



Considerations for Assessing Mounting Needs

CTG 2016

Mary Kay Walch
BlueSky Designs

Optimal Device Positioning



Optimizing Device Positioning

“Optimal” varies (consider the whole picture)

- From person to person
- Their needs and specific considerations
- Impacts access, mobility, health, independence

Holistic approach

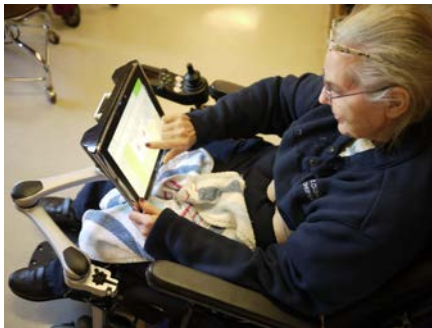
- Accommodate different devices and activities
- Multiple devices (concurrent access)
- Different operating positions
- Across environments (bed, w/c, table, work)

Needs assessment: Ask questions and consider the possibilities

Needs identification

- What do they need/want to access?
- Where do they need it?
- What else do they want to do?(no need to limit them to 1 device)
- How do they currently address this need?
- What is/isn't working for them?
- Do they need to remove their mount/device?
- Describe your ideal set-up

What to Mount



Communication Devices



Technology



Other



Trays



Camera

Where to Mount

Wheelchair



Standers

Strollers



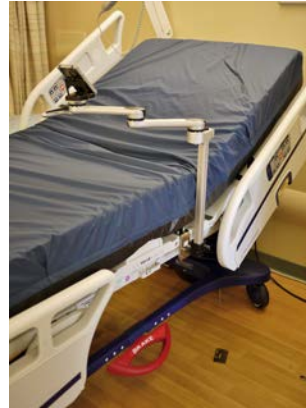
Where to Mount



Wall



Floor Stand



Bed



Walkers

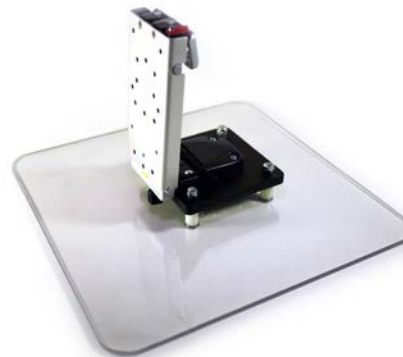


Table

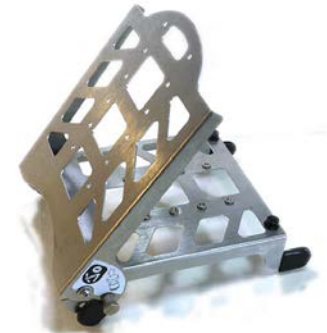
Table Mounts



Table Clamp



Mount'n Tilter



Stand +90

What is available?

Light duty

Static/Rigid (not movable)

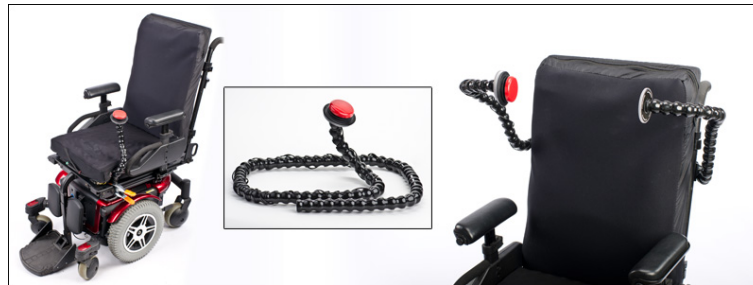
Somewhat movable

- Out of position to nonfunctional positions
- May or may not move it independently
- Daessy Swing-Away; Connect-it

Very movable

- Independently
- To more than one functional position

Light Duty



Heavy Duty



Holds 8 Pounds



Holds 15 Pounds

Rigid Mounts

Examples of rigid mounts are simple bars attached to the wheelchair with a plate for the device, the bar may swing away or not.

Shown below is a common rigid mount that swings away, but has limited adjustment



Daessy Folding Mount



Rigid Mounts

Does the user's device or condition require a mount that can support heavy weights?
(Greater than 15 lbs?)

Does the user or caregiver need a mount that is in one or two positions at all times?
(a use position and a transfer position)

Does care staff change frequently?

If YES consider a more rigid mount

Static vs. Movable

Static Mount

- Impede transfers
- Obstructs vision
- Single operating position
- Most can not be moved independently



Movable Mount

- Move independently
- Set multiple lock positions, changes with ability
- Safety - visual or physical access, reduce tipping hazard
- Use multiple devices



Movable Mounts

Examples of adjustable mounts are arms attached to the wheelchair with a plate for the device or a tray that have many adjustments

Shown here is a common adjustable mount that has wide adjustability



Options



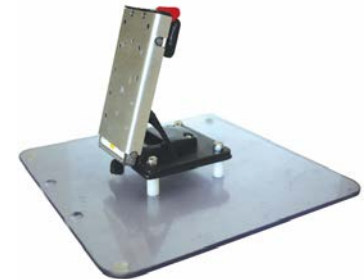
Dual Arm



Single Arm



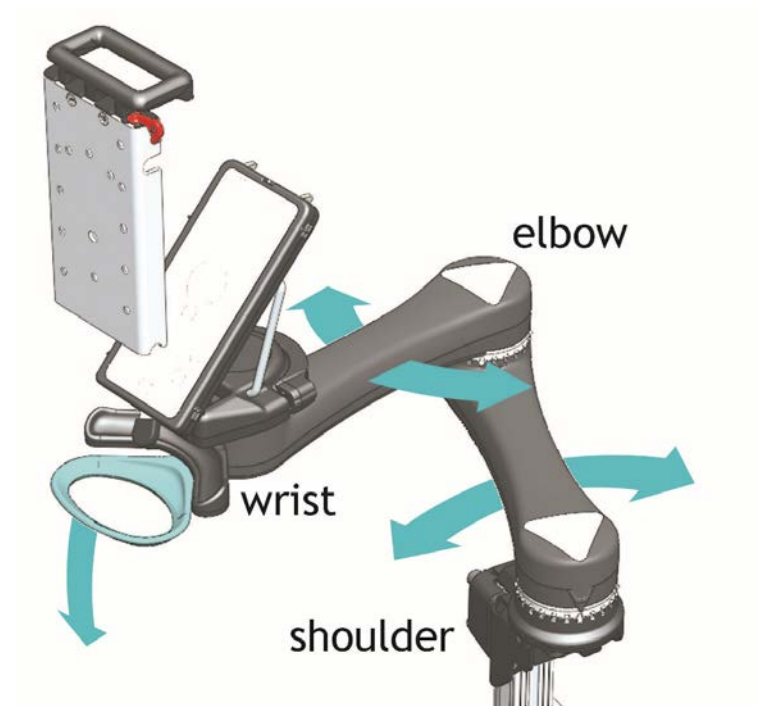
Tilt'n
Turner



Mount'n Tilter

Moving The Arm

1. Press hoop. Unlocks both shoulder and elbow.
2. Move both arms at once. Use hoop to steer.
3. Let up on the hoop. Continue moving arms to find a memory lock position.



