



# Remote Attendant Control

FOR USE WITH **M-SERIES ELECTRONICS**



## ***User Manual***

**DEALER:** This manual contains important safety, operational and set-up instructions specific to the Remote Attendant Control box. **Before** using this product, please read through the instructions carefully and save for future reference.





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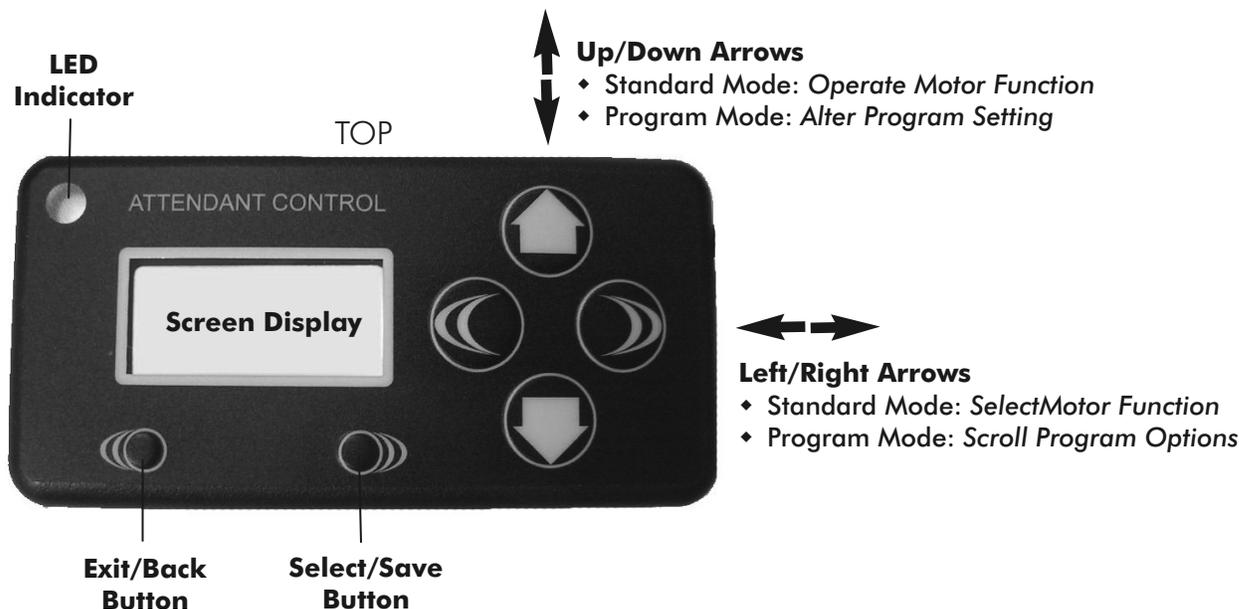
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## 1.0 REMOTE ATTENDANT CONTROL- OVERVIEW



### STANDARD MODE:

In Standard Mode the remote operates as an attendant control box using the Left/Right arrows to cycle through the available motor functions on the power positioning system (PPS), and the Up/Down arrows to operate the selected motor function.

### PROGRAM MODE:

In Program Mode, the remote functions as a hand-held programmer to allow qualified technicians the flexibility to reconfigure the PPS to better meet the specific needs of the end user when necessary. (Program options include: reconfiguring operator switch and joystick assignments, setting of limits & lock-out angles, setting individual motor speeds, etc...)

**IMPORTANT!** Program Mode on the remote is password protected. To enter into Program Mode, press the Select/Save and Exit/Back buttons simultaneously. When the 'Enter Password' prompt appears in the screen display, press the directional arrows in the following sequence: **up, up, down, down**.

### SELECT/SAVE BUTTON:

The select/save button is used in Program Mode to select (enter) the specific option/function you wish to re-program, and is utilized to save your changes once programming is completed.

### EXIT/BACK BUTTON:

The exit/back button is utilized during Program Mode to return to the previous screen display, or to exit at any stage during programming without saving your changes.

### SCREEN DISPLAY:

When not in use, the screen display is designed to enter into *sleep mode* after 10 sec. in Standard mode and after 120 sec. in Program mode ; Pressing any button on the remote will re-awaken the display.

