

OneShot360™

Getting Started Manual

Document Version 1.3

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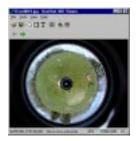
Chapter

OneShot360 Immersive Picture System ™

Thank you for your purchase of the OneShot360 Immersive Picture System from Metropole Worldwide. With the OneShot360 Immersive Picture System, creating fully interactive, immersive content is as easy as...

1 Simply taking an image with the OneShot360 mounted on a mega-pixel digital still camera and uploading to your Windows PC. The image appears as a doughnut-shaped photo.

2 Dragging and dropping or simply opening the OneShot360 photo into our OneShot360 Viewer software, which unwraps the circle into a fully immersive, 360-degree, high-resolution image.



3 Previewing your panoramic immersive image and exporting it for immediate use in your Web site or CD-ROM application with no additional plug-ins.



OneShot360 Immersive Picture System Contents

The OneShot360 Immersive Picture System package contains the following items:

- OneShot360 optics which attach to the camera
- o OneShot360 Viewer Software and Documentation CD-ROM
- o Accessories: hood, bubble level
- O Adapter ring for your digital camera (not needed for Nikon)
- Getting Started Manual
- o Protective Mirror Cap
- Lens Cleaning Kit
- o Tripod Bracket

Storage and Care of the OneShot360

The OneShot360 camera attachment is a precision optical component. Like all precision optics, improper handling can result in damage to the mirror, lens system or both.

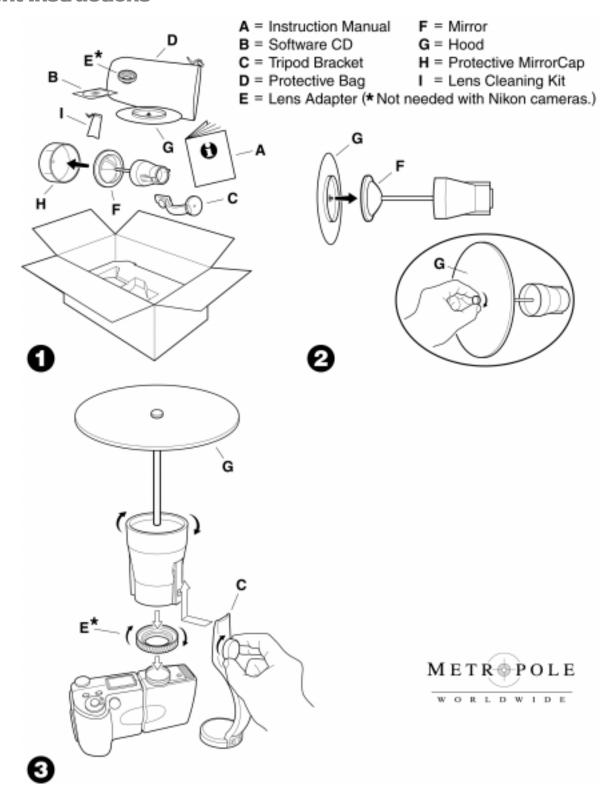
Care – In order to ensure long life and excellent picture quality you should:

- Carefully and lightly clean mirror and lens with cloth and cleaner supplied with the OneShot360 Immersive Picture System.
- Take extra care to protect the OneShot360 optics in environments where there is risk of exposure to moisture, dirt or extremes.
- If you find condensation on the lens, move the unit to a warm, dry place until the condensation has disappeared.
- Before taking a picture, make sure there is no dust or prints on the mirror or the lens. Periodically check inside the lens housing for dust if you take the attachment off the camera regularly. Use a standard lens wisk or compressed air to help remove particles.

Storage – In order to protect your OneShot360 optics you should:

Always keep the protective mirror cap on the mirror when not in use.

