

Bushnell®

IMAGE VIEW



Instruction Manual

Model #: 110833
Lit.#: 98-0917/08-10

Version 2.0

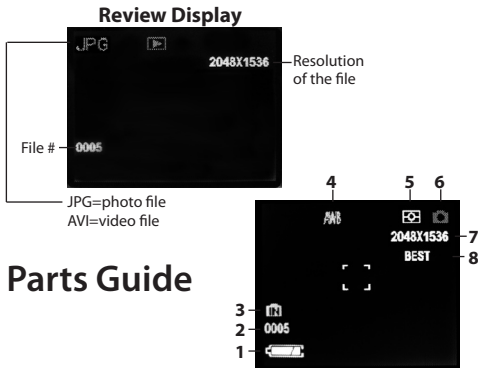
Congratulations on your purchase of the Bushnell® 3.2 MP ImageView™!

Your ImageView “digital binocular” is ideal for all sporting events and nature observation, as it combines a high quality 8 power compact binocular with a versatile digital camera in a single compact unit.

Your Imageview has a dual personality, capable of taking high resolution digital still photos as well as shooting video, with a maximum recording time limited only by the capacity of the memory card you use. The photos and videos are automatically stored in the internal memory, or on an SD card (*optional*), and can be instantly reviewed on the flip-up LCD, or downloaded to your computer without the need to install any special software*.

Before using your new ImageView, please read the instructions contained in this manual and take time to familiarize yourself with the camera’s operation and many special features.

**Compatible OS: Windows 2000, XP, Vista, Windows 7 or Mac OSX.
Windows 98 is not supported.*



Parts Guide

#	Display Icon Guide (Preview Mode)
1	Battery Indicator ("full" battery shown)
2	# of Photos/Videos Left (based on remaining memory)
3	Internal or SD card Memory ("Internal" shown)
4	White Balance Setting ("Auto" shown)
5	Exposure Meter Pattern ("Weighted" shown)
6	Still Photo or Video Mode (Still Photo mode shown)
7	Resolution Setting (in pixels)
8	Quality/File Compression (Best / Better / Standard)

Quick Start Guide

1. The camera is powered by two AAA batteries (not included). Slide the battery cover open (see arrow on cover) and insert batteries, using the polarity marks inside for reference. A battery indicator on the lower left corner of the display indicates remaining power.
2. The camera has 16 MB of internal memory, so you can take photos anytime without using a card. To be able to take more photos without having to stop and download them frequently, you may use SD cards (not MMC cards) up to 32 GB capacity. Insert a new SD card ("upside down" with metal contacts facing up) in the slot. The card will click into place. Push the card in slightly to release and remove it. Turn off the camera's power before inserting or removing a card. Cards that have been previously used in other devices should be formatted by the camera before taking photos (see *"Review Mode": Format*)
3. Pull the LCD display up to viewing position, by grasping the indented areas on each side. Briefly press the **POWER** button. The red power LED will turn on, and the LCD will display a "Bushnell" logo, then go to black (to conserve battery life). Press the **Display** button to turn the LCD back on. Pressing **Display** again will first turn off all screen icons, then turn the entire display off (camera power remains on). The entire camera will automatically turn off after one minute if it has been inactive (no buttons pressed). This can be changed, using the "Auto Off" option in the camera's menu. To turn the camera off manually, briefly press the **POWER** button. The default camera settings will provide optimum quality under most conditions, but you may want to set the date since it will be imprinted on photos by default (you can also turn it off using the menu options).
4. To set the current date and time for imprinting, press **MENU**. Press the **Down** arrow key 7 times to highlight "CLOCK SET", then press **MENU** again. Now set the Year, Month, Date, Hour, and Minute, using the **Up/Down** arrow keys to make changes, and the **Right** key to move to the next field. Once the date & time have been set, press the **MENU** button again. Press the **Down** arrow key once to highlight "DATE STAMP", press **MENU**, then highlight your preference: Month/Day/Year or Year/Month/Day order, or select "OFF" if you don't want to imprint the date on your photos. Press **MENU** to confirm your setting, then keep pressing the down arrow key to highlight "Exit". Press **MENU** again to return to the "live" preview

