



NAVIGANT™ SOFTWARE
NEW FEATURES IN v2.11



NAVIGANT™ v2.11 NEW FEATURES

HIGHLIGHT OF NEW FEATURES:

- NaviLine™
Automated linear navigation

- Automapping of Pulmonary Veins
“Tubeless Maps”

- Roller Wheel Mouse CAS Control
- Keyboard Control
 - » CAS Step Size
 - » Rotate Feature

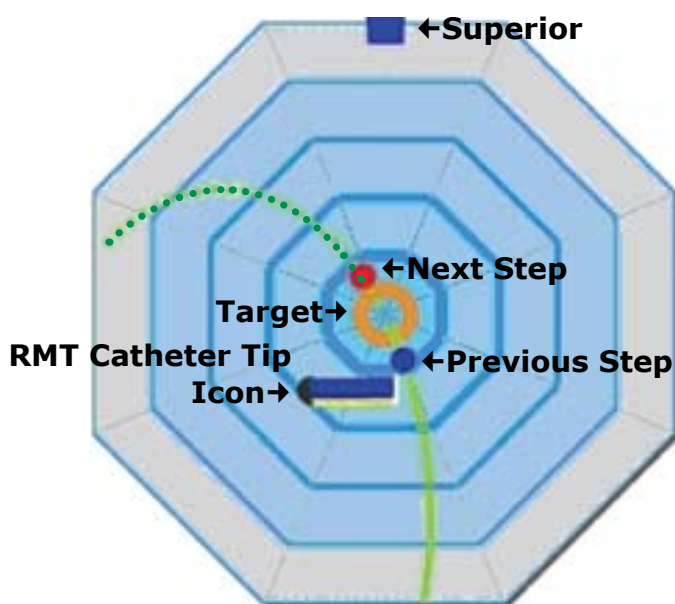
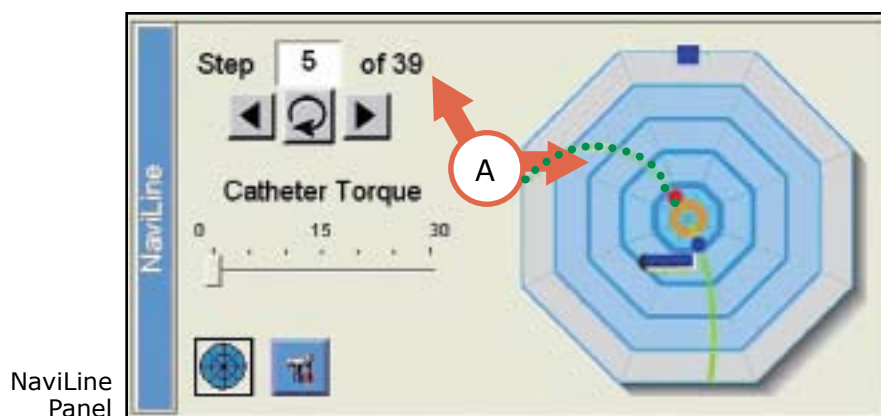


NAVILINE™ AUTOMATED NAVIGATION

ABOUT NAVILINE

NaviLine is the tool designed to follow a Design Line created in the Carto™ RMT. When NaviLine is selected, the navigation mode will change to Target navigation (indicated by the icon in the upper left corner of Navigant™).

Navigant calculates the distance of a Design Line and translates that into evenly distributed steps in NaviLine. The number of steps are displayed in the NaviLine panel as well as a 2D surface graphic representation of the steps (A).



The NaviLine will be displayed on this surface graphic. The surface is viewed from the top.

- The blue square at the top represents **superior**.
- The **gold ring** in the center identifies the CURRENT target.
- The **red dot** identifies the NEXT target.
- The **blue dot** indicates the PREVIOUS target.
- A **solid line** indicates something above the surface.
- The **dotted line** indicates something below the surface.

