



Z+F UK specialises in 3D laser scanning. Our LFM software development team uses its experience to solve complex problems, yet making intuitive and powerful tools. User feedback is constantly sought and integrated into new versions of LFM. By actively listening to our customers the LFM product range is now one of the most comprehensive available. LFM is fast becoming regarded as an industry standard.

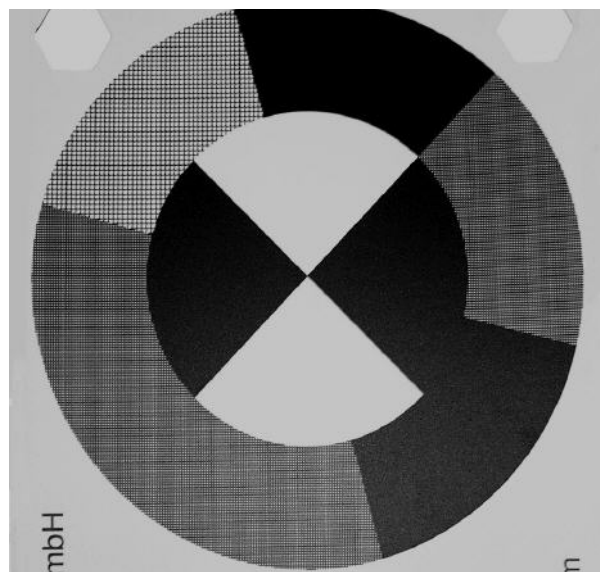
Registration is most easily achieved by placing targets at strategic points in the environment. The targets - which are visible to the scanner - are surveyed to determine their exact location. Once processed, this survey data can be imported into LFM Register which allows the user to bring multiple scans together into a fully registered framework.

LFM Register is equipped with tools and techniques that ensure accurate registration and therefore accurate data. This accurate data can then be used for the purpose in which it was intended, for example the cultural heritage customer may wish to increase their understanding of an item of interest or answer various research questions.

Visible Metrics in the form of a simple three-coloured 'traffic light' set: green, amber and red show the quality of registration against the survey for every single target. Detailed registration reports can be saved for future inspection.

A tool called Inter-cloud registration (ICR) also ensures quality of registration. Complete registration relies on being able to see at least three good targets in each scan. Inevitably, on some projects there will be scans with potentially only a single target visible.

ICR overcomes some of these problems, therefore the laser scanning process may not have to be repeated. This is extremely beneficial for the cultural heritage customer. Access to items of cultural or historical



A Z+F AutoTarget

significance may be difficult or restricted. ICR can also be used where no targets are used at all.

LFM Register has been developed in a way that ensures the customer can register the data in a minimum amount of time.

With target prediction the user need only identify the approximate location of two targets manually, LFM Register is then capable of locating the additional targets.

By combining the technology in the new Z+F AutoTargets and LFM Register, target identification becomes a fully automatic process. This removes the need for an operator and the requirement of manual target selection.