- display. *Note: you may need to reset the date/time after changing batteries.*
5. To take a still photo, hold the camera steady with both hands and press the **SNAP** button. The camera focus is preset to take sharp photos from approximately 35 feet to “infinity”. To shoot a video, press the right arrow key three times until the red movie camera icon appears at the top right corner of the display (*see below*). You can then start shooting the video at any time by pressing **SNAP**. To stop recording the video, press **SNAP** again. *Note: if the power is turned off, then back on, the camera will return to still photo mode.*
 6. When using a tripod, you can help avoid the effects of camera shake by plugging the supplied remote shutter release into the jack above the SD card slot, and using the button on the remote rather than **SNAP** to take photos.
 7. To review or playback a still photo or video, press the **View** button. You will see the most recent still photo or video (first frame). To review previous photos or videos one at a time, press the **Left** arrow key. The top left corner of the display will indicate “**AVI**” instead of “**JPG**” if the file is a video. The file number is shown on the lower left of the display, and the resolution (of still photos) or length in seconds (for videos) is shown on the right. To play back a video, press the **SNAP** button (press again to stop playback). To see “thumbnail” images of multiple stored photos/videos at once, press the **Display** button. Use the **Left/Right** arrow keys to select an individual file, then press **Display** again to see it full frame. To delete a photo or video, press **MENU**. “DELETE ONE” is the first option in the PLAY menu (only the currently displayed photo/video will be deleted-use “FORMAT” if you want to delete all files from memory). Press **MENU** again, then the **Up** arrow key to highlight OK. Press **MENU** to delete the photo or video, then press **View** to return to the review screen. Press **View** again to switch to the live preview screen when you are ready to take more photos or videos.

Your ImageView is ready to use right away- it is not necessary to “go into the menu” before taking photos. However, your percentage of successful photos (especially under less than ideal conditions) will increase if you read the rest of this manual and understand how to use the available options and settings, as well as the section covering “Downloading the Photos & Videos to Your PC”.

Loading Batteries

Turn the ImageView over, and slide open the battery cover as indicated by the arrow, setting it aside. Insert 2 AAA Alkaline or Lithium batteries into the compartment in the direction indicated by the polarity marks inside, then replace the cover and slide it back into place until it clicks. **Note: Rechargeable NiMh type batteries may also be used, but some may not deliver adequate current to power the ImageView. AAA NiMh batteries with a current rating of 850 mAh or higher are recommended.**



Using the Internal Memory and SD Cards

The camera's 16 MB internal memory can store from a minimum of only 3-4 (at 3264x2440 resolution and Best quality) up to hundreds of photos, depending on resolution and quality settings you choose in the main menu. A "countdown" indicator on the lower left of the display shows the remaining number of photos that the available memory can hold. When no more photos will fit in the available storage, a "Memory Full!" message appears. To expand the available storage, you may add an optional SD (Secure Digital) memory card, with up to 32GB capacity. MMC cards, which look similar to SD cards, are not recommended. The card is inserted into the slot on the back of the camera pod, with the "notched" corner on the left as indicated by the card icon below the slot. Insert the SD card with the label side facing down. **Note: be sure the power is turned off before inserting or removing cards to prevent possible loss of files or damage to the card.** A new card will not require formatting, but a card that has been previously used in other devices (cameras, PDAs, etc) should be formatted by the ImageView before beginning to take photos or videos (see "Format" in the Review Mode section of this manual for details). **Note that formatting will erase all files previously stored on the card, so be sure they have been downloaded or copied first if you wish to keep them.**

Basic Binocular and Camera Setup

Before you begin using it, you'll probably want to take a few moments to set up the ImageView for your individual eyesight and user preferences. Leave the rubber eyecups in their "up" position if you are not wearing glasses, or roll them down if you are. Grasp the left and right sides of the binocular, and pull them apart or push them together while looking through the binocular to adjust the eyepiece spacing until your view is a single circular image. Find a distant object with fine detail (tree, sign, brick wall, etc), and adjust the center focus knob until the object appears sharp when viewed through the left binocular eyepiece only. Then, looking at the same object through just the right side of the binocular, simply rotate the right eyepiece until the image is equally sharp for your right eye. This is called the diopter adjustment, and compensates for any difference in sight between your left and right eyes. Once set during this initial procedure, you can leave the diopter adjustment alone and just use the center focus knob to bring objects at any distance into sharp focus through the binoculars (the minimum focus distance is about 15 feet).

