

HOW TO USE YOUR NEW MAPWHEEL

MAP WHEEL INSTRUCTIONS

Congratulations on purchasing MapWheel, the finest map measure available. MapWheel is a simple, fast and accurate way to measure distances on maps, whether in straight lines or along curves. Just set MapWheel's scale to match the map, then roll MapWheel along the route you want to measure. The distance is displayed instantly.

To begin using your MapWheel, first put in the two AAA batteries. Make sure the batteries face the correct way as shown on the label. MapWheel will turn on ready to use.

When you are done with your MapWheel, set it aside and it will turn off automatically after about seven minutes. Press any button to turn your MapWheel back on.

MAKING A MEASUREMENT

Before making a measurement, you must set your MapWheel's scale to match the map. There are three ways to do this as described in the following sections.

Once you have set the scale, roll your MapWheel on the map to make a measurement. To start over, press the CLEAR **0** button to reset MapWheel to zero.

MapWheel reads out in either miles (display shows "MI"), kilometers ("KM") or Nautical Miles ("NM"). Press the MI/KM/NM **MI** button to change the readout. When you change from one readout to another, the measurement is converted.

BUILT-IN SCALES

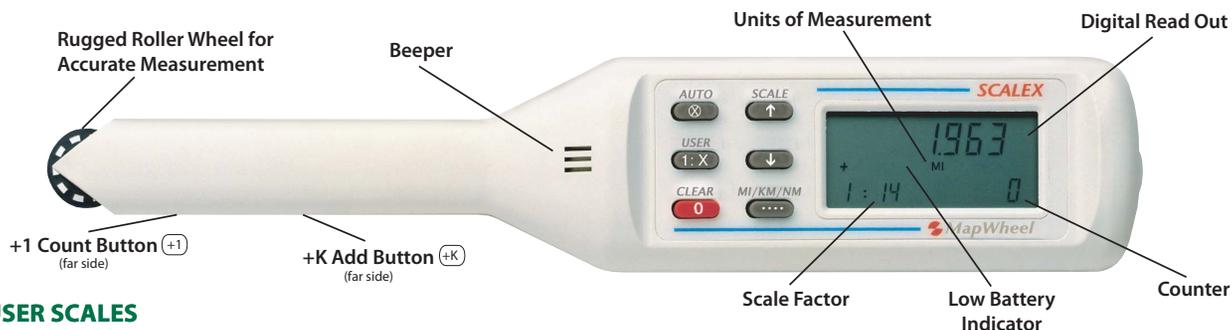
For common scales, simply use one of MapWheel's nineteen standard built-in scales. These are shown on the map like this:

1 : 10,000	1 : 24,000	1 : 50,000	1 : 100,000	1 : 1,000,000
1 : 12,000	1 : 25,000	1 : 62,500	1 : 125,000	1 : 2,000,000
1 : 14,400	1 : 31,680	1 : 63,360	1 : 250,000	1 : 2,500,000
1 : 20,000	1 : 36,000		1 : 500,000	1 : 5,000,000

Press the UP **↑** or DOWN **↓** button and the scale is displayed in place of the measurement. Continue to press **↑** or **↓** until you find the scale which matches your map. Press **0** to begin measuring.

(Note – if the map's scale is shown in miles per inch, see specified section)

A reminder of the MapWheel's scale always appears in the lower left part of the display. The reminder shows the scale but without the last three digits. For example, if the MapWheel is set to 1:24,000, a small 1:24 appears in the lower left part of the display.



USER SCALES

If the map's scale is not on the list above, you can enter it into your MapWheel manually. To do so, press the USER **1:X** button. The scale appears on the display with one digit flashing. Use the **↓** down arrow button to move the flashing digit right or the **1:X** button to move the flashing digit left. Use the **↑** up arrow button to raise each digit or use the **⊗** button to lower the digit. When the scale is correct, press the **MI** button. You are now ready to measure in the new scale.

When you enter your own user scale, it is put into the list of scales in numerical order. For example, if you enter a scale of 1:40,000, it will appear in the list between 1:36,000 and 1:50,000. You can enter up to three user scales. If you enter more than three user scales, the oldest one drops off the list and only the three most recent user scales are kept.

The user scales remain in the MapWheel even if it turns off. However, if you change the batteries, the user scales are erased.

AUTO-SCALE

If your map does not show a scale or if the map has been reduced or enlarged, you can set the scale from a known distance on the map.

To do this, press the AUTO **⊗** button. A picture of the MapWheel's wheel will appear on the display along with a row of digits with one digit flashing. Enter the known distance using the DOWN **↓** button to move the flashing digit right or the **1:X** button to move the flashing digit left. Use the UP **↑** button to raise each digit or use the **⊗** button to lower the digit. When the known distance is shown correctly, roll the MapWheel along this distance and press the **MI** button. You are now ready to make measurements.

For greatest accuracy, use the longest distance possible as your reference.

Note that the scale that was calculated by auto-scale is not automatically entered into the list of scales, so if you change scales, it will be lost. If you want to save the scale, press the **1:X** button and then the **MI** button.

MILES PER INCH

Some maps show the scale in miles per inch instead of the more common ratio form. If you wish, you may set the MapWheel to show scales in miles per inch. To do this, first set the MapWheel to read out in miles ("MI"). Then press the **↑** or **↓** button to display the scale. Press the MI/KM/NM **MI** button to change between miles per inch and ratio. The scale factor will show "1".

When the MapWheel is set to show scales in miles per inch, the USER **1:X** button also works to enter the scale in miles per inch. Simply follow the instructions in the section on "User Scales".

COUNTER

The MapWheel has a special counter **+1** button on the probe tip near the wheel (marked "+1"). Use this button to count individual items on the map.

Press the counter **+1** button to add one to the count in the lower right of the display. Press the **0** button to zero the count.

The count is independent of the measurement and you may use the counter **+1** button while the wheel is rolling or stopped. The count goes up to a maximum of 999.

ADDER

The MapWheel also has a special "adder" **+K** button on the probe tip (marked "+K"). Use this button to add a constant distance to the measurement. This is useful if, for example, you wish to add a few miles to your trip distance for every stop.

To see the adder constant, press and hold the adder **+K** button for two seconds. The display shows the adder constant with one digit flashing. Press **0** to leave the constant as it is or change the constant using the **↑** and **↓** arrow buttons as described for "auto scale", then press the **MI** button.

Every time you press the adder **+K** button, the constant is added to the measurement. You may use the adder button while the wheel is rolling or stopped.