

FSN Ref: VR-23-12.1

FSCA Ref: VR-23-12

Date: 2023-12-13

**Urgent Field Safety Notice**  
**Neuromate Stereotactic System**  
**Neuroinspire – neurolocate module**  
**Incorrect images in the IFU**





For Attention of: Neurosurgeons, Neurosurgical Theatre Staff, Hospital Device Safety Officer

Contact details of local representative (name, e-mail, telephone, address etc.)\*

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**Urgent Field Safety Notice**  
**Neuromate Stereotactic System**  
**Neuroinspire – neurolocate module**  
**Incorrect images in the IFU**

1. Information on Affected Devices*	
1.	<p><b>1. Device Type(s)*</b></p> <p>IFU for neuroinspire neurolocate module within neuroinspire surgical planning software (the software for the neuromate stereotactic robot)</p>
1.	<p><b>2. Commercial name(s)*</b></p> <p>neuroinspire neurolocate (optional module in the neuroinspire software)</p>
1.	<p><b>3. Unique Device Identifier(s) (UDI-DI)</b></p> <p>Not Applicable for IFU</p>
1.	<p><b>4. Primary clinical purpose of device(s)*</b></p> <p>The device is used for stereotactic brain surgery. The affected part is the IFU for the additional/optional module for neuroinspire neurolocate .</p>
1.	<p><b>5. Device Model/Catalogue/part number(s)*</b></p> <p>047.0107C/DE neuroinspire neurolocate module - German Language                      047.0107B/ES neuroinspire neurolocate module – Spanish Language                      047.0107C/FR neuroinspire neurolocate module – French Language                      047.0107C/IT neuroinspire neurolocate module – Italian Language                      047.0107C/EN neuroinspire neurolocate module – English Language</p> <p>IFU Version number is found on the front page as shown in the examples below:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid red; padding: 2px; font-size: 8px;">                         neuroinspire™ neurolocate™-Modul – Bedienungsanleitung                          047.0107C/DE                     </div> <div style="text-align: center;">  <p>apply innovation™</p> </div> </div> <div style="background-color: #f4a460; padding: 10px; margin: 10px 0; display: flex; align-items: center;">  <div> <p><b>neuroinspire™</b> Chirurgische Planungssoftware</p> </div> </div> <p style="text-align: center; font-size: 8px;">zur Verwendung mit dem neurolocate™-Modul</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="border: 1px solid red; padding: 2px; font-size: 8px;">                         neuroinspire™ neurolocate™ module – Instructions for use                          047.0107C/EN                     </div> <div style="text-align: center;">  <p>apply innovation™</p> </div> </div> <div style="background-color: #f4a460; padding: 10px; margin: 10px 0; display: flex; align-items: center;">  <div> <p><b>neuroinspire™</b> surgical planning software</p> </div> </div> <p style="text-align: center; font-size: 8px;">for use with neurolocate™ module</p>

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1.	6. Software version
	V6.2.2 and above
1.	7. Affected serial or lot number range
	IFUs as detailed above
1.	8. Associated devices
	N/A

<b>2. Reason for Field Safety Corrective Action (FSCA)*</b>	
2.	<p>1. Description of the product problem*</p> <p>Some of the images in the IFUs are incorrect and do not relate to the corresponding text in the IFUs.</p> <p><b><u>Error 1</u></b></p> <p>047.0107C/DE neuroinspire neurolocate module - German Language                      047.0107B/ES neuroinspire neurolocate module – Spanish Language                      047.0107C/FR neuroinspire neurolocate module – French Language                      047.0107C/IT neuroinspire neurolocate module – Italian Language</p> <p>The images are consistently incorrect across all languages noted above.</p> <p>Section 3.8 – Figure 27                      Section 3.9 – Figure 28</p> <p><b>There is no defect with the neuroinspire software or the neuromate robot.</b></p> <hr/> <p>Some of the images in the IFUs are incorrect and do not relate to the corresponding text in the IFUs.</p> <p><b><u>Error 2</u></b></p> <p>047.0107C/EN – neuroinspire neurolocate module – English Language</p> <p>Page 1 – Front Image                      Section 2.2 – Figure 1                      Section 2.4 – Figure 3                      Section 2.5 – Figure 4                      Section 2.6 – Figure 5                      Section 2.7 – Figure 6                      Section 2.7 – Figure 7                      Section 3.3 – Figure 22                      Section 3.4 – Figure 23                      Section 3.5 – Figure 24                      Section 3.6 – Figure 25                      Section 3.7 – Figure 26                      Section 3.8 – Figure 27                      Section 3.8 – Figure 28</p>