Your digital photos and videos are not affected by the center focus knob, as the camera lens located between the binocular's objective lenses does not require focusing. It is preset so that objects ranging from approximately 50 feet and farther away will be in focus. Note that the binocular is capable of focusing closer than the camera. Check the live preview image on the LCD display to make sure you are far enough away to ensure sharp photos. The camera lens provides 8x magnification, which is the same as the binocular's optics, and is aligned so that an object centered in the binocular's view will also be centered in your photos or videos. Therefore, it is not necessary to have the LCD turned on or even raised while you are shooting photos or videos. Reducing use of the LCD will extend battery life significantly. Pressing the **Display** button will turn the LCD screen off but leave the camera powered on, ready to take photos anytime you press **SNAP**.

You may want to go into the camera's main menu and set the correct date before using the camera for the first time, since the date stamp (imprint) feature is turned on by default (but can be defeated if you wish). Please refer to Step 4 under "Basic Setup" for details.

Taking Still Photos

After following the initial setup as described in the previous pages, you are ready to take a photo:

1. Raise the LCD and press the **POWER** button briefly (red LED lights, Bushnell logo screen appears, then display goes black). Press the **Display** button to turn on the LCD again if you want to see a preview of the “live” image or check menu settings, battery condition, etc via the display icons.
2. The ImageView will default to high resolution and quality settings, as well as “everything on automatic” when it is turned on for the first time, so you can take excellent photos right away. If you prefer to use different settings, refer to the section “Using the Main Menu” for directions regarding how to find and change settings such as resolution and exposure and other options.
3. You may compose your photo while looking through the binocular (the LCD does not need to be on to take a photo). However, for the most accurate framing, checking the LCD preview display is recommended.
4. Be sure you are not closer than approximately 50 feet from your subject. The binocular optics will focus closer than this, but the camera focus is preset to take photos of distant subjects (no focusing is necessary for the camera). The LCD may be used to verify that the subject is not too close for sharp results.
5. Hold the camera as steady as possible with both hands and slowly squeeze the **SNAP** button. The display will “freeze” briefly while the file is stored, then you are ready to take another photo. The 4-digit counter on the lower left will count down to indicate the number of remaining photos as you use up the available internal or card memory. Once the display indicates “Memory Full” when **SNAP** is pressed, you are out of memory (storage space) and should download any photos you wish to keep so they may be deleted, or you may remove the full card and install another SD card.
6. Digital zoom up to 3x is available. Press the **Down** arrow key to zoom in (note the “Wide to Tele” indicator bar at the bottom of the display). Press the **Up** arrow key to zoom back out. No digital zoom is used (optical magnification only) when the W>T zoom indicator bar goes out after you zoom all the way back to the left (“W”).

7. Press the **View** button if you wish to check the photo after you take it, then press it again to return to a live preview.

See the section “Review Mode” section for more detail about reviewing and deleting previously taken photos.

Warning: Use care during handling to avoid touching the camera lens (located front center between the binocular lenses) to prevent degrading the image quality.

Clean the camera lens only with dry lens tissue or microfiber cloth. DO NOT use liquids of any type.

Selecting and Using the Video Mode

1. Follow steps 1-4 on the previous page, “Taking Still Photos”
2. To change from still photo to video mode, press the Right arrow key 3 times, until the movie camera icon is displayed at the top right area of the LCD. You are now in Video Mode. Press **SNAP** to start recording a new video clip, and press it again to stop recording and store the video in memory. The recording time is limited only by the amount of internal or card memory currently available. You may record a single long video until you run out of memory, or multiple shorter videos by stopping and starting recording whenever you wish by pressing **SNAP**. The counter on the right side of the display shows the elapsed time in seconds since the recording was started.
3. Press the **View** button if you wish to check a video after you shoot it. Press the **SNAP** button to begin playback, press it again to stop playback. Press the **Left** arrow key to review your previous video or still photo files. Pressing the Display button will let you see a “thumbnail” review of multiple files-use the arrow keys to highlight the file you wish to review, then press Display again to select and view it. When you are ready to return to the live preview display to shoot more videos (or stills), press the View button.

