

I. Create a New Study File in Conduct NT

1. Launch Conduct NT
2. Review *Terms of Use* and accept conditions to proceed to create a new study file.
3. Welcome: Select **Create a new study**.
4. Create New Study: A distinct *Name* and *ID* is required. All other entry fields are optional. Conduct NT will title the study file using the Name entry.
5. Copy Settings from a Previous Study: Select previously created case from the Study drop down menu to replicate settings from an existing file or **Cancel** to proceed without a selection.
6. Data Input: Select **Show Live Data**.
7. Set up catheter settings by accessing the *Catheter Settings* menu. Under **Settings** in the Conduct NT toolbar, select **Catheter Settings**, Figure 1 will appear.

II. Pressure Calibration

1. Hydrate the catheter's sensor by placing in room temperature saline (0.9% NaCl) for a minimum of 15 seconds.
2. Proceed with placing the sensor just under the surface of saline. Maintain the sensor below the surface of saline, connect the catheter's pressure connector to the Inca Pressure Module using the pressure interface cable.
3. Follow prompts on Conduct NT to auto calibrate pressure sensor.
4. Connect catheter's volume connector to Inca Volume Module using volume interface cable.

The screenshot shows the 'Catheter Settings' dialog box with the following fields and callouts:

- Current catheter:** CA71103PL (Callout: Select catheter model being used)
- Number of electrodes:** Radio buttons for 10, 11, and 12 electrodes. 12 is selected. (Callout: Default setting 12 electrodes, composing 7 segments)
- Field ratio:** Radio buttons for Single Field Ratio and Dual Field Ratio. 0.30 is selected. (Callout: Default dual field ratio at 0.30)
- Field frequency:** 21.5 KHz
- Distances:** A table with 7 rows, each showing a distance of 10.00 mm between electrodes:

Electrode	Distance (mm)
3 - 4	10.00
4 - 5	10.00
5 - 6	10.00
6 - 7	10.00
7 - 8	10.00
8 - 9	10.00
9 - 10	10.00
- Total volume:** Checkboxes for Segment 1 through Segment 7. All are checked. (Callout: For Number of electrodes: Default setting 12 electrodes, composing 7 segments. Electrodes can be reduced to 11 (6 active volume segments) or 10 (5 active volume segments))
- Buttons:** ECG, All set files, OK, Cancel

Additional callouts on the right side of the dialog box:

- Electrode spacing will default when catheter model is selected.
- Select segments to include in total volume.

Figure 1: Catheter Settings

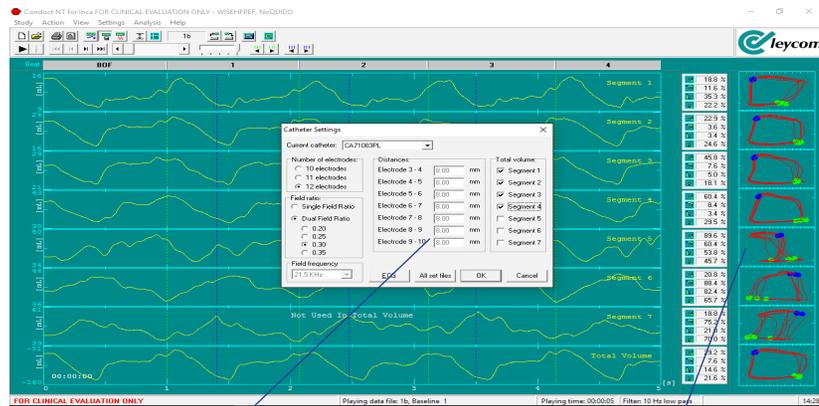
III. Recommended Catheter Placement

1. Place the catheter straight on the long-axis of the ventricle, with the pigtail at the apex.
2. To confirm that segments are in the ventricle, review the *Segmental Loops* view in Conduct NT. Go to **View** on the toolbar and select **Segmental Loops**.

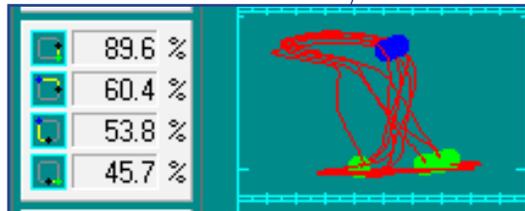
Note: Segmental loops in the ventricle will run counter-clockwise.

3. After segmental loops have been reviewed, pressure and volume recordings can begin. Collect baseline recording.

Figure 2: Segmental Loops View



Values to all the data sets in the study. Segments out of the ventricle can be checked off to exclude from total volume calibration.



IV. Volume Calibration using ESV and EDV

1. Select **Vc** on the Conduct NT toolbar. See Figure 3, label 1.
2. Select the baseline recording listed under *Files*, label 2.
3. Apply the ESV and EDV values in the entry labeled *Echo values*, label 3.
4. Select **Apply**, label 4. Conduct NT will apply the calibration values to all the data sets in the study.

Figure 3: Volume Calibration