	<p>Unless noted in error 1, the above images in error 2 only impact the English language version of the IFU.</p> <p><b>There is no defect with the neuroinspire software or the neuromate robot.</b></p>
2.	<p><b>2. Hazard giving rise to the FSCA*</b></p> <p>There is likely to be confusion if the surgeon or theatre staff try to use the images to support the text in the IFUs stated above.</p>
2.	<p><b>3. Probability of problem arising</b></p> <p>The neurolocate workflow has been designed to be very prescriptive using a step by step process within the software, the incorrect images presented in the IFUs are not available to select within the workflow as an option. These image errors would be very obvious to a trained user, they would be expected to be able to identify these errors. Therefore, a problem arising from these image errors is extremely unlikely.</p> <p>The images are obviously wrong and make no sense in relation to the corresponding text. The text is correct and is sufficient to support the trained user in the use of the software. All users are fully trained in the use of the system by Renishaw Field Service personnel.</p> <p><b><u>Error 1</u></b></p> <p>Figures 27 &amp; 28 are images which are neurolocate module specific. The text is clear on the actions required, the images should give the expected view on the screen. The software user interface and the text in the IFU are sufficient for the surgeon to continue the surgery with no harm to the patient. The correct images are presented below and provide the correct view on the screen</p> <p><b><u>Error 2</u></b></p> <p>All the Figures are images which are neurolocate module specific. The text is clear on the actions required, the images give the expected view on the screen. The software user interface and the text in the IFU are sufficient for the surgeon to continue the surgery with no harm to the patient.</p>
2.	<p><b>4. Predicted risk to patient/users</b></p> <p>Very unlikely to result in patient harm</p>
2.	<p><b>5. Further information to help characterise the problem</b></p> <p>None</p>
2.	<p><b>6. Background on Issue</b></p> <p>This issue was detected within the Renishaw organisation. It has not been identified by a clinician in the field.</p>
2.	<p><b>7. Other information relevant to FSCA</b></p>
	<p><b><u>Previous Versions of the IFUs Impacted</u></b></p>

The errors presented also impacted historic versions of this IFU. The identification of 1 of the historic IFUs follow a different numeric reference type, this was then subsequently transferred to a new numeric reference type.

**Error 1**

H-5630-3035-A3 – neurolocate module – instructions for use (English Language, French Language, Spanish Language, German Language, Italian Language)  
 047.0107A/EN – neurolocate module – instructions for use (English Language)  
 047.0107B/DE – neurolocate module – instruction for use (German Language)  
 047.0107B/FR – neurolocate module – instructions for use (French Language)  
 047.0107B/IT – neurolocate module – instructions for us (Italian Language)

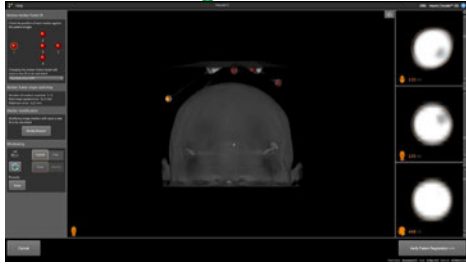
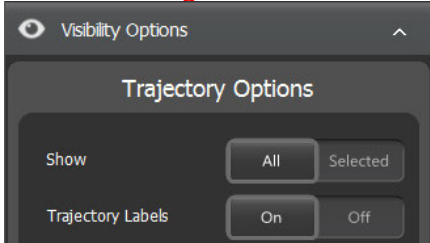
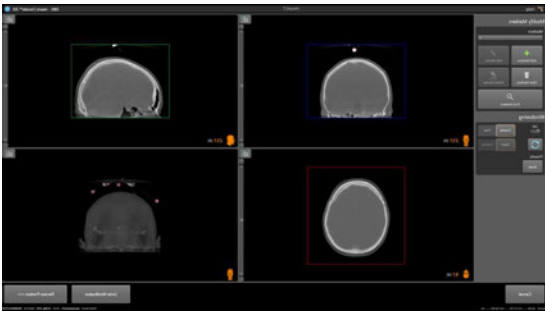
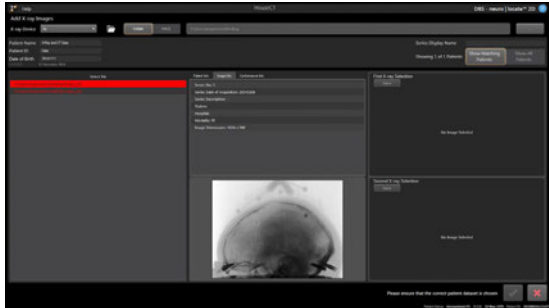
Please note that version A was not created for German, French, Italian or Spanish language.

