GEOSCAN RM15 FIELD USE.

PRE.USE CHECKS

Battery must be charged for 10 hours or more before use. 10 hours will give a use of 12.5 hour at 1mA

Memory must be cleared before a new set of grids is started. Clear Memory by pressing ENABLE LOG.'Then hold down CLEAR MEM key for 4 beeps.

CHECKING THE SETTINGS. (MENU KEY)

Menu contains7 sub-menus, accessed by pressing numbered keys. Parameters in the sub-menus are scrolled using the Menu key. Recommended settings are given below, and will be already present unless someone has mucked about with it. (Settings may be changed with the (< or> keys). Exit Menu with End Menu Key.

1. Map	Grid size	20m.	**5 Comms.**	Baud Rate	9600
	Sample Interval	1m.		Data Separator	No Space
	Traverse Interval	1m.			
	Traverse Mode	Zig-Zag			
2. Range	Gain	x 1	**6. Progr**	Program Number	1
	Current	1mA.		Probe Configurations	1
	Frequency	137 Hz.		Colours	**Gr** highlighted
3. Set-Up	Output Voltage	40V.	**7. Status**	Battery Voltage 10.4V.(eg)	
	Auto log speed	Medium		RM15 Adv 15000, Version 2.00	
	High Pass Filter	13Hz.			
	Mains Frequency	50 Hz.			
	Reset RM 15 ?	No			
4. Array	Hardware PA1				

THE GRID

Mark out the perimeter of the 20 m. grid using 4 lines or tapes.

Lay one of the 2 'travelling lines' (marked in metres) at lm. inside the left edge of the grid so

that the first coloured marker lies on the base line.

Other lines are laid parallel to this at2m. intervals (3,5,7,9,11,13,15,17 and 19m along the base line*). We only have two lines so you have to leap-frog the in-use one with the one just finished to set up the next*

Set out the **Remote probes** about 0.5 -2m. apart, at least 15m. from the far edge of the grid. Allow enough cable to reach all parts of the grid, with all the cable off the drum.

THE SURVEY

Set up the Array with connector-box for the mobile probe cables on the right of the operator". (Right probe connects with the red socket, Left with the black)

Attach remote probe cable to the RM15 using **all three** plastic ties on the cross-bar

Switch on the RM15 Screen will show **'HCR/Open cct'**,

Insert the probes in the soil (*no need to go deep)* at the base line so that the right hand probe is about 0.25m (10 inches) to the left of the right hand travelling) line. The screen should now show a reading in Ohms,

Press **ENABLE LOG**

Press **START**, allow time for reading to be taken , (logs it as ***Grid 1, Line I, Position 1*.** (Beeps when ready to move to next point).

Proceed for 20 positions, after which a longer beep occurs and the Line Number increase by one and the position number goes back to 1. Note: the far tape is never reached

Turn to return down the other side of the same travelling liue, keeping it 0.25m to your right, and starting at lm. in from the tape

Turn and start third row on the left of the 3m line, the fourth being repeat of the second row, etc.

Note:

At the **end of the Grid**, the machine **automatically starts Grid 2**, so switch it off you're notready,

CONTROLS DURING SURVEY.

DEL will delete the last reading (press START to resume)'

DELETE LINE Press this for 4 beeps to delete the last lne. Also worl<s on an un-finished line

DUMMY LOG Inserts a dummy reading where a reading cannot be taken because of anobstacle

FINISH LINE Inserts dummy readings to the end of the line.

IMAGE LINE Inserts a mirror image of dummy readings after use of the **FINISH LINE** command, *For use if the obstacle is bigger than one line width*. Resets **L** to the next number, and **P** to the corresponding position on the previous line.

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Any problems, ring Colin Campbell, 01934 838520