### LED INDICATOR:

The LED light is a visual signal as to the position/status of the power positioning system. The LED light on remote box is designed to mirror the indicator lights on the 4-way and 8-way switch boxes:

**Green Light** = indicates that seating system is in the Home position;

**Flashing Green** = indicates that seating system is Out of Home;

**Flashing Red** = indicates that a Tilt/Recline and/or Elevating system is in Reduced Speed Drive;

**Red Light** = indicates the seating system is in Drive Lockout (DLO).

# STANDARD MODE

## 2.0 USING THE REMOTE AS AN ATTENDANT CONTROL

In Standard Mode the remote operates as an attendant control box using the **Left/Right** arrows to cycle through the available motor functions on the power positioning system (PPS), and the **Up/Down** arrows to operate the selected motor function.

### 2.1 ATTENDANT CONTROL - OPERATING MOTOR FUNCTIONS

1. Use **Left/Right** arrows (1) to scroll through the available power positioning (motor) functions (i.e. Tilt, Recline, Elevate, etc..).

**Note:** the remote will only display the power positioning functions that are available.

2. Select the desired motor function (in the screen display), then press and **hold** the **Up/Down** arrows (2) and (3) to operate the actuator. The power positioning function and direction of travel will be indicated on the display screen (See example below showing Tilt function).



### 2.2 ATTENDANT CONTROL - ADJUSTING MOTOR SPEED

**Motor speeds may be adjusted independently while in attendant control (standard) mode.** In standard mode, the 'Exit/Back' and 'Select/Save' buttons function as '**Speed Down**' and '**Speed Up**' while operating a motor function.

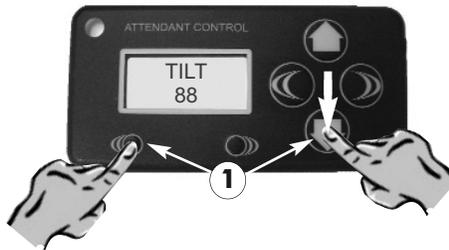
1. Select the motor function and direction you wish to adjust.
2. To decrease the motor speed, press the **Speed Down** button (left) while **simultaneously** pressing the motor function/direction button (1).
3. To increase the motor speed, press the **Speed Up** button (right) while **simultaneously** pressing the motor function/direction button (2).



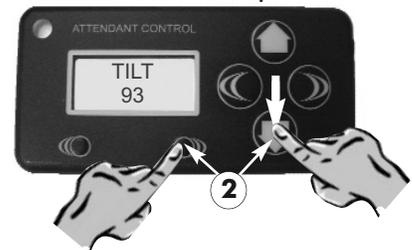
e.g. Adjusting 'Tilt Backward' speed



Decrease Motor Speed



Increase Motor Speed



# PROGRAM MODE

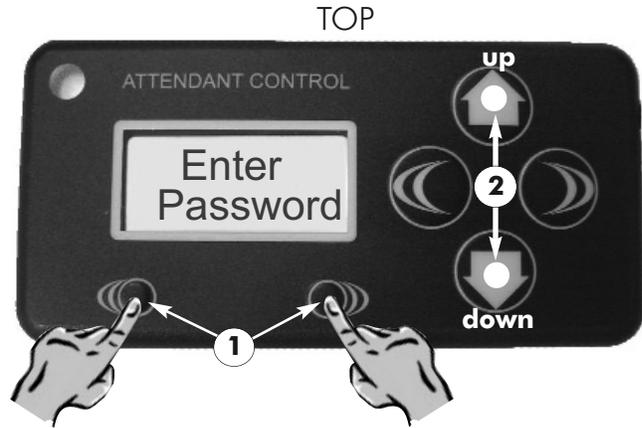
## 3.0 PROGRAMMING YOUR SEATING SYSTEM VIA THE REMOTE

### 3.1 ENTERING PROGRAM MODE

#### To Enter Program Mode:

1. Press both lower buttons simultaneously (1) to access password screen
2. Enter Password using key pad (2): Press the **up** arrow twice, followed by the **down** arrow twice.

