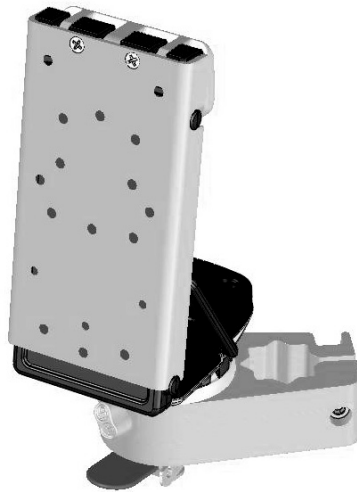


Tilt'n Turner User Manual



For further info or technical support:

BlueSky Designs
www.blueskydesigns.us
1-888-724-7002

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SAFETY TIPS:

Read manual before using!!!

MAXIMUM load = 15 pounds

Do not use the mount to support a person

- Do not place baby or child on it
- Do not use as a means of support when getting in or out of chair



Be sure mount is securely attached:

- Check bracket attachment to wheelchair
- Tighten mount/link to post securely
- Use thread lock on bolts as directed
- Attach device securely to Quick Release Plate
- Firmly attach Quick Release Plate/device to tilt plate

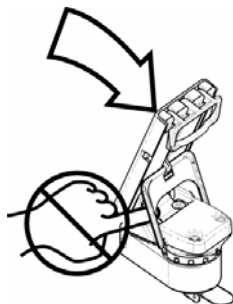


Do not attach the mount to an armrest; if it is unstable.

Move mount to a **locked position** before driving or **tilting** the wheelchair:

- Do not unlock or move mount when wheelchair is tilted
- Put in locked position before driving or tilting wheelchair

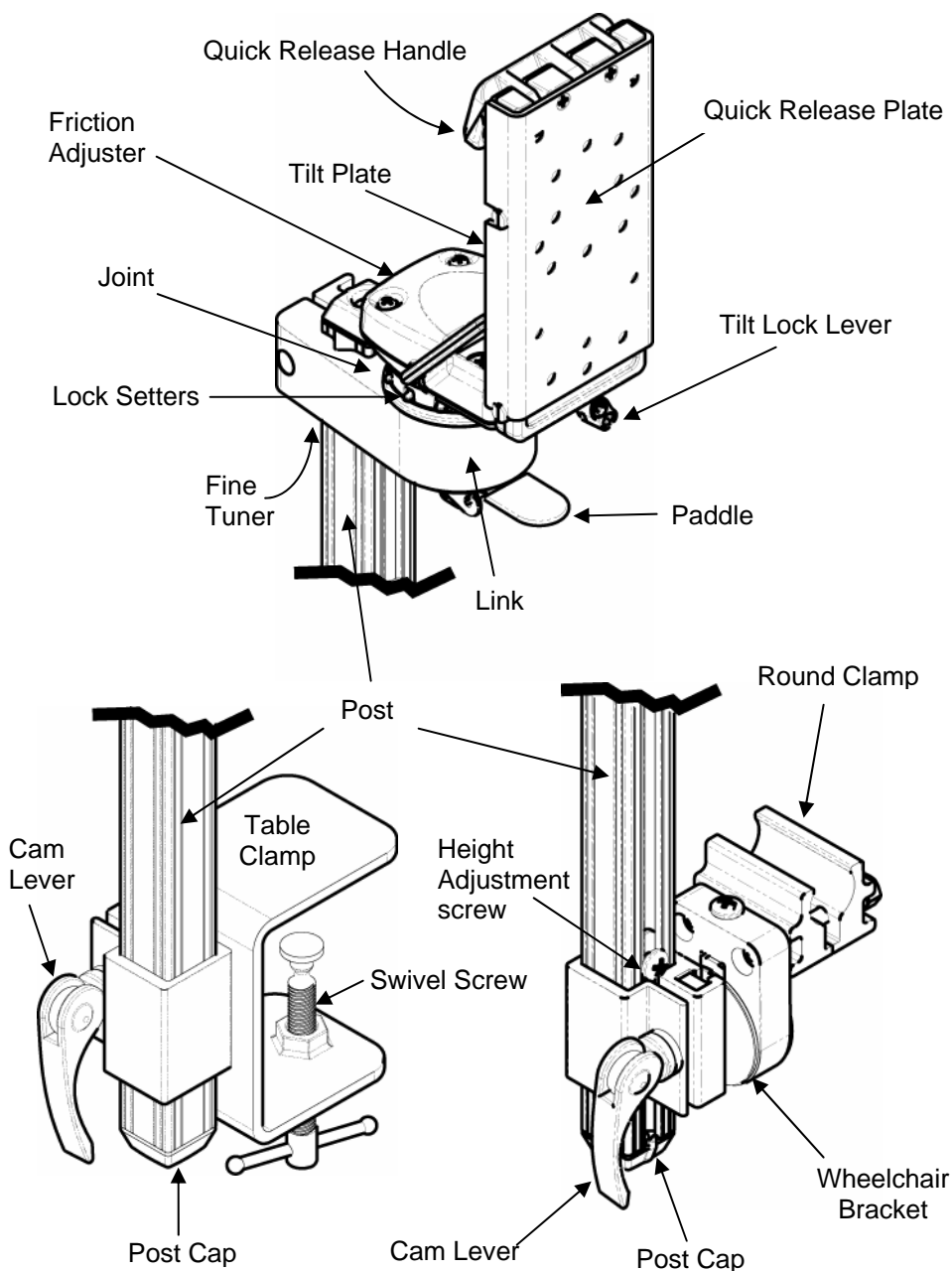
Stay clear of **pinch points** when adjusting the tilt or arm position