Rotate The Wrist

1. Press PADDLE to unlock wrist. Wrist is momentarily unlocked at that position.
2. Move it! Wrist will remain unlocked until it finds memory lock position.

One-handed operation!



Adjust The Tilt

1. **Unlock:** move tilt lever to the right.
2. **Adjust tilt angle:** push down or pull up on the device.
3. **Lock:** move tilt lever to the left.

High or Low resistance hinge available.

High resistance hinge recommended for large devices 5 pounds or heavier.



Slight forward tilt for eye gaze access



Customize Lock Positions



To set one or more lock positions, push lock setter(s) down.
Up to unlock*.

**Setters can only flip up when NOT locked in position*

Getting Started

Determine the functional needs and desires to recommend the correct match between the person the assistive technology

Ask key questions to identify what features in a mount can aid in meeting those needs

Does the Mount Allow for a Variety of Adjustments?

Does it allow for a variety of adjustments to accommodate for change in positioning, growth, fatigue, or environment?



Adjustable Mount Tilts With Chair



Adjustable Rotation for Head Tilt

Rotation

- Communication device for head tilt and side-lying for eye gaze access
- iPads from landscape to portrait and back



Universal Rotator

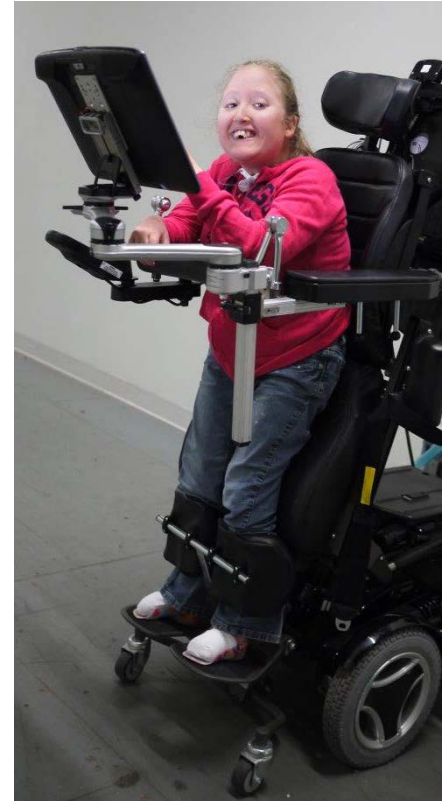


Adjustable Visual Access and Standing

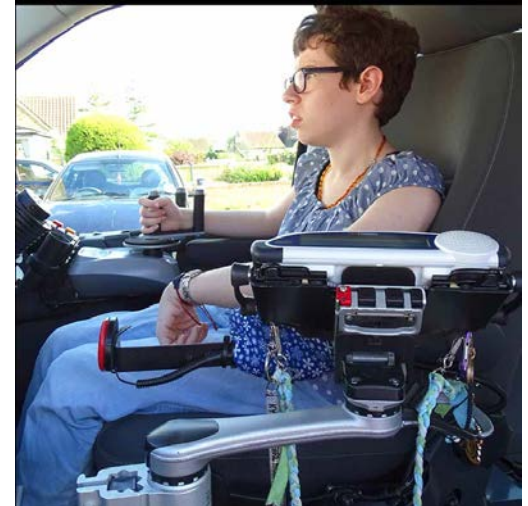
Moves to
side for
visual access



Access device
when standing



Adjustable Grows with Client



Tools for life!

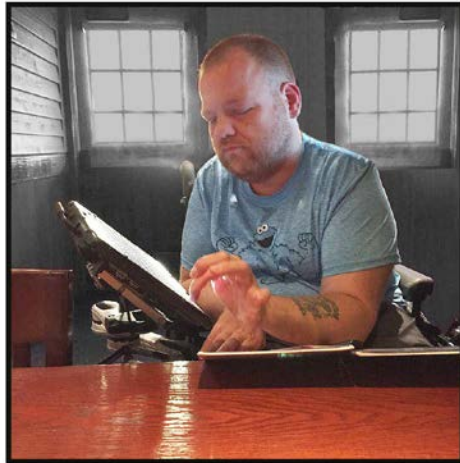
Adjustable Environment



Move to the side for dining
Access from another chair



Adjustable Different Environments



Moves to the side to pull up to the table, read menu, transfer, use restroom



Protects device when working out at the gym and allows him to communicate with personal Trainer

Can the Mount be used Independently by the User?

Reduces dependency on caregivers

Increased independence in performing functional skills like eating, writing and communicating

Provides access to device in case of an emergency

FREEDOM!

Independence Moves to Transfer



Gae moves her device to the side to transfer to her stair lift

Independence

Transfer from Chair to Bed

Life changing:

Ryan is no longer dependent on family members for removing device to transfer. He moves it to the side.



Independence Communication



“I like the new mount because I can eat and talk at the same time.”

~Bob

Can access device from two positions!

