USER GUIDE

Mobility MiX Cart

HKPX2VC/A   Mobility MiX Cart 30

HKPY2VC/A   Mobility MiX Cart 45

TECHNICAL SPECIFICATIONS

CAPACITY per slot width	1″	1.25″	1.5″	
HKPX2VC/A 2 modules	30	24	20	devices
HKPY2VC/A 3 modules	45	36	30	devices

COMPATIBILITY Optimized for use with most Apple MagSafe (45W, 60W, 85W), USB (10W, 12W), and USB-C (29W, 61W, 87W) power adapters, supporting all sizes and models of MacBook and iPad.

OUTSIDE DIMENSIONS   33.50″W x 26.00″D x 44.5″H

SLOT DIMENSIONS   1″ or 1.25″ or 1.5″ W x
10″H or 10″H x 17″D

WEIGHT WITHOUT DEVICES   176 lb (30 cart)
190 lb (45 cart)

POWER MANAGER   Digital

POWER REQUIREMENTS   100 -125V AC, 12A, 50/60Hz;
220-240V AC, 8A, 50/60Hz;
optional USB output; 5V DC, 2.4A

SHIPPING Ships fully assembled, ready to load devices

WARRANTY 12 years cart, 3 years electrical. For full warranty terms and conditions, please visit: **bretford.com/warranty**

MADE IN USA with globally sourced components

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bretford.com/apple   **BRETFORD®**

What's in the Box?

- One (1) Mobility MiX Cart
  - One (1) Removable rear access panel
  - Two (2) thumb screws, pre-installed
- Mobility MiX Modules
  - Two (2) MiX Modules for HKPX2
  - Three (3) MiX Modules for HKPY2
    - Each MiX Module contains two (2) number bars
- Rubber mats
  - One (1) on top of the cart
  - Three (3), one on each shelf
- Hardware pack (red plastic bag)
  - Two (2) Torx T-25 security screws
  - Two (2) Washers
  - One (1) Torx T-25 bit
  - One (1) Programmable Combination Padlock
- One (1) Power Cord

General Use

CORD PASS-THROUGH
Grommet allows for laptop or other accessory to be powered on top of the cart, while their power cords are plugged inside the cart.

DURABLE PLASTIC TOP
Provides a soft, skid-resistant platform for objects placed on top of the cart (max. weight restriction of 25 lb)

COURTESY POWER OUTLET
Directly behind the left front door is a cutout for the following:

• Power whip which provides a single outlet for powering a device on the top of the cart, accessible through the Cord Pass-Through.

• Circuit breaker rated for 2 amps that is tied to courtesy power.

• A USB port which allows for syncing capability, if cart is used with a PowerSync MiX Module (sold separately)

ILLUMINATED POWER SWITCH
Located on the left side of the cabinet, in the Power Cord Shroud

REAR SECURITY PANEL
Provides access for removal of MiX Modules, allowing for easy wiring and setup to take place outside the cart. Ships with both thumb screws and security screws, enabling a choice between convenient, or restricted access to the power adapters in the back of the cart.

POWER CORD SHROUD
Located on the left side of the cabinet, provides a cord winder for the power cord, and an IEC outlet for plugging in the 12-foot power cord

DIRECTIONAL LOCK CASTERS
When engaged, keep the cart rolling in the right direction. When unengaged, allow the cart to be easily maneuvered into small spaces. Marked with a Green Locking Tab

DOOR LOCK SHROUD
Protects the padlock and the locking handle from damage during transport.
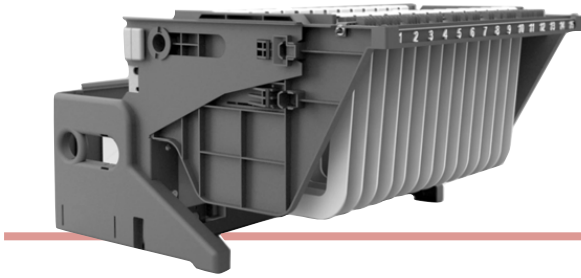
SETTING THE COMBINATION LOCK
Your new MiX Cart comes equipped with a resettable combination padlock. The lock is factory set to 0-0-0-0. Use the combination reset tool to set your combination, following the included instructions. Remember to depress the shackle before disengaging it from the lock.

