1. **Install ConfigSoft prior to connecting the Configurator**
   - System requirements: Windows 10 (USB 2.0 or 3.0).
   - Insert the USB drive and open the ConfigSoft folder. There are two separate installers, 32 bit and 64 bit, please install the version compatible with your system.
   - Open the appropriate folder and run setup.exe.
   - Internet connection is necessary to access and install any drivers not already installed.

2. **Configurator setup**
   - The Configurator enables users to set the transmission and receiving channels of telemeters and SmartPads through wireless communication.
   - Attach aerial to rear of the Configurator.
   - Connect Configurator to computer via USB cable.

3. **SmartPad Setup**
   - The SmartPad acts as a universal inductive telemeter recharging platform and data receiving station for all Kaha rat telemeters.
   - Plug in power.
   - Light on front will turn on (initially solid orange).

4. **Telemeter Setup**
   - Telemeters do not need to be removed from their sterile packaging.
   - Place only one telemeter on the SmartPad (ensure any other telemeters are 2 meters away).
   - The SmartPad will turn the telemeter on and into Active Mode and it will start transmitting data.
   - A green LED on the front of the SmartPad indicates that it has identified a telemeter on the same Channel. All telemeters and SmartPads ship on the same Channel allocation “Setup.”
   - An orange LED indicates no telemeter could be found on that Channel.
   - Do not operate SmartPad within 10cm of any metal. See manual for more information.

5. **Pair telemeters and SmartPads using Configurator system.**
   - All telemeters and SmartPads are initially configured to Channel “Setup.” For data collection, select and pair each telemeter and SmartPad to one of 40 Channels using the Configurator and ConfigSoft software.
   - After changing Channels, remove the telemeter from the SmartPad and place into Safe Mode using ConfigSoft. Keep telemeters that are in Safe Mode at least 1m away from any SmartPad or they will turn back on.

6. **Implant telemeters**
   - Telemeters are normally shipped sterile and ready to implant. Surgical instructional videos, guides and techniques are available online at: [www.adinstruments.com/support/kaha](http://www.adinstruments.com/support/kaha)

7. **Connect SmartPads to PowerLab data acquisition system**
   - Connect each SmartPad to a PowerLab and LabChart data acquisition system using the BNC outputs. Each SmartPad has three analog outputs which are automatically set when the telemeter has been paired.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Output 1</th>
<th>Output 2</th>
<th>Output 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRM54P</td>
<td>Pressure</td>
<td>Unused</td>
<td>Temperature</td>
</tr>
<tr>
<td>TRM54PB</td>
<td>Pressure</td>
<td>Biopotential</td>
<td>Temperature</td>
</tr>
<tr>
<td>TRM54PP</td>
<td>Pressure</td>
<td>Pressure</td>
<td>Temperature</td>
</tr>
<tr>
<td>TR50B</td>
<td>Unused</td>
<td>Biopotential</td>
<td>Temperature</td>
</tr>
<tr>
<td>TR50BB</td>
<td>Biopotential 1 (yellow &amp; green)</td>
<td>Biopotential 2 (black &amp; red)</td>
<td>Temperature</td>
</tr>
<tr>
<td>TRM56SP</td>
<td>Pressure</td>
<td>SNA original</td>
<td>Temperature</td>
</tr>
<tr>
<td>TR57Y</td>
<td>Oxygen</td>
<td>Unused</td>
<td>Temperature</td>
</tr>
<tr>
<td>TR58AB</td>
<td>Biopotential</td>
<td>-</td>
<td>Temperature</td>
</tr>
</tbody>
</table>

8. **Acquire data**
   - When the animal is placed on the SmartPad, and SmartPad charging field is enabled, the telemeter will be automatically activated and data transmission will occur. Continuous data collection and simultaneous charging is now possible (the Configurator is not required for data acquisition).

9. **Care and storage of telemeters**
   - Telemeters are precision electronic devices and cannot be refurbished if damaged. Always store in original packaging. Use ConfigSoft to place telemeters into Safe Mode for storage or when animals are away from the SmartPad for extended periods. Always fully charge the battery prior to storage and check battery level at least every 2 months.

10. **Questions/support?**
    - We are proud of our before and after sales support. Please contact us with any questions about our telemetry systems. [adi.to/support](http://adi.to/support)