LINKSYS® by Cisco





Wireless Home Audio Director

Wireless-N Music Player with Integrated Amplifier DMC250

User Guide

About This Guide

Icon Descriptions

While reading through the User Guide you may see various icons that call attention to specific items. Below is a description of these icons:



NOTE: This check mark indicates that there is a note of interest and is something that you should pay special attention to while using the product.



WARNING: This exclamation point indicates that there is a caution or warning and it is something that could damage your property or product.



WEB: This globe icon indicates a noteworthy website address or e-mail address.

Online Resources

Website addresses in this document are listed without **http://** in front of the address because most current web browsers do not require it. If you use an older web browser, you may have to add **http://** in front of the web address.

| Resource | Website |
|-----------------------|-------------------------------|
| Linksys | www.linksys.com |
| Linksys International | www.linksys.com/international |
| Glossary | www.linksys.com/glossary |
| Network Security | www.linksys.com/security |
| Support | www.linksys.com/support |

Copyright and Trademarks



iliili CISCO Linksys, Cisco and the Cisco Logo are registered trademarks or trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Copyright © 2008 Cisco Systems, Inc. All rights reserved. Other brands and product names are trademarks or registered trademarks of their respective holders.

Important Safety Instructions

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. The socket-outlet shall be installed near the equipment and shall be easily accessible.



WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Table of Contents

| About This Guide | Ì |
|---|-----------|
| Important Safety Instructions | İ |
| Wireless Home Audio Product Family | 1 |
| Fill Your Home With Music Conductor (DMC350) | 1 2 2 2 3 |
| Other Great Linksys Products | |
| Product Overview - Director | 5 |
| Before You Begin | 5 |
| Product Placement | 7 |
| Speaker Guidelines | 7 |
| IR Remote Control Functions | 8 |
| User Interface Carousel | 9 |
| Lists | 9 |
| Setting Up Your Director 1 | 2 |
| Setup with LELA | 12 |

| Com | imon Uses | 16 |
|------|--|-----|
| P | aying Music From Different Sources | .16 |
| | iPod and iTunes | .16 |
| | Generic MP3 Player | .16 |
| | USB Drive | .16 |
| | Computer | |
| | Rhapsody | |
| | RadioTime | |
| | Stereo System | |
| | nding Music | |
| M | anaging Music Libraries | |
| | Creating Playlists | |
| | Creating and Using Favorites | |
| | Presets | |
| | sing the Queue | |
| | sing Online Services | |
| Р | layback Controls and Options | |
| | Playing to Multiple Rooms | |
| | Party Mode | |
| | Playback Controls | |
| | Playback Settings | |
| | Controlling Other Devices on the Network | |
| _ | Volume Control | |
| | ower On/Off and Standby Modes | |
| U | sing the PC Application | .17 |
| Navi | gating the User Interface | 18 |
| Н | ome Screen | .18 |
| R | hapsody | .18 |
| | My Library | |
| | Search | |
| | Channels | |
| | Playlist | |
| | Browsing and Content Playback | |
| N | y Music | |
| | Artists | |
| | Albums | |
| | Genres | |
| | Queue | |
| _ | Browse Folders | |
| | evices | |
| S | ource | .20 |

| Analog Source In | .20 |
|---|-------------|
| Finding Content in a Library on the Network | .20 |
| Other Libraries | .20 |
| RadioTime | |
| Browsing and Playback from RadioTime | |
| Favorites | |
| Now Playing | |
| Settings | |
| Play To | |
| Network | |
| Brightness | |
| Audio | |
| USB | .23 |
| About | .24 |
| Rhapsody | 25 |
| Signup | •25 |
| RadioTime | 26 |
| Browsing and Playback from RadioTime | •26 |
| Troubleshooting | 27 |
| Specifications | 28 |
| Warranty Information | 29 |
| Limited Warranty | .29 |
| Exclusions and Limitations | |
| Obtaining Warranty Service | |
| Technical Support | |
| Regulatory Information | 31 |
| Safety Warning Statement | •31 |
| California Lead Warning Statement | .31 |
| FCC RF Exposure Statement | . 31 |
| Canadian RF Exposure Statement | •31 |
| Avis d'Industrie Canada concernant l'exposition aux radiofréquences | •31 |
| Australian RF Exposure Statement | •31 |
| Approved Antenna Information | . 31 |
| FCC Part15 Class B Statement | . 31 |
| FCC Caution | . 31 |
| IC Class B Statement (Canada) | •32 |
| Règlement de la classe B d'Industrie Canada | 2- |