POWER MANAGEMENT
Mobility MiX Carts offer advanced power management features to minimize device charging time, while limiting the maximum power draw to prevent electrical overload.

Upon startup, the cart will cycle power between zones to determine the initial power demand. During this period (and any subsequent period of time where the power demand exceeds the maximum threshold) device charging will be intermittent. This allows the cart to ignore zones that are empty and focus power on the zones with the largest demand.

MiX
MODULE SYSTEM™

The MiX Module disconnects from the MiX Cart and can be removed through the back of the cart, then placed on a work surface for simple, time-saving cable management & adjustable slot width - all outside the cart!

Removing MiX Modules from MiX Cart

1. IMPORTANT: Before you begin, be sure to remove any devices from the front of the cart and set them aside in a safe location.

2. From the front of the cart, reach under the dividers and slide the Locking Tabs (see fig 1.1) from both sides away from the cart's interior side wall. This releases the MiX Module from the cart.

3. At the back of the cart, remove the thumb screws (or if the security screws have been installed, use the security bit provided). Lift off the rear panel of the cart to expose the back of the MiX Modules.

4. Unplug the MiX Module power cord and Cat 6 Ethernet cable from the cart. The MiX Module is now ready to be lifted out of the cart.

5. Using the built-in handles, lift the MiX Module out of the cart and set it on a work surface. You are now ready to start customizing the slots for your specific devices and cable management.
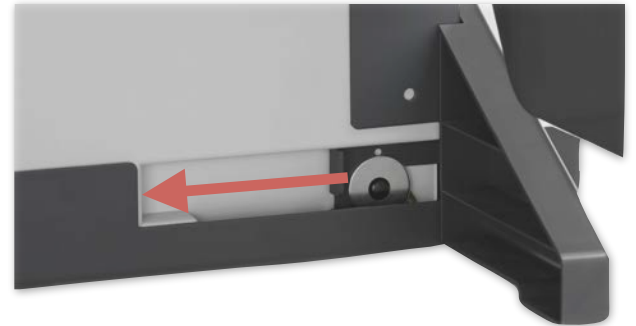
fig 1.1 Front View of the MiX Module
Step 2: Slide Locking Tabs toward center of cart

fig 1.3 Rear View of the MiX Module
Step 5: Lift the MIX Module out using the built-in handles

Security Screws

For convenience during setup, your new MiX Cart ships with thumb screws installed in the rear panel.

Replacing the thumb screws with the Torx screws included in the hardware pack is recommended for the most secure fit. NOTE: you must use the two washers included with the security screws.
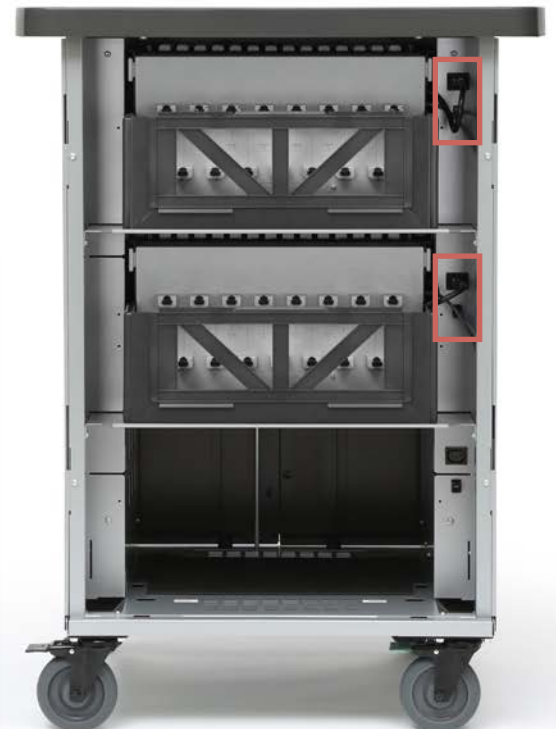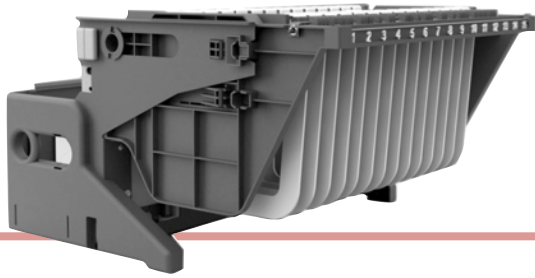
fig 1.2 Rear View of the Mobility MiX Cart
Step 4: Unplug MiX Module power & Cat Ethernet 6 cables

Adjust the Slot Width on the MiX Module

1. Set the MiX Module on a comfortable work surface where you will make all of the adjustments for storing and charging your devices.