Attachment Instructions



OneShot360 Viewer Software System Requirements

Pentium processor operating at a minimum of 166 MHz

32 MB RAM

30 MB free space on your hard disk

CD-ROM

Windows 95, 98 or NT 4.0

Set monitor to High color (16 Bit) or better

Viewing Panoramic Image Requirements

Any Java and Javascript enabled web browser such as Netscape NavigatorTM (3.01 and higher) or Internet Explorer TM (3.0 or higher). To view Apple QuickTime images, you need the Apple QuickTime Plugin which can be downloaded free of charge from www.apple.com/quicktime. For the MGI Plugin format, you need the MGI Viewer plugin which is included free of charge with the OneShot360 viewer software.

Installing Your Viewer Software

Note: If you have previously installed Parashot software, you should uninstall it before you install OneShot360 V1.3.

Insert the OneShot360 Software and Documentation CD into your CD-ROM drive. When the CD loads, you will see a splash screen for the OneShot360 software, and other applications that we have included with our software. Click on the OneShot360 Immersive Picture System bar to install your software.

If your CD does not auto play, Select Start | Run from the Windows desktop and type D:\autorun.exe (where D is the letter of your CD-ROM drive) if not D, use the letter shown in your CD ROM drive.

Follow the instructions on your screen until setup is complete. You will be asked to enter your software license ID; you will find this license string on the Software and Documentation CD envelope included with your OneShot360.



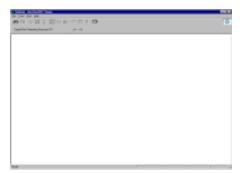
If you do not input a license at this time or if you input the license incorrectly, you will see the following message when you start the OneShot360 Viewer software:



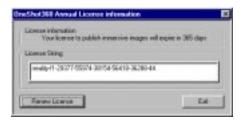
The setup procedure automatically adds the OneShot360 Viewer icon to the Windows Start Menu and to the desktop. To start the OneShot360 viewer program, select:

Start | Programs | RemoteReality | OneShot360WebSystem | OneShot360 Viewer

Or double click the OneShot360 Viewer icon on your Windows desktop. The OneShot360 Viewer window appears:



Note: Check to be sure that you have entered a valid license. Go to File | Renew License and be sure that you have 365 days showing in the box. If you do not show a valid license, reenter the license string.



OneShot360 Digital Film

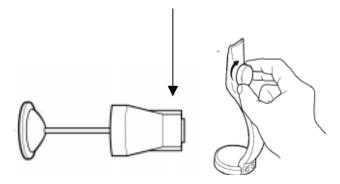
Our Digital Film is a unique software code. When you create immersive pictures in the OneShot360 Viewer Software, you use OneShot360 Digital Film to save your immersive pictures for publishing or e-mail.

Note: Before you can publish an image for use on your web site, CD-ROM or E-mail, you must have purchased your Digital Film from Metropole Worldwide. Please see our web site at www.metropoleworldwide.com.

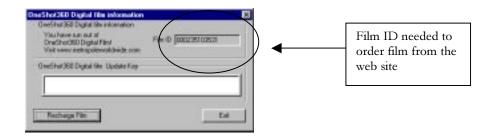
.

Follow these easy steps to obtain your Digital Film and save your images

O Locate your hardware serial number, it can be found on the OneShot360 attachment as shown below. You will need to remove the bracket in order to see the serial number.



Open the OneShot360 Viewer Software, go to Tools | Recharge Film or click on the Recharge Film icon on the toolbar to see the film ID shown in the box below:



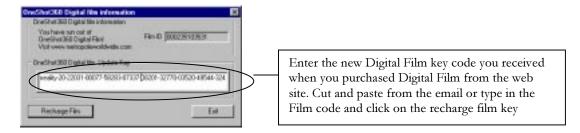
- Open your web browser to http://www.metropoleworldwide.com
- o Click on E- Store
- o Click on OneShot360 Digital Film
- O Choose number of exposures and complete order, including the Film ID# and Serial #.

When you receive e-mail of your Digital Film code, go to Tools Recharge Film to input the code.

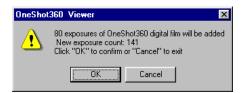
Note: If you have not input your software license or have an invalid software license you will see the following message:



Input the code as shown below under OneShot360 Digital Film Update Key. You should receive your Digital Film code via email as soon as you complete your order. If you do not receive email with your Digital Film code within 24 hours of your order, send mail to support@metropoleworldwide.com or call 212-980-2427.



