Choosing a Smartphone



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Learning Objectives

- Participants will have an understanding of the main considerations when deciding on which smartphone to purchase.
- Participants will gain knowledge of where to obtain additional information such as comparisons and informational tools.
- Participants will gain knowledge on a variety of computer access systems for people with limited mobility.
- Participants will gain a better understanding of funding resources available pertaining to obtaining assistive technology.

What Phone Should I Get?

- Ask yourself, what do I want to be able to do?
- How is my arm and hand function?
- Who is my carrier?
 - Am I willing to switch carriers to get the phone I want?
- Should I wait for a new version to come out?

Resources

- Go to stores
 - Microsoft and Apple
 - Your carrier's store (ie. Verizon, T-mobile, etc...)
- Talk to people who have the phone you want
- GARI comparison tool
- C net website
- Consumer reports website
- Christopher Reeves Website
- Search you tube videos

GARI-comparison tool

http://www.accesswireless.org/Home.aspx

- Goal: Wireless For All
 - Website designed to help people with disabilities and their families find a cell phone and service
 - Designed to be your "first stop" to learn about the ever-changing world of cell phones and wireless services, and discover those that meet your specific needs.







| | Apple Model:: iPhone 4S | Samsung Model:: SGH- I667 | Samsung Model:: SPH- L900 |
|--|---|---------------------------------|--|
| Features | 45 | 1007 | L900 |
| MOBILITY/DEXTERITY FEATU | RES | | |
| Speaker-phone capable | Yes | Yes | Yes |
| Text Messaging Service Capable | Yes | Yes | Yes |
| Predictive Text Input | Yes | Yes | Yes |
| Guarded/recessed keys | N/A | N/A | N/A |
| Device Coupling - Cable | Yes | Yes | Yes |
| Device Coupling - Infrared | No | No | No |
| Device Coupling - Bluetooth/WLAN | Yes | Yes | Yes |
| Device Coupling - Other | iPhone has a dock connector which permits third-party accessories to connect with the device. | No | Yes(NFC) |
| Flat Back for Table Top Operation | Yes | Yes | Yes |
| Automatic Answer | N/A | No | No |
| Automatic Redial | N/A | No | Yes |
| Any Key Answering | N/A | No | Yes |
| Voice Recognition for Dialing | Yes | Yes | Yes |
| Hand Movement | Yes | No | No |
| Voice recognition for accessing features | Yes | Yes | Yes |

C NET Technology Reviews

www.cnet.com

- Reviews
- News
- How To
- Deals

Which phone should you buy?

An embarrassment of mobile phone riches makes this a terrific – and confusing – time to buy. We'll help you figure out where to start depending on what you want.





by Jessica Dolcourt and Brian Bennett | September 13, 2012 3:31 PM PDT Updated: February 5, 2013 4:07 PM PST



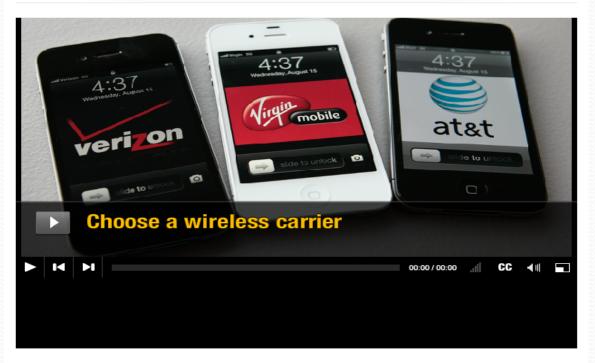
Cell phone buying guide

The most important things to know when shopping for a cell phone.