See the section “Review Mode” for more detail about reviewing and deleting previously taken videos.

Using The Main Menu-Options and Settings

As mentioned earlier in this manual, your ImageView is already set for high resolution and quality right out of the box. Exposure, white balance, and other variables are set automatically. This means that you will get good results for most subjects and lighting without the need to go into the menus and change any settings. However, we recommend that you become familiar with the available options so that you can improve your photos if, for example, you decide they are coming out too dark (common for snow scenes with most cameras), or too green (under many fluorescent lights). Press the **Menu** button to enter the main menu. Use **Down** or **Up** arrow keys to highlight an option within the menu, then press **MENU** if you wish to change the settings for that option. Use the **Left/Right** arrow keys to select the setting you want, then press **MENU** to confirm this setting. The main menu contains a submenu, called "Resolution", with separate settings for still photo and video resolution. Select "Exit" after using the Resolution submenu to return to the main menu. Here are the options and settings available in the main menu (*Default settings are shown in Bold*).

Option	Settings	Description
Image Size <i>(Resolution Submenu)</i>	3264x2440(8MP*), 2550x1920(5MP*), 2048x1536(3MP) , 1600x1200(2MP), 800x600(0.5MP)	Sets the still photo resolution in pixels. Higher resolution settings produce sharper/larger prints but require more storage space in internal or card memory. Use lower settings to store more in memory, or for email, PC viewing only, etc. (*resolution interpolated via internal software)
Video Size <i>(Resolution Submenu)</i>	640x480/30fps, 640x480/15fps , 320x240/30fps, 320x240/15fps	Sets the video resolution (pixels per frame and frame rate). Higher resolution/frame rate settings produce better/smoothier videos but require more storage space in internal or card memory. Use lower settings to store more in memory.

Main Menu-Options and Settings

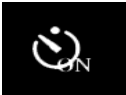


Option	Settings	Description
Image Quality	Best , Better, Standard	Sets the amount of file compression, which affects the quality of the photo and the size of the file it creates. This can be used independently of Image Size to help store more photos in exchange for slightly reduced quality. "Best" produces the highest quality, but also generates larger files that fill available memory sooner (fewer photos possible).
EV	-2.0 ~ +2.0 (Default= 0 EV)	Provides manual under/over exposure adjustment in 0.5 EV steps. Minus values produce darker photos, plus values lighter.
White Balance	Auto , Daylight, Cloudy, Fluorescent, Tungsten	Sets the reference for neutral white, so that colors are reproduced correctly. If "Auto" does not provide good results, try the setting that matches the light source.
Meter	Weight , Center, Average	Sets what area of the framed subject is used to determine exposure. "Weight" bases the exposure 60% on the center of the frame, 40% on the rest of the frame., "Center" uses only the center area (good for strong backlit situations), and "Average" sets exposure based on an average of the overall scene light levels.

Main Menu-Options and Settings

Option	Settings	Description
Language	English, Spanish, Italian, French, German	Selects your preferred language for all menu display screens.
Auto Off	60 Seconds, 120 Seconds , Cancel	Sets the interval after the last action (pressing any button) before the camera turns off to conserve battery power. Select "Cancel" to prevent auto shutoff altogether.
Clock Set		Use the Arrow keys to set (in order) the Year, Month, Date, (2nd row) Hour, and Minute. Press MENU when done. See "Date Stamp" also.
Date Stamp	MM/DD/YY , YY/MM/DD MM/DD	MM/DD/YY: Month/Date/Year are imprinted on each photo. YY/MM/DD: Year/Month/Date are imprinted. Off: no imprint is added to photos.
Sound Effect	On , Off	Turns the confirmation beep sound on or off
Default Setup	OK, Cancel	Select "OK" and press the MENU button to restore all settings to their original factory defaults.
EXIT		Select "Exit" and press MENU to exit the Main menu and return to the preview ("live" camera) display

Additional Features

From the “live” preview display (not the main menu), press the **Right** arrow key to select/cycle through these additional camera features (a fourth press will return to the preview display again):