After you have clicked on the "Recharge Film" key, you will receive a message telling you that a number of exposures have been added. Click ok to complete the process. If this message does not appear, you have entered the code incorrectly and should try again.



You are now ready to take your images and process and save them for use on web sites, CD-ROMs, and e-mail attachments.

SHOOTING TIPS

Positioning the OneShot360

Unlike traditional photography where you carefully frame a shot, with the OneShot360 system you are capturing a 360-degree space. Where you place the camera and lens, either by holding it or by placing it on a tripod, determines what will appear in your image. Here are some examples of things you can do to get the best quality images:

Shooting a large room – place yourself or the tripod as close to the center of the room as possible, and be sure that the mirror is at eye level. At eye level, the mirror "sees" the room just like your eyes do and gives the viewer the effect of standing in the room. Open rooms (like this living room opening into the kitchen) may best be shot from just before the doorway to show how the rooms connect.



To feature a room that has high ceilings, lofts, atriums, beams, tall windows, or to see the top of a building, unscrew the hood from the top and turn the whole unit upside down. For this shot, position the mirror at knee level; this will give the viewer a natural perspective and a great view of the room's upper attributes.



If you have a central point that you want to capture in your image, distance becomes a critical factor. To maximize image quality, you want the OneShot360 to be no more than 7 feet away from the central point in your image. The image below shows what people look like at 7, 15 and 25 feet from the OneShot360. When taking shots using the tripod, you may want to use your cameras self-timer if it has one, so that you will have about 10 seconds to remove yourself from the shot.



Use of Lighting

For Indoor shots

The first person is 7 feet away from the camera, the second person is 15 feet away and the third person is 25 feet away from the camera

- O Turn on all available lights in the rooms and in the surrounding rooms leading in and out of the room you are shooting. This includes all table lamps, picture lamps, and recessed lighting. Remember to use the screw-on hood provided with the OneShot360 to keep overhead lights from "flaring up" in the internal lens of the attachment.
- Adjust the blinds on the windows or close the curtains to obtain more even light in the room. THE MORE BALANCED THE LIGHT IS, OR LESS CONTRASTING LIGHT IN THE ROOM, THE BETTER YOUR SHOT WILL TURN OUT.

Note: Ceiling fans should not be running as they may blur.

For Outdoor shots

Overcast days will provide for even lighting. In certain conditions, like bright sunny days, you may have glare if too much light is concentrated in one spot. Try repositioning the camera or utilize objects such as trees to mask the bright spots. Be sure to use the screw-on hood provided with the OneShot360. When the mirror is facing up, you may end up with a star effect.

Using a Tripod

- o Tripods are not necessary, but may be used to optimize performance.
- O Select a tripod that is used for photography, is lightweight and portable, and features a one-quarter inch screw mount.
- O When using a tripod, adjust the tripod legs so that the parabolic mirror is at eye level. Also adjust the tripod to make sure that the flat top of the mirror is level. To do this you can use the bubble level included with your OneShot360 and place it on top of the lens hood. If you cannot see the bubble level on top of the hood, you can turn it upside down and hold it on the bottom of the lens hood. If you do not have a level, use a vertical line in the distance (i.e. wall corners, building sides) as a guide for ensuring the mirror is straight up or down. Line up the post or strut of the mirror with the vertical surface until they are parallel, while adjusting the tripod legs. Repeat this on the side perpendicular to your first adjustment.

For specific camera settings, please see the OneShot360 Camera Guide for the camera that you are using.

OneShot360 Immersive Images

Downloading Images

Downloading OneShot360 images is done in the same manner as downloading any digital images. As you are aware, there are a number of ways that you can download your images from your digital camera to your PC. The first is to use the serial cable provided with your camera. When using this method, you will first need to install the viewing software provided with your camera. Make sure the camera is turned off, and then connect the serial cable to the serial port on the camera and the serial port on your PC. Follow the instructions in your camera viewer software to download your images and save them for use in the OneShot360 Viewer Software.