2. It is suggested that your collection of devices be close at hand, with each adapter/cord set with its own device.

3. Your MiX Cart ships with the slot width of the MiX Modules set at 1″ intervals. Measure the ″height″ of your device as it sits closed on the work surface. This is the way the device will stand in the slot, and this dimension establishes the ″slot width″. If your device height is less than 1″, then leave the 1″ slots alone and move on to cable management.

4. If your device is taller than 1″ and less than 1 1/4″, then you will need to adjust the dividers to be 1 1/4″ wide, or 1.25″ wide. You will need to remove all of the dividers and reinstall them at the 1.25″ width. The MiX Module makes this exercise very simple.

5. First, release each of the dividers by pinching the white tabs on top of the Mix Module …. pinch between finger and thumb until the divider pops out. Remove the dividers to a safe place out of your way.

6. Next, with the MiX Module facing forward directly at you. locate the locking buttons on both sides of the MiX Module - little square buttons that when depressed in, allow the whole top assembly of the MX Module to side forward toward you on the rails.

7. Top assembly is now free to swivel up, revealing the mounting pattern for the dividers in an easier position for reattaching the dividers at the appropriate position.

8. Reinsert the dividers using the white knobs as the guide into the row of holes which matches your desired slot width (as illustrated below). NOTE: When reinserting the dividers for either 1.25″ or 1.5″ wide slots, rotate the dividers 180° so that they will fit into the pattern.

9. This process is identical for both 1.25″ and 1.5″ wide.

10. When complete, swivel the top assembly back down and slide back on the rails until the locking buttons click on both sides

11. **Change the Slot Number Bar** to match the number of slots you now are using - either 15, 12 or 10. NOTE: The numbers will advance from the top module to the middle module to the lower module:

1-15   16-30   31-45   1 bump on the rails' end
1-12   13-24   25-36   2 bumps on the rails' end
1-10   11-20   21-30   3 bumps on the rails' end

fig 2.2 Top Down View of the MiX Module
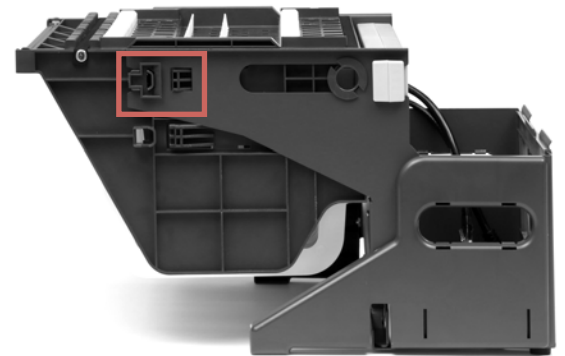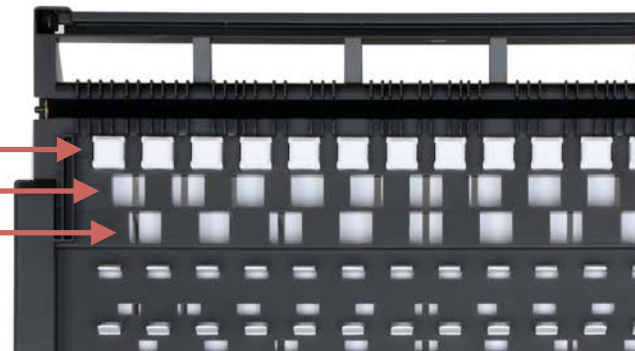**Step 5. Pinch the white tabs to release the dividers**

fig 2.2 Side View of the MiX Module
Step 6. Depress button on <u>both</u> sides of MiX Module & slide top assembly forward on the rails

fig 2.2 Front of the MiX Module
Step 7. Swivel the top assembly up & over, revealing the pattern for attaching the dividers

1″ slot width
1.25″ slot width
1.5″ slot width

Height Adjust the MiX Module

1. Set the MiX Module on a comfortable work surface where you will make all of the adjustments for storing and charging your devices.