by Brian Bennett | October 5, 2012 11:15 AM PDT



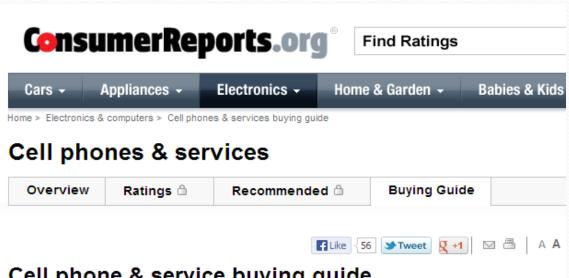


Cell phones have become the most crucial personal technology purchase you can make. Not only are these devices full-fledged miniature computers in their own right, they're getting smarter with each product generation. If you're looking for a new handset right now, start with the Samsung Galaxy S3 or the iPhone 5. The Galaxy S3 offers all the power you'd expect from a high-end Android device in a gorgeous package. The iPhone 5, meanwhile, continues to set a smartphone standard, and it's the best iPhone you can buy. If you're an Android user who's always on the go and far from power outlets, the Motorola Droid Razr Maxx HD is the longest-lasting handset we've ever used plus flaunts a distinctive design. For more top cell picks, check out CNET's list of our favorite phones.

Still undecided or need a little more guidance? Well, if that's you, then read on for CNET's expert advice on how to buy the nest cell phone for you.

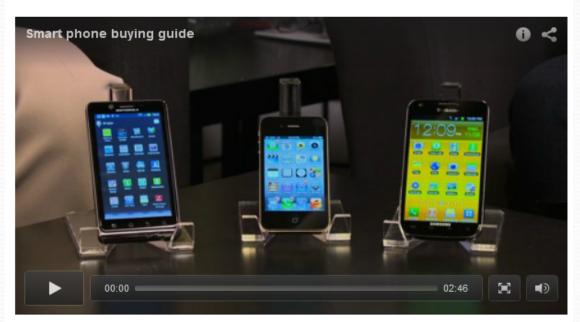
Consumer Reports

- Some free reports
- Buyers Guide
 - Cell phones
- Subscription available for additional information
 - So much free info available, not recommended



Cell phone & service buying guide

Last updated: May 2013



Christopher & Dana Reeve Foundation

www.christopherreeve.org

- The Reeve Foundation's Paralysis Resource Center (PRC)
 - Promotes the health and well-being of people living with a spinal cord injury
 - Provides comprehensive information, resources and referral services.
- Paralysis Resource Center
 - Assistive technology
 - 2012 Apps Guide for Individuals Living with Paralysis

- HOME
- ABOUT US
- RESEARCH
- NEURORECOVERY NETWORK
- QUALITY OF LIFE **GRANTS**
- CENTER

Ask Our Experts Newly Paralyzed Basic Conditions A to Z Paralysis and Its Impact Living a Healthy Life

- Active Lifestyles Rights and Benefits
- Caregivers Children and Teens with Paralysis

- Cars and Driving
- Computers
- Wheelchairs, Positioning

2012 Gift Guide 2012 Best Apps

Outreach

Paralysis Facts &

Find Resources in Your Area

Borrow from Our Lending Library

Peer and Family Support Program

Free Paralysis Resource Guide

Free Children's Book

Paralysis Resource Center

Home > Paralysis Resource Center > Living a Healthy Life > Assistive Technology

Assistive Technology



2012 Apps Guide for Individuals Living with Paralysis

The list is constructed from a wide range of apps and includes those that were specifically created for wheelchair users as well as apps that might just improve the quality of life for anyone including people living with paralysis. SEE THE LIST!









ASK OUR EXPERTS:

Send an email

Set up a phone call

Call us

Newly Paralyzed

Paralysis Resource Guide



FREE: a comprehensive information tool for people affected by paralysis and for those who care for them. In English and Spanish. Request your copy. View the English online version right now!

¡Lea la versión electrónica en español ya mismo

2012 BEST APPS FOR INDIVIDUALS LIVING WITH PARALYSIS

Over the past few months our team has searched out and tested Apps for all devices (iPhone, Android, Blackberry, iPad, iPod Touch) to find out which ones most benefit individuals living with paralysis. See our favorites!



CARS AND DRIVING

A look at the many ways to adapt a car or truck so people with limited body function can drive. Read more.

