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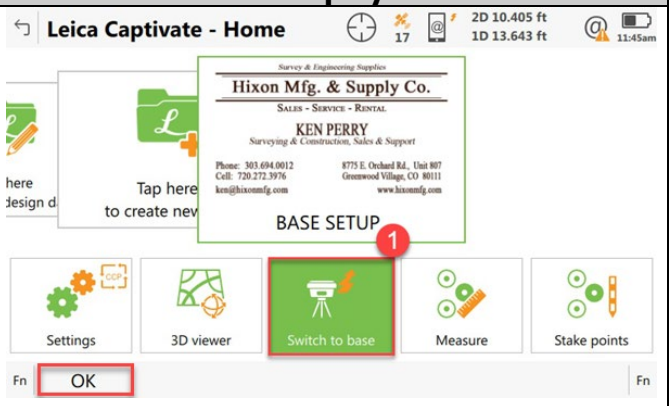
# Flo Chart
# Leica Viva RTK Base Setup

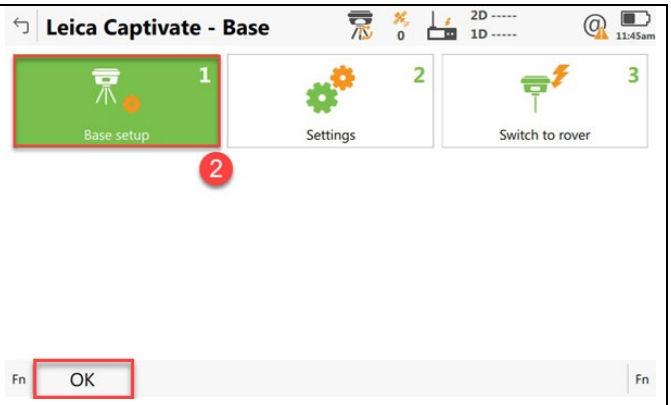
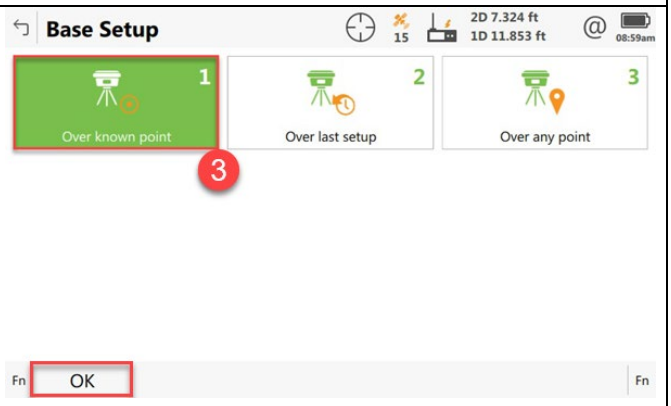
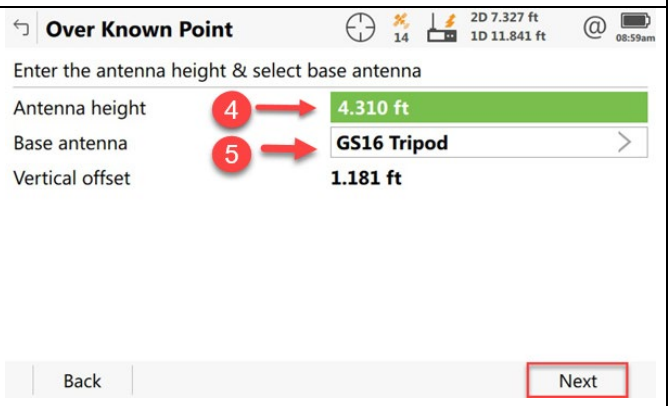
In this Flo Chart, we will be setting up RTK Base Station over a known point, and or anywhere (here) position. We will also be setting our Radio Channel if need be plus configuring your F9 Hot Key to Change Radio Channel.