Adjust friction for specific user.

Tilt'n Turner at a Glance

(Shown with two options for mounting)

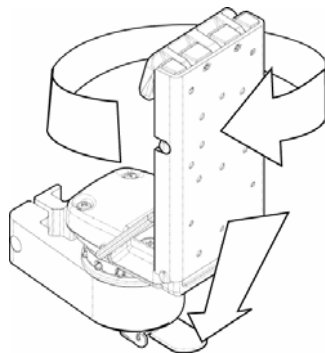


Moving the Tilt'n Turner

The Tilt'n Turner can be customized to lock in specific, repeatable positions, but it is easily unlocked and moved. The device remains in its locked position until you depress the paddle.

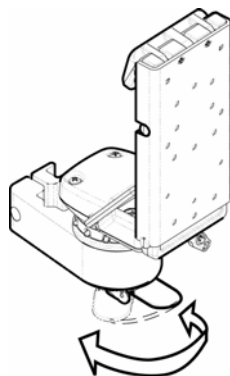
Rotate the device by depressing the paddle and then rotate the device or tray directly:

- The paddle unlocks the joint, allowing rotation of the device.
- Depress, then release the paddle.
- The joint remains unlocked until you rotate it. Rotate the device directly.
- As you move the device/tray, it will begin to seek another lock position.
- The temporary unlock feature allows one-handed release and rotation of the device platform.



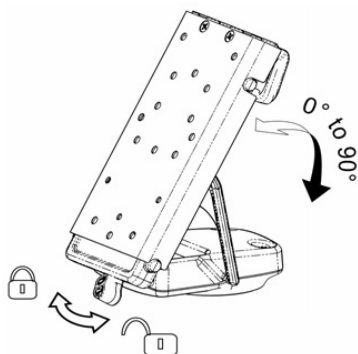
Paddle can be repositioned

- Paddle can be positioned 240 degrees
- Paddle can be repositioned easily for end user



Adjust the tilt

- Move the tilt lever to the unlocked position (to the Right)
- Push down or pull up on the device
- Move the lever to the locked position (to the Left)



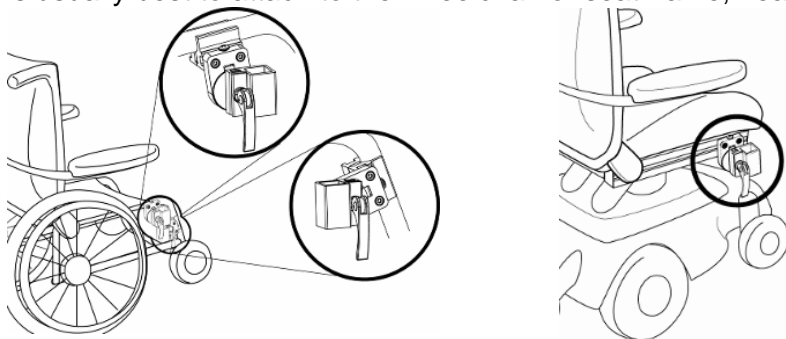
Note: Different hinge torque settings are available. This makes it easier or harder to change the tilt. For larger devices, the High torque hinge will prevent the device from slamming down unintentionally.

Step 1: Methods of attachment

Option 1: Attaching to a wheelchair

A. Determine the best attachment point and hardware required

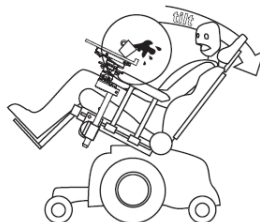
The best attachment point depends on the person, their needs, what they will use the Tilt'n Turner for, the best position for access, and their wheelchair. Most individuals need their mounted device in front of them, so it is usually best to attach to the wheelchair or seat frame, near their knee.