Note: Downloading images from your camera quickly drains batteries. You may want to consider purchasing an AC Adapter or a PCMCIA adapter to save battery power.

If your PC has a PCMCIA card slot, you can purchase a PCMCIA memory card adapter for use in downloading your images from the camera. The memory cards come in a variety of sizes, and can save from 8 to 100 images. The card slips easily out of the camera and plugs directly into the adapter and your PC's PCMCIA slot. Some newer cameras have USB ports for the fastest downloads directly to your PC.

Processing and Publishing Images

The OneShot360 Viewer software processes JPEG images, the standard for digital cameras. Before you can publish or post the images that you have captured with your OneShot360, you must process them with the OneShot360 Viewer software. You can process images in two ways, by using the "wizard toolbar" or the "marking," "cropping," and "camera orientation" icons on the toolbar.

Using the wizard toolbar

- Open the OneShot360 Viewer software, click on the "open" icon or go to **File/Open** to open the unprocessed image downloaded from the digital camera. You may alternatively drag and drop the image file into the blank white space of the software window.
- The wizard toolbar walks you through the three simple steps of marking, cropping and specifying camera orientation. When you are done with each step, simply click the forward arrow to go to the next step. If you wish to go back to an earlier step, click the previous arrow button. When you get to the last screen below, click on "Preview the image" and continue to the publishing your image section.
 - Step 1 Mark the image to indicate the center and the boundary of the circular image. Click and drag the cross hairs to match the center of the circular image. Next click and drag the circle to precisely match the circular image.
 - Step 2 Crop the image to the desired field of view, click and drag the outer circle and the inner circle to crop the image. The software will hide the cropped portions of the field of view. This allows you to crop out the photographer.
 - Step 3 Specify the mirror orientation of the camera when the image was taken





O When you are done previewing, if you find that the image was not calibrated correctly, or if you wish to crop the image again, click the Mark Circle Again button. You will be presented with the circle marking tools.

Note: If the picture is upside down, you have chosen the wrong mirror orientation, click on the mirror icon to change orientation.

Using the "Cropping, Marking and Camera Orientation" toolbars

- Open the OneShot360 Viewer software, click on the "open" icon or go to **File/Open** to open the unprocessed image downloaded from the digital camera. You may alternatively drag and drop the image file into the blank white space of the software window.
- O Mark the image to indicate the center and the boundary of the circular image. Click and drag the cross hairs to match the center of the circular image. Next click and drag the circle to precisely match the circular image.
- O Crop the image to the desired field of view, click and drag the outer circle and the inner circle to crop the image.
- O Specify the mirror orientation of the camera when the image was taken. The button toggles when you click it. Be sure to click on one of the camera orientation icon.
- O Choose preview to be sure you are satisfied with the image.

If you are happy with the preview, click the Done button to exit the dialog box.

Note: If the picture is upside down, you have chosen the wrong mirror orientation, click on the mirror icon to change orientation.

Image Enhancement 🎇 🌞



If you have an image that has a bright area on one part of the image, and a much darker area on another part of the image, you can use the Image Enhancement icon to balance the light and improve the image. Click on the Enhance Image icon and when the processing is complete, your image will be more uniform. You can continue to click enhance image as many times as you wish until the image looks the way you want it to. If you do not think that the image is improved by using the image enhancement, you can click on the Undo Image Enhancement and the image will be reset to its original form.

E-mail Immersive Image

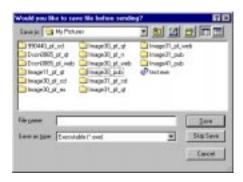


One of the publishing formats is the "E-mailer", this format produces an executable (.exe) e-mailable immersive image, which includes the viewer so that this single executable file can be attached and sent via e-mail. The E-mail Immersive Image tool is a quick publish of an e-mail attachment, without going through the Publish Immersive Image path. The e-mail capability allows you to send your processed image as an attachment to your message to any e-mail recipient on a PC. If you wish to send your image to a Mac recipient you will need to publish your image to QuickTime and send the resulting QuickTime panorama file (.mov) as an e-mail attachment.