COMPUTERS

Adaptive gear includes the huge array of products to help people with disabilities use computers. Read more.



HOME MODIFICATION



Information and resources to adapt one's living or working space to accommodate the needs of all users. Read more.

WHEELCHAIRS, SEATING, POSITIONING



The wheelchair can be a truly liberating device. Read more.

- QUALITY OF LIFE GRANTS
- PARALYSIS RESOURCE CENTER
 - Ask Our Experts
 - Newly Paralyzed
 - Basic Conditions A to Z
 - Paralysis and Its Impact
 - Living a Healthy Life
 - Active Lifestyles
 - Rights and Benefits
 - Caregivers
 - Children and Teens with Paralysis
 - Assistive
 Technology
 - 2012 Gift Guide
 - 2012 Best Apps
 - 2012 Best Apps: In case of emergency
 - 2012 Best Apps: Back to School
 - 2012 Best Apps: Productivity
 - 2012 Best Apps: Games and Entertainment
 - 2012 Best Apps: Well-Being
 - 2012 Best Apps: Travel
 - 2012 Best Apps: Lifestyle
 - 2012 Best Apps: Assistive Technology
 - 2012 Best Apps: Accessories
 - 2012 Best Apps: Smart Phone
 Accessibility
 - Multicultural Outreach
 - Halloween Costumes
 - Paralysis Facts &

2012 Best Apps

Resources

2012 Guide to the Best Apps for Individuals Living with Paralysis by the Reeve Foundation

The Christopher & Dana Reeve Foundation has compiled a list of apps for SmartPhone devices (including iPhone, iPod Touch, iPad, Android, and Blackberry) that benefit people living with paralysis of any kind. The list is constructed from a wide range of apps and includes those that were specifically created for wheelchair users as well as apps that might just improve the quality of life for anyone including people living with paralysis.



Read more about accessibility and your smartphone.



Accessories



Assistive Technology



Back to School



Games & Entertainment



In Case of Emergency



Lifestyle



Productivity



Travel



Well-Being

You Tube comparisons



iPhone 5 (Siri) vs (Svoice) Samsung Galaxy S3 Voice Assitant

by thereviewroom • 7 months ago • 88,915 views

We use three difficult phrases to see how well Apple's Siri on the iPhone 5, and Samsungs S Voice on the Samsung Galaxy S3 ...



iPhone 4S Siri vs. Samsung Galaxy S3 S Voice

by CHRISVOSS . 8 months ago . 6,991 views

iPhone 4S Siri vs. Samsung Galaxy S3 S Voice Comparison Review http://amzn.to/VszKKD ...

HD



Siri vs S-Voice | Apple iPhone 5 and Samsung Galaxy SIII | FACE OFF!!!

by AAReviewer . 6 months ago . 2,116 views

Comparison between Samsung's S Voice on the Galaxy S3 and Apple's Siri on the new iPhone 5...

HD



iPhone 5 (Siri) vs Galaxy S III (S Voice)

by SoldierKnowsBest • 7 months ago • 512,425 views

Other places I hang out: FaceBook Fan Page: http://goo.gl/pZsjC Twitter: http://twitter.com/soldierknowbest Instagram: markwatson ...

HD



Jelly Bean Samsung Galaxy S3 (Google Voice) vs (Siri) iPhone 5

by thereviewroom • 7 months ago • 76,078 views

It's time to test both Google Voice for the Galaxy S3 and Siri on the iPhone 5 especially now that we have updated our Samsung ...

HD



iPhone 4S Siri vs Samsung Galaxy S Voice - Which Is best ?

by KuzzNshazziie . 11 months ago . 16,532 views

iPhone's Siri vs Samsung's S Voice!! KuzzNshazziie / KFX have the full copyrights to use this video. S Voice is a intelligent ...

HD

Things to Consider...

- Screen Size: Key Board Size
- Home key: location and pressure needed to activate
- Holding your phone: Mounting system?
- Need for styluses or mouth sticks?
- Voice Access: Which phone features & apps is it compatible with?
- Bluetooth Access vs. Speaker Phone
- What accessibility Apps are compatible with your phone?



