# SCAN&GO surveying technology & solutions

# CAN&GO DRIVE SferaZERO

SCAN&GO DRIVE Sfera7FRO for Leica BLK360





SCAN&GO DRIVE SferaZERO

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# **SCAN&GO srl**

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**DATA SHEET** 

# STAY ON BOARD WITH SCAN&GO DRIVE!





Scan&Go DRIVE SferaZERO 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.

# The Scan&Go DRIVE SferaZERO is composed of:

- 1 Level Plane 16 Radio, Automatic leveler (not dynamic)
- 1 Magnetic Level Bracket
- 1 Orientation target SferaZERO

(GNSS receivers and 3D Laser Scanner not included)

**Level-Plane 16 Radio**, is a system planned for authomatic leveling *(not dynamic)* to ensure total verticality of the equipment with an accuracy of +/- 30" (or +/-3" with manual control) in all vehicle inclination conditions.

Magnetic level Bracket, used for positioning of the SferaZERO (reference target)

**SferaZERO**, Spherical reference target. The SferaZERO center coincides with the GNSS receiver phase center (or differs by a few millimeters)

## **BENEFITS:**

- ⇒ Higher laser scanner measuring range
- ⇒ Fast and easy mobility
- ⇒ Unnecessary common targets
- ⇒ Only one operator
- ⇒ Quicker surveying phase
- ⇒ Not relevant external environment
- ⇒ Time of restitution of the scans greatly reduced
- ⇒ Excellent precision in positioning the scans



#### **HOW TO USE**

Install the 3D Laser Scanner with GNSS receiver on the top of the **Level Plane 16 Radio**.

Place another GNSS receiver with the target **SferaZERO** on the top of **Magnetic Level Bracket** for the orientation of the scanning.

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

#### **SURVEYING PHASE**

Once the ideal position for the first scan is determined, the vehicle must be stopped and the engine switched off

Then, level the Laser Scanner with GNSS receiver by the Level-Plane 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 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.

# Scan&Go Drive SferaZERO

#### Composed of

LPE16R Level-Plane16 Radio with accessories

UCR16 LP16 Radio Controller
SZ SferaZERO with accessories
MLB Magnetic Level Bracket

TLA Frame for LP16R

BMT Soft Bag for Level Plane 16R BMA Soft Bag for accesories

# Scan&Go Drive SferaZERO for Leica BLK

Composed of

LP16R Level-Plane 16 Radio with accessories

UCR16 LP16 Radio Controller
SZ SferaZERO with accessories
MLB Magnetic Level Bracket

TLA Frame for LP16R
BLK-GNSS BLK and GNSS Adapter
RMT Soft Rag for Level Plane

BMT Soft Bag for Level Plane 16R
BMA Soft Bag for accesories

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

# Configurations of use

# FARO LASER SCANNER: Focus 3D, series X, series M, series S



# Configurations of use:

- 1 Level Plane 16 Radio,
- 1 Magnetic Level Bracket
- 1 Orientation target SferaZERO
- Coaxial Bracket @



## **©** CB-TFX COAXIAL BRACKET

Support designed to surmount laser scanner Trimble TX5, Faro Focus 3D, Faro X serie with GNSS receiver or reflective prism at 360°.



# **© CB-SM COAXIAL BRACKET**

Support designed to surmount laser scanner laser scanner Faro S and Faro M serie with GNSS receiver or reflective prism at 360°.

@ To be ordered separately

# LEICA LASER SCANNER SERIE P, C10



#### Configurations of use:

- 1 Level Plane 16 Radio,
- 1 Magnetic Level Bracket
- 1 Orientation target SferaZERO
- 1 Handle and Adapter for GNSS receivers #

# # Handle and Adapter for GNSS receivers

Support designed to surmount laser scanner with GNSS receiver or reflective prism at 360°.

# Leica Product

# LEICA LASER SCANNER BLK360



- 1 Level Plane 16 Radio,
- 1 Magnetic Level Bracket
- 1 Orientation target SferaZERO
- 1 BLK-GNSS adapter @

# @ BLK-GNSS BLK and GNSS Adapter

Support designed to surmount the LP16R with Leica BLK360 and GNSS receiver

@ To be ordered separately