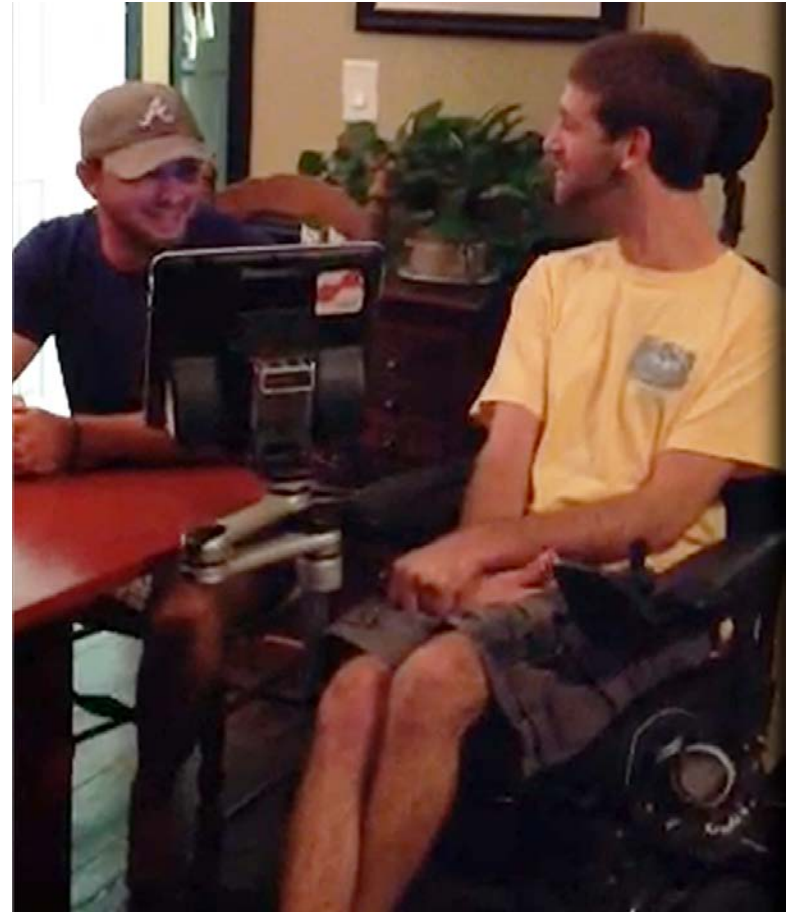
Independence Communication



Greta places her order at the restaurant independently

Independence Communication

Ryan programs his communication device, turns the screen to his friend to read his message.



Do They Need to Access Multiple Items?

Do they have more than one item they need to access?

Do they want to mount two items at the same time?

Rosie



“Overcoming obstacles is the stuff of being a disabled person, and so when the mountain seems ever harder to climb, we look at ways of moving the mountain a little closer which, for most of us, means we can look at ways of making life easier in all kinds of different ways”.

“One of the things the Mount’n Mover does is give you back some of the spontaneity that life as a disabled person doesn’t always allow. With the Mount’n Mover the emphasis is very much on the product meeting the needs of the consumer”.

Rosie Moriarty-Simmonds OBE
Consultant, Writer, Artist,
Presenter, Photographer



<http://fourfingersandthirteento.es.wordpress.com/>

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Multiple Devices At the Same Time

As a college student Nicole needs to multitask: reading, writing, laptop

Solution:

Double Decker Mount

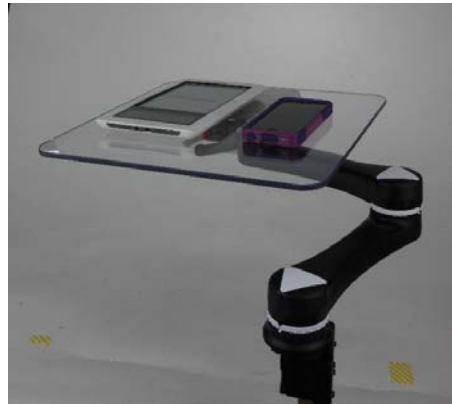
- Dual Arm, Laptop Tray
- Tilt'n Turner, Reading Tray
- One Post, w/c Hardware



Multiple Items One Tray - Multipurpose



Multi-tasking



Device & Tray Attachment Options



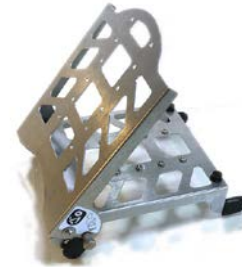
iTab Tray



12" x 12" Tray



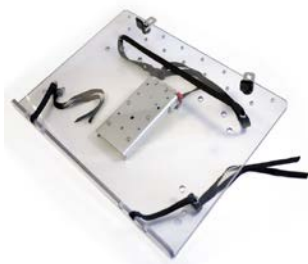
Universal Rotator



Stand +90



Camera



Laptop Tray



Tray with Lip



Phone



Tablet & Keyboard



Device Plates

AAC Device Plates

Find the attachment plate for your device

MAKE	MODEL	PLATE
Tobii Dynavox	Maestro, T10, T15, V, Vmax, M3, DV4, MT4	DP-DV1
	EyeMax, Maestro w/eye gaze	DP-DV2
	EyeMobile, C15 (contact us for C15 with eyegaze)	DP-MULTI1
	T 7	Contact Us
	P10, C8, C12, CEye, S32,	DP-T1
	I-Series	DP-T2
Prentke Romich Co.	Accent 800	QRP or DP-PRC4*
	Accent 1000	DP-PRC5
	Accent 1400, ECO2, ECOpoint, ECO-14, Vanguard, Pathfinder 2	DP-PRC1
	Accent 1200, Vantage Lite, Springboard Lite	DP-PRC4 *
Saltillo	NOVA chat (requires wheelchair mounting plate)	DP-PRC4 *
Others	(Jabbla)-Mobi/Tellus, (Abilia)-Rolltalk, AMDI, VESA (50,75,100mm), Smartbox	DP-MULTI1
iPad/Tablets	Fits most iPads / Tablets	TR-iTab,-UR

Plates for AbleNet, Lightwriter and more are available. See website for specifics

* DP-PRC4 plate requires a QRM mounting bracket from Prentke Romich Co.