Feature	Icon	Description
Self Timer	Clock (white) 	Photo is taken after a 10 second delay when the SNAP button is pressed. With the ImageView mounted on a tripod, this can help prevent blur caused by jarring the camera when SNAP is pressed. To take a photo at the exact time you wish and reduce camera shake, plug the included remote shutter release cable into the jack on the rear of the camera pod and press the button on the remote instead of SNAP on the camera.
Sequence	Multiple Frames (red) 	3 frames are taken in rapid sequence when SNAP is pressed.
Normal Video	Movie Camera (red) 	Camera shoots a video clip when SNAP is pressed, with maximum recording time limited only by the amount of available internal or card memory. The counter on the right side of the display shows elapsed minutes and seconds. Press SNAP again to stop recording.

Review Mode -Viewing and Deleting Photos Using the Review Menu

Press **View** to enter Review mode. Use the **Left** arrow key to go back through the stored photos/videos. Press **SNAP** to playback a video (indicated by AVI at top left of display). Once you are in review mode, pressing the **MENU** button will enter the review menu. This operates in the same way previously described in the main menu section (use the **Arrow** keypad to navigate to the desired menu option and settings, press **MENU** to confirm a setting), with these available options:

Option	Settings	Description
Delete One	OK, Cancel	Deletes only the currently viewed photo or video. Highlight "OK" and press the MENU button to delete the photo or video.
Format	Cancel, OK	Select OK and press MENU to format (clear) an SD card for use in the camera. Erases all previously stored files on the card. Will also erase internal memory contents.
Protect	Lock, Unlock	Prevents accidental erasure. If "Lock" is activated, that file cannot be deleted using the "Delete One" function. Highlight "Lock" and press MENU to protect the currently viewed photo or video. Note: Formatting internal or card memory will erase even protected files.
Language, Auto Off, Clock Set, etc.	various	Same functions as described in "Main Menu-Options and Settings"-these are just duplicated in the Review menu for your convenience.
Exit		Exits the review menu and returns to the last image viewed. Press the View button to switch to the live Preview display again.

System Requirements

OS: Windows® 2000/ME/XP/Vista/Windows 7 or Mac OS 9/OS X

Internal USB Port

Downloading the Photos & Videos to Your PC

1. Turn on the Imageview's power. Connect the supplied cable to the ImageView's USB port, then directly to a main USB port on your computer-do not use front panel/keyboard USB ports or unpowered "hubs".
2. The LCD display will indicate "Mass Storage", and the ImageView will be recognized as a standard "USB Mass Storage" device. This means that the camera files can be easily viewed, edited, or copied to your hard drive, just as if they were stored on an external hard drive or a CD-ROM.
3. Open "My Computer" or Windows Explorer on your PC (*if your PC is running Windows XP or a later operating system, you may simply use the options in the pop-up window to view, copy or edit your photos*). The camera is the device identified as "BUSHNELL" with an unused drive letter assigned to it (*on Mac computers, it will appear on your desktop*). Double click this "Bushnell" storage device, open the "DCIM" folder inside, then the folder(s) inside that ("100MEDIA", etc). Your photos/videos are the files inside-they have the prefix "HUNT__" followed by a 4-digit number. To view the photos, change to a Filmstrip or Thumbnail file view, or double click a file name to open it with your default PC program.
4. From the "My Computer" menu bar, select "Edit>Select All", or click on one photo file (Control+click to select multiple photos), then select "Edit>Copy to Folder". Choose an existing folder on your hard drive, such as "My Pictures", or create a new folder ("Hawaiian Vacation", etc), then click "OK" to transfer copies of any or all of the photo files you want from the camera to your hard drive.
5. After the photos are transferred to your hard drive, you can disconnect the camera. Some older Windows OS computers may produce a screen warning that you have disconnected a USB device without stopping or ejecting the "disk" first (your photo files will not be harmed). If so, check the box that adds an icon to your system tray or taskbar. Then next time you finish transferring photos, you can click that icon first, and "Stop the USB Mass Storage Device" before disconnecting the camera*.