Home keys

I phone

HTC One

Samsung S₃







Holding your phone

Mounting Systems







Lanyard





Mounting Systems: Things to Consider

3 components

- Device holder
- Arm
 - How adjustable do you need it to be?
 - The more options, the more \$
- Base
 - Do you need additional hardware on your w/c to mount the system to?



Website Resources

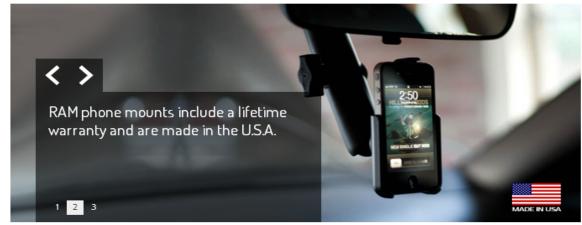
- www.quadadapt.com/adaptive_solutions.html
 - Smart phone holder and mount \$189
- http://www.wheelchairs.com/devicemounts.htm
 - Ipad and Iphone mounts \$96
- www.rammounts.com
 - Various holders (tablets, phones, etc) \$56-\$200

Products Antenna Mounts Apple Mounts AQUA BOX® ATV Mounts Aviation Mounts Bicycle Mounts Camera Mounts Components Console Mounts **Docking Stations** Drink Cup Mounts Fishing Rod Holders Golf Mounts GPS Mounts iPad/iPhone/iPod Mounts Kayak Mounts Laptop Mounts Law Enforcement Mounts Lift Truck Mounts Marine Electronic Mounts Mobile Handheld PC Mounts Motorcycle Mounts Phone Mounts Printer Mounts Radio Mounts Suction Cup Mounts Tablet Mounts Vehicle Mounts X-Grip™ Mounts

Products I Phone Mounts

RAM Phone Mount





RAM Mounting Solutions for all Cell and Smartphones

No matter where you go, you probably take your phone with you. And did you know RAM has mounts for all cell phone and smartphones? Simple to use and install, kits are available for boats, cars, motorcycles, and more. These durable and sleek looking mounts are universal in application, built in AMERICA, and are backed by a LIFETIME WARRANTY. If it is not in your pocket, it should be in a RAM Mount.

Phone Mount Wizard: How to Build Your Phone Mount

[Step 1: Select Device] *Required

The resulting cradle or adapter will attach to you're the double socket arm; this chosen in Step 2.

[Step 2: Finish & Select Arm Length] *Required

Select either black or chrome finish. Select from a short, medium or long double socket

[Step 3: Select Base] *Required

The base attaches directly to the double socket arm; this chosen in Step 2.

[Accessories] *Optional

Add a locking knob to secure mount, big screen magnifier or quick release adapter.

Need help building your phone mount?

Step 1 - Select Device 2

Mounting Gallery





X-Grip Holder with iPhone on Motorcycle

RAM iPhone Airplane/Car Mount

◆ PREVIOUS



Select Make SELECT...



Total: \$0.00
ADD TO CART

How to Build Your Phone Mount



[Step 1: Select Device] The resulting cradle or adapter will attach to the cradle and arm selected in Step 2.

[Step 2: Finish & Select Arm Length] Select either black or chrome finish. Select a short, medium or long double socket arm. For cradles which require a RAM ball adapter, this will be included in the solution. The adapter attaches to the cradle selected in Step 1.

[Step 3: Select Base] The wizard will provide the appropriate mounting base, depending on the mounting location. The base attaches to the double socket arm selected in Step 2.

[Accessories] Add a locking knob to secure mount, quick release adapter or big screen magnifier. Accessories are optional and are not required to complete your mount.

Select:

Note: The select box must be checked for Step 1, Step 2 and Step 3 to complete your phone mount.



Styluses & Mouth Sticks

Are they **capacitive**?