Multiple Devices with Dual Posts

Anthony wanted separate mounts for communication device and phone

Solution: Dual Posts, Dual Arm, Custom Plate for Phone



Multiple Devices with Dual Posts

Meet Brian

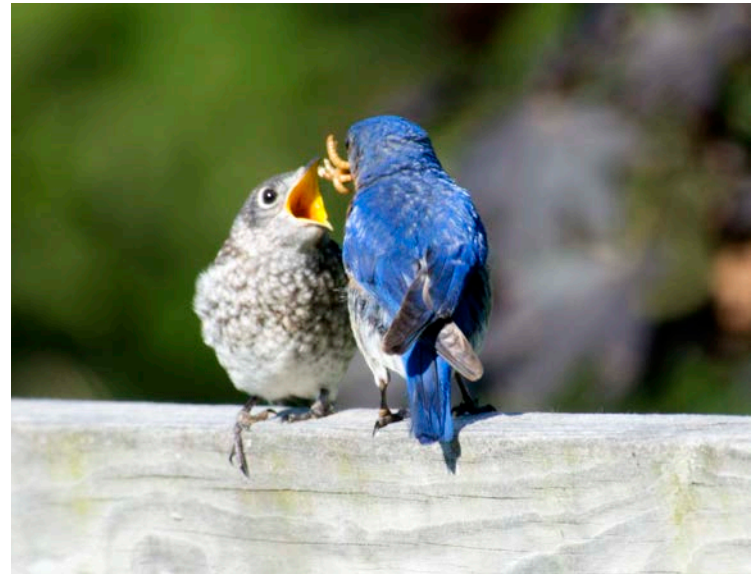
Film Maker

Two cameras for film making. Allows him to film himself and his subject.



Do They Need Multiple Operating Positions?

Can it provide multiple operating positions without the use of tools?



Operating Positions Adjustability

Attached to power chair
Allows camera to get close to eye
Rotation and tilt



Operating Positions

Unique Operating Position



Ergonomics

Varies per person's needs

Access to iPad

Mount is below seat level

Stabilizes arm on leg

Angled for access (Vis/Phys)

Access to computer table

Needs to move it to the side

Elevates herself to work on her
computer

Operating Positions

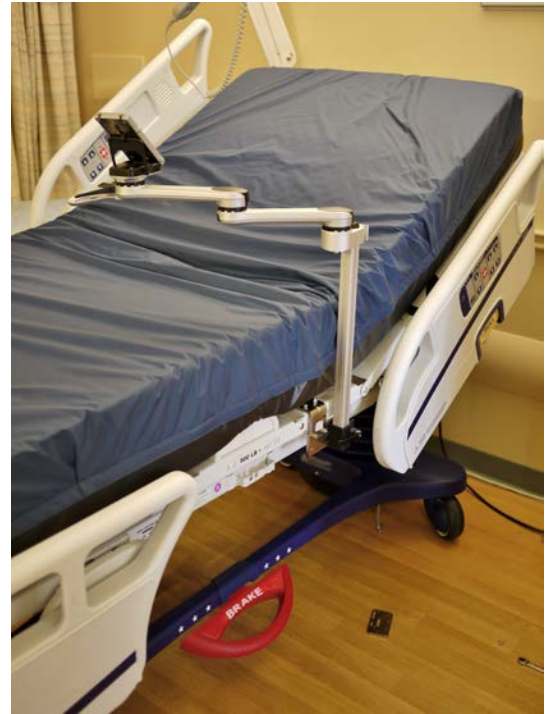
Unique Operating Position



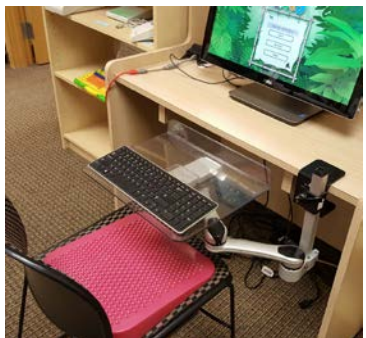
iPad mounted at seat level provided ability to stabilize arm for direct select access

Will the Client want Access in Multiple Locations?

Locations include chair, bed, table, desk, and wall



The same mount can be relocated eliminating the need for multiple mounts.



Rotate Mount for Access out of the Chair

Uses chair as base

Can eliminate need for additional bed or table mount



Is Access Method Eye Gaze or Head Tracker?

Positioning is critical

Consistent placement of device is essential



Eye Gaze Optimal Positioning

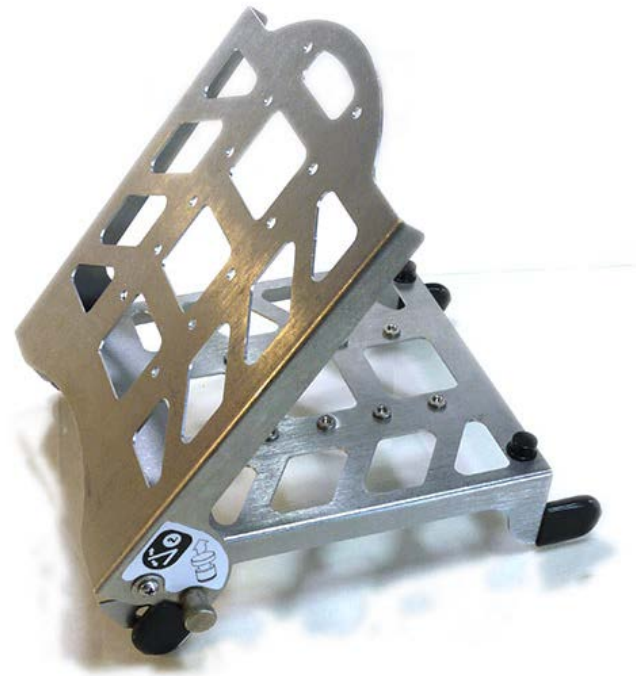


- Positioning is critical
- Easy calibration
- Need consistent placement of device
- As position changes throughout the day - so must the mount
- Tilt and rotation
- Easy for caregivers - multiple locked positions
- Moves from chair to bed, table, wall or floor stand

Eye Gaze Options



Universal Rotator

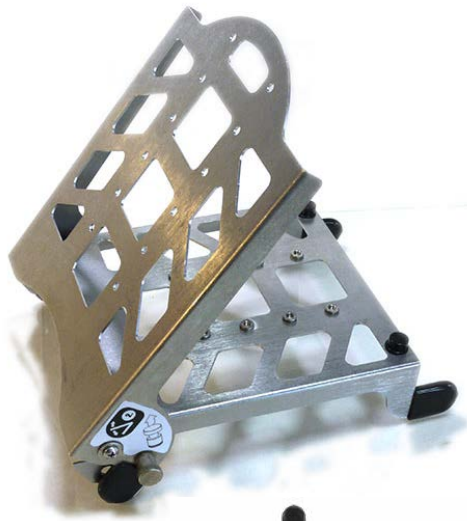


Stand+90

Stand +90

Combines two products in one!

