



Please read these instructions carefully before beginning the installation. Failure to understand and follow installation instructions may result in injury to installer and/or end user and may void the warranty. If you have any questions call Sunrise Medical Technical Support at 800-333-4000.

A. Product Description:

DualPro is a fully adjustable proportional head array with "On Board Programming". This gives the user the ability to operate their wheelchair using the full range of the wheelchair's speed and acceleration parameters. The DualPro contains a combination of proximity and force sensor technologies. This technology allows the end user to customize the headarray in the field. Traditional switched head arrays do not allow this level of customization. For set up instructions please see the set up guides for 3 or 4 direction proportional located on our website: www.switchit-inc.com.



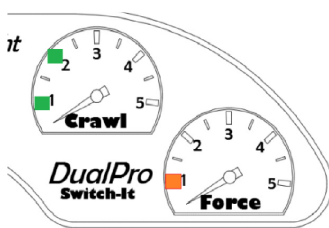
B. On Board Programming: **A**

Each pad has a force and a proximity (crawl) sensitivity setting, and both settings can be adjusted individually through the "On Board Programmer". To configure the different pads follow these easy steps.

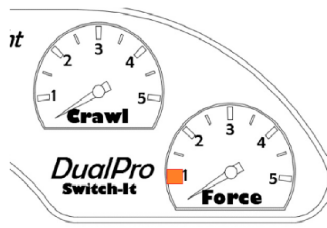
1. Press the "Set" and "Force" buttons at the same time for 1 second, Fig A1.
2. This will allow you to select the pad you would like to configure as indicated by the light corresponding with each pad, Fig A2.
3. Press the set button to scroll through and select the pads you would like to configure, Fig A3.
4. You can set the "Force" by pressing the "Force" button. More Force lights means more force is required to reach full speed. This is indicated through the series of lights on the right side of the keypad, Fig A4.
5. You can set the Proximity setting by pressing the "Crawl/Prox" button. More "Crawl/Prox" lights means more speed when within range of the proximity sensor. This is indicated through the series of lights on the right side of the keypad, Fig A5.

NOTE- Once the maximum sensitivity is reached, the lights will reset to the left indicating you have reached the minimum setting. The sensitivity will cycle through the lights until the desired setting is reached. Once the sensitivity of both switches is set as desired, scroll through the pads until no pad indicators are lit.

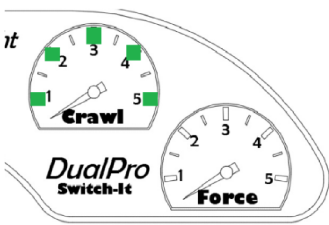
C. Programming Interface Examples:



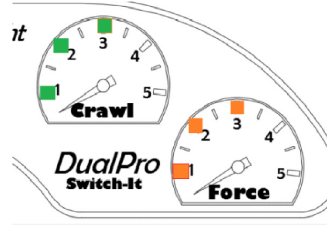
1. 40% speed within proximity (crawl) and light force for full speed.



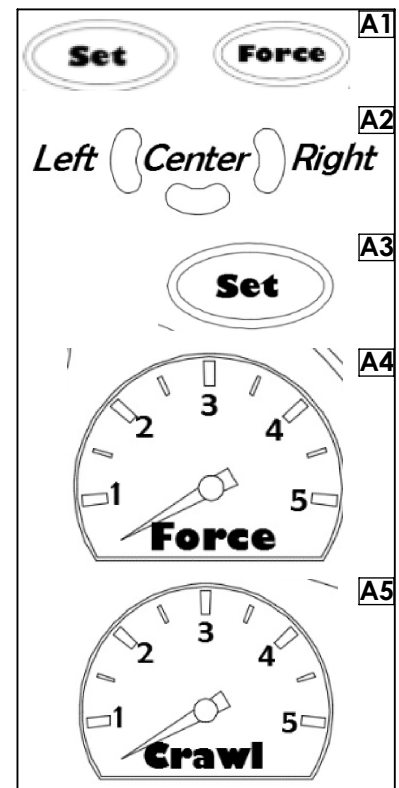
2. Light Force on pad for full speed, no proximity (crawl) speed.



3. Fully proximity switched head array.



4. 60% speed within Proximity (crawl) switch and then reach full speed with medium force.