**Error 2**

H-5630-3035-A3 – neuroinspire surgical planning software for use with neurolocate module  
 047.0107A/EN – neurolocate module – instructions for use (English Language)  
 047.0107B/EN – neurolocate module – instructions for use (English Language)

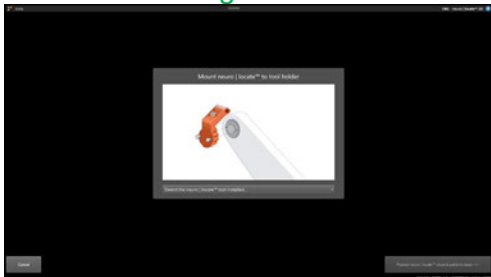
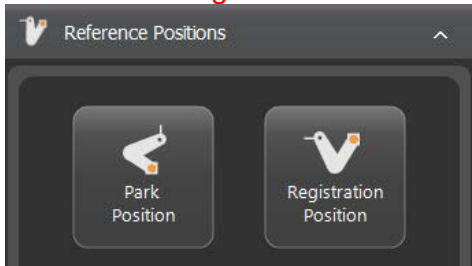
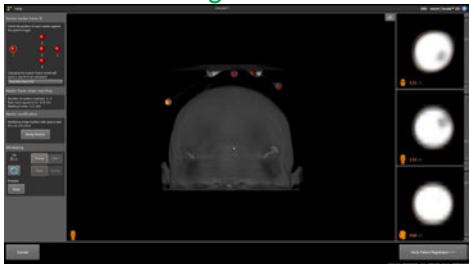
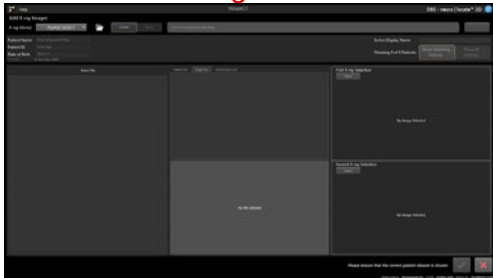
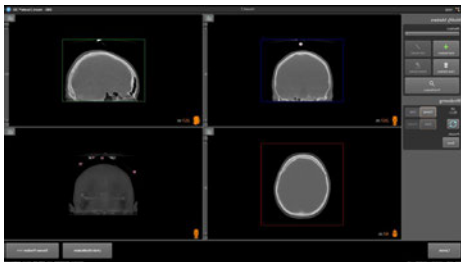
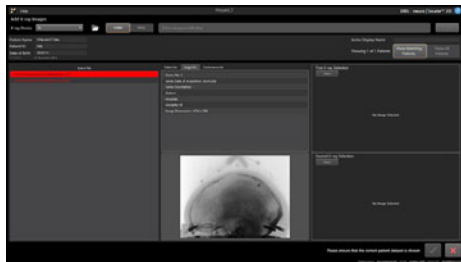
Details of the correct and incorrect images are detailed below :

**Error 1**

<p style="text-align: center;">Correct ✓</p>	<p style="text-align: center;">Incorrect ✗</p>
<p style="text-align: center;">Figure 27</p> 	<p style="text-align: center;">Figure 27</p> 
<p style="text-align: center;">Figure 28</p> 	<p style="text-align: center;">Figure 28</p> 

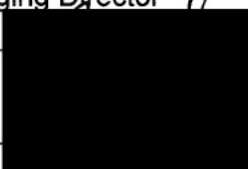
**Error 2**

The incorrect images where there is most likely to be confusion are detailed below.

<p style="text-align: center;">Correct ✓</p>	<p style="text-align: center;">Incorrect ✗</p>
<p style="text-align: center;">2.5 neurolocate 2D patient localization process Figure 4</p> 	<p style="text-align: center;">2.5 neurolocate 2D patient localization process Figure 4</p> 
<p style="text-align: center;">Figure 27</p> 	<p style="text-align: center;">Figure 27</p> 
<p style="text-align: center;">Figure 28</p> 	<p style="text-align: center;">Figure 28</p> 

A full list of images for Error 2 can be supplied upon request.