- Additional 90 degrees of tilt for reclined access
- Use as a table stand



Eye Gaze Access

At the dinner table

- Mount 'n Tilter

At school tables

- Table clamp
- Mount 'n Tilter

On the floor

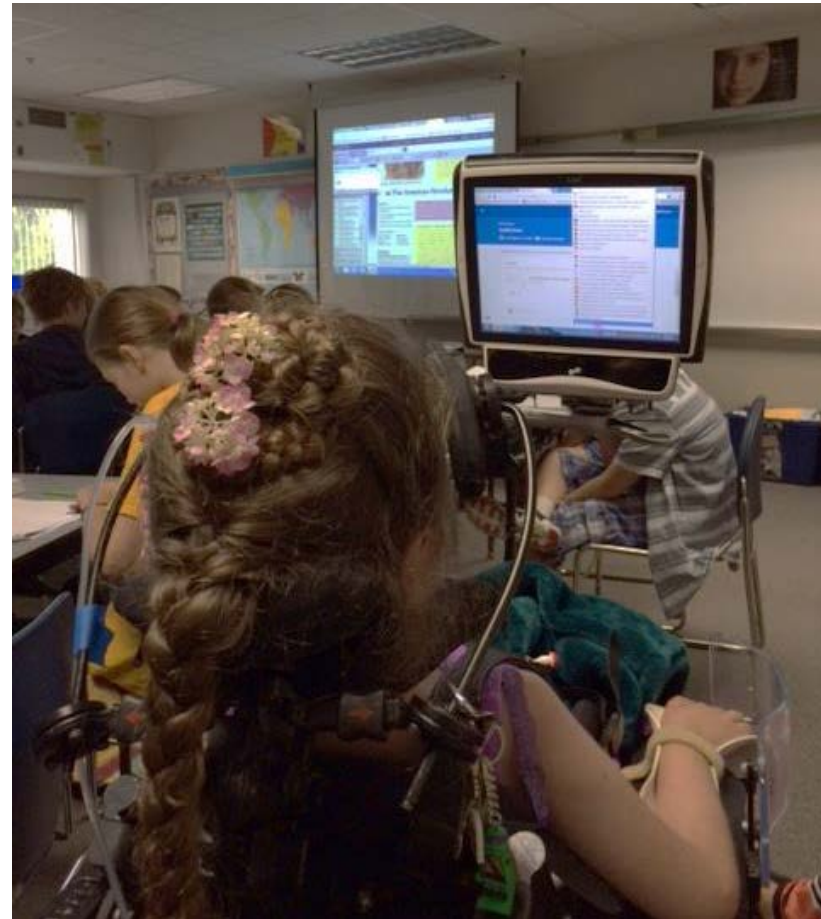
- Standing
- In low position



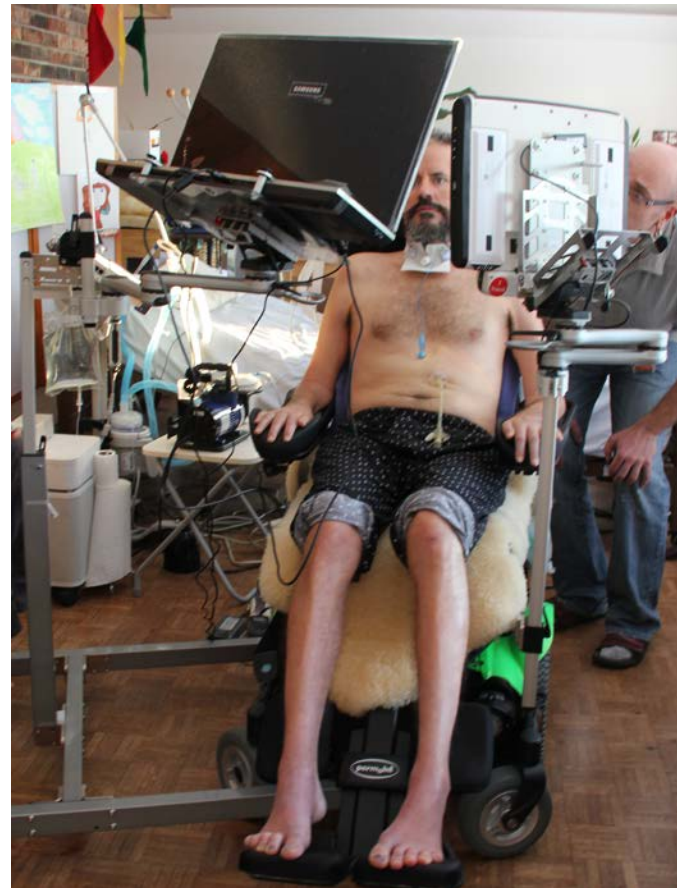
Eye Gaze



At home and school!



Stand +90



Universal Rotator



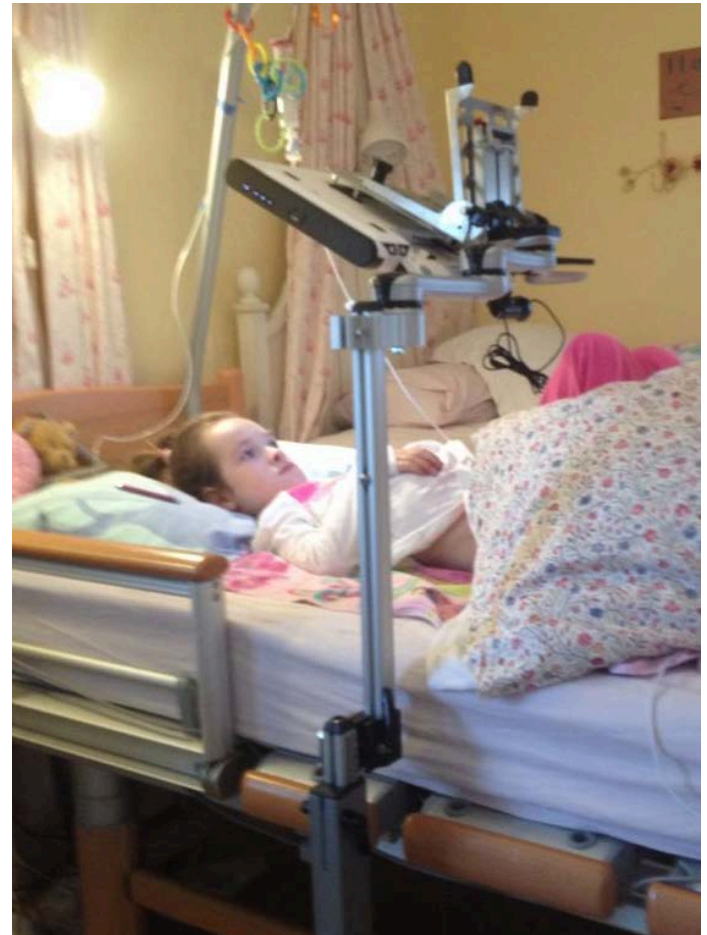
Rotates

- Communication device for head tilt and side-lying for eye gaze access
- iPads from landscape to portrait and back