2. It is suggested that your collection of devices be close at hand, with each adapter/cord set with its own device.

3. Your MiX Cart ships with the the MiX Modules set at 10″ height. Measure the ″depth″ of your device as it will sit in the slot of the MiX Module.. This is the way the device will stand in the slot, and this dimension establishes the ″slot height″. If your device height is less than 10″, then leave the height alone and move on to cable management.

4. If your device is deeper than 10″, then you will need to adjust the Height of the MiX Module to its 12″ high setting.

5. Start by removing two dividers from each side of the MiX Module

6. Then, with the MiX Module facing forward directly at you. locate the locking buttons on both sides of the MiX Module - little square buttons that when depressed in, allow the whole top assembly of the MiX Module to side forward toward you on the rails.

7. Top assembly is now free to swivel up.

8. Using the illustrations below, swivel the top assembly up until it is perpendicular to the frame. Find the Height Adjust Caps on both sides of the Module.

9. Hold the top assembly so that both the Height Adjust Cap and the 2nd adjustment hole are both visible through the Height Adjust Slot.

10. Keeping the top assembly steady with one hand, remove the Height Adjust Cap with the other hand and reinsert into the 2nd adjustment hole. Repeat on the opposite side of the top assembly.
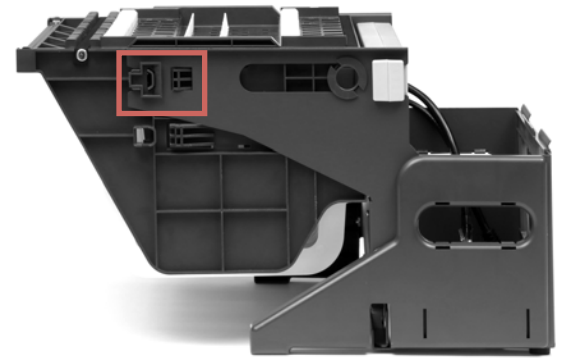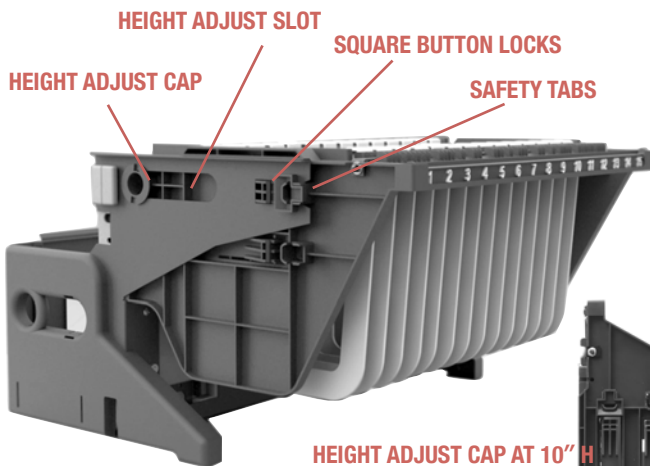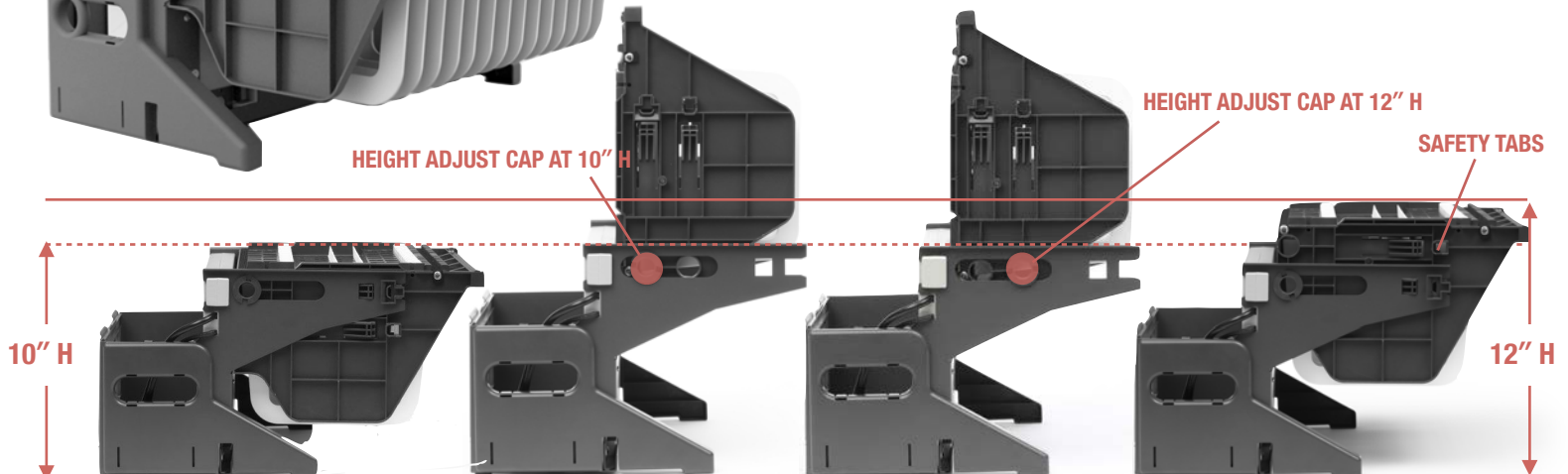

