



SCAN&GO DRIVE

sferaZERO - TargetZERO

www.scan-go.eu

Made in Italy



DATA SHEET

January 2018

SCAN&GO srl
Via della Tecnica 34 A/B - 41051
Castelnuovo Rangone (MO) - Italy
Telefono +39 059798545
info@scan-go.eu

STAY ON BOARD WITH SCAN&GO DRIVE!

TargetZERO



SferaZERO



**Scan&Go DRIVE is a
"STOP & GO" system for topographical survey
using 3D Laser Scanner combined with GNSS receivers**

Scan&Go Drive can be installed on any type of vehicle. It was born from the necessity to make the use of 3D laser scanners more productive and performing during topographic activity land surveys. Moreover, it has been created to obtain a highly defined centrimetric tridimensional performance for 3D scans in a sole reference system.

Composed of (GNSS receivers and 3D Laser Scanner not included)

- 1 Automatic leveler Level Plane Evo 16 Radio
- 1 Magnetic Level Bracket
- 1 Orientation target SferaZERO or TargetZERO

Level-Plane Evo 16 Radio is planned for automatic levelling to ensure total verticality of the equipments with accuracy of +/- 30" (or +/-3" with manual control) in all vehicle inclination conditions

Magnetic level Bracket, for positioning and leveling of the reference SferaZERO

SferaZERO, Spherical reference target.

TargetZERO, Semicircular and flat reference target.

The SferaZERO or TargetZERO center coincides with the GNSS receiver phase center (or differs by few millimeters) consequently the leveling not required.

WORK EASY AND FAST

Control of Laser Scanner and GNSS receivers

Verification of data acquired

Automatic levelling

ALL THESE WHILE SITTING IN THE VEHICLE



Only 4-15 minutes stop, while sitting on the vehicle

to survey an area with a diameter of 100 mts with a topographic precision around 1/2 cm.*

** depending of Laser scanner and on the used relief methodology*



HOW TO USE

Install the Laser Scanner on the top Level-Plane Evo 16 Radio, there is a GNSS receiver placed on the top of it.

Place on the **Magnetic Level Bracket** another GNSS receiver with overlying **SferaZERO** or **TargetZERO** for the orientation of the scanning.

While the Laser Scanner is scanning, the receivers get the measurements that will be elaborated later on, and provide the geographical and local coordinates of the Laser Scanner and of the Target; this will allow the operator to obtain a **tridimensional reference system with a topographic precision**.

SURVEYNG PHASE

Once the ideal position for the first scan is determined, the vehicle must be stopped.

Then, level the Laser Scanner with GNSS receiver by the **Level-Plane Evo 16 Radio**.

Once the stationing phase is completed, and the GNSS receivers has measured the positions of the laser scanner and the target, you can proceed to the scanning with the density characteristics required by the survey.

Once the surveying phase is finished the vehicle can be moved to the next chosen position for the second station of the survey, where the operator can proceed again in the above described way.

Repeat these procedures any time the vehicle changes position, as long as the survey lasts and with no need to materialize the target points or identify homologous points between the various scans, allowing the operator to have the maximum freedom of choice of the stationing positions.

By using the SferaZERO or TargetZERO it is not necessary to level the reference target on the bonnet of the vehicle, so you can perform all the survey operations while sitting in the vehicle.



CONCLUSIONS

The benefits of SCAN & GO DRIVE are:

- *Higher laser scanner measuring range*
- *Fast and easy mobility, all you need is mounting it on the vehicle*
- *Unnecessary common targets*
- *Only one operator driving the vehicle*
- *Quicker surveying phase*
- *Not relevant external environment*
- *Time of restitution of the scans greatly reduced*
- *Excellent precision in positioning the scans.*

Examples of restitutions

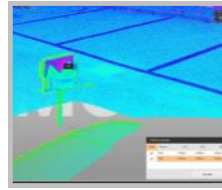
With **Faro SCENE** software



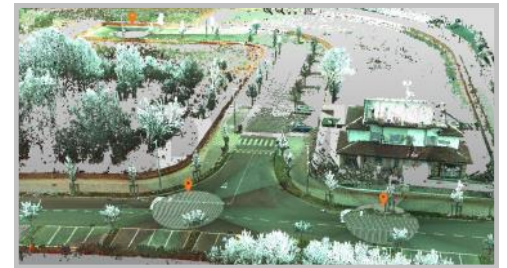
Simple and immediate registration of scans thanks to the automatic recognition of the SferaZERO



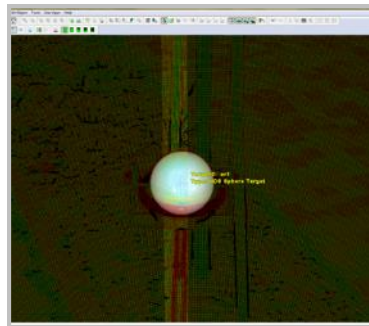
With GeoMax Software



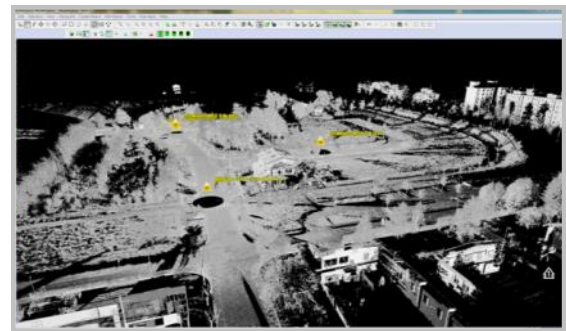
Simple and immediate registration of scans thanks to easy recognition of the target



With **LEICA CYCLONE** software



Simple and immediate registration of scans thanks to the automatic recognition of the SferaZERO



Scan&Go Drive SferaZERO

Composed of

LPE16R	Level-Plane Evo16 Radio with accessories
UC16R	LPE16 Radio Controller
SZ	SferaZERO with accessories
MLB	Magnetic Level Bracket
TLA	Frame for LPE16R
BMT	Soft Bag for Level Plane EVO
BMA	Soft Bag for accesories

Scan&Go Drive TargetZERO

Composed of

LPE16R	Level-Plane Evo Radio 16 with accessories
UC16R	LPE16 Radio Controller
TZ	TargetZERO with accessories
MLB	Magnetic Level Bracket
TLA	Frame for LPE16R
BMT	Soft Bag for Level Plane EVO
BMA	Soft Bag for accesories

Scan&Go Drive
can be used with any 3D
Laser Scanner brand !