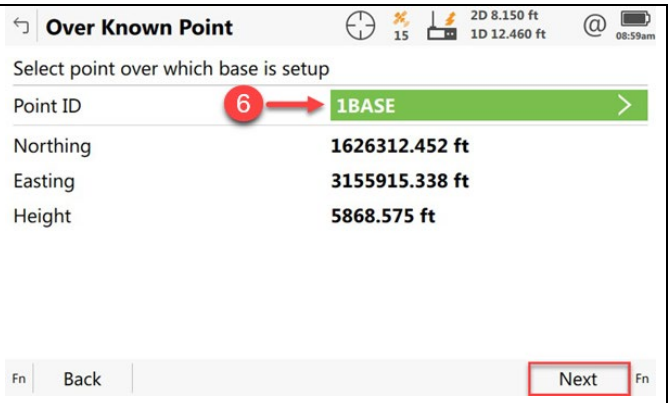
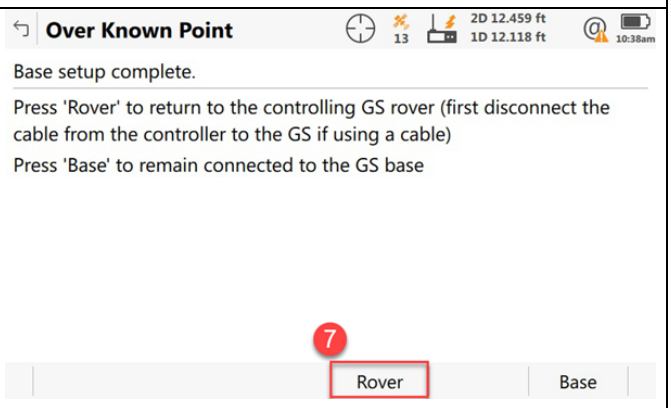
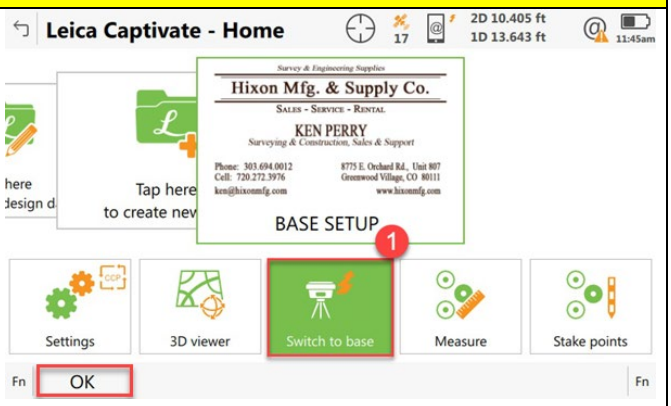
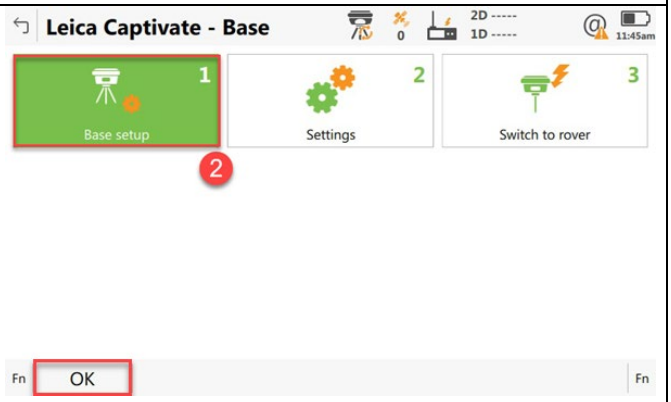
**Note:**
Make sure when you're placing your antenna on the tripod you have the right one. Each Antenna has to be synced via Bluetooth. Look for the blue light (Bluetooth) on the antenna, when you have connected to the base.

