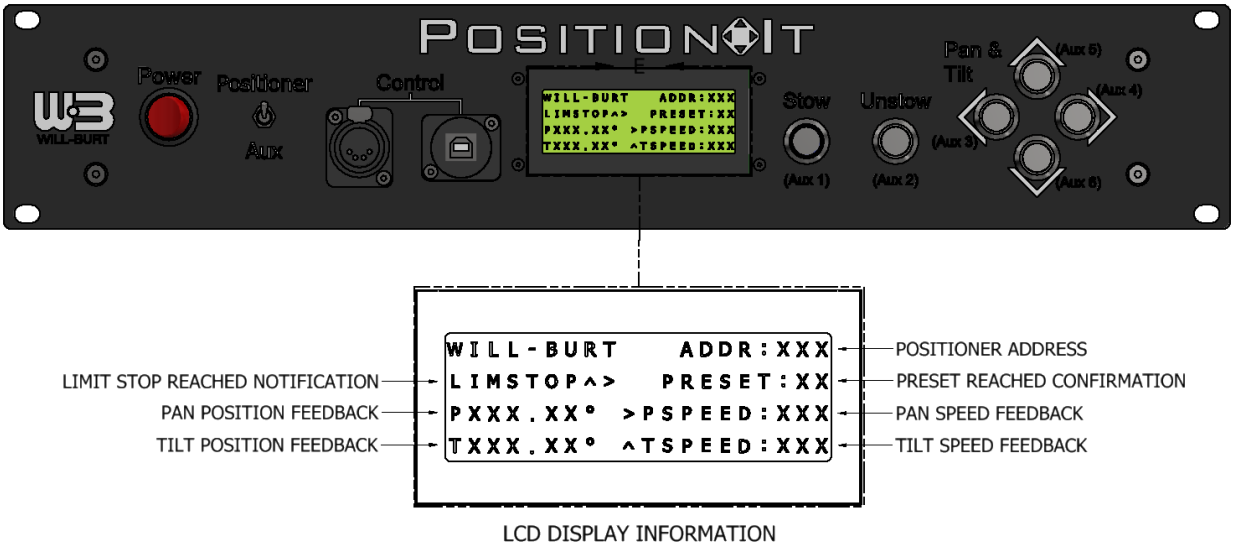

Figure 3-8 Home Screen - LCD Display

3.9.1 Positioner Address

The Positioner Address displays the address of the active positioner. The positioner address can be changed in the Selector Menu (See Section 3.10.1).

Note: The Rackmount Controller cannot set or assign an address to a positioner.

3.9.2 Limit Stop Reached Notification

The Limit Stop Reached Notification notifies the user when either a programmable electronic limit stop or a factory set limit stop has been reached. An arrow indicator icon will appear next to “LIMSTOP” on the LCD display which signifies which Limit Stop has been reached:

↑	-	Up Limit Stop Reached
↓	-	Down Limit Stop Reached
→	-	Right (CW) Limit Stop Reached
←	-	Left (CCW) Limit Stop Reached

Note: The Limit Stop Reached notification is not available on all Will-Burt positioner products.

3.9.3 Preset Designation

A [Preset: XX] appears on the Home Screen when ‘go to’ a preset command is sent to the positioner (“XX” represent the specified preset number). When a ‘go to’ preset command is sent to the positioner the preset text on the LCD Display will blink to signify the user that the positioner is travelling to the preset location. When the positioner reaches its preset location the text will stop blinking and turn solid. The preset location will remain on the LCD Display until the positioner is moved away from the preset location.

3.9.4 Pan/Tilt Position Feedback

Pan and Tilt Position Feedback denotes the positioners current location. The default units for positional feedback is degrees however this can be switched to radians within the Selector Menu (See Section 3.10.2). The Position Feedback reads the absolute position of the positioner relative to its home position. The user can zero the pan and tilt positional feedback in order to ‘set’ a specified ‘zero’ position (See Section 3.10.3).

Note: Pan/Tilt Position Feedback is available on most, but not all, Will-Burt positioner products.

3.9.5 Pan/Tilt Speed Feedback

Pan and Tilt Speed Feedback denotes the speed at which the positioner is travelling. Speed is displayed as a value from 0-100 and is a percentage of the positioners maximum speed. A specified maximum speed can be set in the Selector Menu (See Section 3.10.6).

3.10 LCD Display - Selector Menu

The Selector Menu allows users to access additional control functionality and features. To open the Selector Menu, press the “Stow” and “Unstow” push-button controls simultaneously. You can scroll through the various menu options using the ‘left’ and ‘right’ push button. To select a menu option, press the ‘down’ push button and to back out of a menu option or the menu all together press the ‘up’ push button.

