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.

A. Product Description:

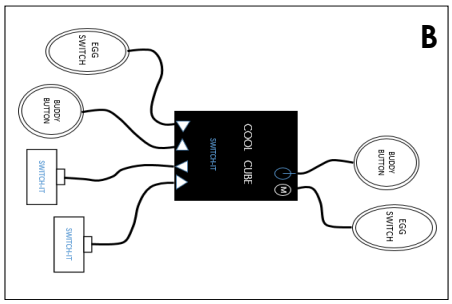
A smart switch box allowing the user to have mechanical switches, electronic sensors, and proportional switches to control a powered wheelchair. The device has 6 ports that are labeled forward, reverse, left, right, off, and mode.

B. Compatible Switches:

a. Proportional switches
   i. Examples: Pro Spot Proportional Switches

b. Electronic sensors
   i. Examples: Proximity Switches, Flex Switches, Zero Touch Proximity Switches

c. Mechanical Switches
   i. Examples: Mini Buttons, Buddy Buttons, MicroLite Switches, Pileo Switches



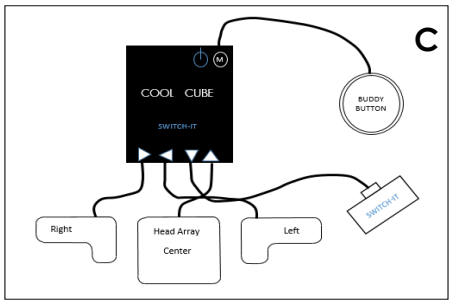
C. Example Configurations:

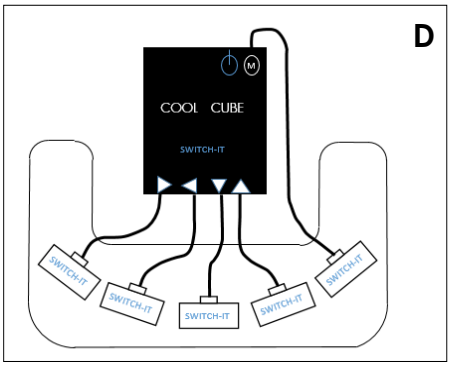
a. Proportional Pro Spot Switches: (A)
   i. Cool Cube with Proportional Pro Spot Switches - Use 1, 2, 3, 4, or 5 Pro Spots

b. Combination mechanical switches & electronic sensors: (B)
   i. Cool Cube with electronic sensors (proximity switches) - use 1, 2, 3, 4, or 5 switches
   ii. Mechanical switches can also be utilized in combination with electronic sensors

c. Head Array: (C)
   i. Head Array with Cool Cube and proximity switches -use 1, 2, 3, 4, or 5 switches

d. Lap Tray: (D)
   i. Lap Tray with Cool Cube and proximity switches - use 1, 2, 3, 4, or 5 switches





D. Cable Extensions:

Extensions can be used when a switch location needs to be farther from the Cool Cube. Pro Spot Switches include a cable extension (E).

E. Compatibility:

i. Penny and Giles R-Net - Omni is required.
ii. Curtis Electronics Enable 50 - Enhanced Display is required.
iii. Dynamic Controls - DX-ACC4B Switch Interface module from wheelchair manufacturer is required for switched drive controls.
iv. For use with Invacare powerchair with Mark VI electronics, Sip-N-Puff/Digital Interface module (P/N: SNPM6) is required from wheelchair manufacturer.

F. Standard switched/sensor driving configuration. You can use three or more switches to control your power wheelchair.

a. **3 or more switch mode:** Plug any switch or sensor into the ports of the Cool Cube you would like to control
i. To move forward: Press the forward switch/sensor.
ii. To move reverse: You can use a dedicated reverse switch/sensor plugged into the reverse port on the Cool Cube or quickly tap forward to toggle forward and reverse. See programming section for details to set this up.
iii. To move right: Press the right switch/sensor
iv. To move left: Press the left switch/sensor.
v. To access mode: You can use a dedicated mode switch/sensor plugged into the mode port on the Cool Cube. See programming section for details to set this up.

