

Digital Pipe Locator

The Gen-Eye G3 locator can detect two types of signals:

- **Active signals** are placed on a target line with the transmitter and detected by the locator. An active signal from a camera can also be detected by the locator.
- **Passive signals** reside on the target line and are read by locator.

Camera Location

Camera signals allow the user to trace the camera in either metal or nonmetal pipes.

Active Line Location

There are two ways to place active signals on a target line with a transmitter:

- **Direct connection** (preferred method) requires a connection to be made directly onto target line.
- **Broadcast** method sends current into lines near the transmitter.

Passive Power Line Location

Some utility lines pick up signals from the environment and carry them as detectable signals. These are power signals.

CHOOSE ANTENNA CONFIGURATION

The Gen-Eye locator has three antenna configurations:

Twin Peak—Uses two horizontal antenna to detect signal. Response is highest at strongest signal.

Null—Uses a vertical antenna to detect signal. Search width is narrower than single peak. Response is lowest when locator is over the line.

Left/Right—Uses arrows to guide the operator to the camera or target line.

IMPORTANT: It is best to verify left/right location using twin peak antenna.

RECOGNIZE COMMON SIGNAL PROBLEMS

Distortions in the field around a camera or line can affect location and depth accuracy. Tees, bends, parallel lines, crossing lines, or metallic objects can distort signals.

NOTICE: If target depth and location are critical, confirm by hand digging or vacuum excavation.

Learn to recognize the following kinds of distortion:

Shadows

Shadows, also called blind spots, often happen when a metallic object partially obstructs signal

False Signals

False signals describe where the locator indicates a line location where there is no line. False signals happen when a line tees or bends, runs parallel to the target line, or crosses the target line.

IMPORTANT: Generally, the locator shows less distortion in twin peak antenna configuration.

Set Up

1. Turn on power switch on Gen-Eye command module.
2. Turn on locator and check that the battery indicator shows at least one bar. Replace batteries if needed.
3. Press the **FREQ** button until locator frequency matches transmitter frequency.
4. Press the **ANT SEL** button until indicator points to **TWIN**, indicating twin peak antenna.
5. Press the up arrow so that the gain bar is at the maximum setting.

Locate

1. Hold the locator so that **the handle is at a 90° angle to the camera head**, as shown.
 2. Walk in a small arc around the drain opening.
 3. Identify location of camera by finding the spot with the strongest signal response.
 4. Sweep the locator along the camera path until you obtain a peak reading.
 5. If the display indicates a maximum signal of 100, reduce gain. Press the down arrow to keep gain at approximately 50-70%.
 6. Repeat steps 4-5 to narrow your search area.
- IMPORTANT:** A ghost signal may appear before and behind the peak reading. Press the down arrow to lower gain until you receive only one signal.
7. When you receive only one signal in a 1 ft² (0.1 m²) area, you've located the camera. Mark the spot.
 8. Set the locator on the ground and press the **DEPTH** button to estimate depth.

Operating Tip

The closer the camera is to the drain opening, the easier it is to locate.

- Push the camera 5-10' (1.5-3.0 m) into the pipe and do the first locate. Mark the spot.
- Push the camera another 5-10' (1.5-3.0 m) and repeat until the entire pipe is traced and marked.