<b>1. Type of Action to mitigate the risk*</b>					
3.	<p><b>1. Action To Be Taken by the User*</b></p> <p><input checked="" type="checkbox"/> Identify Device    <input type="checkbox"/> Quarantine Device    <input type="checkbox"/> Return Device    <input type="checkbox"/> Destroy Device</p> <p><input type="checkbox"/> On-site device modification / inspection</p> <p><input type="checkbox"/> Follow patient management recommendations</p> <p><input type="checkbox"/> Take note of amendment / reinforcement of Instructions For Use (IFU)</p> <p><input checked="" type="checkbox"/> Other                      <input type="checkbox"/> None</p> <p>Provide further details of the action(s) identified.</p>				
3.	<table border="1"> <tr> <td>2. By when should the action be completed?</td> <td>Review should be immediate to identify incorrect IFUs</td> </tr> </table>	2. By when should the action be completed?	Review should be immediate to identify incorrect IFUs		
2. By when should the action be completed?	Review should be immediate to identify incorrect IFUs				
3.	<p>3. Particular considerations for:                      Choose an item.</p> <p>Is follow-up of patients or review of patients' previous results recommended?</p> <p>No</p> <p>No impact on patient expected</p>				
3.	<table border="1"> <tr> <td>4. Is customer Reply Required? * (If yes, form attached specifying deadline for return)</td> <td>No</td> </tr> </table>	4. Is customer Reply Required? * (If yes, form attached specifying deadline for return)	No		
4. Is customer Reply Required? * (If yes, form attached specifying deadline for return)	No				
3.	<p><b>5. Action Being Taken by the Manufacturer*</b></p> <p><input type="checkbox"/> Product Removal    <input type="checkbox"/> On-site device modification/inspection</p> <p><input type="checkbox"/> Software upgrade    <input checked="" type="checkbox"/> IFU or labelling change</p> <p><input type="checkbox"/> Other    <input type="checkbox"/> None</p> <p>The images in the IFUs cited in section 1 will be updated and new IFUs provided to affected sites.</p>				
3.	<table border="1"> <tr> <td>6. By when should the action be completed?</td> <td>January 2024</td> </tr> </table>	6. By when should the action be completed?	January 2024		
6. By when should the action be completed?	January 2024				
3.	<table border="1"> <tr> <td>7. Is the FSN required to be communicated to the patient /lay user?</td> <td>No</td> </tr> </table>	7. Is the FSN required to be communicated to the patient /lay user?	No		
7. Is the FSN required to be communicated to the patient /lay user?	No				
3.	<table border="1"> <tr> <td>8. If yes, has manufacturer provided additional information suitable for the patient/lay user in a patient/lay or non-professional user information letter/sheet?</td> <td></td> </tr> <tr> <td>Choose an item.</td> <td>Choose an item.</td> </tr> </table>	8. If yes, has manufacturer provided additional information suitable for the patient/lay user in a patient/lay or non-professional user information letter/sheet?		Choose an item.	Choose an item.
8. If yes, has manufacturer provided additional information suitable for the patient/lay user in a patient/lay or non-professional user information letter/sheet?					
Choose an item.	Choose an item.				

<b>2. General Information*</b>		
4.	1. FSN Type*	New
4.	2. For updated FSN, reference number and date of previous FSN	Provide reference and date of previous FSN if relevant.
4.	3. For Updated FSN, key new information as follows: Summarise any key difference in devices affected and/or action to be taken.	
4.	4. Further advice or information already expected in follow-up FSN? *	No
4.	5. If follow-up FSN expected, what is the further advice expected to relate to: N/A	
4.	6. Anticipated timescale for follow-up FSN	N/A
4.	7. Manufacturer information (For contact details of local representative refer to page 1 of this FSN)	
	a. Company Name	See Page 1
	b. Address	See Page 1
	c. Website address	See Page 1
4.	8. The Competent (Regulatory) Authority of your country has been informed about this communication to customers. *	
4.	9. List of attachments/appendices:	N/A
4.	10. Name/Signature	Rupert Jones Managing Director 

<b>Transmission of this Field Safety Notice</b>	
	<p>This notice needs to be passed on all those who need to be aware within your organisation or to any organisation where the potentially affected devices have been transferred. (As appropriate)</p> <p>Please transfer this notice to other organisations on which this action has an impact. (As appropriate)s</p> <p>Please maintain awareness on this notice and resulting action for an appropriate period to ensure effectiveness of the corrective action.</p> <p>Please report all device-related incidents to the manufacturer, distributor or local representative, and the national Competent Authority if appropriate, as this provides important feedback.*</p>

Note: Fields indicated by \* are considered necessary for all FSNs. Others are optional.