G. Two switch driving configuration - You can use two switches to control your power wheelchair.

a. **Switched - 2 switch mode**: Plug any switch or sensor into your left and right ports of the Cool Cube. Ensure nothing is plugged into the forward port.
i. To move forward: Press the right and left switch/sensor at the same time.
ii. To move reverse: You can use a dedicated reverse switch/sensor plugged into the reverse port on the Cool Cube Cube or quickly tap both right and left at the same time to toggle forward and reverse. See programming section for details to set this up.
iii. To move right: Press the right switch/sensor.
iv. To move left: Press left switch/sensor.
To access mode: You can use a dedicated mode switch/sensor plugged into the mode port on the Cool Cube. See programming section for details to set this up.

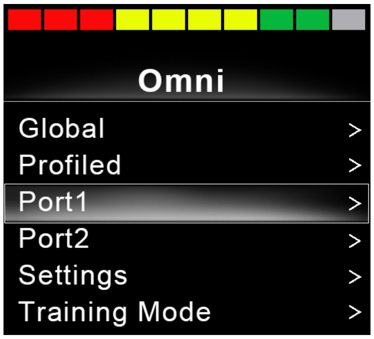
b. **Proportional - 2 switch mode**: Plug two Pro Spots into your left and right ports of the Cool Cube. Ensure nothing is plugged into the forward port.
i. To move forward: Press the right and left switch/sensor at the same time.
ii. To move reverse: You can use a dedicated reverse switch/sensor plugged into the reverse port on the Cool Cube or quickly tap both right and left at the same time to toggle forward and reverse. See programming section for details to set this up.
iii. To move right: Press the right switch/sensor.
iv. To move left: Press left switch/sensor.
To access mode: You can use a dedicated mode switch/sensor plugged into the mode port on the Cool Cube. See programming section for details to set this up.

H. Power chair programming

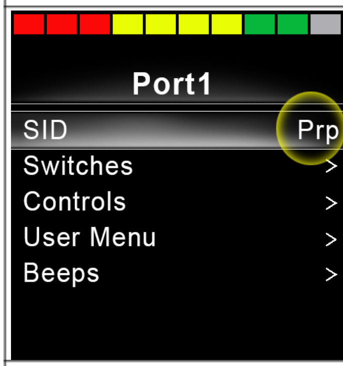
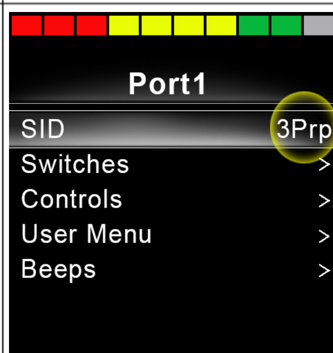
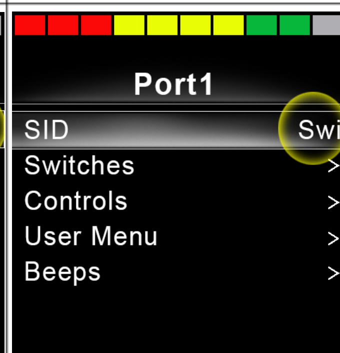
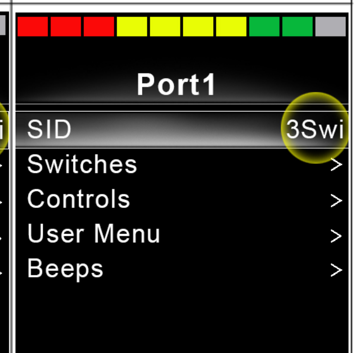
a. **Switched vs Proportional** - On board programming shown as an example. PC programming can also be utilized.
i. Start with the Omni turned off.
ii. At the same time, press and hold down on both the green power button and the profile button (P).
iii. The Omni will then power on, followed by a chirp sound. When you hear the chirp, let go of the profile button (P) and continue to hold down on the green power button.
iv. After a brief moment, you will hear a second chirp sound and when you hear the second chirp sound, let go of the green power button and you should now have access to the on board programming screen. If it was successful, your Omni screen should look like the screen to the right. Select Omni with the right keypad and continue on to page 3.

