

This document guides you through the Raster Manager settings in MicroStation for accurate placement of georeferenced image files. Setting the default Raster Manager preferences (steps 1-9) only needs to be done once. If your Raster Manager preferences have been previously set correctly you may proceed directly to step 10.

Setting the Default Preferences

- 1. From the MicroStation pull-down menu select Workspace > Preferences. The Preferences dialog will appear.
- 2. Select the **Raster Manager** preferences in the *Category* list in the left pane. If preferences match the picture below preferences are set correctly. <D> OK and proceed to step 10.



3. If preferences match the figure below follow steps 4-9 for the required changes and a brief explanation of what each change does.

🔁 Preferences [CDOT	User]
Category Database Input Look and Feel Mouse Operation Rester Manager Reference Spelling Tags Text View Options	Name for preferences Set Raster Manager preferences. ✓ Display Border Around Selected Raster □ Elie Georeference Has Priority when Raster Is Loaded □ Use Sister File, if Present, for Georeferenced Files Cancel ✓ Save Loadion Info in Siter File if Required ✓ Ogen Raster Files Read-Only □ Use Sister Altachments From Self References Geotif Settings ✓ List Raster Attachments From Self References Geotif Default Unit: 1 Unit = [1.000000000 Working Units] WorldFile Default Unit: 1 Unit = [1.000000000 Meters] Recent Files List Contains: 4 Focus Item Description

4. Place a check in the checkbox next to the preference for *File Georeference Has Priority*. When this setting is on, the georeferencing information contained in the world file takes precedence over any previous reference attachment information.

S Preferences [CDO]	[User]
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5. Place a check in the checkbox next to the preference *Use Sister File, if Present, for Georeferenced Files*. A sister file is a companion file to the image file that contains placement or georeference information. A world file is one type of sister file. Both .tif and .jpg images will typically require a world file for correct placement.

S Preferences [CDO]	[User]
Category Database Input Look and Feel Mouse Operation Raster Manager Reference Spelling Tags Text View Options	Name for preferences Default Preferences Set Raster Manager preferences. ✓ ✓ Display Border Around Selected Raster ①K ✓ Eile Georeference Has Priority when Raster Is Loaded ①K ✓ Use Sister File, if Present, for Georeferenced Files) Cancel ✓ Save Location Info in Sister File if Required Cancel ✓ Ogen Raster Files Read-Only Defaults ✓ Update MS_RFDIR Automatically for Raster Attachments ✓ ✓ List Raster Attachments From Self References Geotiff Settings ✓ Use Unit Definition Geokey if Present (override PCS unit) © Geotiff Default Unit: 1 Unit = 1.0000000000 Working Units ✓ WorldFile Default Unit: 1 Unit = 1.000000000 Meters ✓ Recent Files List Contains: 4 Files Focus Item Description Use sister file, if present, for georeferenced files? ✓

6. Uncheck the checkbox next to the preference for *Save Location Info in Sister File*. This will guard against accidentally moving the raster image and updating the world file with incorrect coordinates.

S Preferences [CDOT	User]	
Category	Name for preferences Default Preferences	
<u>Category</u> Database Input Look and Feel Mouse Operation Raster Manager Reference Spelling Tags Text View Options	Set Raster Manager preferences. Image: Display Border Around Selected Raster Image: Display Border Around Selected Raster Required Image: Display Border Around Selected Regiment Image: Display Border Around Selected Raster Attachments Image: Display Border Around Selected Raster Attachments Image: Display Border Around Selected Raster Attachments Image: Display Border Attachments From Self References Geotiff Settings Image: Display Border Attachments From Self References Geotiff Default Unit: 1 Unit = 1.000000000 Image: Display Border Attachments From Self References Image: Display Border Attachments	
	Recent Files List Contains: 4 Files Focus Item Description Save the file location information automatically in sister file (.hgr, ESRI,) when raster image format does not support georeference?	

7. The *Open Raster Files Read-Only* preference should typically be kept checked on. Turn this preference off if required to change the contrast and brightness display settings in the images for printing purposes. In some cases changing the display settings has no effect on the printed output if the image is attached read-only.