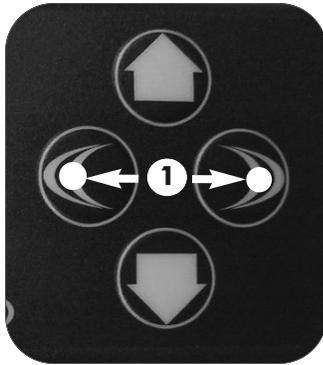
Password Sequence = **UP/UP/DOWN/DOWN**



### 3.2 PROGRAMMING OPTIONS

#### Select Program Option:

1. Use **Left** and **Right** arrows (1) to scroll through available Program Options:



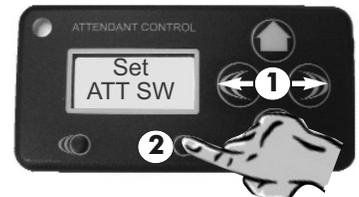
- Set ATT SW** = configuring operator/attendant switch
- Set ASM** = configuring joystick functions or specialty controls
- Set Tipsy** = set limits/lockout angles
- Set Speed** = set individual actuator/motor speeds
- Set Actuator\*** = 'On/Off' motor functions
- Set Config\*** = 'On/Off' settings for miscellaneous system features
- Set Motor Type\*** = set motor type by manufacturer
- Get Version\*** = indicates current software version

*\*Restricted Program Access (Password Protected), for OEM use only:*

### 3.3 CONFIGURING THE OPERATOR/ATTENDANT SWITCH (Set ATT SW):

#### To Program the Operator/Attendant Switch Box:

1. In Program Mode scroll using **Left/Right** arrows (1) until **Set ATT SW** is displayed on screen, then press Select/Save Button (2).



2. Press any switch position (3) you wish to program on the operator switch box (switch type may vary).

**Note:** After pressing the switch, screen display will indicate the assigned switch position (i.e.; SW1, SW2, SW3,...) and the function currently assigned.



### 3.3 CONFIGURING THE OPERATOR/ATTENDANT SWITCH (Set ATT SW):

3. Use the **Up/Down** arrows (4) to scroll through and select the motor function you wish to assign to the switch.

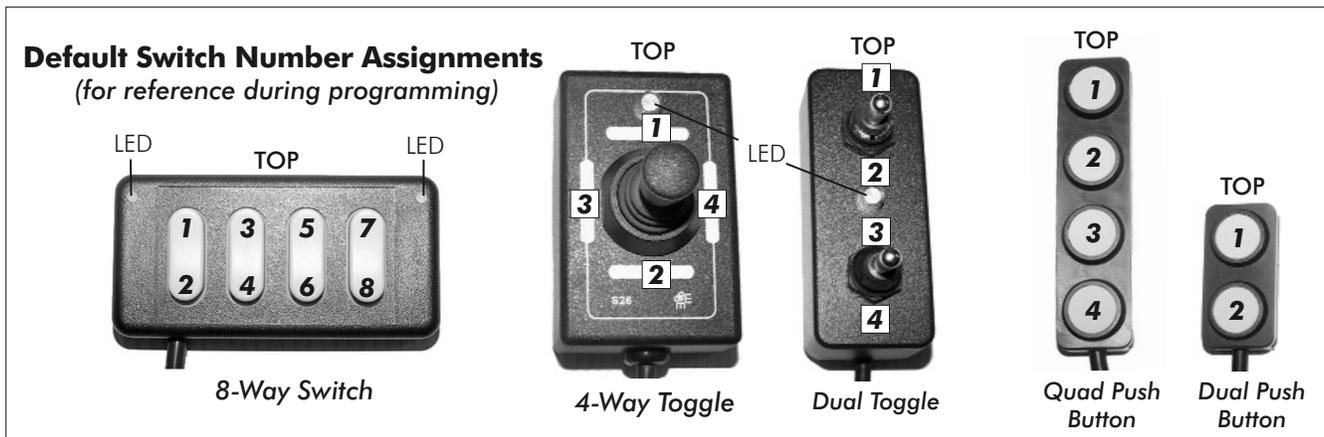
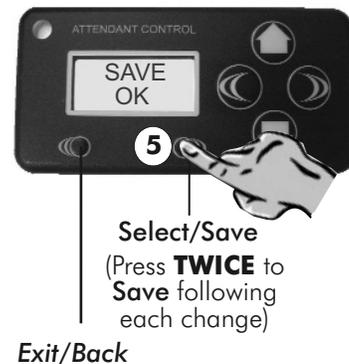
Images i - iii illustrate the options available to assign the Tilt function to the SW1 switch position).