Switched vs Proportional (Continued) -

v. Next select the port you are trying to configure, which is also the the 9 pin port on the Omni that the Cool Cube is plugged into.



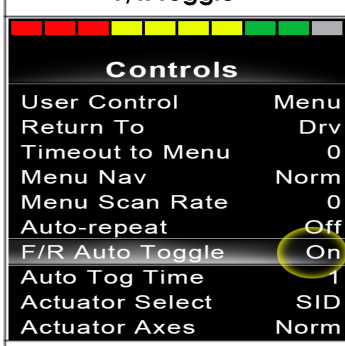
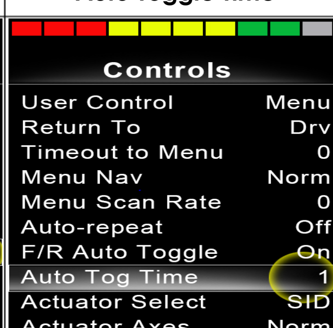
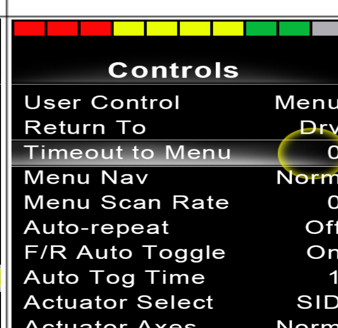
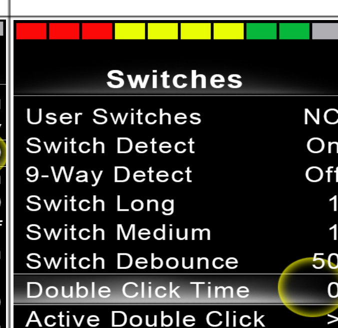
vi. Specialty Input Device (SID) selection - select one of the following.

Proportional	3 Directional Proportional	Switched	3 Direction Switched
			
Allows for proportional driving and a dedicated reverse switch	**Allows for proportional driving and a quick tap forward to toggle forward and reverse**	**Allows for switched driving and a dedicated reverse switch**	**Allows for switched driving and a quick tap forward to toggle forward and reverse**

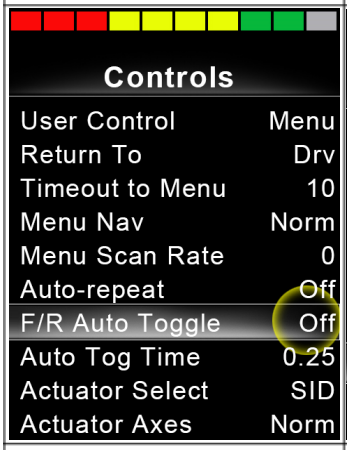
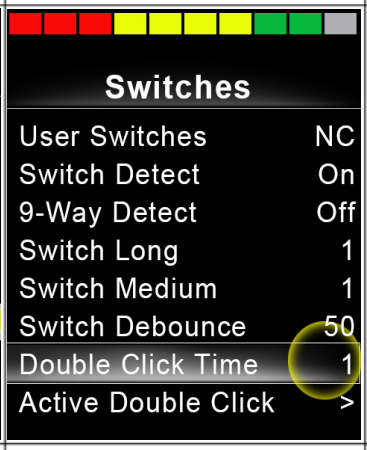
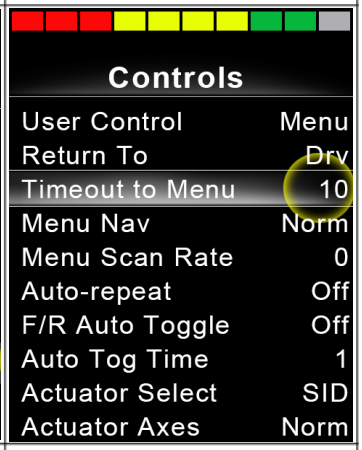
<u>3 Direction Driving</u> - Mode and Forward/Reverse Toggle Set Up -

