Application Notes

UBLS / UBLS-EBF (v10 software)

Contents **Page**

Features 2

Installation 2

Swivel Recovery 3

IR & RS232 Commands 4

User Control 4

Configuration 5

Contact Closure available on request 5

future automation

Features

1. Programmable maximum telescope height
2. Programmable maximum left and right viewing angle
3. Programmable intermediate viewing angle

Installation

1. Apply power.
2. Use the Future Automation IR remote for all the following steps
3. **The buttons for all [STORE] sequences must be pressed sequentially with no more than 2 seconds between each press**
4. Set the maximum telescope height – the unrestricted maximum height of the UBL telescope is. Most installations will require a lower custom height. To trim the maximum height:
    i. Position the telescope at the required height using [IN], [OUT] and [STOP] on the IR remote.
    ii. Press the [STORE], [OUT]. The new telescope height is now configured.
    iii. If you make a mistake and need to set a higher viewing position, press [STORE], [STOP], [OUT]. This will clear the programmed height and revert to the default maximum extension
    iv. Test your new height using the [IN] and [OUT] buttons
5. Set the maximum left and right rotations. The UBL can rotate to a maximum of 180 degrees left and right. Some installations may require you to limit this to a shallower angle
    i. Position the swivel at the required maximum rotation using [<], [>] and [STOP] on the IR remote.

ii. Press the [STORE], [<] or [STORE], [>]. This will set the left or right maximum rotations respectively.
iii. To clear the maximum left rotation, press [STORE], [STOP], [<]
iv. To clear the maximum right rotation, press [STORE], [STOP], [>]
v. Test the new left and right rotational limits using the [<] and [>] buttons.

6. Set the intermediate viewing angles (if required.

i. Position the swivel at the required maximum rotation using [<], [>] and [STOP] on the IR remote.
ii. The following commands will save this position as one of the 4 available viewing angles
    1. **[STORE] [PRESET]**
    2. **[STORE] [A]**
    3. **[STORE] [B]**
    4. **[STORE] [C]**
iii. Intermediate viewing angles cannot be cleared, only repositioned
iv. Test the new intermediate viewing angle using the [PRESET]. [A], [B] or [C] buttons as appropriate.

Swivel Recovery

In some circumstances it is possible for the software within the unit to lose track of where the swivel and telescope are. This will typically happen if replacing a control board of software chip whilst the swivel and telescope are mid-travel, or if there is a power cut whilst the swivel or telescope are moving, In these circumstances, the software may go into a protective shutdown state and will not respond to user commands. To recover from this,

1. Enter **[STORE] [STORE] [>]** on the Future Automation remote control, sequentially with no more than 2 seconds between each press
2. From this point you will be able to move rotate the swivel left and right in short bursts using **[<]** and **[>]**
3. Position the swivel at the HOME (centred) position
4. From this point you will be able to press [IN] to retract and fully reference the unit

IR & RS232 Commands

- RS232 commands are all terminated with carriage return but no line feed. In Crestron this is represented by \r
- IR sequences involving multiple key-presses require each successive key to be pressed within 2 seconds

User Control

IR	RS232	Action	Comments
IN	fa_in	System fully in	
HOME		Moves to telescope extended, swivel centred position	Swivel moves to centre if already rotated
OUT		Similar to HOME but swivel will not move	Swivel will not move
PRESET	fa_preset	Moves to telescope extended, swivel at intermediate viewing angle "PRESET"	
A	fa_a	Moves to telescope extended, swivel at intermediate viewing angle "A"	
B	fa_b	Moves to telescope extended, swivel at intermediate viewing angle "B"	
C	fa_c	Moves to telescope extended, swivel at intermediate viewing angle "C"	
<	fa_left	Moves to telescope extended, swivel at maximum left	Maximum angle achievable relative to the current maximum arm out setting
>	fa_right	Moves to telescope extended, swivel at maximum right	Maximum angle achievable relative to the current maximum arm out setting
STOP	fa_stop	Stop mechanism	

Configuration

IR	RS232	Action	Comments
STORE OUT		Set maximum telescope height	Stores current telescope height
STORE STOP OUT		Clear maximum telescope height	Reverts to physical limit of telescope
STORE PRESET		Set intermediate viewing angle "PRESET"	Stores current swivel position
STORE A		Set intermediate viewing angle "A"	Stores current swivel position
STORE B		Set intermediate viewing angle "B"	Stores current swivel position
STORE C		Set intermediate viewing angle "C"	Stores current swivel position
STORE <		Set maximum left rotation	Stores current swivel position
STORE >		Set maximum right rotation	Stores current swivel position
STORE STOP <		Clear maximum left rotation	Reverts to 180 degree rotation to the left
STORE STOP >		Clear maximum right rotation	Reverts to 180 degree rotation to the right
STORE STORE HOME		Factory Reset	Telescope height and viewing angles must be reconfigured after performing a factory reset
STORE STORE >		Swivel recovery	See above

Contact Closure available on request

The standard Under Bed Lift control unit does not provide direct contact closure control. A separate external module is available upon request providing Contact Closure to RS232 conversion, allowing switched control of all UBL models.