| CE – Marking | |
|--|----|
| EU Declaration of conformity (DOC) | |
| R&TTE Declaration of Conformity | |
| Alert sign! Follows CE marking | 33 |
| NB-Identification number (if there is any) | 33 |
| National Restrictions | |
| Third-Party Software or Firmware | 35 |
| Technical Documents on www.linksysbycisco.com/international \dots | 35 |
| User Information for Consumer Products Covered by EU Directive 2002/ Waste Electric and Electronic Equipment (WEEE) | |
| Software License Agreement | 40 |
| Software in Linksys Products | |
| Software in Linksys Floudets | |
| Software Licenses | 40 |
| · | |
| Software Licenses | 40 |
| Software Licenses | 40 |
| Software Licenses | 40 |

Wireless Home Audio Product Family

Fill Your Home With Music

Let your music play all around your home. Enjoy different songs in different rooms at the same time – or the same one everywhere in Party Mode. This entertainment breakthrough is designed to let you stream, play and control your digital music via your home wireless network. The Wireless Home Audio family of devices is designed to work with your existing system to make it easy to customize complete home-filling music experiences. However you listen, you can configure a Wireless Home Audio setup perfectly suited to your space, tastes, and existing equipment. Set up in minutes – no drilling, no stringing wires.

Believe your ears. Breakthrough technology from the world leaders in networking designed to work with your home wireless network to stream audio signals without compressing or clipping, so your music sounds just as rich, crisp and full as the original CD. The technology also works to synchronize all of your Wireless Home Audio devices, to help eliminate echo effects when you're playing the same music in different locations at the same time. Your home never sounded so good.



Wireless Home Audio Product Family

Conductor (DMC350)



Experience your music all around your home – sounding great and at your control, without wires. With built-in speakers, CD player, and color touch control screen, the Conductor – Wireless-N Digital Music Center is designed to let you play and command your digital music wherever you want in your home. And, as part of the Linksys by Cisco Wireless Home Audio family, it can become part of your complete, customized full-home music experience.

The stylish Conductor is an all-in-one Wireless-N music center that is designed to receive and play digital music streams over your wireless network through its built-in speakers and 50-watt amplifier. It includes a CD-player if you want to simply pop in a disc. Light and easily portable so you can move it wherever you want your music to play: good in the garage, perfect for the patio, cool for the kitchen.

The intuitive 3.5-inch color touchscreen interface is designed to give you full and simple fingertip control over your listening experience. Search your music, create playlists, set up and play music in different rooms. Accesses your musical libraries on your networked PCs or storage devices, or millions of songs online through Rhapsody (30-day free trial included). Accommodates optional Docking Station for iPod, so you can access your playlists and tunes.

Director (DMC250)



The Director – Wireless-N Music Player is designed to enable any sound system or speakers to play your digital music. And, as part of the Linksys by Cisco Wireless Home Audio family, it can become part of your complete, customized full-home music experience.

Connect the Director to your existing audio system and enjoy digital music in excellent quality. It's a great way to give your Home Theater or high-end sound systems the ability to access and play your digital music library without wires. Or build a wireless system from scratch. With its built-in 50-watt per channel amplifier, the Director can power any stand-alone speakers. Pair it with your high-end speaker towers, or the Linksys by Cisco Stereo Speaker Kit (optional). With its compact design and elegant styling, the Director fits and looks great in any room.

Player (DMP100)



The Player – Wireless-N Music Extender is designed to enable any sound system or powered speakers to play your digital sound. And, as part of the Linksys by Cisco Wireless Home Audio family, it can become part of your complete, customized full-home music experience.