Farady Caduceus - \$20 - iFaraday SALT



Ipad Flex Stylus (\$40) Ipad Strap stylus



iPad Mouthstick Stylus (\$40.00)



Sticky back aluminum foil to make standard mouth stick capacitive

Leading Smartphones

- Apple
 - Iphone 5
- Samsung
 - Galaxy S₃
 - Galaxy S4



- HTC windows
 - One

Samsung galaxy 3



Samsung galaxy 4

Pros

- Multiple carriers
- Eye gaze stand by disables screen time out when looking at screen
- Voice command answer/end calls
- Text by voice S-voice

Cons

- Accuracy
- Support
- Wake up
- Mouthstick/stylus needed
- Less durable then other brands

Pros

- Multiple carriers
- Text by voice S-voice
- IR blaster can control TV
- Swipe to answer phone gesture, no touch needed
- Eye movements to pause video
- 5" screen

- Dimmer screen then competitors
- Lots of features = can be confusing and longer to learn to use
- Price
- Less durable then other brands



Apple Phone

Pros

- Voice commands & voice to text virtual assistant (Siri)
- Multiple carriers
- Light weight
- User friendly simpler set up/options

Cons

- Sprint and Verizon models can't use voice and data simultaneously
- Smaller screen size 4"



HTC One

- Android Phone
- Pros
 - Large, 4.7" screen
 - 2 speakers for improved speaker phone use
 - IR blaster for TV control

- Not available on Verizon
- IR blaster needs HTC sense TV app & HTC TV software

Nokia Lumia 920



• Windows phone

Pros

- Highly sensitive screen can use with a glove or finger nail
- Voice to text
- Large screen: 5.1"
- Wireless charging

Cons

- Heavy & with slippery finish = harder to hold
- Not good for voice dictation*
- Small side home key

BlackBerry Q10



Pros

large keyboard buttons

- small screen
- Large learning curve
- Poor app selection
- Physical keyboard
- Need to press button to activate voice command



TABLETS



Pros

- Combines tablet & phone comes with stylus
- Large screen 5.5"
- S-voice

Galaxy Note 2

Multiple customizable options

- Hiccups in stylus & apps
- High price
- Highly reflective screen
- Lots of options complex

- Large Screen size
- Blue tooth compatibility
- Screen Standby Home key button
- Voice Access?
- Making calls?
 - Skype, Face Time, Talkatone*
- USB access?
 - Surface Pro

Apps

Geared towards hands free driving

Dragon Dictate

- Optimized for iphones (free)
- Hands free typing, but requires some touch/tap for screen access

Flex T9

- Android (\$4.99)
- offers multimodal keyboard access to input information into the phone choose to speak, trace, tap, or write

Vlingo

 Ability to send and respond to messages, make calls and get directions using only voice commands

Sonalight Text by Voice

- Android & HTC
- Call and text by voice allows other apps to run in the back ground
- Wakes up the phone from stand by mode





More Apps...

Dragon Go!

- Iphone & android
- Searches websites, but requires some touch/tap for screen access

Medlert911

- Can set up single emergency button to notify selected family/friends/doctors to be call notified while you call 911.
- Optimized for iphone (free download)
- Speak to it (personal assistant)
 - Android & Windows (\$20/year, free download)
 - Can voice enable apps and perform speech to text
- OTs with Apps blog: http://otswithapps.com



Bluetooth



Geared towards hands free driving

- Things to consider:
 - "Wake up" button size or voice only?
 - What do you want to be able to do?
 - What design works best for you?
 - Head set vs. ear piece vs. speaker phone
 - Multipoint pairing allows to connect to multiple devices
 - Voice control capability will be limited by the built in voice control on your phone
 - Does it have it's own voice dialing system?