4. Press the Select/Save button (5) TWICE to save your changes. (Each change must be saved individually following adjustment)

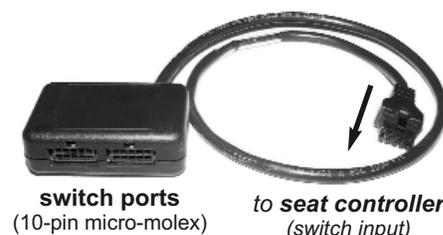
5. Repeat steps 2 - 4 as necessary to program remaining switch positions.

6. To exit press the Exit/Back button once to return to the Program Options screen. Press twice to fully Exit program mode.



#### Optional Splitter Cables:

**i** Additional Switches may be added by connecting a splitter cable into the switch port on the M-Series Seat Controller. There are two models of Splitter cables available: **C648 2-way Splitter**; **C654 3-way Splitter**. Both splitters are configurable up to a maximum of 12 programmable switches. The Remote will automatically recognize and number the additional switches for programming (i.e.; SW1, SW2... SW11, SW12)



The **C648** splitter must be configured using one **8-Way** Switch in one port, combined with any other switch in the remaining port (up to 4 functions).

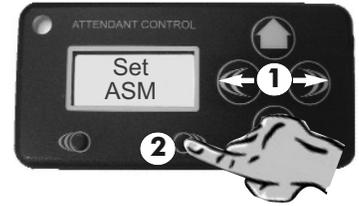


The **C654** splitter may be configured for use with up to three 4-Way Switches (one in each port), or it may be configured to utilize any switch combinations up to the maximum 12 switches.

### 3.4 CONFIGURING THE ASM (for Joystick or Specialty Controls) (Set ASM):

#### Configuring the ASM

1. In Program Mode scroll using **Left/Right** arrows (1) until **Set ASM** is displayed on screen, then press the Select/Save Button (2).



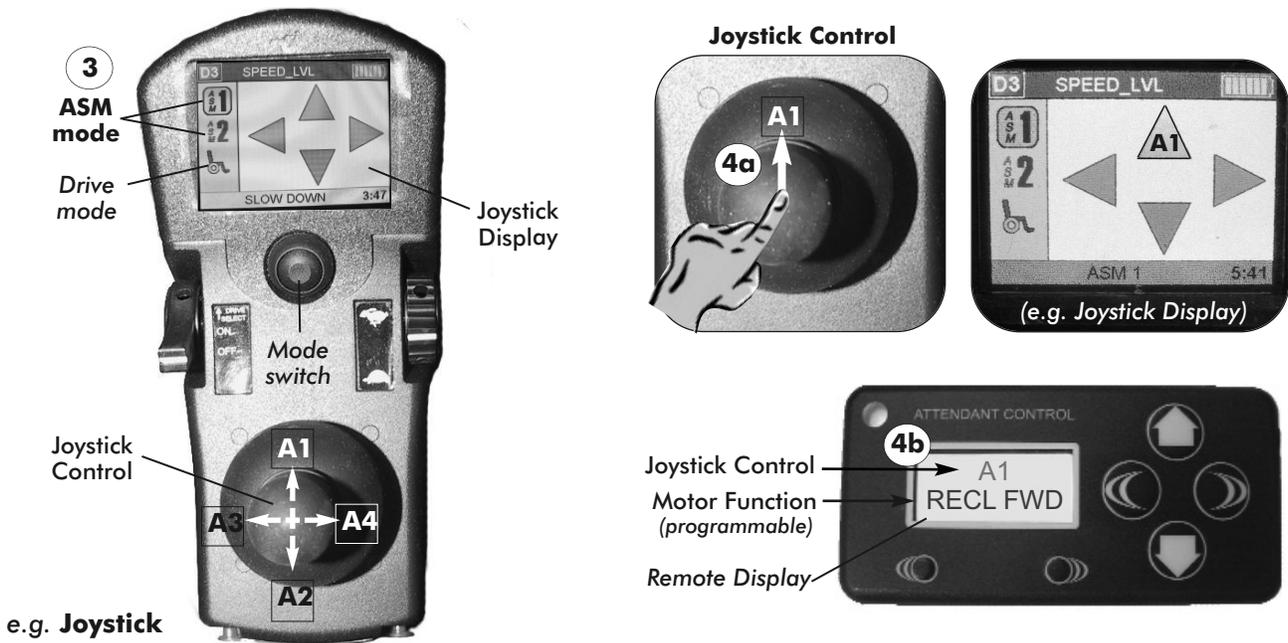
2. For programming instructions on seating systems using a **Joystick Control**, proceed to Step 3. below; For systems equipped with **Specialty Controls** (e.g.; Sip'N Puff, Head Array, etc...) proceed to Step 4. (p.9).