fig 3.1 Side View of the MiX Module
Step 6. Depress button on <u>both</u> sides of MiX Module & slide top assembly forward on the rails
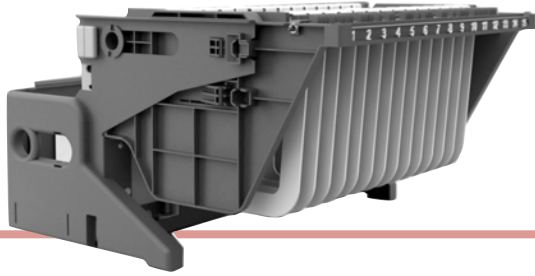

fig 3.2 Front of the MiX Module
Step 7. Swivel the top assembly up & over, revealing the pattern for attaching the dividers

11. Swivel the top assembly back down onto the rails and push back until the top assembly locks into place.

12. Congratulations! The available height for devices is now 12″.

13. The last thing to do is to remove the Safety Tabs that are in front of the Square Botton Locks. These are still at the 10″H setting. Then replace them in front of the Square Button Locks at the 12″H setting. These Safety Tabs assure that the top assembly stays in place on the rails

HEIGHT ADJUST SLOT
SQUARE BUTTON LOCKS
HEIGHT ADJUST CAP
SAFETY TABS

HEIGHT ADJUST CAP AT 12″ H
SAFETY TABS
HEIGHT ADJUST CAP AT 10″ H

10″ H

12″ H

Cable Management on the MiX Module

1. Set the MiX Module on a comfortable work surface where you will make all of the adjustments for storing and charging your devices.

2. It is suggested that your collection of devices be close at hand, with each power adapter with its own device.

3. Start by removing the two-prong "duckhead" portion of the Apple Power Adapter. The bottom of the cord bin provides dedicated storage for the removed "duckhead" (see *fig 4.1*).

4. Take the cable from your first power adapter and lay it loosely across the top of the MiX Module. The cable will be running from back to front, hanging down in the slot at the front of the MiX Module.

5. For ease of wiring, beginning with the outlets closest to the bottom of the bin (3, 6, 9, 12, 15) is recommended.

6. Ensure that the cables are routed in between the white tabs on the top of the dividers. This ensures the cables are aligned perfectly with the device, even if the slot size is reconfigured.

7. Measure how far down from the top of the MiX Module the cord needs to drop down in front of the slot to plug into the device. This will be the standard cable dimension length for each adapter.

8. In the rear of the MiX Module, wrap the adapter and excess power cord using the "wings" on the power adapter (MagSafe only), or using cable ties.

9. Plug in the adapter into the MiX Module outlet that corresponds to the slot you are populating on the front of the MiX module. #3 outlet to #3 slot, #6 outlet to #6 slot, and so on. The length of each adapter's power cord to its designated outlet will vary from wrapped adapter to wrapped adapter, as you move up to the 2nd row of outlets.

10. On the top of the module, there are two elastic strips (see *fig 4.1*) - which will help control the cables as they travel across the top assembly. Once you have plugged in the power adapter, and you have left the proper amount of cable to plug into the device, run that part of the cable under the elastic, to hold it in position.

11. Continue to fill the cable bin, plugging in the adapter cable sets and checking the length of cables at the from of the MiX Module to be sure you have enough length to plug into the computer.