Downloading the Photos & Videos to Your PC

6. You're now ready to open the photo files in any photo editing software. Just go to the folder where you stored the photos earlier and select File>Open. It is also possible to open and work with your photos directly from the ImageView while it is still connected. If you choose to work this way, from a connected camera, be sure that you save the photo (when finished editing) to your hard drive, and not the camera's memory or card.
7. If you are new to photo editing on a computer, consult your software's Help menu for tips on using its features. Along with adjusting the brightness, contrast, sharpness and color of your photos, you can resize the photo to fit the paper if you are printing, or save a smaller, low or medium resolution version for email or inserting into documents. When you are ready to save your edited file, you will likely want to use "Save As" and give it a more descriptive name than "HUNT____". Doing this also preserves the original file as a backup if you decide to make different edits later. Make sure you have successfully transferred all the photos you wanted to save before using "Delete One" or "Format" in the Review menu to delete your old files to make room for new images.

** On Mac computers, you should "eject" the "disk" that appeared on your desktop when the camera was connected.*

Note: If your PC will not play the .avi movie files in Windows Media Player, you may need to download a newer version of Media Player or Direct X from Microsoft.com. The movie files can also be played back with the QuickTime Player, included with many computers, or available as a free download from Apple.com.

Technical Specifications

Magnification	8x	Sensor Type	CMOS
Objective Diameter	30mm	Sensor Resolution	3.2 Megapixels
Exit Pupil	3.75mm	Effective Resolution Settings	8MP*, 5MP*, 3MP (default setting), 2MP, 0.5MP <i>(*via software interpolation)</i>
Field of View	320 ft @ 1000 yds	Internal Memory	16MB Flash Memory (NAND)
Eye Relief	13mm	Memory Expansion	SD / SDHC card (optional) , up to 32 GB capacity
Lens Coating	Fully Coated	File Format (Still/ Video)	JPEG/AVI
Prism Type	Roof, BK-7 glass	File Management	DCF (version 1.0), FAT 16 Format
Focusing Range (binocular)	14' ~ infinity	LCD	1.5" TFT
Weight	14.9 oz / 422 g	Video Resolution/ Frame Rate	640x480 or 320x240 pixels per frame @ 15 or 30 fps.
Shutter	Electronic, 1/16 to 1/1000 seconds	Exposure Value Range	+/- 2 EV in 0.5 EV steps
Focusing Range (camera)	Fixed, approx 30' ~ infinity	White Balance Options	Auto, Daylight, Cloudy, Fluorescent, Tungsten
Lens Aperture	f/5.6	Menu Languages	English, French, Spanish, Italian, German
Power Supply	2xAAA Batteries, Alkaline/Lithium/ NiMh type	Auto Power Off (after inactivity)	1 or 2 minutes or Disabled

TWO-YEAR LIMITED WARRANTY

Your Bushnell product is warranted to be free of defects in materials and workmanship for two years after the date of purchase. In the event of a defect under this warranty, we will, at our option, repair or replace the product, provided that you return the product postage prepaid. This warranty does not cover damages caused by misuse, improper handling, installation, or maintenance provided by someone other than a Bushnell Authorized Service Department.

Any return made under this warranty must be accompanied by the items listed below:

- 1) A check/money order in the amount of \$10.00 to cover the cost of postage and handling
- 2) Name and address for product return
- 3) An explanation of the defect
- 4) Proof of Date Purchased
- 5) Product should be well packed in a sturdy outside shipping carton, to prevent damage in transit, with return postage prepaid to the address listed below:

IN U.S.A. Send To:

Bushnell Outdoor Products
Attn.: Repairs
9200 Cody
Overland Park, Kansas 66214

IN CANADA Send To:

Bushnell Outdoor Products
Attn.: Repairs
25A East Pearce Street, Unit 1
Richmond Hill, Ontario L4B 2M9

For products purchased outside the United States or Canada please contact your local dealer for applicable warranty information. In Europe you may also contact Bushnell at:

Bushnell Germany GmbH
European Service Centre
Mathias-Brüggen-Str. 80
D-50827 Köln
GERMANY
Tel: +49 221 995568-0
Fax: +49 221 995568-20

This warranty gives you specific legal rights.
You may have other rights which vary from country to country.

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FCC Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The shielded interface cable must be used with the equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.



Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.

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For further questions or additional information please contact:

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