D. Back Pad Enable/Disable Angle Setting Feature: B

1. Regular Driving Angle
2. Settable Inactivate Back Pad Angle
3. Pressure Relief Angle

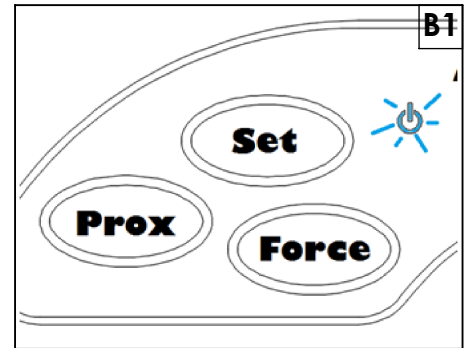
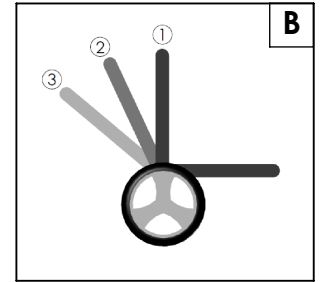
- Ensure angle you select is between driving and pressure relief angles.

1. To set the Inactivate back pad angle:

- a. Tilt the chair to the angle where you would like the back pad to become inactive.
- b. Hold down the "Set" button on the DualPro and power cycle the chair.
- c. Now, when the chair tilts back past this angle the back pad will become inactive.
- d. When the back pad is inactive the blue power symbol will blink, Fig B1.

1. To Disable this feature:

- a. Hold down the "Crawl" or "Prox" button.
- b. Power cycle the chair while holding.
- c. This feature is now disabled.



E. Detailed Example:

The DualPro will send a signal to the chair as a percentage of full speed. For instance, if the chair is set to 100% forward speed and the proximity (crawl) switch is set to 20% then the chair will only move at 20% of full speed in the proximity (crawl) mode. When pressure is applied to the force sensor, the percentage will increase until the maximum rate is met. If the force is set to 80%, the maximum speed will be 80% of the chair settings. Be aware that if the chair is set to 50% maximum speed, the percentages will drop accordingly. A 20% setting of the switch in the DualPro will result in 10% of maximum speed (20% sent by head array to a chair setting of 50% will equate to 10% of maximum drive).

It is recommended that the chair be set at 100% and the percentages be adjusted through the DualPro profile functions.

F. Common DualPro Adjustments:

1. If user leans to one side more or is able to apply more force to one pad than the other. Set the appropriate side to a high force setting and the opposite side pad to a proximity setting with low or no force.
2. If user needs to sit in slight tilt. Increase force requirement and set proximity to zero (no lights) for back pad to avoid activating the drive while in contact with the pad.

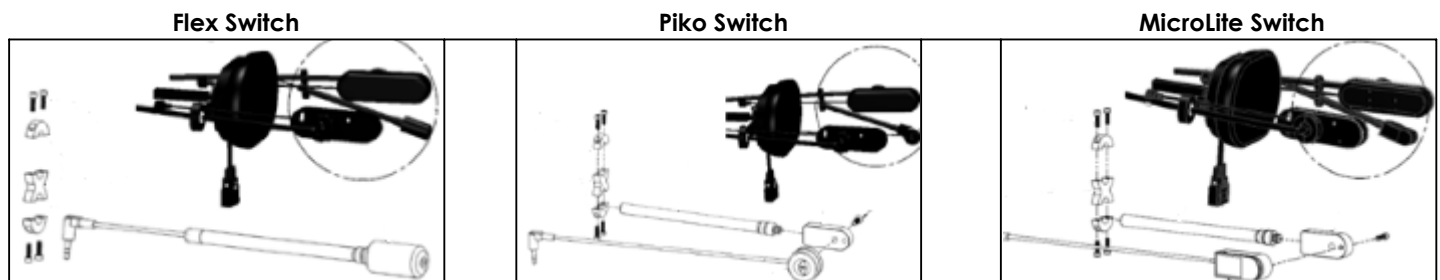
G. External Switch Options: C

The DualPro has three inputs for external switches: mode, reverse, and an assignable user switch. These are located on the bottom of the pad.

1. Flex Switch on Swing Away, Fig C1.
2. Piko Switch on Gooseneck, Fig C2.
3. Swing Away Egg Switch, Fig C3.
4. MicroLite Switch, Fig C4.



H. External Switch Mounting:



I. On Board Smart Jacks: D

There are three ports on the bottom of the pad back. These ports incorporate Patented **Smart Jack Technology**. These ports can accept mechanical or electronic switches.