12. When complete, you are ready to replace the MiX Module back into the MiX Cart.

13. If you changed the height of the MiX Modules to 12″, you will now need to adjust the steel shelf to the lower position (see next page).

NOTE: All MiX Cart models can support a maximum of 3 MiX Modules configured at the 10″ height, or 2 MiX Modules configured at 12″ height.
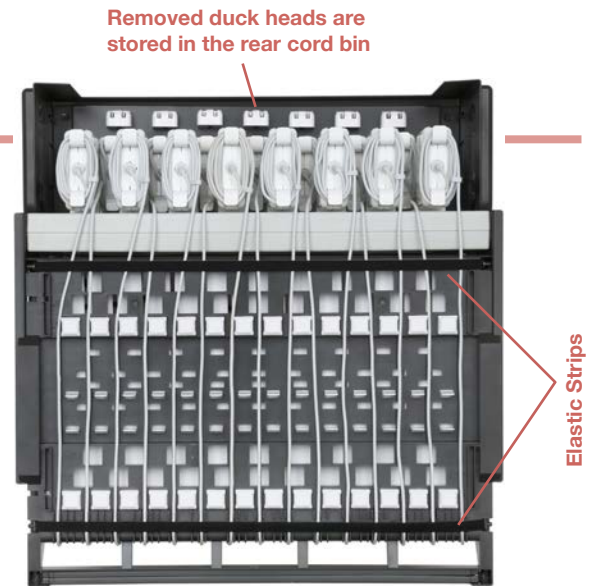

Removed duck heads are stored in the rear cord bin

Elastic Strips

fig 4.1 Top down view of the Mobility MiX Module
Cable routing channels on top of the MiX Module and the dividers ensure perfect alignment.

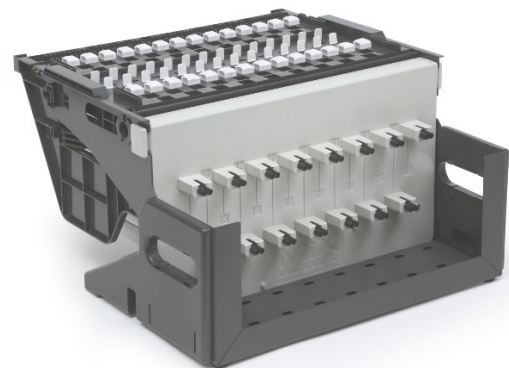*fig 4.1* Rear view of the Mobility MiX Module (unwired)
Remove the power adapter "duckhead" before connecting to the MiX Module

fig 4.1 Rear view of the Mobility MiX Module (wired)
Excess cable can be wrapped around the power adapter "wings" (MagSafe only), or cable-tied

**Both
Rear View &
Front View of
the Mobility MiX Cart
with shelves set to
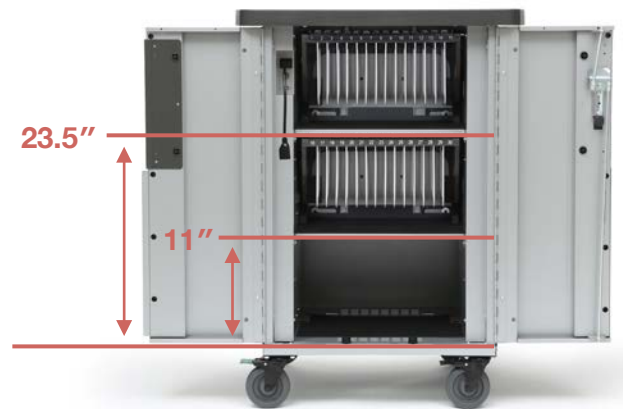10″ to accommodate
3 MiX Modules**

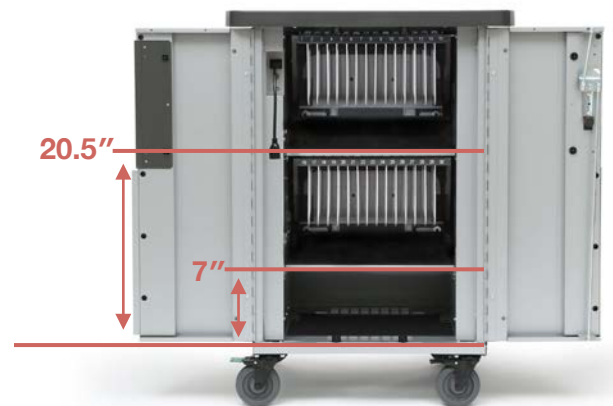## Changing Shelf Height on the Mobility MiX Cart

All MiX Carts ships with a 10″ shelf height to match the default MiX Module height. If your devices require additional slot height, the MiX Module can be adjusted to the 12″ height (see previous page for instructions).