When mounting consider the following:

1. Do you want the Tilt'n Turner to tilt with the person as the seat tilts?
Yes: attach to seat rail No: attach to base frame

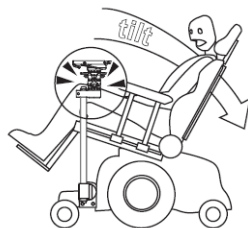
Note: Attachment placement depends on the end use: i.e., you may want a speech device to tilt to allow communication from any angle; a tray to be used for eating may be better attached to the base, so it remains horizontal. Otherwise, tilting could result in spills.



When attached to the seat rail,
Remove items which may spill or slide off
an attached tray or other surface



When attaching to the base, make sure
the tray/device is positioned so that the
user's legs are not squeezed and
injured while tilting.

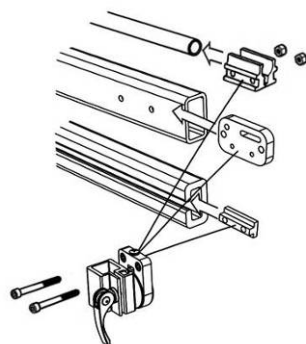


2. Find one or more places to attach securely, keeping in mind:

- wheelchair bracket requires 2" space
- armrest, brake and tie down locations
- post length interference below bracket
- space required to insert/remove mount

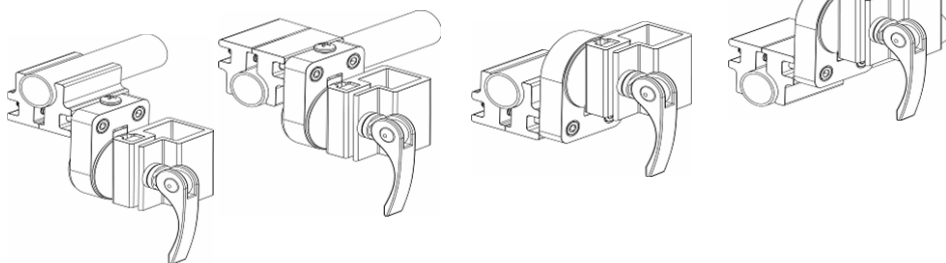
3. Consider attachment options:

- Round tube clamp (7/8" and 1")
- Adaptor plate: Holes spaced 1-2" apart on square or rectangular frame
- T-slot nuts: Slide track or t-slot



4. Figure out the best orientation of the bracket and/or plate to avoid other hardware and provide best support

Note: Bracket can be attached Up or Down. The figure below shows different placements on a tube at the same level, resulting in different square clamp heights. The Square Clamp can also be rotated to be to the Left or Right.



B. Attach the wheelchair bracket

- Attach using lock nuts or a thread-locking product, such as Loctite.
- Tighten securely.
- Test holding strength once post, mount and device are attached.
- Periodically check the bolts for loosening.

C. Additional mounting options

- Mounting may require optional wheelchair brackets, using the adaptor plate as a spacer, or custom plates.
- Adaptor Plate accommodates holes spaced between 1"-2" apart.
- The Wheelchair Bracket attaches to the Adaptor with 1/4"-28 bolts.
- Consult BSD website for other options: www.blueskydesigns.us

Step 1: Methods of attachment

Option 2: Attaching to a table

- A. Pick an area of the table where you want the table clamp to be mounted.
- B. Make sure the swivel screw is unscrewed far enough so that it can fit underneath a table.
- C. Place the mouth of the table clamp around the surface of the table.
- D. Make sure the back side of the clamp is flush with the edge of the table.
- E. Tighten the swivel screw until it clamps down on the table securely.

Table clamp

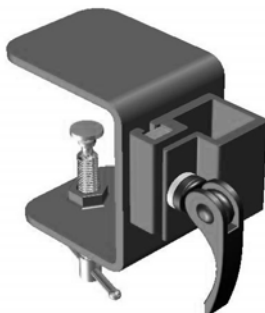
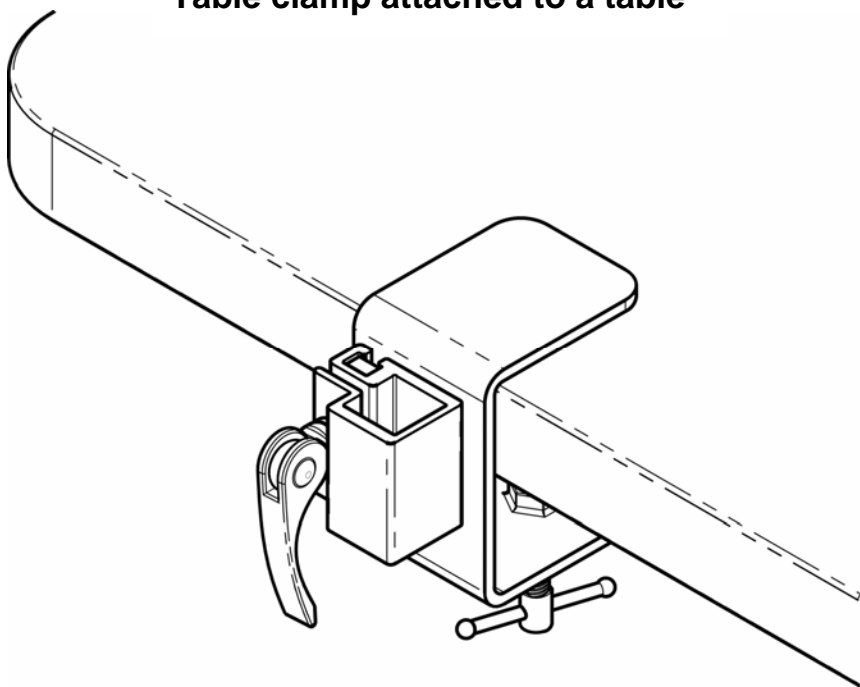
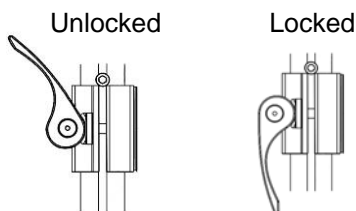