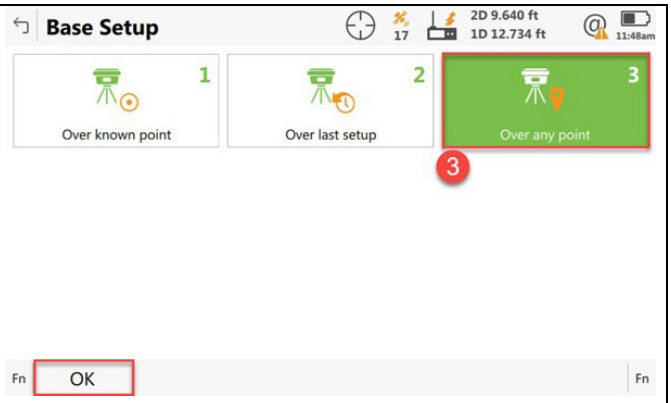
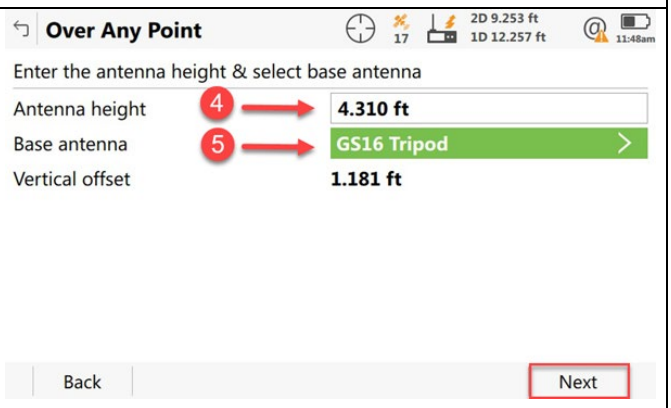
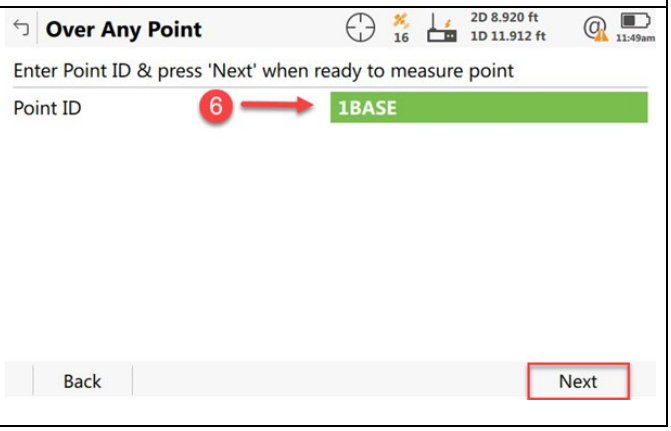
**Helpful Hint:**
Use the stickers provided to label base and rover antenna.

