Common GPR Questions

Q **Isn’t GPR scanning complex, requiring lots of training? I am concerned about training technicians and making costly mistakes.**

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A Not anymore! Modern GPR systems are straightforward and intuitive. If you can operate a smartphone, you can use GPR for concrete inspection. For the basic “Scan and Mark” operations, you can learn to use GPR in just a few hours of online training. Developing advanced skills to identify corrosion or other complex buried structures will come with time.

Earlier devices required more fussing with system settings to produce an image that made sense. Modern systems do much of this automatically, including features that give a new user confidence to see what’s below the surface using a powerful 3-dimensional view. This is extremely important to users who might only use the equipment a handful of times yearly.

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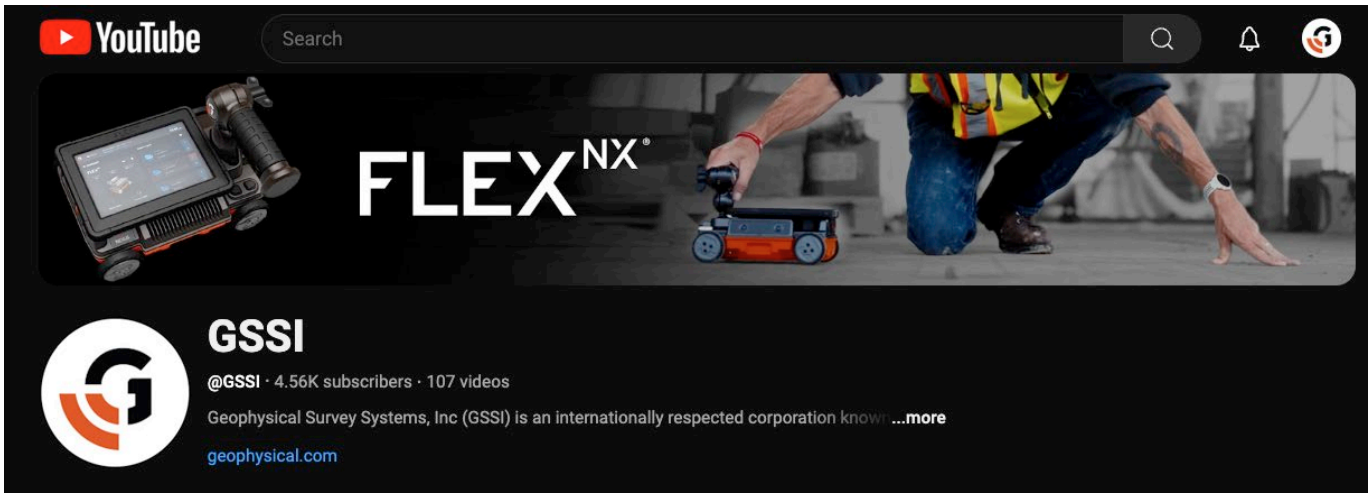
Q I have a lot of turnover with technicians coming and going, how do I get these guys trained to use these tools?

A Training is just a click away on our YouTube channel. Your techs can get a quick refresher on their phone or computer easier than ever. We offer operator certification through our GSSI Academy, and we have a full-time staff of support experts. Users can use the QR code on their Flex system for instant access to the GSSI Academy Training team.

We provide lifetime technical, phone, and email support for our systems, so if a new employee has difficult questions, we will always be available to answer them.



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Q Isn't GPR expensive? Why are some systems $1,200 and some $18,000?

A Prices have come way down as the technology has improved, but vastly different systems are sold as "ground penetrating radar." The low-cost systems typically only penetrate a few inches reliably and only detect metal. Some of these technologies sold as concrete radar or inspection systems are not radar-based but are Profometers or Ferroscan systems. They are typically offered at a lower price. These systems might be fine for locating near-surface structures, but since they can't see deep into concrete or detect PVC, PEX, or other non-metallic targets, they are typically used for installing small anchors. But you can get into trouble if you plan to cut or core deeper into concrete. These low-cost devices can't reliably resolve post-tension cables or other deeper structures.

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A GPR concrete scanners can detect metallic and non-metallic objects, voids, areas of concrete deterioration, slab bottoms, and objects in the grade below the slab. Depending on your chosen system and concrete maturity, they sometimes have detection depths in concrete up to 48” (120 cm) and beyond.

Heavy users or those working on tunnels, dams, or other challenging applications typically order additional compact palm antennas to reduce operator fatigue and see through deeper concrete. Most users want to avoid cutting through utilities or anything structural in concrete floors, ceilings, and walls and can get the job done without these extra items.

It’s also important to note that premium GPR devices last for years. We have many customers who still use equipment that we built more than 25 years ago. Even in a demanding construction environment, you should plan on a 10-year service life for our equipment. You should recover the cost quickly by saving time. Scheduling an outside service provider for your projects can be a nuisance, create delays, and cost thousands of dollars per day. Plans can change suddenly on the job site, and having your equipment on hand can keep things moving.