Free your sound systems to play your digital music without wires. This convenient, compact extender is designed to fit with your systems wherever they live and connect them to your wireless home network. A great way to enhance your home theater setup, premium audio configuration, office bookshelf unit, or any other way you're currently enjoying music. Connect a player to each one and enjoy a multiroom music experience. Includes Infrared remote control.

Wi-Fi Remote (DMRW1000)



The crowning touch of your Wireless Home Audio experience, the Controller - Wireless-N Touchscreen Remote is designed to give you complete, colorful atatouch command of your entire Linksys by Cisco Wireless Home system, from any room in your house. Wireless Home Audio: the fun, easy way to let your music play, all around your home.

The sleek, stylish Wi-Fi Controller puts complete command of your Wireless Home Audio system in the palm of your hand. Large, color touchscreen, thumbwheel, and engaging interface is designed to let you easily control any one or every one of your Wireless Home Audio devices, from anywhere in your home, even when they're out of sight. Select listening sources, create and control listening zones and cue lists, browse and find playlists or individual songs, and more. Wireless Home Audio frees your music; the Controller frees you.

Docking Station for iPod® (MCCI40)



Add your iPod to your wireless music experience and enjoy your portable music all around your home. The Docking Station for iPod is designed to let you integrate and control your iPod with your Linksys by Cisco Wireless Home Audio system. Wireless Home Audio: the fun, easy way to let your digital music out to play.

Your iPod is a key part of how you enjoy your music. Now it can be a part of your Wireless Home Audio listening experience. This wired accessory makes it a snap to connect your iPod to a Linksys by Cisco Director or Conductor. Control the iPod from the Director, the Conductor, or with either the IR Remote or Wi-Fi Controller. Share your favorite tunes and playlists, advance tracks, adjust volume on each Wireless Home Audio device in your home. It even recharges docked iPods. Perfect for when friends drop by and want to include their iPods in the wireless fun. Includes adapters for most common iPod types. If you think this sounds like a great idea for a party, you're right!

Speakers (DMSPK50)



The Stereo Speaker Kit is designed to compliment the Director - Wireless-N Music Player. Pair them to create a complete, high-quality wireless sound system and experience your digital music all around your home, sounding great and at your control. Wireless Home Audio: the fun, easy way to let your digital music out to play.

These elegantly designed, high-performance vented stereo bookshelf speakers are tuned and optimized to deliver excellent music reproduction. When connected to the Director Wireless-N Music Player, they create a quality wireless audio system which you can place wherever you want in your home.

Other Great Linksys Products

There are many other great Linksys products that integrate perfectly with your Wireless Home Audio products.

Media Hub Home Entertainment Storage (NMH 300 and 400 Series)

Conveniently access and stream your media from a versatile, high-performance storage hub. Multi-stream capability lets you enjoy different media at the same time: watch a movie while your kids listen to music and your spouse browses photos. Elegant Web-based interface makes it simple to browse your media. Intelligent aggregation automatically finds, copies and organizes media from all the UPnP devices on your network -- even collecting songs from the same CD stored in different places into one virtual album.

Wireless-N Gigabit Router (WRT310N)

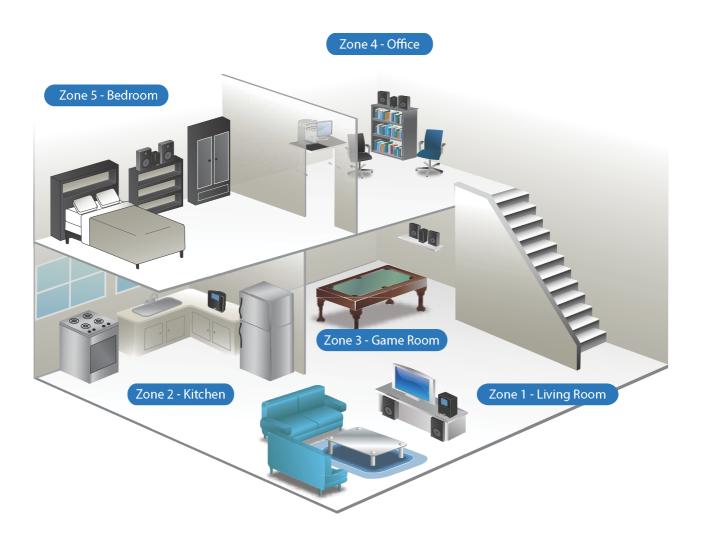
Connect everybody in your home at once without wires. Teaming the power of today's most advanced wireless N networking technology standard with Gigabit-speed ports, the Wireless-N Gigabit Router delivers excellent performance for media-intensive activities and running multiple applications simultaneously. Easy to use and setup; includes Mac setup wizard.