#### 3. Programming for 'Thru Joystick' Controls:

3.1. Ensure the joystick display is switched from Drive Mode into ASM mode (3). (e.g.; ASM1, ASM2)\*

\***Note:** **ASM1** and **ASM2** are denoted by the letters **A** and **B** respectively during programming. (i.e.; ASM1 = A1, A2, A3, A4 and ASM2 = B1, B2, B3, B4).

3.2. Press the joystick control in the direction that you wish to program (see example (4a)); The remote display will automatically indicate the assigned joystick position (i.e. A1, A2, A3, A4) and display the motor function that is currently assigned to it (see example (4b)).



3.3. Use the **Up/Down** arrows (5) to scroll through and select the motor function you wish to assign to the joystick control/position (see images i -iii).

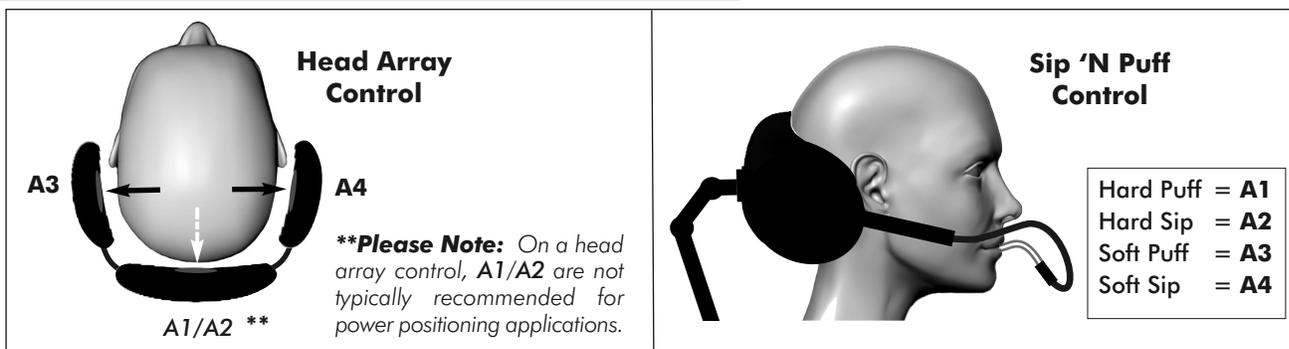


Images i - iii illustrate the program options available to assign the Recline function to the A1 joystick position.

