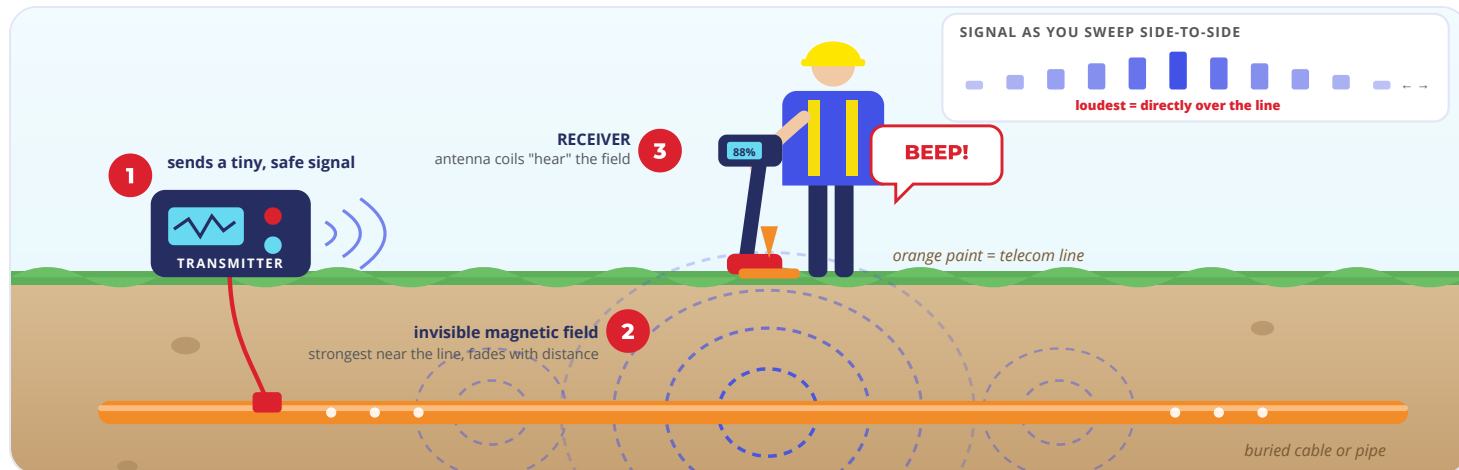




AOP FIBER • UTILITY LOCATING

How We Find What's Buried

Radio-detection locating, explained simply: a transmitter, an invisible magnetic field, and a receiver that listens.



1 The transmitter makes the line hum

We clip a small box to the pipe or cable (or set it on the ground above it). It pushes a tiny, safe electric signal down the line, at a frequency we choose, like tuning to one radio station.

2 Electricity makes an invisible field

Whenever electricity flows through metal, a magnetic field wraps around it. It's the same force that swings a compass needle. The field is strongest right next to the line and fades as you move away.

3 The receiver finds the loudest spot

The handheld receiver has antenna coils that sense the field. We sweep it side-to-side. The beep peaks directly over the line, and that is where we paint the mark. Comparing two antennas gives an estimate of depth.

How close is "close"? The tool tells us where the line is. It does not measure to the inch.

WHAT THE TOOL CAN TELL US

- ✓ **Where** the line runs: its path across the ground, marked with paint or flags.
- ✓ **About how deep** it is, as an estimate read from the receiver.
- ✓ **Which** line it is, because our transmitter's frequency is the one we're listening for.

WHAT IT CANNOT DO

- ✗ It is **not a survey instrument**. It does not give inch or sub-inch positions.
- ✗ Nearby pipes, bends, tees, and wet or rocky soil can **bend the field** and shift where the peak reads.
- ✗ Plastic pipe or fiber **without a tracer wire** carries no signal at all, so it can't be heard this way.

HOW FAR OFF CAN THE MARK BE? (inches from the true line)

Survey-grade
GPS / total station

about ¼ inch

Radio-detection locator
good conditions → real-world

a few inches, up to about a foot

Louisiana "tolerance zone"
dig law: 18" each side of the mark

18 inches



In good conditions the locator reads within roughly 5% of depth (a line 4 ft down → a few inches). Real ground is messier. Louisiana's dig law builds in an 18-inch tolerance zone on each side of the mark precisely because a locate is a close estimate, not a survey.

PLANNING TO DIG? Call 811 before you dig. It's free, and it's the law.

1. **Request a locate.** Call 811 (or 1-800-272-3020) or use louisiana811.com/locate-request. Emergencies: 24 hours a day.
2. **Give two full business days.** At least 48 hours' notice, not counting weekends and holidays.
3. **Respect the marks.** Hand-dig within 18 inches either side of a marked line: the tolerance zone, La. R.S. 40:1749.14.

One 811 request notifies every utility near your dig site, including AOP Fiber, and each marks its own lines at no cost. Requests go through Louisiana 811 (Louisiana One Call), not AOP.

What the paint colors mean

- White Planned dig
- Red Electric
- Orange Telecom
- Purple Reclaimed
- Pink Survey
- Yellow Gas / oil
- Blue Water
- Green Sewer

Orange marks are ours.