Simultaneous Dual-N Band Wireless Router (WRT610N)

Built for speed – optimized for media. Music, movies, gaming: whatever you're into, the Simultaneous Dual-N Band Wireless Router delivers double the bandwidth and media-optimized performance so you can enjoy it more smoothly, with less lag, all around your home. Easy to use and setup; includes Mac setup wizard.

Sample Home Configuration

Click on the image below to launch an interactive Flash version of a Wireless Home Audio configuration. Place the cursor over a device to zoom in and obtain details.



Product Overview - Director

Before You Begin

This User Guide is intended to provide details on the product hardware, user interface, and use of the product. For initial installation instructions, please refer to the Quick Installation Guide included with your product.

Features

- 50W RMS amplifier
- 3.5 inch LCD Color Screen
- Tos-Link, SPDIF, RCA and 3.5mm Audio Outputs
- Sub-woofer output
- Draft N Wireless
- Wired Speaker Interface
- Internal Power supply
- Internal Antenna's
- · Controlled by either DMWR1000 or IR RCU
- Docking Station for iPod interface (Docking Station for iPod, MCCI40 is an optional accessory)
- Optional Speakers
- May be streamed in PCM, MP3, or FLAC
- Lossless formats (FLAC lossless)
- Uncompressed formats: (AIFF, WAV, PCM)
- Compressed formats: (MP3, AAC, AAC+, Ogg Vorbis, MP2, Real, WMA).
- DLNA 1.5 and UpNP compliant and certified
- Plug and play simplicity when used with other Linksys A/V products and routers.

Front Panel

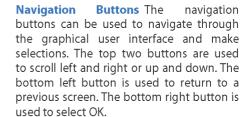




Power (Blue/Orange) The Power LED lights flashes blue while the device is powering up and connecting to the network. It will remain solid blue once the device is connected to the network. When the device is in standby mode, the LED will appear orange. If the LED is red, there is an issue with the device.



Volume The volume slider rotates clockwise to increase the volume and counter clockwise to lower the volume.



Back Panel





Power Switch The Power Switch must be in the ON position before the device will power on.



Power Connector The Power connector is where you will connect the power cord.



Wi-Fi Protected Setup Button The Wi-Fi protected setup button is used to connect to a router that has the Wi-Fi Protected Setup feature. It provides a simple method of connecting to your network and configuring your network security settings using a push button or PIN method.



S/PDIF Jack The S/PDIF jack provides an output connector for a digital optical cable to deliver digital audio.



Ethernet The Ethernet port connects the Director to your router or switch.



Headphone A standard stereo mini headphone jack.



iPod Dock Port This connector attaches an iPod to the Director using the optional Docking Station for iPod (MCC-140).



USB Port The USB port can be used to attach an external storage device to the Director.



Speaker Out This is where the speakers connect to the Director.



Audio In Standard analog RCA left and right jacks used to deliver audio to the Director from external sources. This input functions as a standard auxilliary input and is controlled on the external device. Some examples of devices that could deliver audio to the Director would be MP3 players, DVD players, televisions, VCRs, or gaming consoles.



