

# Application Notes

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## HSE

Contents	Page
Installation .....	2
Referencing.....	3
Referencing when installing a new chip .....	3
Referencing after adjusting or replacing a potentiometer .....	3
Adjusting the docking speed (only available for mechanisms supplied after 02 / 2017) .....	4
Factory Reset .....	4
Controlling the Mechanism.....	5



## Installation

- 1) The HSE allows for up to 7 user programmable presets positions, assigned to the A, B, C, D, E, F and PRESET commands. These are defaulted at 7 evenly spaced intervals throughout the 90 degree arc of the mechanism.
- 2) Use the Future Automation IR remote to set each programmable position
- 3) Move the mechanism to the required position using [IN], [OUT] and [STOP]
- 4) Press [STORE] followed no more than 2 seconds later by the key associated with your chosen preset.

## Referencing

**A newly supplied mechanism will not need referencing as this has already been done prior to dispatch.**

Referencing is a process which must be performed whenever the mechanism needs to “learn” the limits of its own travel. Some service/maintenance procedures may require the unit to be re-referenced.

### Referencing when installing a new chip

- 1) Press [IN] until the mechanism stops at its fully closed position
- 2) Press [OUT] until the mechanism stops at its full 90 degrees switch
- 3) The mechanism is now referenced

### Referencing after adjusting or replacing a potentiometer

- 1) Press [STORE] [STORE] [HOME] to perform a factory reset (note: this will remove any previously stored viewing angles)
- 2) Press [IN] until the mechanism stops at its fully closed position
- 3) Press [OUT] until the mechanism stops at its full 90 degrees switch
- 4) The mechanism is now referenced
- 5) Reprogram the required viewing angles (follow the instructions in the Installation Section above)

## Adjusting the docking speed (only available for mechanisms supplied after 02 / 2017)

**Do not alter docking speed unless specifically advised by Future Automation.**

The default docking speed is suitable for the entire weight range of this mechanism and **should not need to be adjusted**. It is set at a value which optimally dampens any shaking caused by loss of momentum as the mechanism stops.

However, in exceptional circumstances docking can be adjusted as follows

- a) [STORE] [STORE] [>] - fractionally increases the docking speed
- b) [STORE] [STORE] [<] - fractionally decreases the docking speed
- c) Successive adjustments can be used in this way to tailor docking speed to specific requirements.

## Factory Reset

Completely restores the mechanism to all default settings. NOTE: the mechanism must be fully referenced again after a factory reset. Any viewing angles or customized docking speeds will need to be reprogrammed.

## Controlling the Mechanism

- 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

IR Sequence	RS232	CC Pin	Action	Comments
IN	fa_in	Pin 8 Or Pin 5 short removed	System fully in	
OUT	fa_out	Pin 7	System fully out	
STORE A			Store current position as Preset A	Inactive when not referenced
STORE B			Store current position as Preset B	Inactive when not referenced
STORE C			Store current position as Preset C	Inactive when not referenced
STORE D			Store current position as Preset D	Inactive when not referenced
STORE E			Store current position as Preset E	Inactive when not referenced
STORE F			Store current position as Preset F	Inactive when not referenced
STORE PRESET			Store current position as Preset PRESET	Inactive when not referenced
A	fa_a		Move to Preset A	Inactive when not referenced
B	fa_b		Move to Preset B	Inactive when not referenced
C	fa_c		Move to Preset C	Inactive when not referenced
D	fa_d	Pin 5 shorted	Move to Preset D	Inactive when not referenced
E	fa_e		Move to Preset E	Inactive when not referenced
F	fa_f		Move to Preset F	Inactive when not referenced
PRESET	fa_preset		Move to Preset PRESET	Inactive when not referenced
STOP	fa_stop	Pin 6	Stop Mechanism	Inactive when not referenced
STORE STORE HOME			Factory reset	Mechanism must be referenced and the viewing angles re programmed after a factory reset