E-mail Immersive Image

When you select E-mail Immersive Image, you will be given the opportunity to save your image as an executable file. If you do not wish to save it, you may choose skip save and send the e-mail directly from within the OneShot360 software. We recommend that you save your image in case your e-mail system is unable to send your message.



If you choose to save your image, you should give it a file name and choose the directory in which you want it to be saved. When you have saved the image or chosen to skip saving it, you will see the following e-mail window which has your image file attached to it. You must input a complete email address in the "To:" box, for example bsmith@metropoleworldwide.com.



The message will be sent through your default e-mail application. Please note that your e-mail application may overwrite what you enter in the "from" box.

Note: If you use more than one e-mail application, you should choose the application you use most often and make it your default. You can do this by going to Start|Settings|Control Panel|Internet Options|Programs|E-mail and choosing the e-mail application you want as your default. If you cannot set your web based mail system as a default, you should save your image and attach the file to your e-mail message.

Publishing Your Images

Types of Publishing Formats

There are six possible output formats in which you can publish your images: IBM's HotMedia Viewer, Apple's QuickTime Viewer, the MGI Java Viewer, the MGI Plug-in Viewer, IBM's HotMedia Authoring format and an e-mailable immersive image which includes the viewer. You have the option of publishing your image in one format or any combination of the output formats at the same time. You can select the formats you desire by checking the box next to the format. You will only use one exposure of Digital Film regardless of how many formats you select. The next section will explain each of the formats and why you might choose them.



Publish Immersive Image

• IBM's HotMedia Viewer (.mvr file)

Publishing in IBM's HotMedia format produces a high quality image file, but may have a large file size that makes loading the image slower. However it can be viewed without a plug-in. This java viewer handles larger images (more pixels) than most other java viewers. A copy of IBM's HotMedia application is included on the OneShot360 Software/Documentation CD-ROM.

HotMedia Authoring (.rr file)

You can import your .rr image files into HotMedia 3.5 and above to add hot spots and audio for an enhanced viewing experience. This format will also be used for future products offered by Metropole Worldwide.

Note: A copy of IBM's HotMedia application is included on the OneShot360 Software and Documentation CD-ROM.

• Apple QuickTime Viewer (.mov file)

In order to publish QuickTime format files you must have QuickTime with authoring installed on your PC. The QuickTime application is included on the OneShot360 Software and Documentation CD-ROM; choose the "full" install option. Publishing Apple's QuickTime produces a high quality image file, but may have a large file size that makes loading the image much slower. A QuickTime plugin is required for viewing, but there is a very large installed base of QuickTime players. This file can be attached to an e-mail message and sent to anyone with a QuickTime player. The QuickTime plugin can be downloaded free of charge from www.apple.com/quicktime and is included on the OneShot360 Software and Documentation CD-ROM.

MGI Java Viewer (.ivr file)

Publishing MGI Java format produces a good quality image with a small file size for fast image loading. No plug-in is required for viewing.

• MGI Plug-in Viewer (.ivr file)

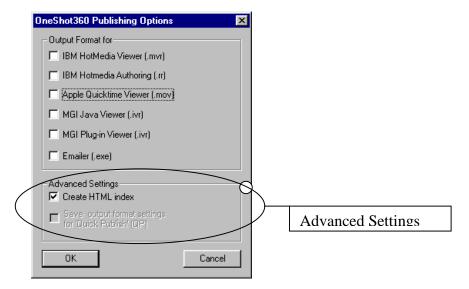
Publishing MGI Plug-in format produces large, high-resolution image files that require the MGI Viewer plugin for your Internet browser. This format should be used for images that will be viewed from a CD-ROM.

• Emailer (.exe)

This will produce an e-mailable immersive image, which includes the viewer. You can send this file to anyone on a PC running Win95, 98, NT, or 2000, the addressee will be able to click on the attached file and view your immersive image.

The Publishing Process

When you select the Publish Immersive Image button, you will be presented with the following screen (if you have not already saved the image, you will be asked to do so). Select the image output format(s) that you desire by checking the box next to the format. Remember that you will use one key for any format or combination of formats you check. When you check one of the output formats, you will see an options button (discussed in the next section) appear next to the output format type you have chosen. Unless you have specific requirements for your image or your image frame, you do not need to set any options, the default settings for each of the formats will give you the best image resolution and quality at the most reasonable file size.



