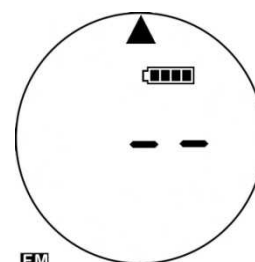## Manual Input Of Coordinates (**F**ree **M**arking)

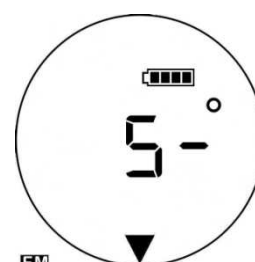1. Click Power/Mode key to select Free Marking icon

    FM to input longitude and latitude manually.

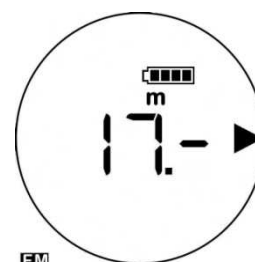2. Press and hold Mark key, wait until the triangle pointing forward shows up, then release Mark key and miniHomer is now ready for entering the latitude. Clicking Mark key toggles between selection of northern hemisphere ▲ and southern hemisphere ▼. When the correct hemisphere shows, do nothing wait for 3 seconds and the hemisphere is selected.

3. Next the first digit of latitude starts blinking, you can click Mark key repeatedly to advance the digit for adjustment, when the correct digit shows wait for 3 seconds and the first digit of latitude is entered. Latitude in ddmm.mmmm format is entered one-by-one in sequence.

4. After latitude is entered, the longitude is to be entered using the same method. Clicking Mark key first toggles between selection of western hemisphere ◀ and eastern hemisphere ▶ Longitude in dddmm.mmmm format is entered in sequence. After the longitude is entered, circle of direction arrows shows, blinking twice, and the manually input coordinates is stored.

5. It then shows distance and direction to the manually input and stored location under the **FM** icon.

To make correction to the input coordinate, above steps need to be repeated.

Checking Free Marking Coordinates

1. Click Power/Mode key to select Free Marking icon **FM** .

2. The manually entered latitude (ddmm.mmmm) and longitude (dddmm.mmmm) coordinate can be checked by clicking Mark key. You will see latitude degrees shown first, then latitude minutes and first decimal digits shown, then the lower three decimal digits shown lastly; with ▲ denoting northern hemisphere and ▼ denoting southern hemisphere.

3. Next longitude degrees is shown first, then longitude minutes and first decimal digits shown, then the lower three decimal digits shown lastly; with ◀ denoting western hemisphere and ▶ denoting eastern hemisphere.

Note that the unit of latitude and longitude coordinates used in *mini*Homer is degrees and decimal minutes. The latitude has 8 digits and the longitude has 9 digits, for example, the latitude may be N24°47.0967′ and the longitude may be E121°40.5236′.
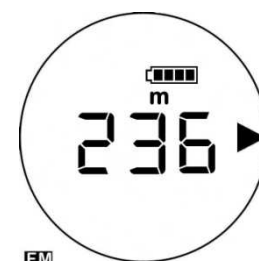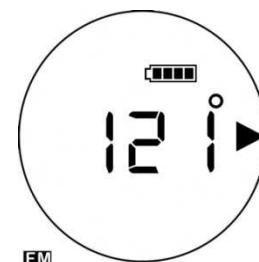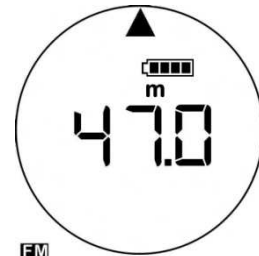
Go to a Free Marked Location

1. Click Power/Mode key to select Free Marking icon **FM** .

2. Make sure satellite icon is not blinking and showing arcs.

3. The displayed number shows distance to the stored location, and the direction arrow shows the direction to follow.

4. After reaching the destination, within a 5 meter (or 20 feet) radius, the circle of direction arrows will show up.

Checking Current Location Coordinates (where-**AM**-i)

1. Click Power/Mode key to select where-AM-i icon **AM**.

2. Make sure satellite icon is not blinking.

3. The current latitude and longitude coordinates will be displayed in the same manner as described in Checking Free Marking Coordinates section.

4. Clicking Mark key toggles between displays of latitude/longitude coordinates and mean sea level altitude.

5. The maximum displayed altitude number is 19.99, with unit in kilometer or mile.
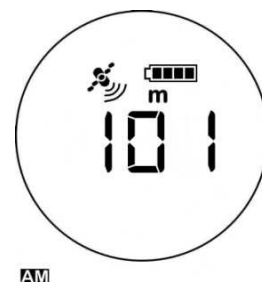
Note: GPS altitude is much less accurate than horizontal position accuracy. GPS receivers with more accurate altitude reading usually employ barometric pressure sensor for altitude measurement. miniHomer does not have such sensor inside and shows GPS derived altitude directly; thus altitude reading should be used as coarse estimate only.

SPORTS MODE

The Sports mode enables one to use miniHomer to track accumulated time, accumulated distance, and current speed.

The sports mode is entered by clicking Power/Mode key to select Sports mode icon

FM AM. Upon entering Sports mode, it shows accumulated time by default. Short clicking Mark key selects accumulated distance, current speed, current pace and back to accumulated time in sequence.

The accumulated time and accumulated distance can be cleared and restarted by pressing and holding Mark key, wait until the circle of direction arrows shows up and then release Mark key.

Upon powering on miniHomer, the accumulated time only advance count after it has GPS position fix, i.e. having satellite icon not blinking with arcs. Afterwards the count will continue even if GPS position fix is lost. The accumulated distance will only accumulate when there is GPS position fix.

Reading Accumulated Time

1. Upon selecting Sports icon **FM AM** the accumulated time is displayed.
2. If the accumulated time is less than 19 minutes and 59 seconds, it is displayed in <minute/second> format.
3. If the accumulated time is more than 19 minutes and 59 seconds, <hour/minute> is displayed first, then <second> is displayed.
4. If the accumulated time is more than 19 hours 59 minutes and 59 seconds, it will only show 19:59:59
5. You can restart the accumulated time by pressing and holding Mark key, wait until the circle of direction arrows shows up and then release Mark key.
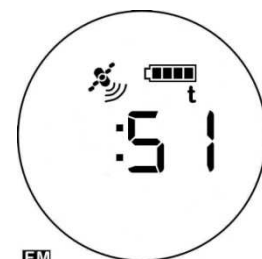
Reading Accumulated Distance

1. Click Power/Mode key to select Sports icon **FM AM**.

2. Click Mark key until **m** or **km** shows without flashing under metric unit mode, or **ft** or **mi** shows without flashing under English unit mode; the accumulated distance is displayed.

3. The accumulated distance can be cleared and restarted by pressing and holding Mark key, wait until the circle of direction arrows shows up and then release Mark key.

Note: The accumulated distance is formed by summing distance between current measured position and the position measured 1 second ago. As each position has inherent measurement error, the errors add up in the accumulated distance. Thus the accumulated distance should be used as a rough estimate only.

Reading Current Speed

1. Click Power/Mode key to select Sports icon **FM AM**.

2. Click Mark key until **km** shows and flashing under metric unit mode, or **mi** shows and flashing under English unit mode. The current speed is displayed in unit of km/hr or mi/hr.

Reading Current Pace

1. Click Power/Mode key to select Sports icon **FM AM**.

2. Click Mark key until no unit shows and the current pace is displayed.

3. Unit of pace is minutes/Km or minutes/mile depending on whether metric unit or English unit is currently used.