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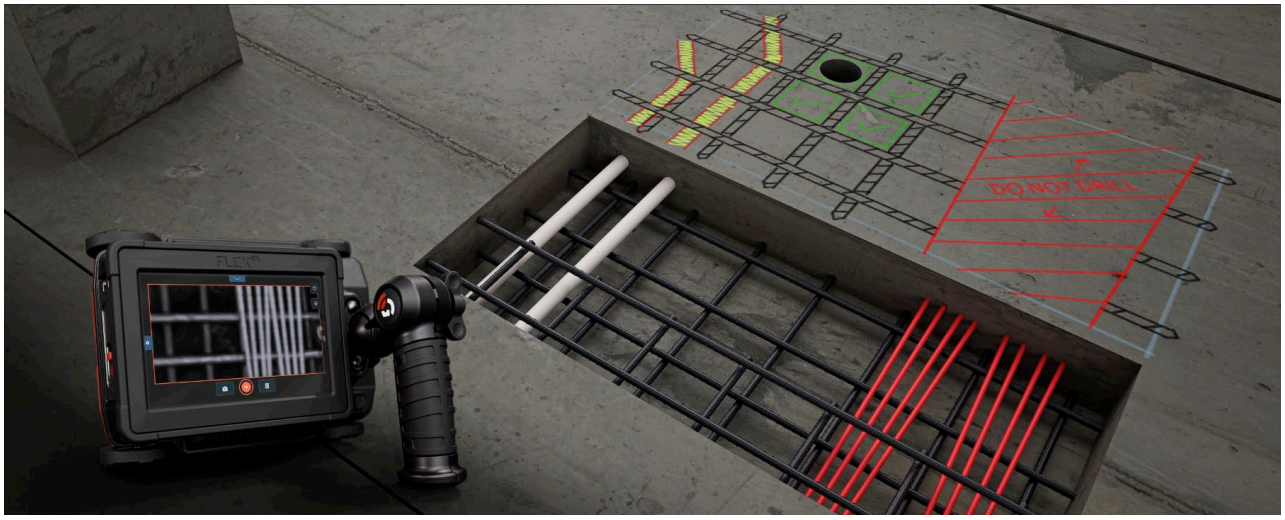
Q It's hard for me to understand how these GPR systems work or how easy they are to use; how do I evaluate them?

A The best way to understand the capabilities of GPR is to see it in action. We are happy to visit and let you see the system in action. We also have regional training events where you can attend a free class. Coming to a training class and gaining knowledge about the technology and its uses will allow you to make the most informed decision possible.



Q How accurate is it?

A GSSI GPR has easy-to-use built-in features for determining the depth of objects you locate. Depth accuracy depends on multiple factors. However, it is accurate to approximately +/- 10%.

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Q Are these things safe to use? Aren't radar waves dangerous? Is GPR like X-Ray?

A Ground penetrating radar devices have much less emitted energy than a cellphone, so they are safe to use. The signal they create is very similar to a radio signal or a Wi-Fi signal, but the power output is significantly lower. GPR will not interfere with on-site wireless or wired signals when operating. GPR is *not* X-Ray, and does NOT produce ionizing radiation, or any other signals harmful to humans.

Q We do work in some secure government facilities, and we can't bring any internet-enabled or wireless devices into the sites. Can we bring these systems in?

A Yes, the wireless connectivity can be shut off in our Flex NX system, and the Flex LT model is engineered without any wireless hardware.

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Q These devices look fragile, and we are hard on gear. How is this going to hold up?

A We know that jobsites are dirty are dangerous, and ground penetrating radar systems have sensitive electronics inside. Water, dust, and extreme temps are always a concern. You want to look for equipment that has an Ingress Protection (IP) Rating of 65 or higher. All professional grade and heavy commercial tools should have an IP rating.

GSSI has 50 years of experience building tools that are subject to a lifetime of torture testing, and our test engineers take great pleasure in subjecting our products to a variety of reliability experiments that exceed IP and most military standards.

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Q Don't these devices require calibration? Will I have to send it in for annual maintenance? Are there other hidden costs? What about subscriptions for software?

A There is no annual maintenance or calibration required on FLEX products. Over time and in cases of heavy use, you might need to replace the rubber wheels, but these can be ordered and installed by the user easily.

We don't require any annual fees or subscriptions for updates or use of the system. Imagery from an inspection will show up on your phone wirelessly (depending on the system type you choose) so sharing results or preparing a quick report is easy and open source. Watch out for manufacturers that offer a low entry cost and make up the balance in subscriptions. No one likes paying for subscriptions, but for industrial equipment it can be a nuisance. These devices may fail to work without paid updates, which can be a huge problem if it happens on the jobsite.

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Q Do I have to buy extra batteries from GSSI?

A No, our batteries are commercially available and easy to find online. They are used in a number of industrial and commercial products, so if you need an extra battery, you should be able to find spares on Amazon or other online retailers easily. Third-party, compatible chargers are also available online.

Let us know if you have more questions!

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