Blue Tooth

- BlueAnt S4 (\$99)
 - Allows you to launch voice access totally hand free
 - Place/receive calls & speech to text
 - "What can I say?" feature
 - Only allows one command at a time.
 - Does not have it's own voice dialer, so relies on the phone

Saje

- EasyBlue (\$299)
 - Switch Enabled
 - Does not pair well with all phones
- Saje OfficeMate (\$499)
 - Allows you to switch between your cellphone and computer
- Saje Zoomate
 - A switch activated speaker phone





Computer Access



Computer Access

- Voice
 - Dragon Naturally Speaking
 - Windows Speech Recognition
- Adaptive mice
 - Hand operated
 - Mouth operated
 - Mouse emulators





Voice Access

- Windows
 - http>//www.microsoft.com/enable/products/windowsvista/speech.aspx
 - Demo, tutorials
 - Windows 7, 8, Vista

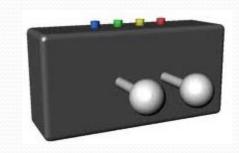
Dragon Naturally Speaking

- Latest version Dragon 12
- Amazon.com \$55.88 (5/7/20213)

Mouse options

- Mouth operated
 - Quad joy
 - Jouse 2
 - Tetra Mouse





- Hand operated
 - Track ball
 - Ergo
 - Big boy



• *Eye gaze systems and Smart Nav type systems are also available but will not be covered today.

Mouse emulators

- Access through the joystick and buttons on your w/c
 - Permobile chairs
 - Bluetooth connection
 - \$830
 - Invacare chairs
 - Dongle
 - Approx \$800

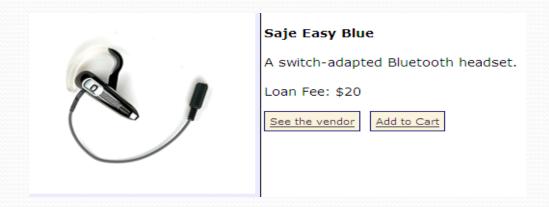


Washington Assistive Technology Act Program (WATAP) www.watap.org

- Device Demos and Device Borrowing
 - Computer access equipment
 - Environmental Adaptations
 - Mobility, Seating, Positioning
 - Daily living
 - Landline voice access phones
 - S4 Blue Ant
- Get AT: Partnered with WAF (Washington Access Funds)
 - Provides low interest financing for AT equipment
- Education and other services
 - Webinars
 - Device demonstration and lending

WATAP

Device borrowing





IHealth Blood Pressue Dock

IHealth records your Systolic/diastolic, heart rate, measure time, and pulse wave graph. You can also E-mail your doctor or other medical professional as part of an analysis of your health.

Loan Fee: \$10

See the vendor

Add to Cart



Illuminated Big Button Universal TV Remote Control

Extra large buttons have big, readable characters. Lighted buttons are very large and light up at the touch of any button.

Loan Fee: no cost

See the vendor

Add to Cart



Jitterbug cell phone - DEMO ONLY

Jitterbug has EasyDial keypad and easy to see screen. Other features include powerful speaker, no complicated menus or confusing icons. Live, 24-hour Jitterbug Operators greet you by name and update your Phone Book. Plans start at just \$14.99 per month.

Loan Fee: demo only

See the vendor

Add to Cart



Jouse 2

An advanced joystick-operated USB mouse that is controlled with your mouth.

Loan Fee: \$30

See the vendor

Add to Cart



Kensington Expert Mouse

Designed for PCs and Mac's, the new Expert Mouse employs Kensington's Diamond Eye optical technology for smooth, precise cursor movement. Trackball is very accurate, and comfortable to use.

Loan Fee: \$10

See the vendor

Add to Cart



Kensington Expert Mouse Pro

Designed for PCs and Mac's, the new Expert Mouse employs Kensington's Diamond Eye optical technology for smooth, precise cursor movement. Trackball is very accurate, and comfortable to use.

Loan Fee: \$10

See the vendor

Add to Cart



Infogrip BigTrack Trackball

A 3 inch trackball makes it the largest trackball available. The trackball helps to make mouse movements easy and accurate. The oversized buttons make mouse clicks simple for those with poor motor control. Easy to install and works on any Windows or Macintosh computer.