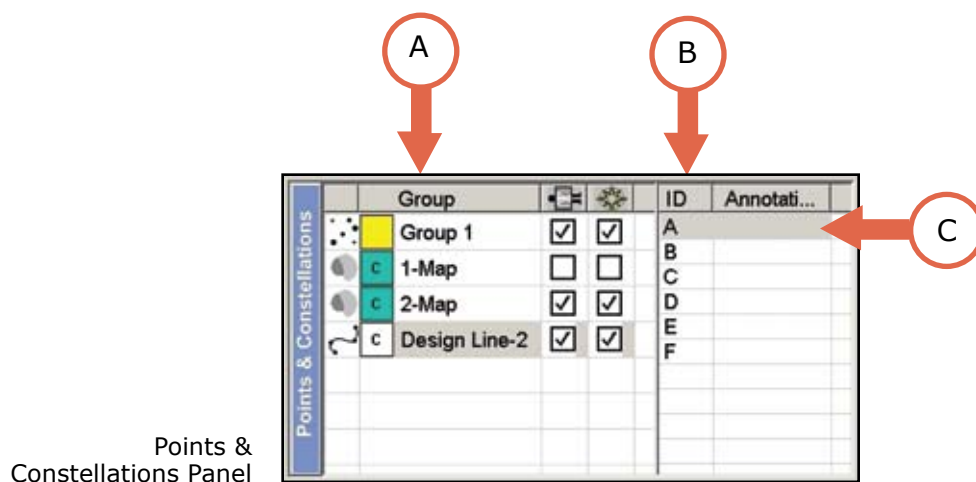


SETTING UP NAVILINE

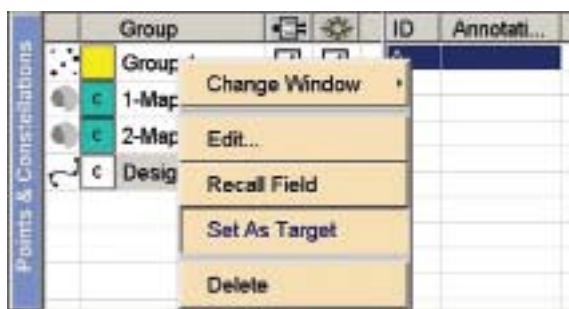
Select the NaviLine panel from the Navigate Tab.

- Create Design Line on Carto
- Send to Navigant from Carto
- Design Line will appear in the Points and Constellation Panel
- Select the desired Design Line on the group side (A)

A series of points will appear under the ID column in the Annotation section (B).



Right click on a starting point in the annotation side of the panel (C). In the dropdown list that will be displayed choose **Set as Target** (D) while holding the **AUTO** key, and the NaviLine panel is activated.



Points & Constellations Panel with Drop Down Menu

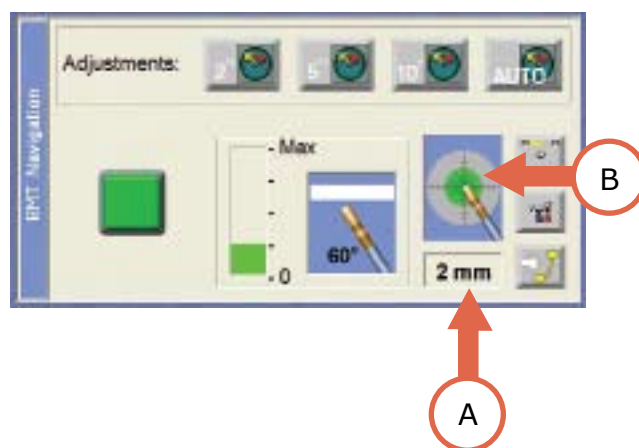


USING NAVILINE

NaviLine will calculate the distance and field direction to reach the target. When holding down AUTO the catheter will advance to the target.

During this process, monitor the **distance to target** (A) on the RMT panel, as well as the target icon (B).

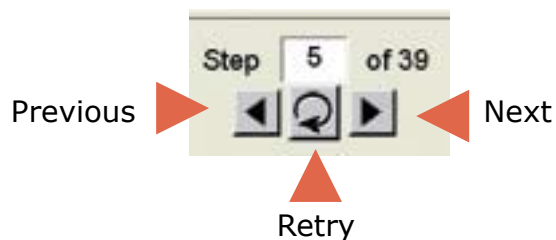
This information combined with the ongoing assessment of the contact meter level will assure the most accurate catheter tip placement.



During this ongoing assessment, if a closer proximity to the target is desired, the **Retry** button can be utilized.

The NaviLine, based on this input as well as the catheter tip location, will adjust the field direction and/or the CAS by making small incremental movements towards the target. This can be repeated if desired.

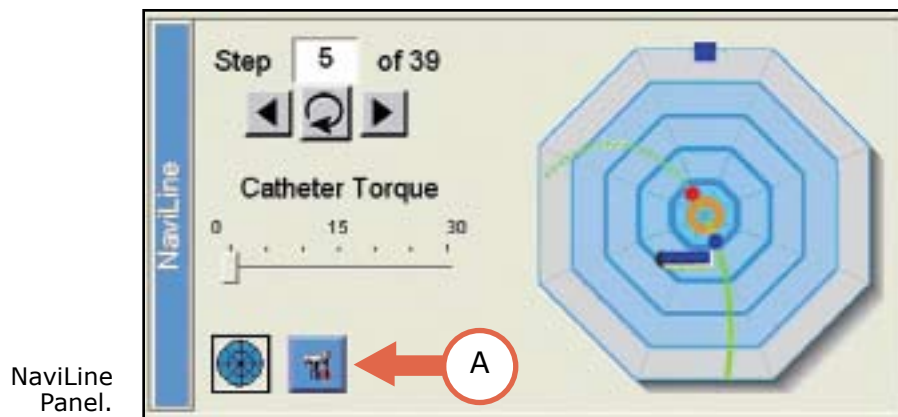
The **Next** step button will advance the catheter to the next incremental target location. The **Previous** button will return the catheter to a previous target location.