Table clamp attached to a table

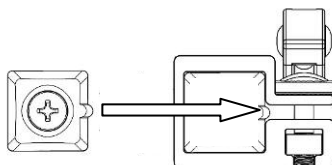


Inserting and securing the Post

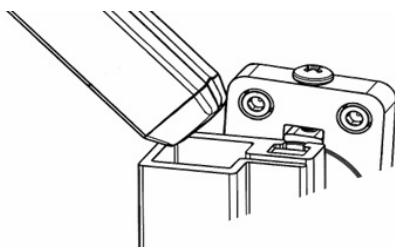
- A. Unlock the cam clamp lever



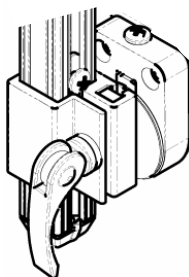
- B. Line up the post cap ridge with the gap in the square clamp



- C. Drop the post into the square clamp slot

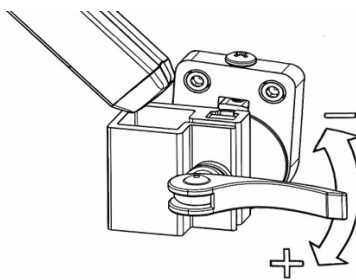


- D. Lock the cam clamp



Note:

If the post won't fit into the square clamp, or if the post can still move up and down when the cam clamp is locked, try loosening (-) or tightening (+) the cam clamp.



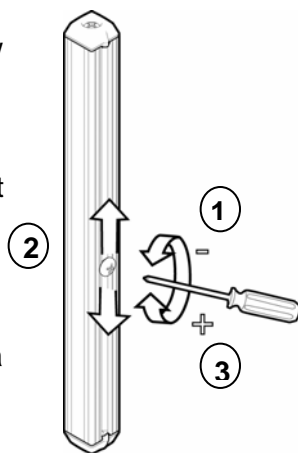
Step 3: Post adjustments

Adjusting post height

- The height adjustment screw provides a consistent mount height, limiting how low it goes when you insert the post.
- The top of the post determines the mount height.
- Once the mount is attached, the height can be easily readjusted.

To adjust the height:

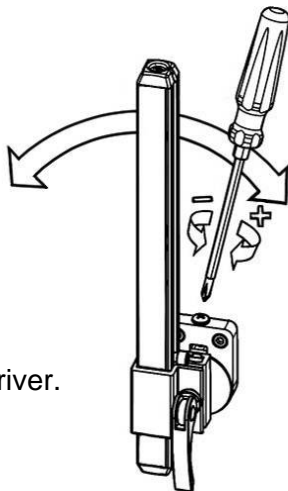
1. Loosen height adjustment screw using a Phillips screwdriver.
2. Move the screw up or down.
3. Tighten height adjustment screw at desired setting.



Adjusting post angle

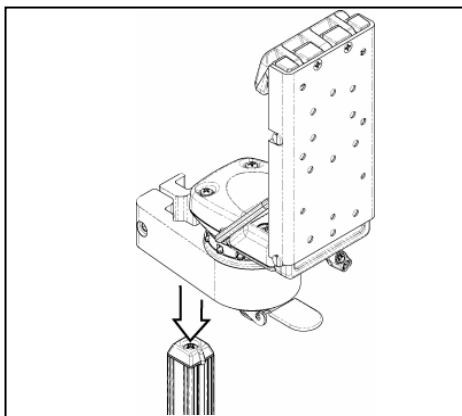
The post angle should be adjusted so it is vertical with a person in their usual upright position. This will make it easier and safer to move.