Setup 1 - Short forward to toggle forward and reverse; user switch for mode.
a. Ensure powerchair port is set for 3 direction driving.

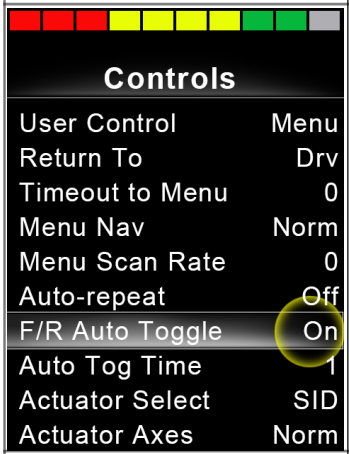
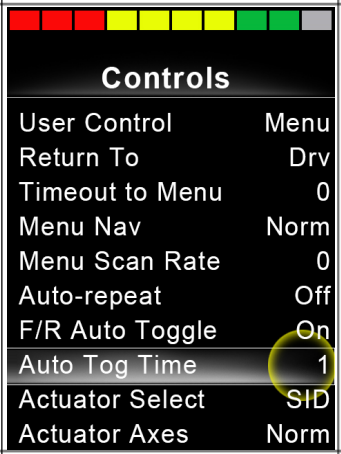
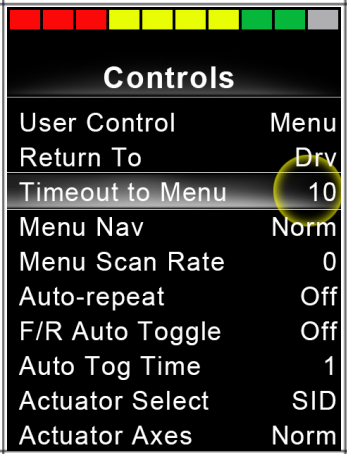
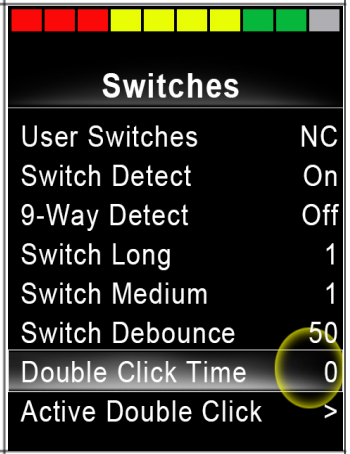
<u>NOTE:</u> For 2 switch or 3 switch driving, make sure that F/R Auto Toggle is set to "ON", and that F/R Auto Toggle Time is set. For proportional driving, F/R Auto Toggle Time should be set for 2 seconds or more. This will cause a 2 second delay between pushing the buttons and the chair moving, but is recommended to allow the user to tap the buttons in order to change the direction of driving. In 2 switch driving there is also a small delay in pushing of either button or turning. This is in order to allow for tapping the buttons to switch driving direction. Also in 2 switch driving, make sure that the turning speed is not too high for the user to easily operate the chair. To access this setting, as also noted below, from the first on board programming screen, select Omni > Port 1 or 2 > Controls.