Stand+90 and Universal Rotator

Sophia needed to use eye gaze for access to her communication device while in bed and in her chair

Solution: Floor Stand, Dual Arm, Stand +90 with Universal Rotator



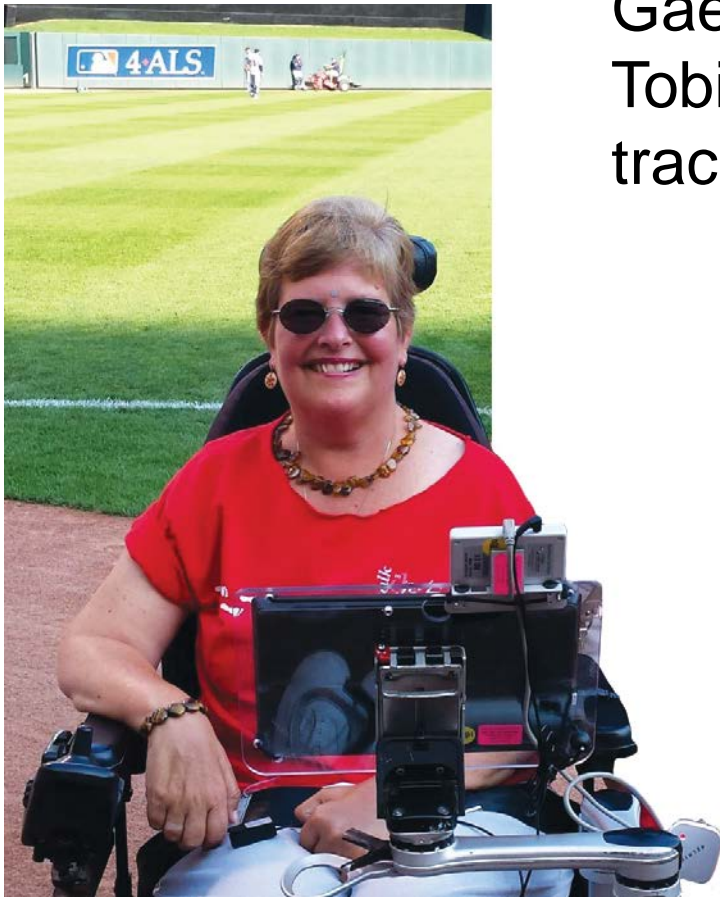
Video: Sophia and Her Mount'n Mover



https://www.youtube.com/watch?v=AGJK80_8jvM&feature=youtu.be

Head Tracker Technology

Gae uses a Surface Pro 2 Tablet with Tobii Communicate 4 software with head tracking technology



