**Accessing Your GPR Settings:**

- Rotate selector knob to “Setup”

 - Toggle “Mode” button until GPR only is lit.

 - Press and hold “C” button until you hear a beep.

 - You are now ready to change your GPR settings.

|  |
| --- |
|  |
| LED | Adjustment | Range | Default  |
| 11  | Start Point“Top - Down”  | 30 – 80  | 30  |
| 11F  | Stop Point“Bottom – Up”  | 255 – 100  | 255  |
| 12  | Linear Gain“GPR Sensitivity” | 10 – 50  | 28  |
| 11 + 12  | Time Variable Gain (TVG)“GPR Power”  | 1 – 10  | 1  |

 **Changing GPR Settings:**

 These settings allow you to make changes to the ceiling and

 floor.(Shallow and Deep Target Amplification).

 - Press the “C” button to toggle from one parameter

 setting to another.

 - Press + or – to change the selected setting.

 - There are four adjustable settings each with their

 own LED indicator.

 **Storing GPR Settings:**

 Settings are stored in memory and can be changed

 as needed.

 - Press and hold C for 3-4 seconds.

 - LED 5-8 will illuminate and return to the volume setting

 - Settings have now been saved and can be recalled.

 **Recalling GPR Settings:**

 You need to be in N or M in order to recall your GPR

 settings.

 - Toggle “Mode” button until GPR only is lit.

 - Press and hold “C” for 3 seconds until LED 5-8 illuminate.

 - Release “C”, LEDs will flash and a beep will be heard.

 - You have successfully recalled your saved settings.

  **Setup for Metal Detection in Normal Soil:**

 Operating in Normal Soil and do not need to

 compensate for minerals, follow these steps.

 - Rotate selector knob to N

 - Toggle “Mode” button until MD only is lit.

 - Lower search head to the ground and wait for alert to

 subside.

 - Detector is now ready for metal detection in normal soil.

 \*You may now test the detector with the MD test piece.

 

 **Setup for Metal Detection in Mineralized Soil**

 - Rotate selector knob to M

 - Toggle “Mode” button until MD only is lit.

 - Conduct Automatic or Manual soil compensation.

 - Detector is now ready for metal detection in mineralized

 soil.

 \* You may now test the detector with the MD test piece.

 **Automatic Soil Compensation for MD:**

 Operating in Mineralized Soil and need to

 compensate, follow these steps.

 **-** Rotate selector knob to M

 - Toggle “Mode” button until MD only is lit.

 - Place search head on the ground.

 - Press and hold C until you hear a short beep.

 - While holding C, raise and lower the search head.

 - When you hear a beep, release C.

 - The detector has now compensated for mineralized soil.

 

**Manual Soil compensation for MD:**

If you are operating in mineralized soil and want to manually compensate, follow these steps.

- Rotate selector knob to M

- Toggle “Mode” button until MD only is lit.

- Hold down C and + buttons until a short beep is heard.

- Once the beep is heard, release ONLY the + button.

- While holding C, adjust with the + or – buttons.

 **Automatic Frequency Assignment:**

 - Place detector in “Setup”

 - Toggle “Mode” button until MD only is lit.

 - Press + and – simultaneously for 4 seconds.

 - Odd and even LEDs will alternate.

 - Process will take 3 minutes.

 - When complete, the detector will return to volume

 control.

 - Place the detector back in to N or M

 

 **Manual Frequency Assignment:**

 - Rotate selector knob to “Setup”

 - Press and hold C for 4 seconds until it beeps.

 - While holding C, press + or – to select channel.

 - When complete, release C

 - Place the detector back in to N or M

 **Alert Configurations:**

 All alert modes are changed while switching from the off

 position.

- **Audio alerts only**: Press and hold “C” button while

 turning on the detector.

- **LED** **alert for MD/LED and AUDIO for GPR**: Press and hold

 the + button while turning on the detector.

- **LED and AUDIO alert for MD and GPR**: Press and hold

 the “C” button and the + button while turning on the

 detector.

\*Settings will be saved when detector is turned off.

**Sweep Techniques:**

- Operator will conduct a 180 degree sweep from left to right

- Cover at least ½ half the width of search head over the left

 and right edges of the lane

- Forward no more than 1/3 the length of search head using

 MD only

- Search head must be parallel to ground

- No more than two inches above the ground

- Avoid common sweep mistakes: Cupping, Pushing, and

 Hooking.