TOTAL CONTROL HEAD ARRAY SYSTEM
In 1963 Per Udden was a practicing MD in his native Sweden.

He was asked by a patient for a wheelchair that she could use both indoors and out.

Dr. Udden and some friends came up with the concept of Front Wheel Drive (FWD) and multiple seating options in the basement of a hospital.

Permobil was born 3 years later in 1966.
HEAD ARRAY

September 2013
ADJUSTABLE AND VERSATILE

- Multiple Configurations
- Changing is Quick and Easy
- Reconfigured in Minutes
  - Adding/Removing Arms
  - Relocating Arms
- PERMOfix Compatible
  - Components can be used to further customize arm configurations.

Component Guide:
1: Upper Arm, 2: Lower Arm
3: Short Arm, 4: Long Arm
5: PermoFix Arm
Arms can be adjusted vertically, horizontally, lengthened and shortened.

Sensors and switches can be located virtually anywhere on the chair:
- Not confined to the head array
- Numerous potential activation sites – arm, knee, elbow
- Especially convenient for evaluations

Component Guide:
1: Locking Collar lengthens/shortens Arms
2: Arm rotates for Vertical Positioning
3: PERMOfix Ball allows angling of Sensor/Switch
TOTAL CONTROL HEAD ARRAY SYSTEM

POSITIONING RANGE LENGTH
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POSITIONING RANGE VERTICAL / HORIZONTAL
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VIRTUALLY ANYWHERE AROUND THE HEAD
Sensors and switches can be located virtually anywhere on the chair. At the arm, knee, elbow…

- Egg Switch
- Micro Lite
- Touch Contact
- Buddy Button
- Mini Cup
- Proximity Sensor
Driving made easier with two occipital sensors:
• Provides a Larger Activation Target
• Simplifies “Veer” Turns

Component Guide:
1 & 2: Two Sensors for Improved Driving Control
CENTRALIZED CONNECTION PANEL

- Located on Occipital Module
- Color Coded 3.5mm Jacks (for Sensors and Switches)
- No Tools Needed
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PLUG ‘N PLAY

• Change Sensor & Switch Functions in Seconds
  • Simply Disconnect to Prevent a Direction or Function

• Reconfigure Driving Functions
  • Examples: Switch Left, Right, Reverse & Forward

• Makes Evaluations Quick and Easier

• Dedicated On/Off

• Dedicated Mode
No extra boxes to mount. All the electronics are incorporated in the occipital module. Typically, there's only one cable to route between the Head Array and the Omni.
Engage/Disengage Switch

- Engage/Disengage switch located on top of the occipital module. Activate the switch and the head array stops operating without having to switch the wheelchair off.

Component Guide:
1 & 2: LED Indicators
Solid Green = Engaged, Ready
Solid Yellow = Engaged, Direction Signal Active
Flashing Yellow = Disengaged (Stand-by)
Flashing Red = Error (count flashes)

Component Guide:
3: Engage/Disengage/Reconfigure Button
On/Off and mode functions are supported

- Dedicated On/Off and Mode jacks standard.
- On/Off jack can operate alternate items (mechanical switch only) such as augmentative communication or door openers.
- On/Off jack remains functional even when the head array is “disengaged” providing continuous support of items.

1: Dedicated Mode
   Mechanical or Proximity Switch

2: Dedicated On/Off
   Only Mechanical Switches
**CONFIGURATION OPTIONS**

Head Array features configurable via DIP switches

### Switch 1: Occipital Sensor Operation

<table>
<thead>
<tr>
<th>Switch 1</th>
<th>Occipital Sensor Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>One Sensor active to drive forward (default)</td>
</tr>
<tr>
<td>ON</td>
<td>Both Sensors must be active to drive forward</td>
</tr>
</tbody>
</table>

### Switch 3: Switch 4: Acoustic Scheme

<table>
<thead>
<tr>
<th>Switch 3</th>
<th>Switch 4</th>
<th>Acoustic Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Off</td>
<td>No Acoustic Feedback (default)</td>
</tr>
<tr>
<td>ON</td>
<td>Off</td>
<td>‘Clicks’ Scheme</td>
</tr>
<tr>
<td>Off</td>
<td>ON</td>
<td>‘Dots &amp; Dash’ Scheme</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>‘Dots’ Scheme</td>
</tr>
</tbody>
</table>

### Switch 5: Switch/Sensor Re-Learn

<table>
<thead>
<tr>
<th>Switch 5</th>
<th>Switch/Sensor Re-Learn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Re-Learn only possible at Power-On (default)</td>
</tr>
<tr>
<td></td>
<td>(Hold Engage Switch at Power-On.)</td>
</tr>
<tr>
<td>ON</td>
<td>Can Re-Learn at any time</td>
</tr>
<tr>
<td></td>
<td>(Press Engage Switch for 5 seconds at any time.)</td>
</tr>
</tbody>
</table>

**Note:** Switch 2 & 6 are reserved for future expansion.
Durable, yet soft, pads are easily wiped clean and available in two sizes.

Large
6” Wide x 4” Tall

Small
4.5” Wide x 3” Tall
SWING AWAY STANDARD

Arms Swing Completely Clear for Transfers
- Open Lateral Space
- Simple Thumb Screw to Lock/Release Swing-Away
  - Tighten the thumb screw to remove the “play” inherent to swing-away mechanisms

Component Guide:
1: Locking Screw/Release Button for Left Arm Swing-Away
2: Locking Screw/Release Button for Right Arm Swing-Away
OCCIPITAL ANGLE ADJUSTMENT

- Adjustable angle option provides adjustments for left/right and up/down.
- Angles occipital pad relative to the arms.

Component Guide:
1: Occipital Adjustment Screw
2 & 3: Right/Left Pivot
4 & 5: Up/Down Pivot
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STEALTH BACKREST ATTACHING HARDWARE

TWB 480
with Flip-Down
STANDARD CONFIGURATION

- Swivel
- Short arms + proximity
- Small occ. Pad mounted
- Large occ. Pad not mounted
- Extension cable 1m
- Stealth 4080 + flip back + sub occ. Support receiver + strips for unitrack
STANDARD OPTIONS

**On/Off switch**
- Long arm with “Egg” switch mounted “low” on left or right side

**Mode/Function switch**
- Long arm with “Egg” switch mounted “low” on left or right side
- Long arm with Proximity switch mounted “low” on left or right side
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SPECIAL CONFIGURATION

Right / High:
- Arm: □ Short □ Long □ Custom
- Switch: □ Egg □ Prox. □ Support
- Function: □ □ □ □ □ □

Left / High:
- Arm: □ Short □ Long □ Custom
- Switch: □ Egg □ Prox. □ Support
- Function: □ □ □ □ □ □

Right / Low:
- Arm: □ Short □ Long □ Custom
- Switch: □ Egg □ Prox. □ Support
- Function: □ □ □ □ □ □

Left / Low:
- Arm: □ Short □ Long □ Custom
- Switch: □ Egg □ Prox. □ Support
- Function: □ □ □ □ □ □