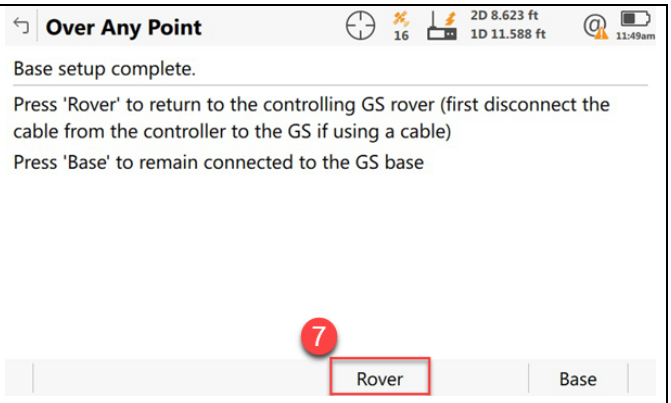
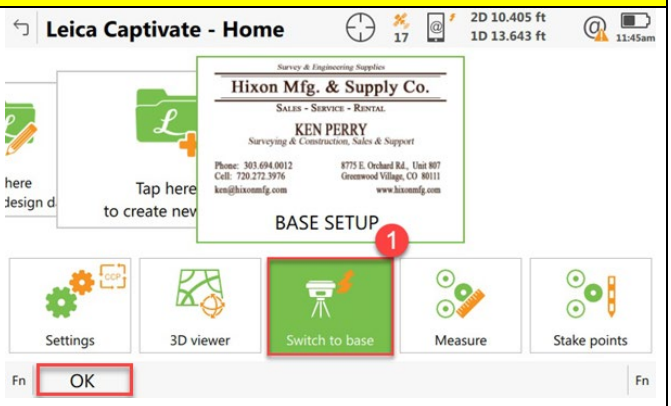
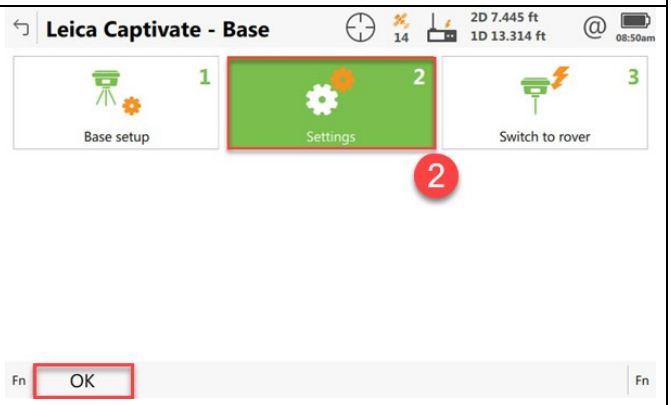
**In this Flow Chart we will be Setting your RTK Base over Known Point.**

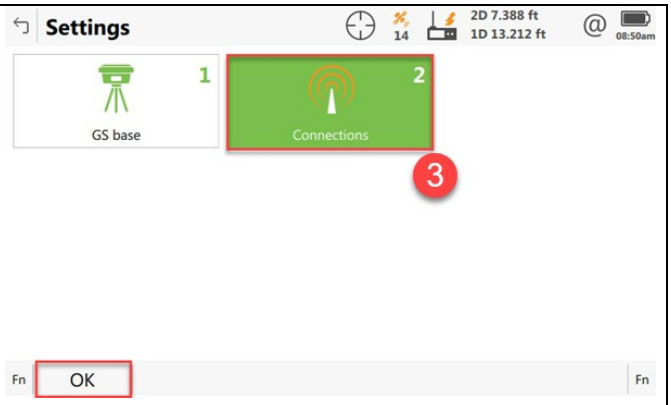
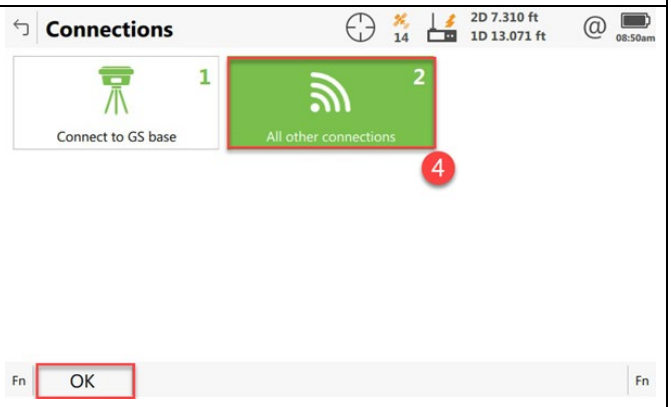
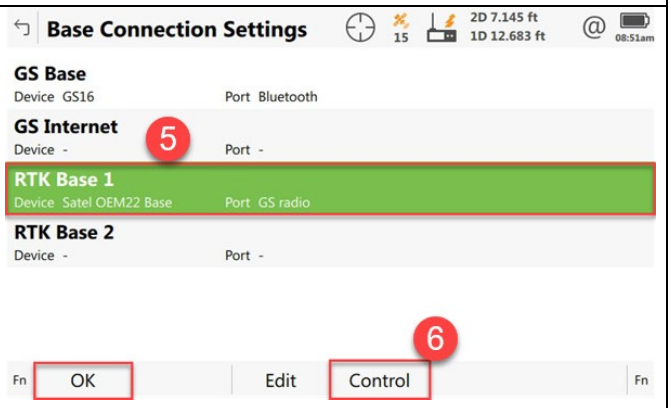
| Step | Action | Display |
|---|---|---|
| **1** | From the Leica Captivate - Home<br><br>1. Step (1) Highlight, Switch to base, then F1 OK<br><br>• Hint… You may have to scroll across the Carousel to find this app. |  |