F/R Toggle	Auto Toggle Time	Timeout to Menu	Double Click Time
			
Set to on **Omni > Port# > Controls**	**Set the time the user needs to quick tap to toggle forward/ reverse** **Omni > Port# > Controls**	**Set to 0** **Omni > Port# > Controls**	**Set to 0** **Omni > Port# > Switches**

Setup 2 - Short user switch to toggle forward and reverse; double click user switch to activate mode function
a. Ensure power chair port is set for 3 direction driving.

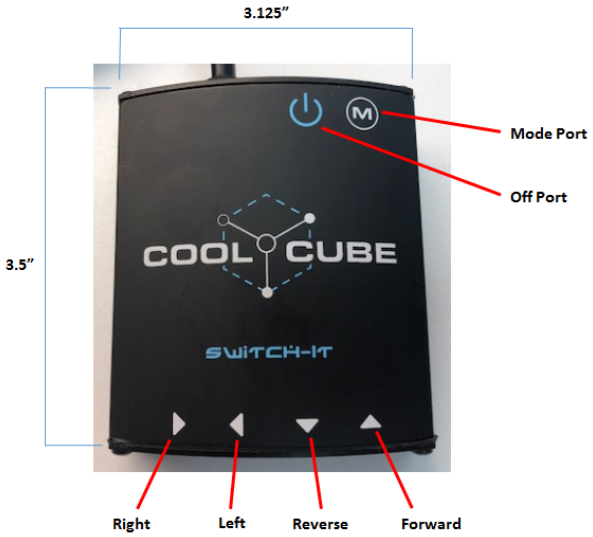
F/R Auto Toggle	Double Click Time	Timeout to Menu
		
Set to off **Omni > Port# > Controls**	**Set time user needs to double click** **Omni > Port# > Switches**	**Set to 0** **Omni > Port# > Controls**

Setup 3 - Short forward toggles forward/reverse; timeout to menu (no extra switch needed for reverse or mode)
a. Ensure power chair port is set for 3 direction driving.

F/R Auto Toggle	Auto Toggle Time	Timeout to Menu	Double Click Time
			
Set to on **Omni > Port# > Controls**	**Set the time the user needs to quick tap to toggle forward/reverse** **Omni > Port# > Controls**	**Set the time of inactivity before the system automatically enters menu mode** **Omni > Port# > Controls**	**Set to 0** **Omni > Port# > Switches**

4 Direction Driving

Setup 4 - Dedicated switches/sensors for forward, reverse, right, left, and mode.
a. Ensure power chair is set for 4 direction driving.



L. Mounting and Cable routing procedure:

WARNING

i. Ensure Cool Cube is firmly mounted to powerchair using Velcro or double sided adhesive.
ii. Cool Cube should be mounted out of the way of the movement of the seat actuators.
iii. Ensure all cable routing is held securely to the powerchair. This can be accomplished using cable ties.
iv. There should not be any loose cabling. The loose cable could get caught on an object while moving causing the device to become unplugged resulting in a failure to control your powerchair.

M. Audible Feedback and mounting:

WARNING

i. If user requires audible feedback while using the Cool Cube ensure the Cool Cube hub is where the user can hear the speaker, such as closer to the user's ear.

N. Port Usage:

⚠ WARNING

i. A switch or sensor must be plugged into a port for it to operate.
ii. The labels on Cool Cube which describes port functionality, may be difficult to read in direct sunlight or may become bleached by the sun over time. Use this document's figures to appropriately identify the port functionality.
iii. If a switch or sensor becomes unplugged it will cease to operate.
iv. There are 6 ports on the Cool Cube:
    a. Forward - Used for forward movement of the wheelchair.
    b. Reverse - Used for reverse movement of the wheelchair.
    c. Right - Used for right movement of the wheelchair.
    d. Left - Used for left movement of the wheelchair.
    e. Mode - Used for mode changes of the wheelchair.
    f. Off - Used for off function of the wheelchair.
v. Ensure wheelchair is powered off when changing switches or sensors.

Warranty- See the owner's manual for Warranty details

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