- Once the mount is attached, the angle can be readjusted.
1. Loosen post angle screw with a screw driver.
 2. Tip the post to the preferred angle of orientation.
 3. Tighten post angle screw.

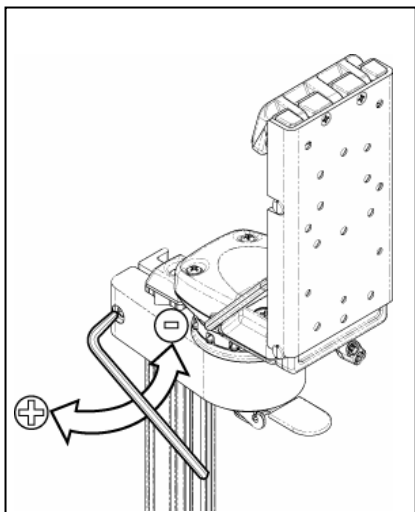
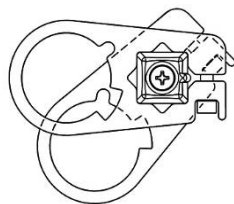


Step 4: Attaching the Tilt'n Turner to the post

- A. Make sure the post is locked in position by the cam clamp
- B. Slide the star shaped Link opening onto the post **past** the post cap
- C. If the Link does not slide on easily, loosen the Link bolt using a 3/16" hex key
- D. Tighten the Link bolt with a 3/16" hex key to ensure Tilt'n Turner will not slide down on the post
- E. Once Tilt'n Turner is securely attached, the post height and angle orientation can be readjusted.



Tip: The Link may be attached in different orientations relative to the wheelchair, depending on an individual's situation.



Tips and warnings:

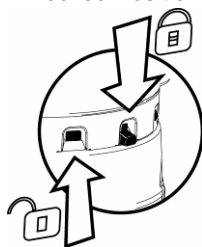
- You can slide the Link as far down on the post as you'd like.
- You can place two mounts on a single post. The 15 pound restriction is the combined weight limit for a single post/bracket.
- The post may limit the full rotation and movement of the lower arm.
- If you're going to set it up as a double-decker, slide the lower one on first.

Setting lock positions

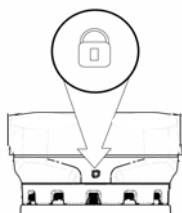
The basics:

- Lock setters provide repeatable, user-specific positions.
- To set a lock position, slide a lock setter down, or to create a bypass location, flip a lock setter up.
- Lock setting may require a small tool or pen tip
- The alignment of the friction adjust screw with a lock setter determines the lock position.
- To unlock a position with the friction adjustment screw above it, the paddle must be depressed.

Locked Position

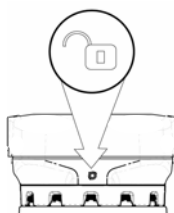


Bypass position



Lock position:

Lock setter is down and in line with friction adjustment screw.

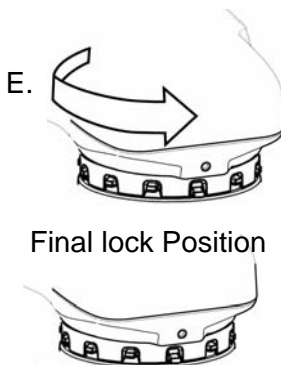
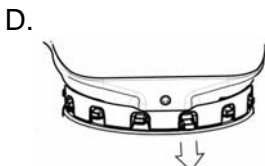
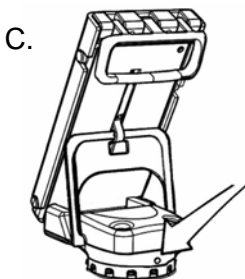


Bypass position:

Lock setter is up.

Initial setup: The following is recommended for the initial setup: Slide all lock setters up, creating bypass positions.

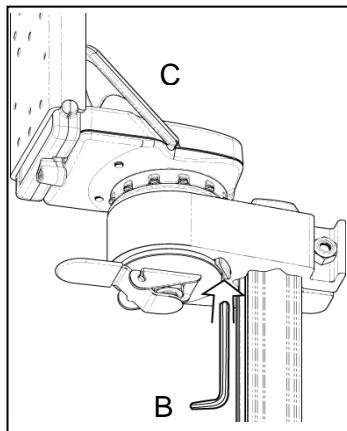
- Make sure all lock setters are set into the unlocked position.
- Rotate the mounted device into a position for the end user.
- Find the position of the friction adjustment screw.
- Slide the lock setter closest to the friction adjustment screw to a locked position.
- Rotate the mount until the friction adjustment screw and lock setters are in alignment with each other.



Fine tuning the position:

Now that the desired lock positions have been set, use the directions below to more exactly get an individualized arm placement of the Tilt'n Turner. The lock positions set a position every 30 degrees. Using the fine tuner, you can adjust the joint to every 5 degrees.

