

KT-9 Quick Reference

This reference card, along with its companion card (**Using the KT-9**) provide a quick summary of the features and how to use the KT-9. If you are already experienced with the KT-5, these reference cards may be all that you need to start using your instrument properly. However, you are encouraged to read the **User's Guide** to find out more about the special options, such as computer assisted logging.

Batteries

The KT-9 is powered by a *single* 9-volt alkaline battery (type 6F22, IEC standard). The battery compartment is accessed from the bottom of the instrument by removing the single screw, as shown in Figure 1.

Under normal conditions, you can expect up to 10,000 readings from a battery. If the battery voltage drops below 6V, you will see a low battery warning (LoBAT) displayed in the upper left corner of the display, e.g.

LoBAT [: 3



When the LoBAT warning appears, you have enough power left for only 100 readings (at normal temperatures).

If the battery voltage drops below 5.3V, then the KT-9 will not allow any more readings, since proper operation cannot be guaranteed. You will then see the following message on the display and will have to replace the battery to continue..

Err 1



All configuration settings and stored data are in flash memory. You will not lose any data when you remove the battery.

If you are going to store your KT-9 for a longer term (over 30 days), please remove the battery from the unit to prevent damage from electrolyte leakage. It is also recommended that you visually inspect the battery after any long storage interval.

Controls and features

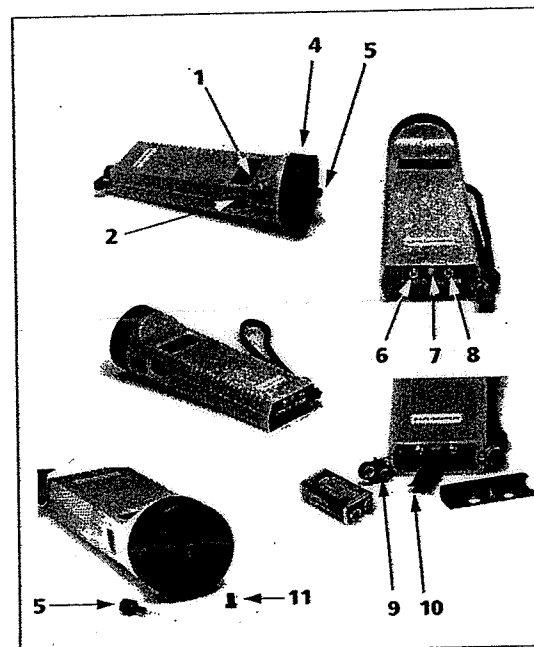


Figure 1 KT-9 Controls and features

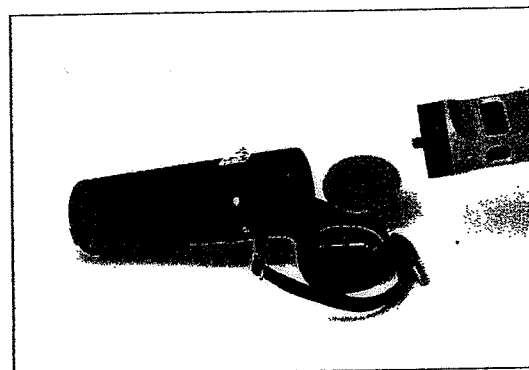


Figure 2 KT-9 orientation for storage in field case. Note the storage compartment in the lid.

Power on

- R** 1 Press the RIGHT button.

When the KT-9 powers on, the following test display is shown for about a second, after which the display will change to the *last* mode that was used:

LoBAT 18:888

Power off

- R L** 1 Press the RIGHT and LEFT buttons *simultaneously*. A beep will be heard to indicate that the unit is powering off. All of your data and the current configuration will be saved and immediately available when you power back on.



The KT-9 turns off automatically after five minutes of inactivity to conserve battery power.