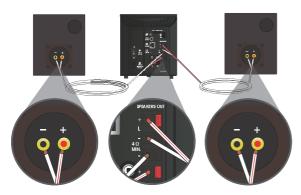
Audio Out Standard analog RCA left and right jacks used to deliver audio from the Director to an external device. This connection can be used to connect the Director to an external receiver.



Subwoofer Out Standard analog RCA output for connection to a subwoofer.

Product Placement

Speaker Guidelines



Speaaker Connections

USB Devices

iPod Dock

Connecting Your Existing Stereo Equipment

IR Remote Control Functions



Infrared Lens/LED This is the area that transmits the remote functions to the device. For optimal use, point the remote directly at the device.



Power/ Standby Toggles between Power On and Standby for your Conductor, Director, or Player.



Up Moves up in a list menu.

Down Moves down in a list menu.

Left Moves left in the carousel menu.

Right/Options Moves right in the carousel menu. It is also used to access additional options in the user interface on your Conductor or Director.



OK Selects and opens items that are highlighted in the user interface. In the Song menu, clicking OK will play that song.



Back Returns to the previous screen.



Home Press this button once from the Home menu or twice from any other menu to go to the Now Playing screensaver.



Add to Now Playing Queue When music is highlighted (Genre, Playlists, Artist, Album, or Song), the selected item will be added to the queue on the Now Playing screen. The queued item will be added to the bottom of the queue and will not begin playing even if it is the only item in the queue.



Previous Press this to play the previous track in the queue.



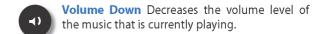
Play/Pause This button toggles between playback and a paused state. If nothing is playing, pressing this button when music is selected starts playback of the selected music.

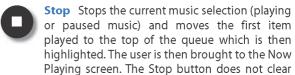


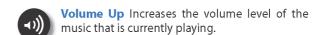
NOTE: You can not pause streaming Internet music.



Next Plays the next song in the queue.

















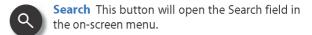
the queue.



Alpha-Numeric Keypad/ Presets Numeric Keypad is the default mode. In Search and Setup modes, the keypad can be used for text entry similar to cell phones without a full keyboard, including numbers, letters and symbols. To begin playing a preset, press the Favorites button and then press the number that you selected for the preset.







Click on this page to launch an interactive overview of the remote control functions.



User Interface

Carousel



Navigating the Carousel



Using the Controller to navigate through the carousel, there are multiple ways to achieve the same result:

- Rotate the scroll left or right and press the center of the Scroll/5-Way Button to select an option.
- Use the left and right buttons on the Scroll/5-Way button and press the center to select an option.
- Press the left and right arrows on the touchscreen to navigate and press directly on an icon to select it.



NOTE: Pressing up on the Controller Scroll/5-Way Button in a carousel menu will open the device control selection window. Pressing down on the Controller Scroll/5-Way Button in a carousel menu displays the Now Playing Queue.



Using the IR Remote to navigate through the carousel, use the left and right buttons to navigate and press OK to select an item.



NOTE: Pressing down on the IR Remote in a carousel menu displays the Now Playing Queue.



Using the buttons on the front of the Director to navigate through a carousel, use the upper left button to move left and the upper right button to move right. The lower left button is used to return to the previous screen and the lower right is used for OK or select.

Lists



Navigating Lists



Using the Controller to navigate through a list, there are multiple ways to achieve the same result:

- Go through the list using the scroll and press the center of the Scroll/5-Way Button to select an option.
- Use the up and down buttons on the Scroll/5-Way button and press the center to select an option.
- Select the option directly on the touchscreen.



NOTE: Pressing right on the Controller Scroll/5-Way Button in a list menu will open the Quick Action menu.



Using the IR Remote to navigate through a list, use the up and down buttons to navigate and press OK to select an item.



NOTE: Pressing right on the IR Remote in a list menu displays the Quick Action menu.



Using the buttons on the front of the Director to navigate through a list, use the upper right button to move down a list and the upper left button to move up a list. The lower left button is used to return to the previous screen and the lower right is used for OK or select.

Action Menus

Action Menus provide quick shortcuts that change depending upon your location in the interface.