- A. Locate the fine tuner.
- B. Using a thin object, such as an allen key, push up on the fine tuner.
- C. Rotate the joint until it sits in the best position for the end user.
- D. Release the fine tuner and move the joint slightly until the joint finds a locked position.
- E. Have the end user try to use the device, make adjustments as needed.



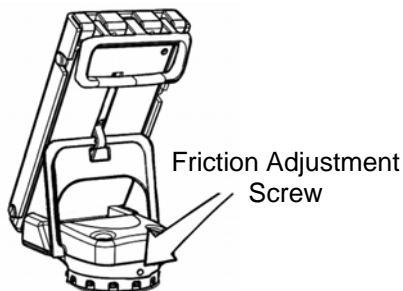
Adjusting the joint friction

The Tilt'n Turner can be adjusted to increase or reduce the effort required to move it. Adjustments are made using the friction adjustment screw.

Locate friction adjustment screw (see below)

Tighten or loosen friction adjust using the 1/16 hex key provided:

- Turn screw clockwise = tighten
- Turn counterclockwise = loosen

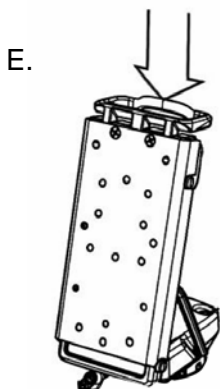
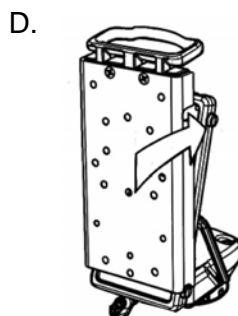
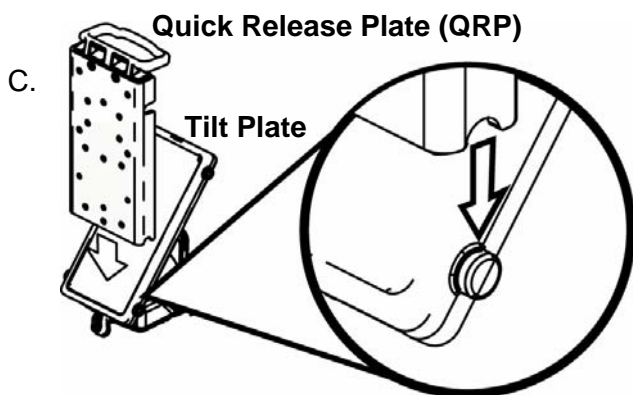
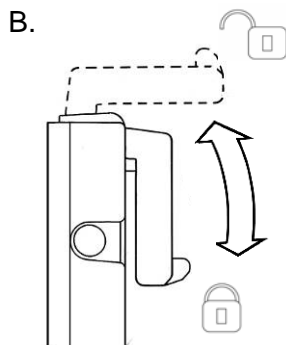


CAUTION:

- If you loosen the friction screw too much, it may fall out.
- If it falls out, the plastic cap on the joint may come off.
- If the screw is lost, replace it with a 6-32 screw.

Using the Quick Release Plate (QRP): Attaching the QRP to the tilt plate

- A. For easy access, start with the tilt plate at an angle and in a locked position (page 5).
- B. Make sure the quick release handle is in the unlocked position (up).
- C. Slide the rounded slots at the bottom of the QR plate onto the round bosses on the tilt plate.
- D. Push QRP into the tilt plate until it “clicks” into place.
- E. Push the QR handle into the locked position.
- F. Check to see if you can pull the QRP/device away from the plate.



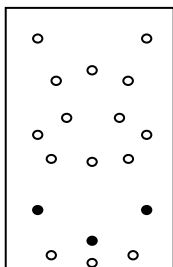
Using the Quick Release Plate (QRP): Attaching a QRP to a tray

All Bluesky Designs trays attach to the quick release plate (QRP) using 3 screws (included). Use the instructions below to attach the tray to the QRP.

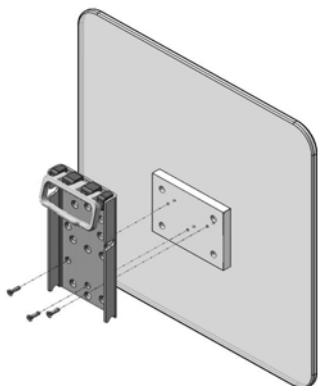
- A. Place the flat side of the QRP flush with the attachment plate (back side of the tray).
- B. See the diagrams below to determine which hole spacing pattern will suit the users need.
- C. Align holes in QRP with holes in the attachment plate.
- D. Using the 3/18" Phillips screws provided, attach QRP to tray.

NOTE: Trays have 2 sets of attachment points!