Display symbols

Symbol	Meaning	Description
R :	Access:	the mode of measurement can be set
E :	Control:	you can change from <i>right-handed</i> to <i>left-handed</i> operation
E o r :	CORE:	the measurement mode is set for core samples
E d d :	Core Diameter:	core sample measurement set for a diameter of " d d " cm
d :	Diameter:	the core diameter in centimetres
E C :	External Coil	an external coil is connected for use
E r r X	Error:	error number "X" occurred. See "Error messages" in the Using the KT-9 quick reference for details.
F :	Full:	the data memory is <i>full</i> , i.e. ten readings have been stored
o :	Average:	the displayed value is the <i>average</i> of all the data in memory
P :	PIN:	indicates that the measurement is set for the PIN mode
n P :	NO-PIN:	the measurement mode is set for operation without the pin

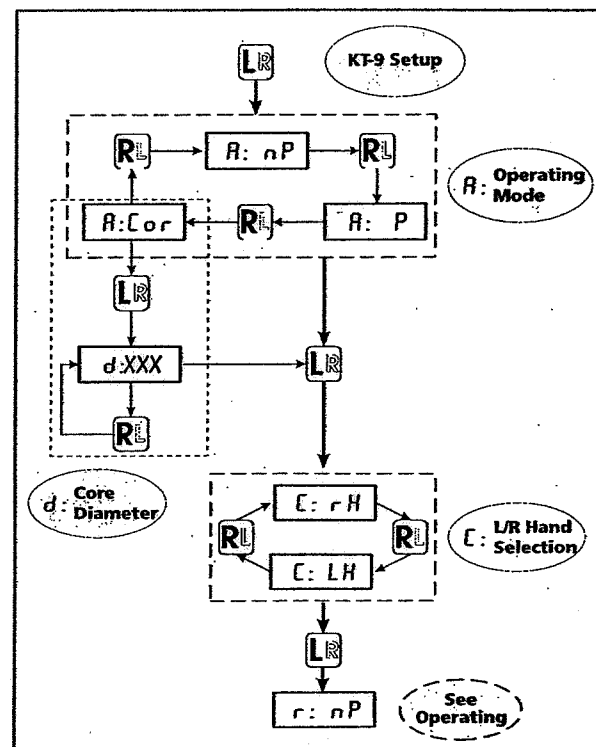


Figure 3 KT-9 set-up/configuration flow chart

Menus

R:XXX Access menu for operating mode

R: nP No-PIN operation

R: P PIN operation

R: E o r CORE logging operation






E: XX Configuration menu for right or left hand

E: LH LEFT-HAND operation

E: rH RIGHT-HAND operation

d:XXX Diameter selection for core

You will be able to toggle between the following core diameters (in units of inches): 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. The following value is used to represent a 1 inch diameter core: 2.54

#	Item	Description
1	LCD Display	Up to 5 large characters can be displayed making it easy to read under a variety of conditions
2	Right Button	Multiple functions: - main control - mappable to LEFT function - ON switch - referred to by these icons:  
3	Left Button	Multiple functions: - menu selections - mappable to RIGHT function - OFF switch, when pressed at the same time with the RIGHT - referred to by these icons:  
4	Sensor Head	This is the <i>active</i> face of the instrument when using the internal sensor coil.
5	PIN	This removable measuring pin is located in the centre of the top coil assembly. For ease of use, it behaves as the RIGHT button for taking readings. It is referred to by this icon: 
6	Computer connector	The cable to a computer plugs into this connector.
7	Battery compartment screw	This screw secures the cover to the battery compartment.
8	External sensor connector	External sensors plug into this connector.
9	Battery connector	A standard 9-volt battery connector.
10	Battery extractor strip	A textile strip to facilitate battery removal from the case.
11	STUD	Used to seal PIN hole.

Setting right- or left-handed use

Whenever a re-mappable button is referred to in the following documentation, it will be described from a *right-handed* operations point of view, unless specified otherwise. The special icons shown in the margins will be used to highlight a *right* or *left* re-mapped button respectively.

To change from right to left-handed usage:

- 1 The display in the measurement mode will have a *r* as the first character, e.g.

r: nP

- 2 Press the LEFT button twice to get to the *E*: menu. Please also refer to Figure 3 to see the flow of events.

- 3 Press the RIGHT button once to toggle to the left-handed mode. You should now see the following display:

E: LH

- 4 Press the LEFT button again to get back to the measurement mode.

To change from left to right-handed usage:

The steps in the previous description need to be repeated, except that you will be pressing the opposite button.

- 1 The display in the measurement mode will have a *r* as the first character, e.g.

L: nP

- 2 Press the RIGHT button twice to get to the *E*: menu. Please also refer to Figure 3 to see the flow of events.

- 3 Press the LEFT button once to toggle to the right-handed mode. You should now see the following display:

E: rH

- 4 Press the RIGHT button again to get back to the measurement mode.



TIP

The mode of operation can only be changed when the data memory is empty.