3.4. To save your changes, proceed to Step 5.

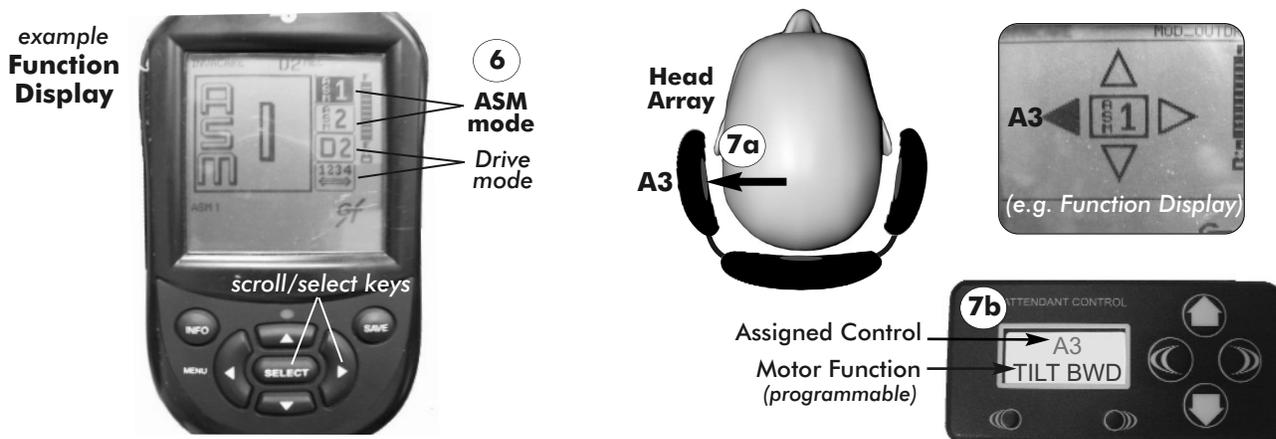
### 3.4 CONFIGURING THE ASM (for Joystick or Specialty Controls) (Set ASM):

#### 4. Programming for 'Specialty Controls' (if applicable):



4.1. Ensure the function display is switched from Drive Mode into **ASM mode (6)**. (e.g.; ASM1, ASM2)\*  
 \*Note: **ASM1** and **ASM2** are denoted by the letters **A** and **B** respectively during programming.  
 (i.e.; ASM1 = A1, A2, A3, A4 and ASM2 = B1, B2, B3, B4).

4.2. Activate the specialty control that you wish to program (see example **7a**); The remote display will automatically indicate the assigned control (i.e. A1, A2, A3, A4) and display the motor function that is currently assigned to it (see example **7b**).



4.3 Use the **Up/Down** arrows (**8**) to scroll through and select the motor function you wish to assign to the specialty control\* (see images **i - iii**)



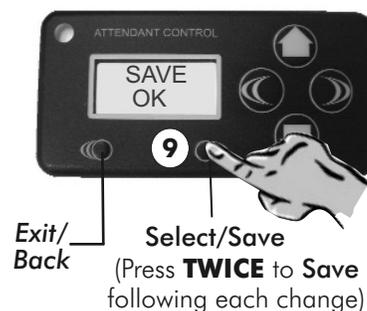
Images **i - iii** illustrate the program options available to assign the Tilt function to the A3 control/position.

**i** **NOTE:** To turn off a specialty control switch (i.e. A1/A2), scroll through the Motor Function options until the OFF command is displayed on the screen. This will prevent the switch from activating.

5. To save changes, press the Select/Save button (**9**) **TWICE**.  
**(Each change must be saved individually following adjustment)**

6. Repeat steps 2 - 5 as necessary to program remaining controls.

7. Press the Exit/Back button once to return to the Program Options screen. Press twice to fully Exit program mode.

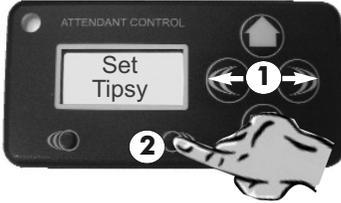


### 3.5 SETTING LIMITS AND LOCKOUT ANGLES (Set Tippy):

**i Important!** When adjusting/programming the Tippy Sensor, please note that the Home, Reduce, DLO and Max-Angle limits are contiguous. Each limit/angle must be set to a greater or equal angle than the previous.

#### To Program the Limits and Lockout Angles :

**i** Ensure seating system is on a level surface in the full upright position prior to programming the tippy.



1. In Program Mode scroll using **Left/Right** arrows (1) until **Set Tippy** is displayed on screen, then press the Select/Save button (2).