Navigating Action Menus



Pressing right on the 5-Way Button/ Scroll from a list menu displays the quick action options. You can select an action directly using the touchscreen or use the Scroll to navigate to the appropriate selection and press the center to select. Below is a list options you will encounter.



NOTE: The Quick Action menu options vary depending upon your location in the interface.



Play To Use this button to select the zones to play the music to.



Add to Favorites Adds the selected items to your list of favorites. You can add tracks, albums, or playlists to your favorites. Once you select this option you will be prompted to assign a favorite position number to the selection. You can press the touchscreen to select a number or scroll and select.



Remove Single Item Removes the item that was last selected before pressing this option.



Clear Now Playing Queue Remove all tracks from the Now Playing Queue.



Shuffle Select this option to randomly shuffle the playback order of the tracks in the Now Playing Queue.



Repeat This option will repeat the tracks in the Now Playing Queue once all of tracks in the queue have been played. To turn repeat off, return to the Quick Action menu and select Repeat off.



Remove All This option removes all currently stored favorites.



Rename Use this to rename a favorite. The touchscreen keyboard will appear and allow you to edit the current name.

Navigating Action Menus



Pressing right on the IR Remote from a list menu displays the quick action options. You can select an action by using the up and down arrows to navigate and pressing OK to select an action. Below is a list actions you will encounter.



NOTE: The Quick Action menu options vary depending upon your location in the interface.



Play To Use this button to select the zones to play the music to.



View Queue Displays the Now Playing Queue.



Add Favorite Adds the selected items to your list of favorites. You can add tracks, albums, or playlists to your favorites. Once you select this option you will be prompted to assign a favorite position number to the selection. You can press the touchscreen to select a number or scroll and select.



Clear Queue Stops the track currently playing and clears it and all other tracks from the Now Playing Queue.



Shuffle Select this option to randomly shuffle the playback order of the tracks in the Now Playing Queue.



Repeat This option will repeat the tracks in the Now Playing Queue once all of tracks in the queue have been played. To turn repeat off, return to the Quick Action menu and select Repeat off.

| ۱۸ | /ire | less | Hο | me | Δп | dio |
|----|------|------|----|----|----|-----|
| | | | | | | |

Setting Up Your Director

Setup with LELA

The Wireless Home Audio Installer will guide you through the setup of your Linksys by Cisco Wireless Home Audio devices. Below is an overview of the steps required to get up and running.

- Install EasyLink Advisor
- Install Cisco Media Center software for your computer
- · Configure your Wireless Home Audio Devices
- Create your Cisco account and register for music services
- 1. To begin, insert the CD into your CD-ROM drive.



2. Click the **Start Setup** button and follow the on-screen prompts to configure your Wireless Home Audio devices.



Setup without LELA

The Director is a key component of the Linksys by Cisco Wireless Home Audio system. The installation process is simplified with the use of the LELA CD-ROM and it is necessary to use LELA to setup your Internet services. If you need to change your network connection type or connect to another network, follow these steps.

Connecting to the Network

1. Navigate to **Settings** and select it.



2. Select Network.



3. Select Connect to Network.



 Select Wired or Wireless to activate the appropriate network connection and continue under the selected section.



Wireless

5. Go to Select Network.



Select the wireless connection to use from the list of available wireless connections.





NOTE: If you've disabled the broadcasting of your wirless network name (SSID) on your router, you can enter it manually by selecting **Enter Network name**.

7. You will either be prompted to select your encryption type or to enter your encryption key or passphrase. Select **Enter Passphrase**.



8. The keypad can be used for text entry similar to cell phones without a full keyboard, including numbers, letters and symbols. You can also enter the characters using the up and down buttons on the remote. The cursor will move to the next prompt automatically after you stop browsing through the characters. Use the left arrow to go back a space. Press the **OK** button on the screen after you've entered the appropriate passphrase.



NOTE: The passphrase is case sensitive. To use uppercase, numeric or special characters you must cycle through the characters. It is easier to do this from the numeric keypad but you can also use the up and down buttons.