

# **Computer Workstations**

Computer Access Series

Design of computer workstations is slowly becoming more innovative, like the technology that sits on top of it. In the process of making workstations "ergonomically correct," more consideration has been given to the variety of potential users. This has worked to the advantage of people with disabilities since many workstations are now more "adjustable." Still, many of the workstations available may not address the placement, ease and accessibility of office equipment for the disabled user. In such cases, workstations specifically designed for people with disabilities may be the best option. The products described in this article may accommodate users with or without disabilities and it is suggested that the reader call the individual companies to further investigate the equipment of interest.

## FREQUENTLY ASKED QUESTIONS:

#### What are adjustable workstations?

Any single level or multilevel computer station that offers a height adjustment feature fits in this category. Most often this adjustment is accomplished via a manual crank or switch that operates a motor. These workstations may accommodate a wide range of users, including a person of short stature who may need to work at a lower level or a large person in a power wheelchair that may require higher leg clearance. Another option to consider is the more permanent, modular/panel type workstations which are height adjustable during initial set up and best of all, often provide a lot of leg clearance under the desk.

#### Will the monitor and keyboard surface be adjustable too?

If the workstation has a single flat surface and the monitor sitting on it is too low, a monitor platform or monitor arm may need to be added to achieve the proper height. Similarly, a keyboard platform or arm can be attached to most work surfaces to achieve the desired keyboard/mouse position. Unlike a single level surface workstation, most bi-level workstations will allow the user to fix and adjust the monitor shelf and keyboard shelf independently to obtain the desired position.

# Are height adjustable workstations more expensive than non-adjustable ones?

Not necessarily. Prices vary greatly in office furniture, as they would in other types of furniture. The most significant cost differences is between a manually adjusted workstation, starting at about \$250 and power driven adjustable workstations that begin close to \$1000. Although motorized workstations are not as expensive as they were years ago, it still may not be worth the additional cost if the surface is to remain fixed after the initial adjustment.

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#### Can my old desk be adapted to accommodate my wheelchair?

There are some low tech, inexpensive ways to adjust the height of a desk or work surface that has fixed legs. Besides using wood blocks, leg extenders, designed specifically for this purpose, can boost the height 3" to 5".

#### What are recessed workstations?

Some workstations are designed with recessed compartments that house the monitor and sit "down in the desk." Often there is some flexibility in the angling of the monitor and for some individuals this positioning may reduce neck, eye and/or back strain. Another appealing feature of utilizing this type of workstation is the resulting unobstructed view. For this reason, recessed workstations may be desirable for training or educational settings.

# What are the advantages of mobile workstations?

The obvious perk is the ability to move these castor-based units to other areas of the office, but there may be other advantages as well. A tight office budget may necessitate the sharing of technology between different users. Also, since many of the mobile units on the market are compact in size, they may be desirable in smaller or tight workspaces. Most of these units also have adjustable height surfaces and can accommodate a wheelchair user.

#### What are sit/stand workstations?

These workstations are usually fairly compact and convert from a sitting to a standing height and anywhere in between. A majority of the sit/stand stations are adjusted at the touch of a button, but a few are manual. They are usually narrow, and would need to be at least 30" wide to accommodate a wheelchair, although this width may not leave a lot of room for maneuverability. An alternative is to purchase a monitor riser and keyboard riser that turns a standard workstation into one that can be used from a standing position.

#### What is a wall or ceiling mounted workstation?

These units may be found in industrial, manufacturing or health care settings and are ideally designed for brief or intermittent data entry. There is no desktop, but rather an arm that attaches to a wall and supports the monitor and keyboard, without any additional work surface. Ceiling mounted units function the same way, except they are even more mobile via a tracking system. All these units are adjustable in all directions for the optimum ergonomic positioning of the user, standing or sitting. In addition, they are very space efficient and can easily be moved out of the way. Some units, with flat screen monitors, can even be folded up flat against the wall. Given the clear floor space and adjustability features of these workstations, they may be desirable to wheelchair or scooter users in the appropriate setting.