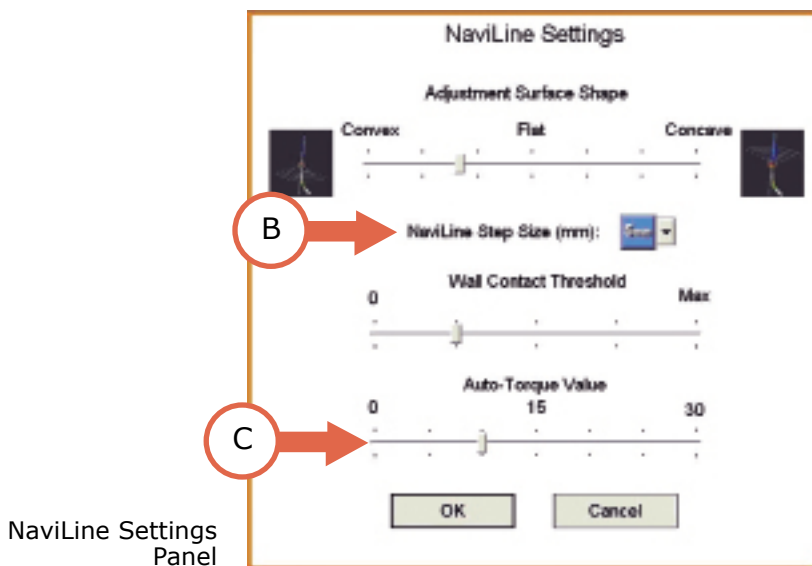


NAVILINE SETTINGS

Adjustments to step size are made in the NaviLine Settings dialogue box.



The default NaviLine step size is 5 mm. Click on the **toolbox icon** (A) to open the NaviLine Settings dialogue box. Adjust the step size by selecting from the drop down menu (B).



The Wall Contact and Auto-Torque controls are utilized during the NaviLine sequencing process. They set the parameters for magnetic torque adjustments based on tip location information as well as contact meter input received from the RMT panel. The default Auto-Torque Value is 10 (indicated by the second marker on the horizontal bar). Adjust the value by dragging the slider along the bar.



TIP For LA mapping procedures it is recommended to adjust the Auto Torque Value sliding bar (C) to a level of approximately 5.



PULMONARY VEIN (PV) AUTOMAP

HOW AUTOMAP WORKS

The Pulmonary Vein AutoMap feature of Navigant creates a map of the pulmonary vein by collecting points in a specific pattern.

- Prior to initiating the AutoMap it is important to position the catheter appropriately.
- The program will map an area of approximately 2 cm in length.
- It is recommended to utilize electrogram and impedance signals to determine the differentiation of tissue.
- After advancing the catheter into the pulmonary vein retract the catheter slowly to identify the most distal area of conduction.

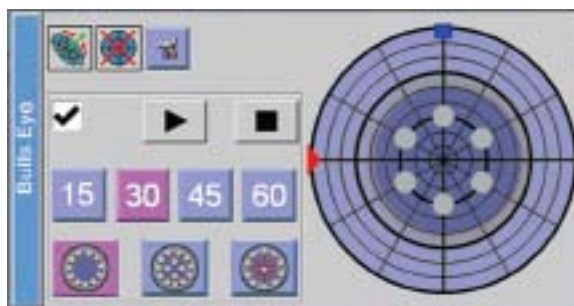


TIP

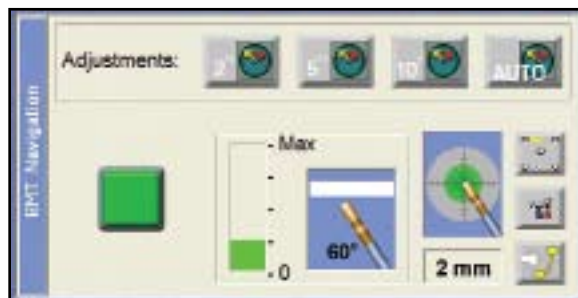
- From this position advance the catheter 2 cm into the vein.

Use the numbers across the top of the keyboard to change the CAS step size. The range is from 1 to 9 mm.

When the AutoMap feature is initiated, the Bulls Eye control panel will be activated. The Bulls Eye will display the sequence of catheter movements on the panel.



The AutoMap sequence uses information from the contact meter in the RMT Navigation panel. It monitors the contact and adjusts the deflection of the catheter tip optimizing contact with the tissue.

