SECTION III : OPERATION

Sonde/Camera Locator

Your XT512 receiver supports the detection of any standard 512 Hz sonde or camera in the market.

This type of sonde or camera is usually attached to devices that are sent through non-metallic sewer or water pipes. The emitted magnetic field easily passes through the walls of such pipes.

Since the signal being traced by the receiver is produced by the sonde or camera, there are some differences in the way the receiver is used when compared with normal cable or pipe tracing.

Due to the nature and strength of the sonde signal, it is necessary to have some idea of where the sonde is located. This is usually not much of a problem, since the sonde is "guided" by a device under control of the work crew, often with a camera attached to it.

Once in the surroundings of the sonde, it is important to differentiate whether you are positioned along the axis of the sonde (the direction of the pipe) or off to either side. In the sonde mode the arrows are not functional, so the signal strength is the only indication available, and it will be "null" (very close to zero) if the receiver is placed on the axis of the sonde with the plane of the sensors perpendicular to it. Move away from the axis and follow the direction that results in increasing signal strength. Rotate the receiver back and forth and move in the direction that produces the maximum. As the receiver gets closer to the sonde the signal strength increases to a maximum when directly over the sonde if the plane of the sensors is parallel to the axis of the sonde (approaching from a direction that is perpendicular to the direction of the pipe). A rotation of 90 degrees from this position should produce a null. To measure depth, simply place the tip of the receiver, in the EXTENDED position, on the ground and press the DEPTH button when the signal strength is at a maximum. The digital display will indicate the approximate depth. The reading will be displayed as long as the button is depressed. See Controls section for more details.

The receiver defaults to AUTO Gain in Sonde Mode. Here, the numeric indication is a measure of the absolute signal strength. By switching to MANUAL Gain (See Control Section) the operator can control the gain. The numeric indication is a measure of relative signal strength. It should be adjusted to 300 - 400 when over the target. A reading of 999 indicates the signal is saturating the amplifiers and the gain should be reduced.

Passive (60/50 Hz) Cable Locator

Start searching for the conductor by turning the receiver ON and placing it in the passive mode. As you move toward the buried target, one of the arrows will indicate in which direction to move. If you move beyond the target, the other arrow will indicate that you should reverse direction. When you are right over the target the tone will reach maximum pitch and the digital reading will reach a maximum. Both arrows and the center bar on the display will be ON, and the receiver will start beeping (see also "Alternate Directional Indication" Section).

To measure depth, simply place the tip of the receiver, in the EXTENDED position, on the ground and press the DEPTH button when the signal strength is at a maximum, and you are right over the target, as explained above. The digital display will indicate the depth. The reading will be displayed as long as the button is depressed. See Controls section for more details.

The receiver defaults to AUTO Gain in Passive Mode. Here, the numeric indication is a measure of the absolute signal strength. By switching to MANUAL Gain (See Control Section) the operator can control the gain. The numeric indication is a measure of relative signal strenght. It should be adjusted to 300 - 400 when over the target. A reading of 999 indicates the signal is saturating the amplifiers and the gain should be reduced.