2. Use the **Left/Right** arrows (3) to scroll through and select the tippy position you wish to adjust:

**Home** - sets home position/angle

**Reduce** - sets reduced speed drive angle

**DLO** - sets drive lockout angle

**Max\_Angl** - sets the maximum Tilt or Recline<sup>1</sup> or Tilt/Recline<sup>1</sup> angle (see **Important!** note below)

**Reset** - resets existing limits\* (to reset press Select/Save **TWICE**)

**\*Note:** Resetting the Tippy requires the Home, Reduce and DLO limits to be re-programmed; Following a reset, the Max\_Angl limit will be automatically defaulted to the maximum allowable angle.



3. Press the **Up/Down** arrows (4) to adjust the seating system to the desired angle\*. (See **Recommended Tippy Angles** (p. 11)).

**\*Note:** as the seating system is tilted/reclined, the back angle will be indicated in the upper right corner of the display screen for reference.

#### IMPORTANT!

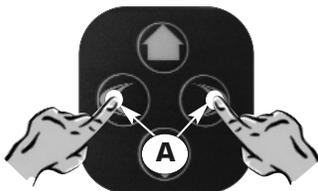
**<sup>1</sup>Note:** Adjusting the **Max\_Angle** on a Tilt/Recline or Recline Only system:

The default Max\_Angle setting may vary from system to system and is pre-set at the factory. The Max\_Angl limit should only be adjusted if the maximum angle needs to be decreased from the current factory set-up.

#### Programming Instructions:

i. To set the Max Recline angle, the display (angle indicator) must be switched to 'Recline' mode by pressing the **left & right arrows simultaneously (A)**- the display will change to show the recline angle (range= 90°-168°).

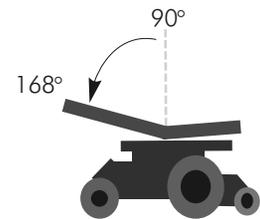
ii. Proceed to step 3. above.



Press simultaneously to switch Max\_Angl to Recline mode (90°-168°)

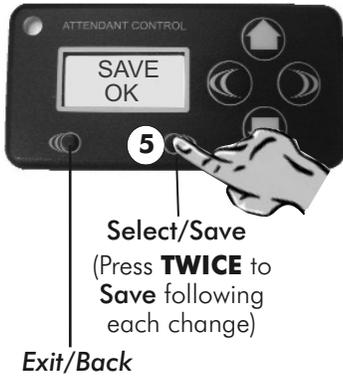


Back Angle Indicator (in Recline Mode)



Recline back to the desired Max\_Angle

### 3.5 SETTING LIMITS AND LOCKOUT ANGLES (Set Tippy):



4. Before saving, verify that the angle & tipsy position you wish to set are displayed on the screen (e.g. *DLO, 25°*), then press the Select/Save button (5) **TWICE** to save changes.

**(Each tipsy position must be saved individually following an adjustment)**

5. Repeat steps 2 - 4 as necessary to program remaining limits/angles.

6. To exit press the Exit/Back button once to return to the Program Options screen. Press twice to exit program mode.

#### Recommended Tippy Angles

The tipsy angle sensors allows for the individual programming of up to 4 limits: **Home/Anti-Tip Limit, Reduced Speed Drive, DLO Limit** and the **Max Tilt (Tilt/Recline) Limit**. Refer to the following factory recommended limit/lockout angles when programming the Tippy Sensor :

<b>Home Position</b>	<b>0° to 20°</b>
<b>Reduced Speed Drive Limit</b>	<b>Max. Limit = 20°</b>
<b>Drive Lockout (DLO) Limit<sup>1</sup></b>	<b>Max. DLO = 30° (Max DLO = 25° if Reduced Drive is not programmed)</b>
<b>Maximum Back Angle<sup>2</sup>:</b>	<b>Max. Tilt Limit = 55° (Tilt-only), 50° (Tilt-Only Module) or 45° (Scissor Lift/Tilt module)</b>
	<b>Max. Tilt/Recline Limit = 168° (Tilt/Recl, Recl-only)</b>