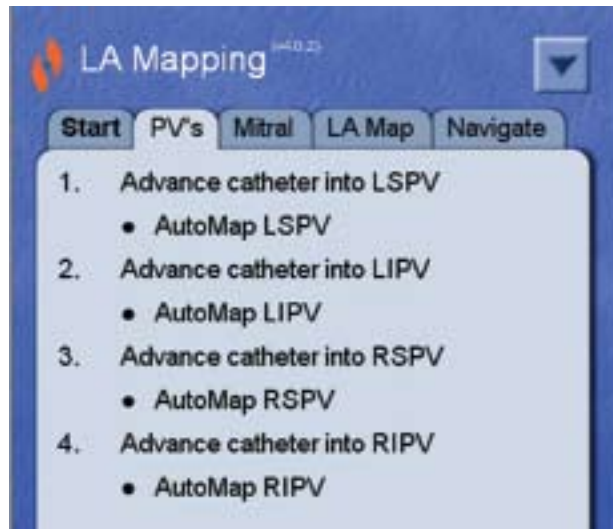


RMT Navigation Panel
The Contact Meter is at its optimal contact reading.



PV TAB

The PV (pulmonary vein) tab provides the ability to automap the pulmonary veins by using the numbered and bulleted steps provided.



CWM with LA Mapping PVs Tab



TIP

Prior to mapping the pulmonary veins, create and label 5 maps on Carto.

1. Advance catheter into LSPV

This applies a preset field direction. At this point, advance the catheter with the Cardiodrive into the LSPV.

• AutoMap LSPV

While observing the electrogram and/or impedance, slowly retract while monitoring for changes. Once the tip is at the desired location advance the catheter approximately 2cm and initiate AutoMap.



REMINDER: Hold down the AUTO button on the keyboard during the entire AutoMap process

Continue this procedure for each vein: LSPV, LIPV, RSPV, and RIPV until all four have been mapped. Click play to advance to the Mitral tab.



TIP

Prior to proceeding to the next vein, open the corresponding map on Carto.



ROLLER WHEEL MOUSE CAS CONTROL

THE ROLLER WHEEL CAN BE USED TO ADVANCE AND RETRACT CAS

Each click equals one stepsize.





KEYBOARD CONTROL

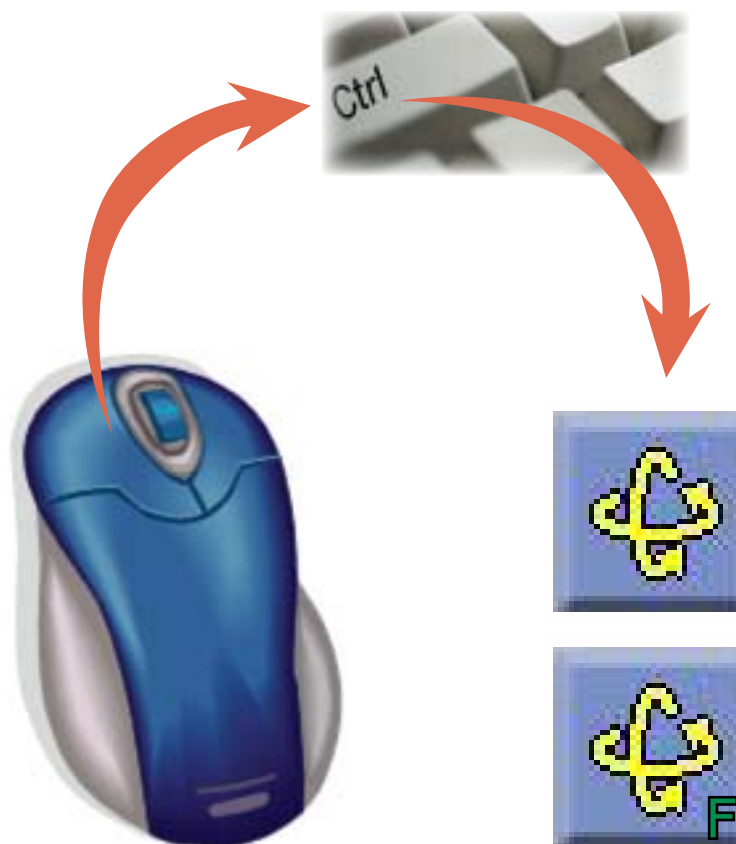
CAS STEP SIZE

The CAS step size can be adjusted by selecting the numeric keys on the keyboard. This adjustment applies to the CAS keyboard controls as well as the CAS roller wheel mouse control.

ROTATE FEATURE

The **CTRL** key on the keyboard provides the ability to switch between rotate field and rotate model.

When the mouse mode is in rotate field, press and hold the **CTRL** button to switch to rotate model.



TIP

This will not switch if rotate model is the primary function.