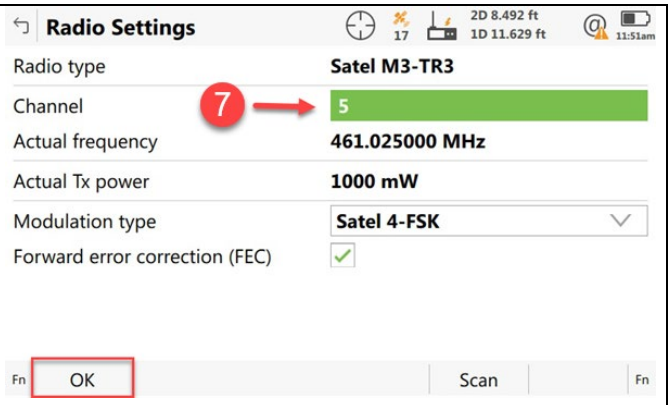
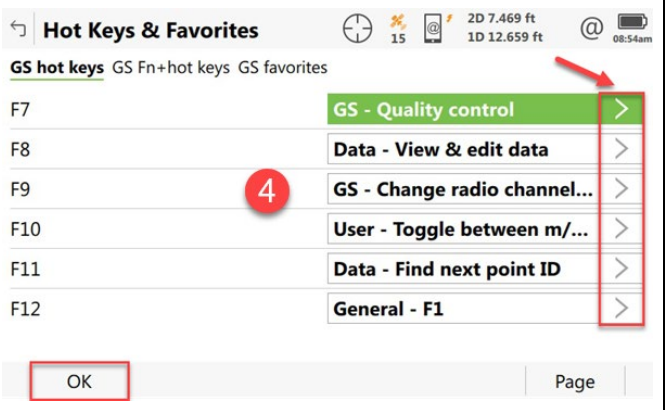
| | | |
|---|---|---|
| **2** | From the Leica Captivate - Base<br><br>2. Step (2) Highlight, Base setup, then F1 OK<br><br>Hint… Make sure the Data Collector Sync's with the Base.<br><br>Syncing  Synced  |  |
| **3** | From Base Setup<br><br>3. Step (3) Highlight, Over known point, then F1 OK |  |
| **4** | From the Over Known Point<br><br>4. Step (4) Highlight, the Antenna height Block and Enter your base antenna height.<br><br>5. Step (5) If you are using the height hook make sure you select the specific antenna you are using with your tripod as there is a 36cm offset when using the height hook.<br><br>If you are not using the height hook, select GS(X) on a Pillar, this will remove the Vertical offset.<br><br>• Then (F6) Next |  |

| | | |
|---|---|---|
| **5** | From the Over Known Point<br><br>6. Step (6) Tap on the arrow box or press enter to drop down the data points in your Job  <br><br>• Then (F6) Next |  |
| **6** | From the Over Known Point<br><br>• You are now done setting the base station Over Known Point<br><br>7. Step (7) Tap on Rover or press F4 to connect to your Rover |  |
| **In this Flow Chart we will be Setting your RTK Base over Any Point (Here) position.** | | |
| **1** | From the Leica Captivate - Home<br><br>8. Step (1) Highlight, Switch to base, then F1 OK<br><br>Hint… You may have to scroll across the Carousel to find this app. |  |
| **2** | From the Leica Captivate - Base<br><br>1. Step (2) Highlight, Base setup, then F1 OK<br><br>Hint… Make sure the Data Collector Sync's with the Base.<br><br>Syncing  Synced  |  |