Under the Advanced Settings of the publishing box are two other check boxes. The first is the "Create HTML index" option, which creates an index file that can be viewed with a browser. This index provides hot links to the different files created, sample HTML pages, and locations of the published files. This box is checked by default. We recommend that you keep this item checked, especially if you are publishing to multiple formats. It will give you the directory and files created for each of the publishing formats that you have chosen. The other option box "Save output format settings for Quick Publish" is initially grayed out and is for advanced users who do high volumes of publishing and want to save their output settings for expedience. This will be discussed in more detail later in the chapter.

Format Options

Basic Settings

If you choose the "Options" button, you will be presented with a screen showing the options for the image format you have chosen. An example of the Apple QuickTime format options screen is shown on the next page.



You can save your image in one of three ways:

- Clicking on OK in the options screen will save your image at the system default settings, which are "Web Quality". This will give you a good quality image that will display quickly on your web site.
- You can choose to save your by clicking on the "CD Quality" button. When you do this
 you will see that the slider bars for both compression and resolution move to the right,
 giving you a higher quality image and increasing your file size.
- You may make changes to the image resolution and quality by moving the slider bars to the left or right, moving to the left generates lower resolution and lower quality files, but with small file size. Moving to the right generates higher resolution and quality and potentially much larger files. Large file size may be a concern because of image loading and display times. When you have made changes, you can click on the "Save Settings" button, this will keep the settings that you have chosen as the default that appears whenever you publish an image. You can click on the "Web Quality" to go back to the original defaults set by the software.

The frame size settings allow you to determine the height and width in pixels of the window size in which you view your image. You can make the frame as large or as small as you wish with no impact on file size. However, the larger the frame, the more impact on the loading of and the sharpness in your image.

Advanced Settings

Each of the **Options** screens for the various publishing formats has an "Advanced Settings" at the bottom of the screen. The "Publish To" path is the default directory for publishing your images. The default directory is the directory in which the user has saved their initial .tif (doughnut) file, a subdirectory with the original image name and a "_pub" extension, and a second subdirectory for HotMedia, which will contain all the files that are generated for your image. The file structure is shown below:



You can change the directory path to wherever you want to save your files

If you want to save all your images using the same path, either the default or to one you have created, you can check the box below the path and save this path for all the images you create in the current session.

The QuickTime screen has an additional box in the advanced settings for Codec type. A Codec type refers to a specific compression/decompression scheme optimized for specific types of source material. Photo JPEG compression works best for photographic stills and is the default type for QuickTime. Other Codec types are selectable for advanced QuickTime users.

Published Images

When you click the OK button to publish your image in the format(s) of your choice, you will be told that you will use one exposure of Digital Film to publish your image.



When you click on OK, your image will be processed and you will see an HTML Index Page like the one below with the directory and file that you have created.

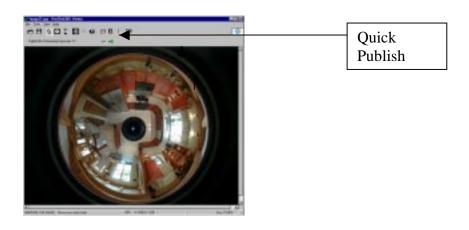


You will be shown a link for each type of file format that you can click on to see your files and where applicable the image is shown. The .rr file must be opened in HotMedia and the E-mailer is opened by clicking on the .exe file. You will also be shown other information related to publishing your image on a web page or for a CD-ROM and you will see a listing of the files that have been created. The IBM HotMedia Authoring HTML Index Page will tell you that this format can be used with IBM Hotmedia version 3.5a and above and how to insert it. The E-mailer format will give you an .exe file that can be attached to an e-mail message and sent to any PC running Win95, 98, NT or 2000.