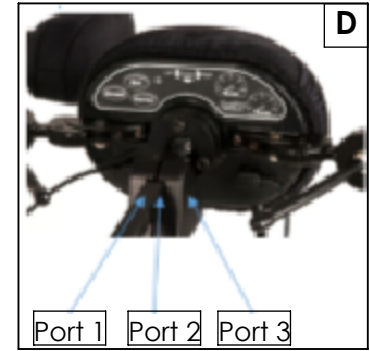
- Port 1 - Reverse
- Port 2 - Mode
- Port 3 - On/Off Switch

J. Head Pad Styles Offered:

1. Adult DualPro with Swing Away Facial Pads
2. Pediatric DualPro with Swing Away Facial Pads

K. Comptibility:

- P7G R-Net - Omni is required
- Curtis Electronics Enable 50 - Enhanced Display is required
- Dynamic Controls DX2 - Switch It DX Dongle (DXD) is required

**L. Using Seat Functions:****R-Net electronics configurations available:**

- Use right to scan through seat functions and left pad to activate.
- Use left pad to scan through seat functions and right pad to activate.
- Use right or left to scan through seat functions and forward/reverse to activate.
- Use tilt sensor to de-activate back pad when in tilted or pressure relief positions.

Curtis electronics configurations available:

- Use right to scan through seat functions and left pad to activate.
- Use left pad to scan through seat functions and right pad to activate.
- Use right or left to scan through seat functions and forward/reverse to activate.

M. Basic Set-up Instructions for Q-Logic Electronics:

1. Connect DB9 plug of head array cable into port of Enhanced Display.
2. Access the chair programming menu.
3. Scroll down to Program Adjustments and select.
4. Select Specialty Control.
5. Scroll down to Specialty Control.
6. Set your active device to **3-Direction Proportional**.
7. Set up preferred reverse and mode options:

Scroll down to the 3 direction proportional folder and select.

- a. Single mode click toggles forward and reverse, and a double click activates mode:
 - i. Scroll down to **Switch Options** and select.
 - ii. Set the **Mode Jack Switch Type** to **Toggle**
 - iii. Confirm **Mode Jack Operation** is set to **N.O.**
- b. For using the back pad to automatically toggle between forward and reverse with short activation (*longer activation will result in drive*):
 - i. Scroll down to **Back Switch Toggle** and **Select**
 - ii. Set Back **Switch Toggle** to Enabled
 - iii. Confirm **Mode Jack** is set to **N.O.**

N. Basic Set-up Instructions for P&G R-Net Series Electronics:

1. This instruction uses an extra switch plugged into the back pad for mode and on/off.
2. Access the Omni Display programming menu.
3. From main menu, select **Omni** and Scroll down to **Port 1** and select.
4. Highlight **SID** and select **3Prp**, then return to Main menu.
5. Set up preferred reverse and mode options:
 - a. Single click of mode switch toggles forward and reverse, and a double click activates mode:
 - i. Back up until you highlight **Port 1** and select.
 - ii. Highlight **Switches** & select.
 - iii. Highlight **Double Click Time** & set to desired time.
 - b. For using the back-pad to automatically toggle between forward and reverse with short activation (*longer activation will result in drive*):
 - i. Back up until you have **Port 1** highlighted and select.
 - ii. Highlight **Controls** & select.
 - iii. Highlight **F/R Auto Toggle** and change to **ON**.
 - iv. Highlight **Auto Toggle Time** and set desired time.
 - c. For using the medium and long clicks of mode switch for reverse and mode (*medium click of mode switch toggles forward and reverse, and a long click activates mode*):
 - i. Back up until you highlight **Port 1** and select.
 - ii. Highlight **Switches** and select.
 - iii. Highlight **Switch Medium** & set to desired time **Double** using the "+" and "-" keys. (set to **0** if this option is not preferred; **F/R Auto toggle under controls must be set to Off**).
 - iv. Highlight **Switch Long** & set to desired time (*must be more than medium settings*) **Double Click Time**.

**WARNING**

- Caution should be exercised with regards to the use of portable communications equipment in the area around where the sensors are located in the head array. If the wheelchair behaves erratically, shut the wheelchair off immediately and contact the dealer.
- Ensure wheelchair is powered off when in a vehicle or during a patient transfer.
- Ensure wheelchair is powered off when plugging or unplugging switches or sensor on the back pad.
- Avoid use under power lines and around cellular phones.
- WARRANTY- 1 year from the date of manufacture.

For more information:



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