[STOW] + **[UNSTOW]** → Open Selector Menu
[LEFT] or **[RIGHT]** → Scroll through Selector Menu options
[DOWN] → Select/Enter current option
[Up] → Go back

Some menu options within the Selector Menu are ‘address specific’ and others are not. The user can identify which commands are ‘address specific’ by selecting a menu option and noticing whether or not the ‘address’ is displayed at the top right of the LCD. If a menu option is ‘address specific’ then adjusting that option will only affect the positioner assigned to the address that is displayed. If the menu option is not address specific then that option will affect all positioners on the data line.

3.10.1 Address Select

The Address can be selected within the Selector Menu to determine which positioner to control. This allows users to control multiple positioners on a single data line using a single Rackmount Controller. The user can choose between addresses 1-255.

3.10.2 Degrees or Radians

The [DEG OR RAD] menu option in the Selector Menu allows the user to designate the pan and tilt position feedback to be displayed in either degrees or radians on the Home Screen.

3.10.3 Zero Home Position

The [SET ZERO POS] menu option in the Selector Menu allows the user to set the pan and tilt position feedback on the home screen to ‘zero’. To do this, drive the positioner to the desired ‘Home’ position and select [ZERO] in the [SET ZERO POS] menu option. The factory default ‘Home’ position can be reset by selecting [DEFAULT] in the [SET ZERO POS] menu option.

3.10.4 Setting & Clearing Electronic Limit Stops

The [LIMIT STOP] menu option in the Selector Menu allows the user to set and clear electronic limit stops. Electronic limit stops limit the positioner’s pan and tilt travel range in order to avoid positioner/payload collision. Electronic limit stops should be set during installation of the positioner to avoid collision with third party obstructions which could damage the positioner or its payload. The user can set a limit stop to restrict travel in the pan left (CCW), pan right (CW), tilt up and/or tilt down directions. To do this, drive the positioner to a desired travel limit stop location, select the appropriate electronic limit stop direction (left, right, up or down) in the [LIMIT STOP] menu option and select [SET]. Back out of the Selector Menu to the and drive the positioner away and then towards the limit stop to ensure it has been appropriately set. Limit stops can be cleared by selecting the appropriate limit stop in the [LIMIT STOP] menu option and then selecting [CLR].

3.10.5 Setting, Calling and Clearing Presets

The [PRESET POSN] menu option in the Selector Menu allows users to set/store, call (‘go to’) or clear presets. To set/store a preset drive the positioner to the desired preset location. Then, within the [PRESET POSN] menu select the preset number. Next, select [SET] and the preset position will be stored. Presets can be called by selecting the desired preset with the [PRESET POSN] menu and selecting [CALL]. Presets can be cleared by following the same steps and selecting [CLR] in the [PRESET POSN] menu. Calling a preset will send the positioner to the stored preset location. Clearing a preset will erase the preset location.

Preset [1] and Preset [2] are designated for “Stow” and “Unstow”, respectively. These presets can be called both through the hidden selector menu or through the Stow/Unstow push-button controls on the front of the Rackmount Controller.

Preset locations are stored in the positioner and not the Rackmount Controller. Therefore, setting presets is address dependent. Preset [0] is the factory home preset position and cannot be set or cleared, only called.

3.10.6 Setting Max Pan and Tilt Speed

The [SET SPEED] menu option in the hidden selector menu allows the user to set the max pan and tilt speed. The max speed setting is displayed as a range from (1-100) and represents a percentage of the maximum speed of the positioner. For example, if a positioner tilt speed is specified to be 12°/sec and the max tilt speed value is set to ‘50’ then the positioner will travel at 6°/sec. The max speed setting only affects the speed control for the push-button controls and discrete inputs. It does not limit the speed control through the USB and RS485 input as the speed is directly related to the data command being sent to the positioner. To set the max speed, select the appropriate speed value, from ‘1-100’, and select [SAVE] in the [SET SPEED] menu option.

3.10.7 LCD Display Back Light Brightness

The [BACK LIGHT] menu option in the hidden selector menus allows the user to set the back light brightness of the LCD display. To do this, select the desired brightness level and then select [SAVE] in the [BACK LIGHT] menu option.

3.10.8 Setting Baud Rate

The [BAUD RATE] menu option in the hidden selector menu allows the user to choose the data Baud Rate for the control commands. To do this, select the desired baud rate and then select [SAVE] in the [BAUD RATE] menu option.