<sup>1</sup>**Note:** Do Not exceed the max recommended DLO

<sup>2</sup>**Note:** for bariatric systems, the Max. Back Angle may be limited to 30° or 45° based on client weight

#### **WARNING!** Risk of severe injury or death

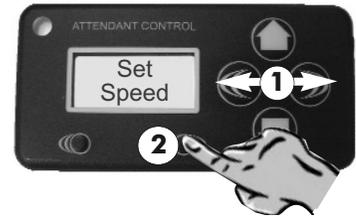
The angle at which limits are set is **critical** to the safe operation of the power positioning system. Motion Concepts will not be liable for any injuries or damage sustained when adjustments are made beyond the factory recommended settings.

### 3.6. SETTING INDIVIDUAL ACTUATOR MOTOR SPEEDS (Set Speed):

Motor speeds are shown as a percentage value and may be set independently for each direction of travel (i.e.; Tilt Fwd, Tilt Bwd, Recl Fwd, etc...). Default Setting= **100** (Full Speed). (See also Section 2.2, p.5)

#### To Program the Actuator Motor Speeds:

1. In Program Mode scroll using **Left/Right** arrows (1) until **Set Speed** is displayed on screen, then press the Select/Save Button (2).



2. Use the **Left/Right** arrows (3) to scroll through and select the actuator function for which you would like to adjust the motor speed (Tilt Fwd, Tilt Bwd...). (\*See Optional: ALL SPEED Adjustment below)



3. Use the **Up/Down** arrows to adjust the motor speed for the selected motor function:

- ◆ Press adjustment arrow (4) to decrease or (5) to increase the motor speed in 1% increments;
- ◆ Hold down adjustment arrow (4) to decrease or (5) to increase the motor speed in 5% increments;
- ◆ Hold down both adjustment buttons simultaneously (6) to **RESET\*** the selected actuator speed back to 100%

Images i - iii. illustrate motor speed adjustments made to the Tilt Fwd actuator function



**\*Note:** System must be in the Home position for reset

4. To save changes, press the Select/Save button (7) **TWICE**. (Each speed adjustment must be saved individually following modification)



Select/Save  
(Press **TWICE** to Save following each change)

Exit/Back

5. Repeat steps 2 - 4 as necessary to program remaining limits.

6. Press the Exit/Back button once to return to the Program Options screen. Press twice to exit program mode.

#### **\*OPTIONAL: ALL SPEED Adjustment**

The motor speed for all actuator functions can be programmed simultaneously via the **ALL SPD** function. The ALL SPD setting configures all actuators to the identical speed (in both travel directions).



## 4.0 RESTRICTED PROGRAM ACCESS (FOR OEM USE ONLY)



**WARNING!** Program modifications for the following sections (**Sections 4.1 - 4.4**) are under Restricted Access (for OEM use only). To obtain access/authorization for changes to these factory settings, please contact Motion Concept's Technical Service Department:

**Canada:** 800-680-4191

**USA:** 888-433-6818

### 4.1 SETTING INDIVIDUAL ACTUATOR FUNCTIONS ON/OFF (Set Actuator)



**Restricted Access:** Set Actuator functions are factory preset and password protected. Actuator functions may be individually programmed (i.e.; turned on and off). Please contact our Technical Service Department if any changes to the existing set-up are required.

### 4.2 MISCELLANEOUS (ON/OFF) FEATURE SETTINGS (Set Config):



**Restricted Access:** The Configuration settings are factory preset and password protected. Please contact our Technical Service Department if any changes to the existing set-up are required.

### 4.3 SETTING MOTOR TYPE BY MANUFACTURER (Set Motor Type):



**Restricted Access:** Motor Type settings are factory preset and password protected. If any changes are required, please contact our Technical Service Department for authorization to reconfigure the existing Motor Type settings.

### 4.4 GET SOFTWARE VERSION (Get Version):



In order for our Technical Service Department to properly diagnose any potential issues, it may be necessary to identify the software version of the remote attendant control. Access to the Get Version display is available in the restricted program access section.

**Note:** the current software version is also indicated briefly on the display screen when the remote attendant control is initially powered on.

**NOTES:**





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