Loan Fee: \$20

See the vendor

Add to Cart



Quad Joy

The QuadJoy, an orally-controlled Mouse, is an alternative to the hand-controlled Mouse. QuadJoy enables people with limited or no hand mobility to operate their computers.

Loan Fee: \$20

See the vendor

Add to Cart



RJ Cooper Mini Port Switches

Mini-SwitchPort provides 2 inputs to plug switches into a computer using USB. When plugged into a the jacks the switches become standard mouse-clicks. With installation of the accompanying Switchhopper software you can configure each button to be any mouse-button event or keystroke.

Loan Fee: \$20

See the vendor

Add to Cart



IScan-MP3

Control your iPod with single switch scanning. Plug in simple switch to activate scanning through all the iPod functions. Scanning speed is adjustable. Works with iPod classic with a 30 pin connection. **Loan does not include iPod.

Loan Fee: \$20

See the vendor

Add to Cart

Mounting options

- Laptop mounts
 - Adjustable
 - Portable
 - Fairly easily attaches to multiple surfaces (bed rail and table)
- Table top mounts
 - May make it easier to access
- Portable Tray Tables
 - Height adjustable
 - Base configuration
- Work stations
 - Portable versus stationary
 - Variable adjustability (height/length/tilt options)

Lap top mount

http://www.quadadapt.com/catalog/item/6504032/9354638.htm

- •\$419.00
- •Accommodates 10" to 16" wide laptops
- •Maximum weight of laptop should be 7 lbs

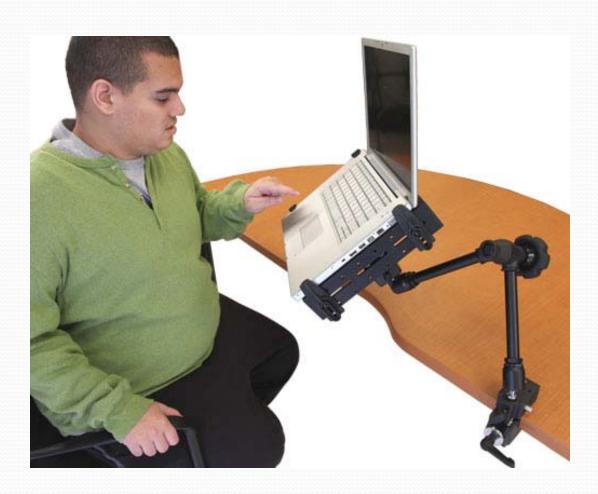


Table top mounts

Evo 5507 \$393

 $http://store.tradeshow direct.com/EVO_5507_T_Laptop_Mount_p/monitor\%20mount\%20evo\%205507-tlaptop.htm$





Flat screen arm monitor \$292 http://www.populasfurniture.com/accessory/flat-screen-monitor-arm/ 1800 957-2720

Portable Tray tables

http://www.amazon.com/LAPTOP-COMPUTER-NOTEBOOK-TABLE-MOBILE/dp/B004NB7G22



Drive Medical 1300 Deluxe Pivot and Tilt Over bed Table \$77

http://www.google.com/products/catalog?q=Drive+Medical+pivot+and+tilt+overbed+table&hl=en&cid=4612181629606651621&ei=oRWjT-3wG43oigTliuzNCg&ved=0CAcQ8wlwAA#p



New Adjustable Sofa Food Tray Rolling Hospital Over Bed Laptop Table TV \$83.70

http://www.amazon.com/Adjustable-Rolling-Hospital-Laptop-Table/dp/B009HF3V5A/ref=pd_sim_sbs_hpc_6





www.populasfurniture.com

\$373 Adjustable height: 23-33 inches \$431Tilt top: 0-50 degrees

\$17 add casters





www.hertzfurniture.com

\$519 Height adjustable 24-32 inches Length 72 inches

\$389 Height adjustable 24-32 inches Length 36 inches





Conclusion

- World of AT smart phones and computers is ever changing.
- Use community resources when you need help.
- Keep in mind no system is perfect or fool proof.
- Make sure the person helping you understands your goals with the device.