# What workstations have features that specifically address the needs of wheelchair users? There are a few manufacturers whose workstations are designed primarily for people with disabilities:

- A bi-level, adjustable height workstation with a lower (keyboard) shelf that has a maximum tilt of 85 degrees. This accommodates a mouthstick typist, placing the keyboard in a near vertical position once secured in place. (*Daedalus Technologies, Inc*)
- A height adjustable completely wall-mounted desk, completely free of any obstructions beneath the "desk," offering easy wheelchair access in and out. (AD-AS)
- A workstation with a wheelchair track on the floor that allows the user to easily slide side to side along the track while working in a horizontal workstation (*Wheelchair Workstations*)

A desk with one or two turntable surfaces for someone with limited or no reaching ability.
Rotating surfaces make desktop components/equipment more accessible. (Extensions for Independence)

## What type of workstation can accommodate a user who cannot sit upright?

For individuals with orthopedic back conditions, there are a few companies that make workstations that recline to varying degrees, offering an option to computing from an office chair.

- A self-contained workstation and chair with headrest, attached as one unit that moves simultaneously to a semi reclining position of 20 degrees or forward tilt of 10 degrees. (*Aptus*)
- A mobile, tilting, computer support frame that straddles the users own bed or recliner. (*ErgoPod*)
- A portable work surface that resembles a tilted TV tray that is designed to hold a book or laptop computer while the user is reclining on a couch or bed. (*Laptop Laid- Back, KayJae*)
- A hospital over-the-bed table with a tilting feature to allow a lap top computer user to work from a somewhat reclined position. Some models may not have a "lip" along the edge to hold the laptop in place while tilted, so try securing the bottom with velco. (*BackSaver*, *Sammons*)
- A steel frame which supports an adjustable CRT arm and attached pull-out keyboard tray, that is positioned over the users recliner or easy chair. (*EasyChair Workstation*)

#### **PRODUCT INFORMATION:**

Company	City, State, Phone	Web Address	Products Available
AD-AS	Boise, ID 800-208-2020	www.ad-as.com	wall mounted height adjustable desk
AliMed (Ergonomics)	Dedham, MA 800-225-2610	www.alimed.com	workstations and misc. accessories
Anthro Corporation	Tualatin,OR 800-325-3841	www.anthro.com	mobile workstations; bi-level workstations
Apex Medical Corp	Minneapolis, MN 800-328-2935	www.apexmedical.com	tilting over the bed table
BackSaver	Holliston, MA 800-251-2225	www.backsaver.com	"mobile recliner desk" or tilting over-the-bed table with lip; sit-stand workstation
Daedalus Technologies	Daedulus, British Columbia 604-244-8443	www.daessy.com	manual bi-level adjustable height workstation
Ergotron	St. Paul, MN 800-888-8458	www.ergotron.com	wall and ceiling mounted monitor/keyboard

ErgoQuest	Grand Rapids, MI 888-298-2898	www.ergoquest.com	"ErgoPod," reclining computer support frame; sit-stand workstations
Ergotect	Dallas, TX 214-747-3746	www.ergotect.com	height adjustable workstations; drafting table
Extensions for Independence	San Diego, CA 610-388-2037	www.mouthstick.net	accessible workstation with rotating surfaces
Freedom Accentz	Memphis, TN 901-388-0133	www.freedomaccentz.com	recessed desks; sit-stand desks; mobile workstations; bi-level workstations
Kayjae	Cobbs Creek, VA 888-4-KAYJAE	secure.midpenmall.com/ cgi-bin/kayjae/announce.html	work surface for holding lap top in reclining position
Keysan	Greensburg, PA 800-069-5397	www.keysan.com/ ksi1020.htm	mobile workstations; sit- stand workstations; height adjustable workstations
Laptop Laidback	Arichat, Nova Scotia 902-226-3092	www.laptop-laidback.com	portable tilting tray for laptop
Mack Bailey Enterprises	Westerville, OH 614-899-0974	members.ee.net/mdbailey	EasyChair Workstation
North Coast Medical	Morgan Hill, CA 800-277-6826	www.BeSafeAtWork.com	monitor arms/risers, keyboard trays, mobile workstations
Sammons	Bolingbrook, IL 800-323-5547	www.sammonspreston.com	tilting over-the- bed table; leg extenders
Source Ergonomic	King of Prussia, PA 610-265-2620	www.source-ergo.com	height adjustable workstations
Smart Desks	Lutherville, MD 800-770-7042	www.smartdesks.com	recessed desks
Viking Acoustical Corp	Lakeville, MN 800-328-8385	www.vikingusa.com	monitor arms; keyboard trays; adjustable height workstations
Wheelchair Workstations	845-634- 3595	No website available	wheelchair tracking system for "sliding along" a horizontal workstation
Work Environments	Email: info@workenv.com Fax: 205-939-8448	www.workenv.com/ background.html	"Aptus" semi reclining workstation