| | | |
|---|---|---|
| **3** | From the Base Setup<br><br>2. Step (3) Highlight, Over any point, then F1 OK |  |
| **4** | From the Over Any Point<br><br>3. Step (4) Highlight this Block and Enter your antenna height.<br><br>4. Step (5) If you are using the height hook make sure you select the specific antenna you are using with tripod as there is a 36cm offset when using the height hook.<br><br>If you are not using the height hook, select GS(X) on a Pillar, this will remove the Vertical offset.<br><br>• Then (F6) Next |  |
| **5** | From the Over Any Point:<br><br>5. Step (6) Name your Base Point ID<br><br>• Then (F6) Next |  |

| | | |
|---|---|---|
| **6** | From the Over Any Point:<br>• You are now done setting the base station Over Any Point<br>• Step (7) Tap on Rover or press F4 to connect to your Rover |  |
| **In this Flow Chart we will be going thru the Base Connections to Change the RTK Radio Channel…**<br><br>**Helpful Hint… Make sure your F9 key is configured as a short cut to change the channel so you can avoid these steps. Please see Setting your Hot Keys & Favorites below this Flow Chart.** | | |
| **1** | From the Leica Captivate - Home<br>1. Step (1) Highlight, Switch to base, then F1 OK<br><br>Hint… You may have to scroll across the Carousel to find this app. |  |
| **2** | From the Leica Captivate - Base<br>2. Step (2) Highlight, Settings, then F1 OK |  |

| | | |
|---|---|---|
| **3** | From the Leica Settings<br><br>3. Step (3) Highlight, Connections, then F1 OK |  |
| **4** | From the Connections<br><br>4. Step (4) Highlight, All other connections, then Press F1 OK |  |
| **5** | From the Base Connection Settings<br><br>5. Step (5) Highlight, RTK Base 1,<br><br>6. Step (6) Press F4 Control, this will populate the Radio Channels Screen |  |

| | | |
|---|---|---|
| **6** | From the Radio Settings<br><br>7. Step (7) Highlight the Channel, and select a different one.<br><br>• Hint, you will have to do this for the Base and Rover as they do have to match!<br><br>• Make sure to set a hot key! Hixon presets F9 to Change Radio Channel<br><br>• Please see below on how to set you Hot Keys & Favorites |  |
| | In this Flow Chart we will be Configuring your Hot Keys & Favorites, so we can have a Hot Key to change the Radio Channel.<br><br>Helpful Hint… Make sure this is completed to avoid having to go thru the steps above.<br><br>Helpful Hint… When you have completed this Flow Chart, you will beable to use F9 to Change Radio Channel on Rover. | |
| **6** | From the Main Menu<br><br>1. Step (1) Highlight, Settings, then press F1 OK<br>2. Step (2) Highlight, Customization, then press F1 OK<br>3. Step (3) Highlight, Hot keys & favorites, then press F1 OK<br>4. Step (4) Set your F9 Hot Key, GS - Change Radio Channel |  |

**Summary What we did:**
Collected a single point to base the coordinate system on.
All measurements are then relative to this value.
Created a new coordinate system that could be attached to any project.
Attached a coordinate to the measured point.
Defined a direction for a 0 azimuth, in this case GPS north.
Calculated a local Grid to Ground scale factor to produce "ground distances".
When would I use this?
Any time you would assume a coordinate for the total station setup, this would be the corresponding setup.
When the items to be surveyed do not have trusted values.

**Notes:**
This is a general guide for One Step Localization.

Depending on your firmware, some screens maybe missing in this flow chart.

Neither Hixon nor Leica Geosystems takes any responsibility in any configuration that you may setup.

If you have any question's please call us at any time.