Benefits of a Movable Mount

Optimal positioning reduces fatigue due to ALS

Easier to transfer

Can rotate device to reboot or adjusts for glare

Visual access for driving, TV

Access to tables and sink

Move device to exercise her legs

Mount adapts to changing needs



Moves device to the side for photo

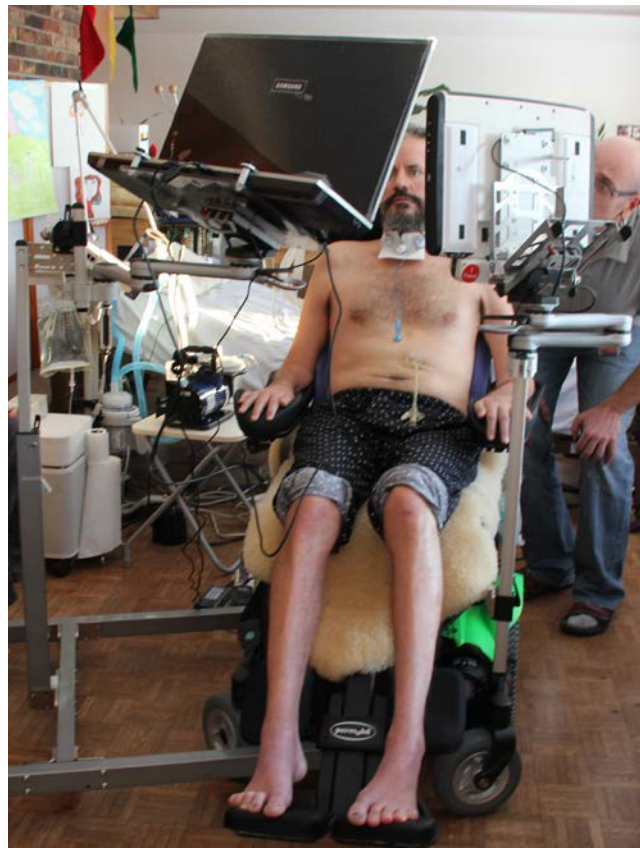
Video: Gae and her Mount'n Mover

See how Gae finds ways to preserve her independence while living with ALS

<https://www.youtube.com/watch?v=4RH5ljYnQjU>



Downward Angle for Visual Access with Eye Gaze



Stand +90

Meet David

IT guy, ALS

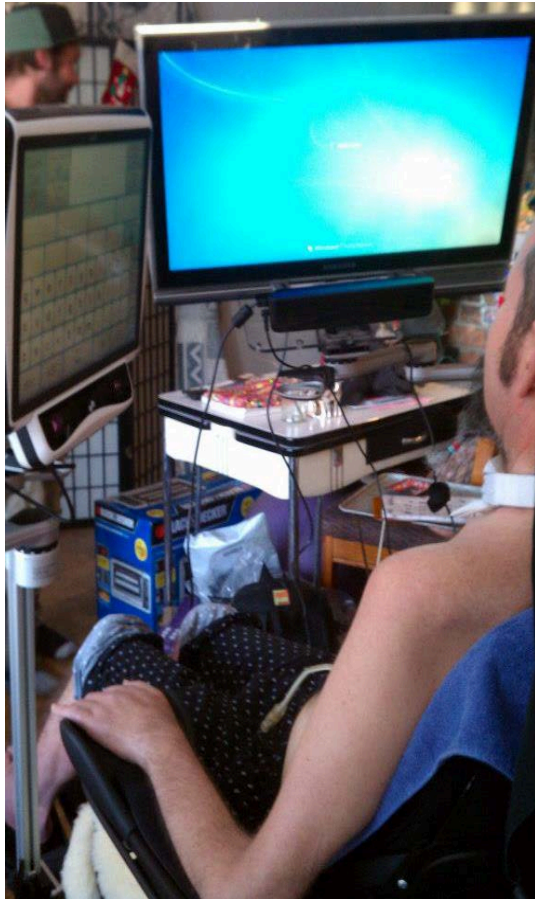
Using eye gaze for
speech & computers

Wanted to improve the
technology

Goal: DJ a New Year's
Eve Dance



Wheelchair Access to Two Devices



Bed Access - Floor Stand



DJ David Rocks New Year's Eve

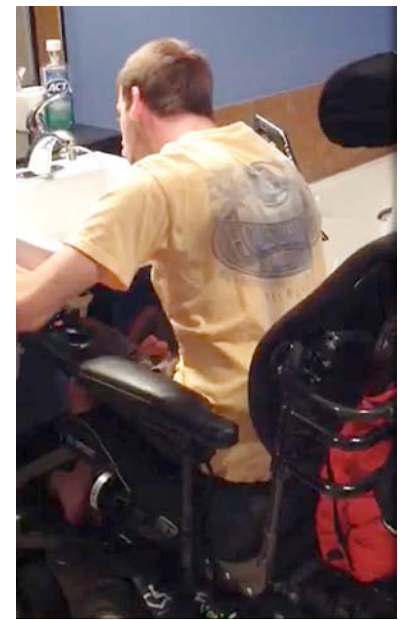


Is There Risk of Damage to the Device?

Can the device be moved out of the way rather than removed entirely risking damage and loss?

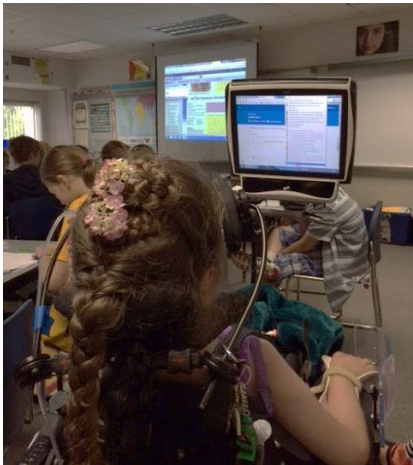
Securing device to a mount protects it from dropping.

Protect Investment Move Instead of Remove



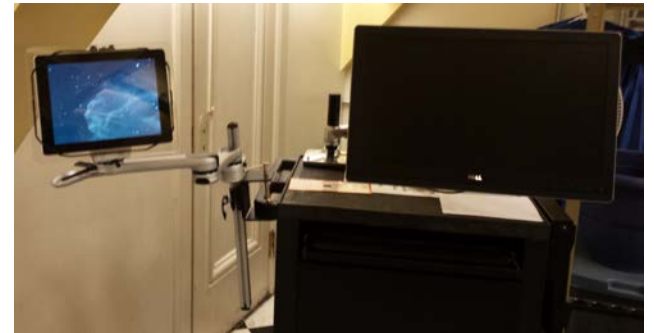
Ryan moves his device to the side allowing him to turn on the faucet for a drink.

Classroom Access



School – Classroom Access

- Universal Design for classroom, library or workstation
- Access from a chair, wheelchair or standing, or on the floor
- Access many different devices
- Secures device from damage
- Adjustable for different sizes and positions for good ergonomics



Special Education Classrooms

Virginia Beach City Public Schools

- 30 Mount'n Mover workstations in special education classrooms - uses floor stand for easy movement through the room
- Adjusts quickly for physical accommodation
- Elevated iPads position for small group instructions
- Access for all - lying on the floor and presenting
- Offer security to the devices - safe, less damage, protects investment

Accessible Workstations

Elevate position for small group instructions

Customize lock position

Versatile - mount from below for low access

Floor Stand roll around room. Protects device



What Additional Health Benefits Does it Offer?

Optimal Positioning and Access Provides:

- Improved range of motion & fine motor dexterity with increase use due to access
- Improved access to sink and toilet (hygiene)
- Improved ability to eat (pull up to a table or positioning of tray)
- Improved ergonomics; less pain
- Ability to change positioning based on the activity
- Better head control due to device positioning (height & tilt)
- Less fatigue

Therapeutic Benefits

Better Access = Increase Use



Fine motor improved
since using iPhone due
to increase in use

Therapeutic Benefits Improve Posture



Positioning iPad
at eye level
improved posture

Therapeutic Benefits Improve Posture

Neck pain reduced
immensely after just
one week with
elevated.

BEL13VE in Miracles
Foundation



Psychosocial Benefits Of A Moveable Mount Reported

Study by Ithaca College OT Department

PIADS: How are you affected by the Mount' n Mover?

Adam Kinney, MS and Lynn Gitlow, PhD, OTR/L, ATP

"A Consumer-Centered Approach to Evaluating Assistive Technology Usability Outcomes"

June 2015 issue of American Occupational Therapy Association Special Interest Section on Technology.

Increase:

Competence

Adaptability

Self esteem

Decrease:

Frustration

Embarrassment

Confusion

Impacted more than device access, unrelated tasks were easier to perform. Tasks included: transferring, answering calls, socializing, feeding, shopping, and adaptive baseball.

Are there Safety Considerations?

Decrease tipping hazard by keeping device closer to the wheelbase of chair

Avoid obstructing vision when driving

Ability to move mount quickly out of the way in case of emergency (aspiration, seizure)

Can Additional Functional Needs be Met?

Can the mount assist with other functional needs

What do they want to do?

