The G4EGQ RAE courseResistor Values (appendix to Lesson1)

## THE SYMBOL USED FOR A RESISTOR

As you may know the symbol, used in a circuit diagram, for a resistor has changed over the years. Originally, to show its opposition to the flow of electric current, it was show as a zigzag line. More recently the symbol was changed to a 'rectangle'.

## RESISTOR VALUES

As you know, resistance is measured in 'Ohms' and this is represented by the Greek letter 'Omega' or Ω

Thus resistor values would be written as follows:
Examples: 600 Ω , 22 Ω , 2200 Ω

1000 Ohms can also be called 1kOhm or 1kΩ
Thus 2200 Ω can also be written as 2.2 kΩ

1000,000 Ω is 1MOhm or 1 MΩ
330,000 Ω can be written as 3.3 MΩ

typewriters did not have the "Ω" symbol so a new scheme was developed that used letters from our own alphabet.

"R" was used to stand for "Ohms" or "Ω"
"K" was used to stand for "KOhms" or "KΩ"
"M" was used to stand for "MOhms" or "MΩ"

Thus 36Ω would be written as 36R
10KΩ would be written as 10K
5MΩ would be written as 5M

Values incorporating the decimal point were written in a special way:
2.4Ω is written as 2R4
If the resistance is written in the form "2.4Ω it is quite possible for the little decimal point to be missed. The value would then become 24Ω This would be very important.
The letter is there put where the decimal point would be. This would eliminate and such errors.
Thus 3.3KΩ is written as 3K3 and 5.6MΩ as 5M6