Quick Publish 🧗

The "Quick Publish" icon is grayed out on the toolbar unless you have specified and saved the format settings for enabling Quick Publish. This tool is provided for advanced users who need the ability to publish large numbers of images during a single session. It allows the user to set the publishing procedure as a default. To use "Quick Publish" set the file save path that you wish to publish to, check the box labeled "Use this path for current session", click OK on this dialog box and check the "Save output format setting for Quick Publish" box on the next dialog box. The "Quick Publish" icon will be activated on the main toolbar of the OneShot360 viewer. Then open your next image in the OneShot360 viewer and click on "Quick Publish"



Moving Images to your Web-Site

The OneShot360 Immersive Picture System software creates all the files that you need to post your images to your web site, including a sample HTML file. To view the source of the HTML file, open it in Notepad and then copy the portion between <!---Begin Copy here---> and <---!End Copy here---> into your HTML page. Please be sure that the files generated for the format you have chosen are in the same folder as the HTML page. For more information on posting the different formats to your web site, please see the documentation at the following locations:

- Apple QuickTime <u>www.apple.com/quicktime</u>
- IBM HotMedia <u>www.ibm.com/hotmedia</u>
- MGI Java <u>www.mgisoft.com/web/viewers</u> click on Lightweight Zoom Viewers and select the Zoom Panorama Applet Viewer
- MGI Plugin <u>www.mgisoft.com/web/viewers</u> click on Multimedia Zoom Viewers and select the Multimedia Zoom Plugin Viewer

Printing your Images

Depending on your application, you may want to print your images. You can print the donut image directly from your camera software or by dropping the .jpg file into any tool that allows you to open and print a .jpg file.



You can print the panoramic image by opening the .jpg file from the camera into the OneShot360 viewing software and saving the image as CD-ROM quality (for best results) Use an application like Microsoft Photo Editor to open the .jpg file and then choose print.



You can also print any subset of the processed 360-degree image. To print 360-degree images from within a browser, first navigate the image to the desired view you wish to print using the navigation and zoom features, then press the print screen key on your PC keyboard. Next, open Microsoft Word (if MS Word is not installed, use WordPad from the accessories section of your Programs in the Start Menu) and type Ctrl+V or (Edit>Paste) to insert the image into the new document. Then print the document as you would any normal file.

If you are unable to achieve the desired result, contact us at support@metropoleworldwide.com for advanced printing instructions.

Chapter

Enhancing your Images

There are a number of ways to enhance your OneShot360 Immersive images and a variety of editing tools that you may already have or will want to purchase to help you achieve the results you want. You can use these tools to:

- Remove an unwanted part of your image and replace the removed area with a background sample. Use paint tools to change colors, correct blemishes and faulty exposures.
- O Add hot spots and links to your panoramic images, useful for moving between rooms in a house, or room to room in a gallery of images, or link to a particular object within your image for a different view or for more information.
- O Add text windows that can be used to add more information to your image by pointing out items of particular interest to viewers.
- O Create "mouse events" to trigger events such as audio, another image, pop up window or a text box.
- O Add an audio track to your image that will play in the background while people are viewing your image. For example, an audio component of a real estate tour can convey information about the floor coverings or window treatments that are included in the home.
- Set background color used by the viewer.
- Frame your image.
- o Imbed high-resolution pictures in the 360 panoramic views that can be zoomed in on for a more detailed look.

You can open up the raw "doughnut" image in your favorite image enhancement tool and adjust it for overall quality. For specific areas of the image it is more convenient to use the panoramic images created in the viewer software, save it and then open up in the software of your choice.

Make the desired changes and additions to your image and save the image under the same name and location. You must maintain proportion (height and width). Some editing tools that allow you to enhance images in some or all of the above areas are listed below.

Image Enhancement Tools

- Adobe Photoshop
- o Micrografx
- Corel Photo Paint

HotSpots

- IBM Hot Media
- o Apple QuickTime VR Authoring Studio
- Macromedia Director with QTVR Module (If you are authoring in Macromedia Director, you can import QTVR panoramas.)
- MGI Reality Studio

Zoom

- Zoomify
- o MGI Flash Pix

For examples of enhanced images, please see our web site at www.metropoleworldwide.com.