To accommodate the increased height of this module configuration, the 2 steel shelves in the cart will need to be lowered to their alternate position. In this configuration, the MiX Cart can accommodate up to 2 MiX Modules, providing a maximum capacity of 30 devices.

1. Before you begin, ensure all devices are unplugged and removed from the cart.

2. Disengage the MiX Module slide locks from the front of the cart and unplug the modules from the back of the cart.

3. Use the security bit (included in the hardware pack) with a manual or powered bit driver to remove the 4 screws that hold each of the steel shelves in place (2 in front, 2 in back). The shelves are supported by tabs that prevent them from falling once the screws are removed.

4. With the help of a 2nd person, lift the lower steel shelf off of its tabs and lower it to the next set of tabs down (about 3″ below; approximately 7″ from the inside bottom of the cart).

5. Again, with the help of a 2nd person, now lift the upper steel shelf off its tabs and lower it to the next set of tabs (about 3″ below; approximately 20.5″ from the inside bottom of the cart).

6. Replace and tighten the previously removed screws, 4 in each shelf.

7. You are now ready to reinstall the MiX Modules into the back of the cart. When correctly positioned, the feet of the module should nest into the round cutouts in the shelf.

8. Plug in the power cable and Cat 6 Ethernet cable from each MiX Module back into the cart.

9. From the front of the cart, engage both slide locks for each module to secure them to the cart interior.

**3 Module MiX Cart with shelves
set for 10″H MiX Modules**

**2 Module MiX Cart with shelves
set for 12″H MiX Modules**

WARNING: This Safe User Label is attached to the side of the cart, warning that the cart may tip over if transported incorrectly, which could cause injury.
- Do not allow children under 16 to move cart. Only adults should move this cart.
- Move the cart slowly
- Apply moving force on the narrow dimension.
- Always push using the handles. Push the cart, do not pull it.
- Engage the directional lock casters when moving the cart for added stability & safety.

WARNING: Relocating audio and/or video devices to a cart not specifically designed to support audio and/or video devices may result in death or serious injury due to the cart collapsing or over turning onto a child.

WARNING: Death or serious injury may occur when children climb on a cart. A remote control or toys placed on the cart may encourage a child to climb on the cart and as a result, the cart may tip over on to the child.

Safe Use Instructions

- The socket outlet shall be installed near the cart and shall be easily accessible.
- Make sure all devices do not exceed the maximum load rating of 12 amps.
- Power strips inside cart are intended only for charging compatible devices. Any other use may cause overload.
- Do not move cart by pulling the power cord. Before moving cart from one room to the next, wrap power cord around the cord winder located on the side of the cart.
- Do not plug the cart in if the switch, receptacle(s), or power cord has been damaged. Contact Bretford or a qualified electrician before attempting to make any type of electrical repair or parts replacement.
- Engage locking casters when cart is not in transit.
- Do not block ventilation holes on cart. Proper air flow is required for safe operation.
- Cart is not designed to be operated by a child or student. Adult operation and supervision is recommended at all times.
- Liquids should not be stored in, set on or placed inside the cart.
- Only clean the surfaces of cart with soft dry cloth. Do not use liquid or spray or abrasive cleansers. Use only disinfecting wipes containing no bleach.
- Product is for indoor use only.
- User can plug in up to 45 devices at one time.
- Turn power switch off before plugging in devices
- Turn power switch off before unplugging the cart.
- Do not pull the cart. Always push cart using the handles. Use extra caution on ramps and thresholds.
- Do not plug the power cord into another extension cord or re-locatable power tap.
- Be sure to turn power switch off and unplug cart before moving to a different location.
- Ensure casters are locked before opening the cart doors.
- Be sure to lock up cart in a secure environment after every use.
- Do not share the lock combination code with any unauthorized persons.