S Preferences [CDO	[User]
Preferences [CDO Category Database Input Look and Feel Mouse Operation Raster Manager Reference Spelling Tags Text View Options	Name for preferences Default Preferences Set Raster Manager preferences. <u>Display Border Around Selected Raster</u> <u>Elle Georeference Has Priority when Raster Is Loaded</u> <u>Use Sister File, if Present, for Georeferenced Files</u> <u>Save Location Info in Sister File if Required</u> <u>Update MS_RFDIR Automatically for Raster Attachments</u> <u>List Raster Attachments From Self References</u> <u>Geotiff Settings</u> <u>Use Unit Definition Geokey if Present (override PCS unit)</u> <u>Geotiff Default Unit: 1 Unit = 1.000000000</u> <u>WorldFile Default Unit: 1 Unit = 1.000000000</u> <u>Meters</u> <u>Recent Files List Contains:</u> <u>4</u> Files
	Focus Item Description Open Raster File in read only?

8. The final preference setting adjustment is for the *WorldFile Default Units*. Select *Survey Feet* from the drop-down list so that Raster Manager will interpret the world file units as survey feet instead of meters.

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Category Database Input Look and Feel Mouse Operation Raster Manager Reference Spelling Tags Text View Options	Name for preferences Default Preferences Set Raster Manager preferences. <u>Display Border Around Selected Raster</u> <u>File Georeference Has Priority when Raster Is Loaded</u> <u>Use Sister File, if Present, for Georeferenced Files</u> <u>Save Location Info in Sister File if Required</u> <u>Open Raster Files Read-Only</u> <u>Defaults</u> <u>Update MS_RFDIR Automatically for Raster Attachments</u> <u>List Raster Attachments From Self References</u> <u>Geotiff Settings</u> <u>If Use Unit Definition Geokey if Present (override PCS unit)</u> <u>Geotiff Default Unit: 1 Unit = 1.000000000</u> <u>Working Units ▼ WorldFile Default Unit: 1 Unit = 1.000000000 <u>Survey Feet</u> <u>Files Focus Item Description </u></u>	

9. **<D> OK** button to save these preferences. Once these preferences have been saved they should not have to be changed again.

Placing Georeferenced Images

- 10. From the MicroStation pull-down menu select File > Raster Manager. The Raster Manager dialog will appear.
- 11. From the Raster Manager menu select File > Attach. The Attach dialog will appear.
- 12. *Navigate* to the location of the raster image files and select the file(s) to attach.

13. It is important that the *Place Interactively* checkbox is unchecked. <D> OK button to attach the image(s).

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□ c ∪ if ↓ □ C:\Frojects\12345\R0\V_Survey\Drawings\Reference_Files\10.tif □ C:\fi ↓ □ D:\fi ↓		Preview Attachment Baster Preview 10789 X 4706, 24 Bit Color Origin: 3279823,750, 1554598,250,	<u>Q</u> K Cancel <u>H</u> elp
List Files of Type: All Supported Raster Files Attachment Settings: View: 1 2 3 4 5 6 7 3 Logical Name:	Drives: C: Elace Interactively Emporary Attachment		

- 14. After attaching the image a **Fit View** may be needed to display the image.
- 15. If the image does not appear in the correct location adjust the placement location.
 - Next 1
- 16. Select the image from the **Raster Manager** dialog box.

- 17. From Raster Manager select Settings > Attachment. The Attachment Settings dialog will appear.
- 18. Select the *Location* tab.

19. *Verify* that the Geo Priority setting is set to *Sister File*, and that the WorldFile Unit setting is correct.

Attachment Settings		
File Information Location Color Display	//Print	
Geo Priority: Sister File		<u>0</u> K
Origin X: 10760555,087 Y: 5100377.759 Z: 178956.971	Dimensions Width: 17698,455 Height: 7719,801	Cancel Apply
Pixel Size Image: Size X: 1.640 Y: 1.640	Number of Pixels X: 10789 Y: 4706	
Angles Rotation: N90°0'0.00''E Affinity: N90°0'0.00''E	WorldFile Unit 1 Unit = 1.00000000 Meters	

20. Change the WorldFile Unit setting if necessary and <D> OK.

Attachment Settings		$\overline{\times}$
File Information Location Color	Display/Print	
Geo Priority: Sister File 💌		<u>0</u> K
Origin X: 10760555.087 Y: 5100377.759 Z: 178956.971	Dimensions Width: 17698.455 Height: 7719.801	Cancel Apply
Pixel Size	▼ Number of Pixels	
Angles Rotation: N90*0*0.00**E Affinity: N90*0*0.00**E	WorldFile Unit 1 Unit = 1.000000000 Survey Feet	

21. Fit View to display the image. The image should now appear in the correct location.