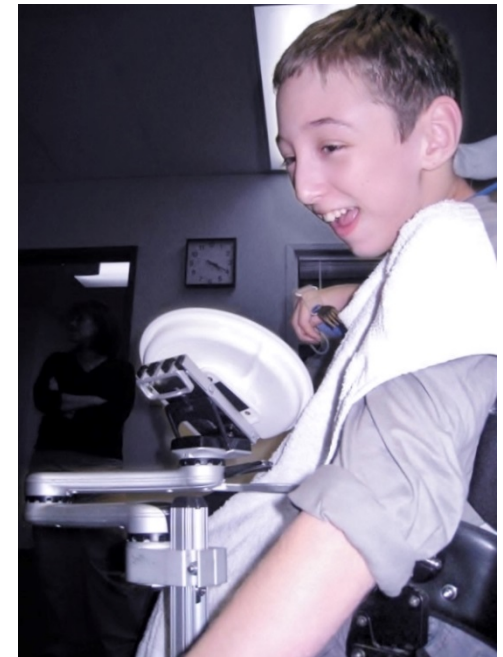
Functional Needs Music Class

Trumpet is mounted to support weight and raise into position

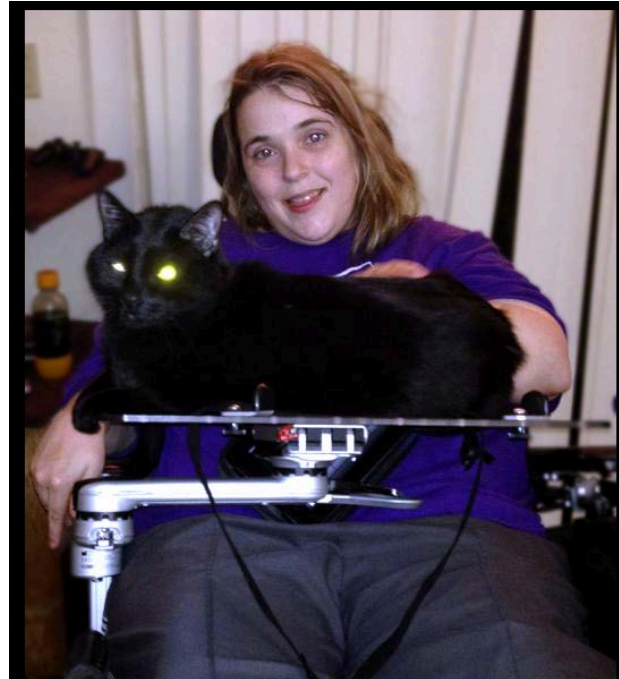


Functional Needs Eating

With optimal positioning of his plate, Jordan can feed himself for the first time!



Functional Needs Think Outside the Box!

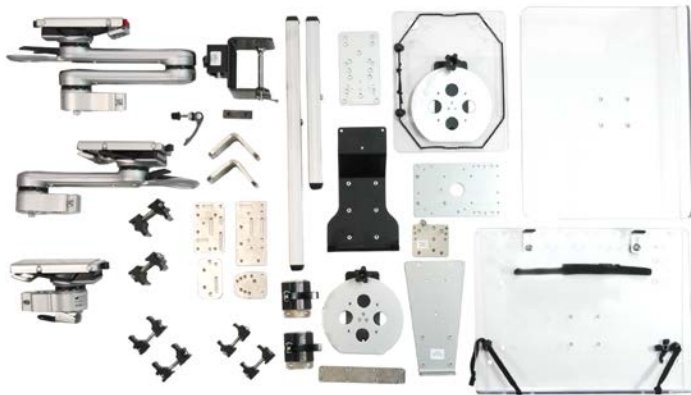


How Can it be Used for Evaluations In The Clinic?

- Mount can allow for ease adjustments and is customizable for evaluations
- Ability to be quickly attached to a variety of surfaces, easily moved, and provide a stable set up for evaluations
- Consider using it during therapy sessions for working on range of motion, posture and visual access or testing



Evaluation Kits



**Device Plate
Attachment Set**



**Eval Kit
includes Case**



Table Eval Kit

Evals, Trials and Warranties

- Evaluation Kits for loan through Meet the Mount'n Mover Program, 2 weeks, only cost is shipping
- 30 day return policy
- One year warranty
- Customer support in-person, email, phone, skype, Facetime...

Medical Justifications

Need to access from a tilted position

Improved visual access for driving

Positioning for access from more than one position (direct and eye gaze)

Able to quickly move the device

Hygiene: able to use a sink and toilet

Positioning changes, so device must change

Must adapt as abilities change (ALS, MD...)

Safety - keep chair from tipping

See: www.mountnmover.com/evaluate-buy/funding/

Letter of Necessity

- Provides independence through positioning and ease of use
- Allows for appropriate communication device position while the chair is tilted.
- provides (name) continuous access to their communication device in the event of an emergency
- Decreases tipping hazard
- Improved visual access for driving/wheeling
- Customized lock positions avoids caregiver guessing and frustration
- Provides access to technology/communication 24/7 in case of emergency

Resources -Therapist Page

www.mountnmover.com/for-therapists-2/

- [Link to this presentation](#)
- Funding information
- Research
- Videos
- Reviews
- And more!

Videos

As a result of a spinal cord injury, Rick has limited movement and strength. See how he does photography and more with the support of his Mount'n Mover mounting system.

https://www.youtube.com/watch?v=Goqh_XdQo6U

See how Gae finds ways to preserve her independence while living with ALS. <https://www.youtube.com/watch?v=4RH5IjYnQjU>

Check out Sophia, who has Spinal Muscular Atrophy (SMA) and uses eye gaze technology and her two Mount'n Mover to communicate, learn and interact with her classmates remotely!

https://www.youtube.com/watch?v=AGJK80_8jvM&feature=youtu.be

The Great Prom Adventure



NCIS: New Orleans

Daryl Mitchell
(Patton Plame)



New Design Offers Enhanced Features

- ❖ Double custom locks from 12 to 24. 13,824 position!
- ❖ Increase forward tilt for eye gaze communicators
- ❖ Easier fine tuning for precise positioning
- ❖ Paddle and lever - improved ergonomics and strength
- ❖ New Post Cube - sleeker with more attachment options
- ❖ Black color - customize with color accents
- ❖ Quick Release Plate attaches/detaches easier, larger Red Lock tab



Future Developments



Custom Trays Available



Pow!r Mount



And more!!!

Thank you!

See mountnmover.com
for product support,
resources and more
information!