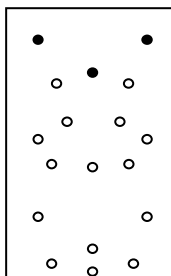
Use these holes on the QRP for tray to rotate about its center



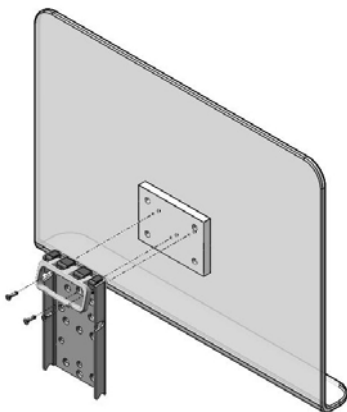
QRP hole pattern



Use these holes for trays that require optimal tilting



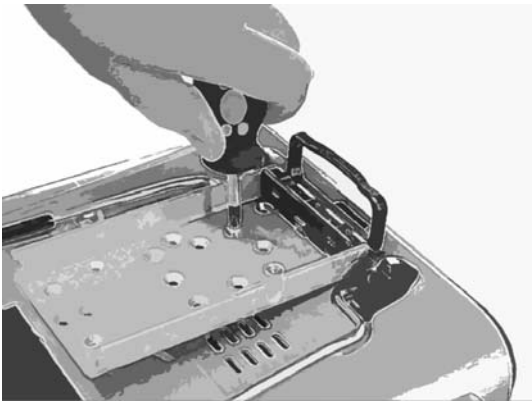
QRP hole pattern



Using the Quick Release Plate (QRP):

Attaching a device to a quick release plate

All devices attach to the quick release plate (QRP) using simple hardware such as screws. Some devices require a special device plate. These device plates attach to both the QRP and the device. Once a device is attached to the QRP, the device can be easily attached and removed from the tilt plate without using any tools. See page 13.



Reference the Device-Plate Attachment Guide on the next page to determine if any additional plates or screws are needed for the attachment of your device to the QRP. See the diagrams below to help you determine the appropriate attachment points between the device and the QRP.

QUICK RELEASE PLATE HOLE SETS:

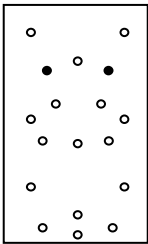


Fig 1

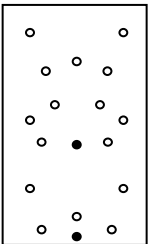


Fig 2

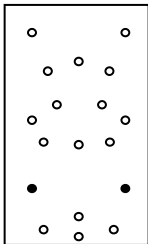


Fig 3

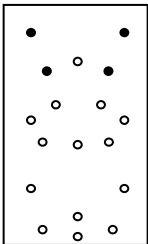


Fig 4

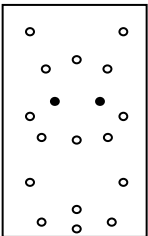


Fig 5

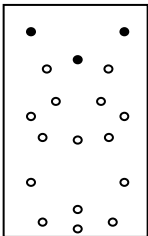


Fig 6

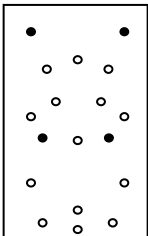


Fig 7

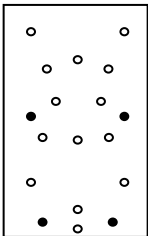


Fig 8

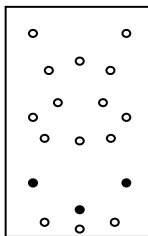


Fig 9

Device-Plate Attachment Guide

| Brand | Device | QR Plate Hole Set | Extra mount plate needed | Screws Required (Flat head Phillips unless otherwise noted) | |
|---------------------------------|---|------------------------------|---|--|--|
| | | | | Qty | Type |
| AbleNet, Inc. | BIGmack communicator BIG Step-by-Step communicator Big Red Switch | Fig 1 | DP-AN1 | 2 2 | 10-32 x ½" 8-32 x 5/16" |
| | FL4SH scanning communicator | Fig 1 | DP-AN1 | 2 2 | 10-32 x ½" 8-32 x 5/16" |
| | Easy Mounting Base iTalk2 LITTLEmack communicator LITTLE Step-by-Step communicator | Fig 2 | "AbleNet Easy Mounting Base" (Made by AbleNet) | 2 2 2 | 8-32 x 5/16" #8 washers #8 nuts |
| | Jelly Beamer | Fig 3 | - | 2 | 6-32 x ½" |
| | SuperTalker progressive communicator | Place on tray/reading stand. | | | |
| | | | | | |
| Blue Sky Designs | All Bluesky Designs trays | Fig 6 | - | 3 | 6-32 x 3/8" |
| | Device Rotation Adapter | Fig 5 | Device Rotator | 2 | 8-32 x 5/16" (pan head) |
| DynaVox | DynaVox V | Fig 1 | - | 2 | 8-32 x 5/16" |
| | DynaVox Vmax | Fig 5 | DP-DV1 | 2 2 | 8-32 x 5/16" 8-32 x 5/16" (pan head) |
| | DynaVox DV4 | Fig 5 | DP-DV1 | 2 4 | 8-32 x 5/16" 8-32 x ½ " (pan head) |
| | DynaVox MT4 | Fig 5 | DP-DV1 | 4 | 8-32 x 5/16" |
| PRC (Prentke Romich Company) | ECO | Fig 8 | PRC Mounting Plates | 4 | 8-32 x 5/8" |
| | Pathfinder 2 | Fig 7 | PRC Mounting Plates | 4 | 8-32 x 5/8" |
| | SpringBoard | Fig 6 | - | 3 | 8-32 x 3/8" |
| | Vantage | Fig 6 | - | 3 | 8-32 x 5/8" |
| | Vanguard | Fig 7 | 2 PRC Mounting Plates required as spacer | 4 | 8-32 x 5/8" |
| Saltillo | ChatPC | Fig 9 | ChatPC kit | 3 | 6-32 x 3/8" |
| | All Other Devices | TBD | NA* | - | TBD |
| Tobii ATI | All Devices | TBD | NA* | - | TBD |
| Words + | All Devices | TBD | NA* | - | TBD |
| Zygo | All Devices | TBD | NA* | - | TBD |
| AMDI | All Devices | TBD | NA* | - | TBD |
| Blink Twice | Tango | TBD | NA* | - | TBD |

*Additional plates under development. For the most current list of adapter plates and hardware visit www.blueskydesigns.us

Trouble Shooting Guide

If...

Then...

| | |
|--|---|
| Pieces are missing | Make sure you ordered all components. Attachment hardware is not included. Contact company you purchased from. |
| Hardware arrives damaged | Contact company you purchased from. |
| The Tilt'n Turner is not finding a locked position | Is the lock setter down? If not, adjust. Is actuator lever stuck or being held down? Lift. p.5,11 |
| Lock setter not able to move up into an unlocked position | Depress paddle and move so friction adjuster is not above lock setter. Lift up on or remove device while setting. |
| The Tilt'n Turner is too difficult or too easy to move | Adjust the friction adjustment screws. p. 12 |
| You are still experiencing trouble with your Tilt'n Turner | Call BlueSky Designs for technical support. 1-888-724-7002 |

Storage and care tips

- Keeping the mount clean and dry will increase its usability.
- Never force the mount into or out of place. Use the paddle and tilt lever to unlock it before attempting to reposition it.
- Set it down with care. Do not drop or throw it.

Warranty/Repair/Returns

- BlueSky Designs offers a one year warranty on the Tilt'n Turner.
- If documentation of the original purchase date is not supplied, the warranty period will be determined as twelve months from the date of manufacture, determined by the serial number.
- This warranty is valid only with proper installation of the Tilt'n Turner according to instructions in the product manual. It does not cover repairs for damage resulting from misuse, such as driving into walls, failing to attach it securely, or failure to follow instructions for set-up and care.
- Please follow our repair/return policy when sending products back under our guarantee. Before returning product for repair, please contact BlueSky Designs for a Return Merchandise Authorization (RMA).
- BlueSky Designs offers a 30 day money back guarantee. To be eligible for a money back guarantee, the Tilt'n Turner must be in new condition.

Technical support

Call BlueSky Designs at 1-888-724-7002 or check out our web resources and videos at www.blueskydesigns.us

Tilt it... Turn it... Use it...

How to get the most out of your Tilt'n Turner

- Access a communication device
- Use your laptop
- Read a book
- Cell phone at the ready
- Utilize tray as a writing surface
- Access to multiple items all at once with a simple turn of the tray
- And much more...



ACCESS YOUR DEVICE

Attach it
to a wheelchair
or a Table



SPIN YOUR TRAY

Bring things closer



TILT OR TURN YOUR TRAY



Also available:

Single arm



Dual Arm



Posts

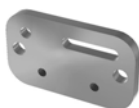


8, 12, 18, 24, 36 inches
Custom lengths

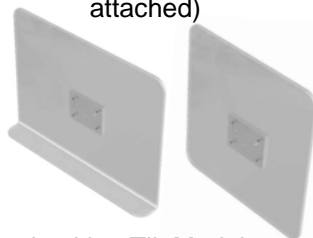
Quick Release Plate



Adaptor plate



Trays (QRP not attached)



Device Rotator

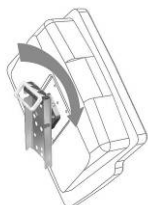


Table Clamp



Locking Tilt Module



Go to our website, www.blueskydesigns.us or call 888-724-7002 for info on new products!

Check out our daVinci Award-winning Freedom tent!



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