

Using the Roamer

If you have never used a Roamer before:

- You control where the Roamer is going using the buttons on the top.
- The arrows obviously give the direction of travel or turn.
- The numbers allow you to control distance travelled, degrees turned etc.
- The unit of travel is **one** Roamer forward or backward.
- The unit of turn is **1 degree** through.
- The only other important buttons at this stage are the **CM** button, which clears the Roamer's memory so that you can start from scratch, and the **GO** button, which you press when you want the Roamer to execute the instruction you give.

Basic Roamer Commands:



Pressing this button when the Roamer is first switched on will run through a demonstration program.



Pressing this button twice will clear the demonstration program from the Roamer's memory and allow you to add your own program.

(Always press this button twice before starting your Roamer work)



These buttons will move the Roamer forwards and backwards. Pressing one of these buttons then a number (from 1 to 99) followed by GO will move the Roamer. Roamers move in units equal to its body length (30cm). However you can change the unit of distance. To change the units of distance to represent centimetres.

Press the following:



Now when you press     the Roamer should move forward 99cm.

Note 99 is the maximum number you can put in as a unit of distance.

Once the units are set, they remain unchanged until you redefine them, or switch the Roamer off. Pressing CM twice does not change the unit setting.



These buttons turn the Roamer left or right. Pressing one of these buttons then a number (up to 999) followed by GO will turn the Roamer. Roamers turn in degrees e.g. if you ask the Roamer to turn 90 it will turn a right angle. Just like the units of distance you can change the units of turn. To change the units of turn so that 1 equals a quarter turn press the following:



Now if you press The Roamer will turn 90 degrees to the right.



This unit will be retained even when CM has been pressed twice. It is lost if the Roamer is turned off.



This button tells the Roamer to wait. Pressing this button then a number followed by GO will make the Roamer wait. Roamers wait in seconds.



This button will cancel the last instruction or part instruction from the GO program.



This is a repeat button, it must be used with a number and brackets, for example to draw a square press the following:



You can make more complex instructions by putting a repeat list within a repeat list.



This button is a sound button. The Roamer has a programmable sound facility. You need to specify how long each note will last (duration) and how high or low the note will be (pitch).




To play a note press this key followed by a number from 1 to 8 for its duration, and another number from 1 to 13 for its pitch.

If you want to rest enter 14 for the pitch.



A Procedure is a list of instructions named P, plus a number from 1 to 99. The list is enclosed in brackets.



Now all you need to do to make the Roamer draw a square is:   

Useful Websites

www.valiant-technology.com Home of the Roamer

www.primaryresources.co.uk/ict/ict.htm Lesson activities using Roamer

www.kented.org.uk/ngfl/primary.html More lesson ideas