

SCAN&GO srl

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January 2019

CAN& GO

SCAN&GO surveying technology & solutions

SCAN&GO System

SCAN&GO, A NEW METHOD FOR TOPOGRAPHIC SURVEY BY LASER SCANNER COMBINED WITH GNSS RECEIVERS

The "Scan&Go" devices, installed on a vehicle are studied to obtain a three-dimensional centimeter definition of the single scan within one reference system.



The "Scan&Go" methodology was created to achieve faster and more effective use of the terrestrial Laser Scanner in the branch of the traditional survey and to allow a daily use of it even in classical topography.

The idea of Scan&Go was to create a topographical survey system that allows to obtain the georeferenced point cloud during the scan session, with a significative decrease of working time.

The benefits of Scan&Go system are:

- Increased measurement range of the scanner
- Significant reduction of survey time
- Easy movement between scan sessions without smounting the equipment
- Laser scanner perfectly leveled in any inclination position

Level-Plane 16 RADIO



Before Leveling



After leveling

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<u>GENERAL SALES TERMS</u> Delivery terms: ex-works Modena –Italy

> DETAILS Price area: EMEA-APAC Currency: EUR

Level-Plane 16 RADIO

Static multi-axis leveling platform with Radio and cable control for 3D Laser Scanner or Robotic Total Stations



Level-Plane 16 Radio is a static multi-axis platform created for automatic (non dynamic) leveling to ensure total verticality of the equipment with accuracy of +/- **30**" (or +/-3" with manual control) in all vehicle inclination conditions.

The structure is made of anodized aluminum, externally with a PVC cover to protect the mechanical and electrical parts from severe weather conditions and dust, removable to ensure internal inspections - IP65.

The top is made of stainless steel, specialy designed for topographic tribrach with standard 5/8 ".

Powered by cable connection to the car-lighter-12 V - 5 A. (it's also possible to use autonomous power source, with 12V battery available as accessory)

The Leveler is equipped with Radio controller, backlit display and keyboard, made of shockproof material resistant to dust and moisture - IP65.

The Radio Controller operation range is about 50 meters, it's also possible a standard connection by cable.

The Radio module complies to the standard regulation CE, FCC, IC and TELEC

Level-Plane 16R is studied for mounting on vehicle roof bars.

TECHNICAL DATA

- Accuracy with manual leveling
- Accuracy with automatic leveling
- Weight
- Maximum load
- External dimensions
- Temperature limit during the use of the equipment
- Storage temperature limit
- Power supply
- Maximum operating limit shooting ground slope along the longitudinal axis of the vehicle - AXIS L

• Maximum operating limit shooting ground slope along the perpendicular axis of the vehicle - AXIS T



+/- 3" +/- 30"

Part number LP16R

(Radio and Cable Controller)

LEVEL-PLANE 16 RADIO

Static multi-axis leveling platform with radio and cable controller for Laser Scanner or Robotic Total Stations.

Composed of

LP16R	Level-Plane 16 Radio
UCR16	LP16 Radio Controller
CUC	Cable for Controller UCR 16
BUC	Battery charger for Controller UCR16
STA	Roof bar brackets
CPC	Power Cable with connection to the car-lighter
TRL	Trilock - Topographic tribach
BMT	Soft bag for Level-Plane 16R
BMA	Soft Bag for accessories



- Temperature limit during the use of the equipment - 15° C + 40° C - 30° C + 50° C
- Storage temperature limit



Part number LP16R-A

(Radio and Cable Controller)

LEVEL-PLANE 16 RADIO ARCTIC

Static multi-axis leveling platform with radio and cable controller for Laser Scanner or Robotic Total Stations for low/high temperatures

Composed of

LP16R-A	Level-Plane 16 Radio Arctic
UCR16	LP16 Radio Controller
CUC	Cable for Controller UCR 16
BUC	Battery charger for Controller UCR16
STA	Roof bar brackets
CPC	Power Cable with connection to the car-lighter
TRL	Trilock - Topographic tribach
BMT	Soft bag for Level-Plane 16R Arctic
BMA	Soft Bag for accessories

Level-Plan 16 Radio Arctic is designed to be used at very low/high temperatures.

- Temperature limit during the use of the equipment -40° C + 50° C
- Storage temperature limit

- 50° C + 60° C





Scan&Go Drive SferaZERO



Configuration of use with LEICA LASER SCANNER SERIE P, C10

Configuration of use with LEICA LASER SCANNER BLK360





Configuration of use with FARO LASER SCANNER

Scan&Go DRIVE SferaZERO is a **"STOP & GO" system for topographic 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 and 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)

Simple configuration:

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 the target; this will allow the operator to obtain a tridimentional reference system with a topographic precision.

<u>Benefits:</u>

- \Rightarrow Higher laser scanner measuring range
- \Rightarrow Fast and easy mobility
- \Rightarrow Unnecessary common targets
- \Rightarrow Only one operator
- \Rightarrow Quicker surveying phase
- \Rightarrow Not relevant external environment
- \Rightarrow Reduced time of restitution of the scans
- \Rightarrow Excellent precision in positioning the scans

Scan&Go Drive SferaZERO

Part number SGD-SZ

SCAN&GO DRIVE SFERAZERO

<u>Composed of</u>

LP16R	Level-Plane 16 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
BMA	Soft Bag for accesories
	-



The "STOP & GO" system for topographic survey with Laser Scanner 3D and GNSS receivers includes:

- 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)

(GNSS receiver not included)

Scan&Go Drive SferaZERO for Leica BLK360

Part number SGD-BLK

SCAN&GO DRIVE SFERAZERO FOR LEICA BLK360

Composed of

LP16R UCR16 SZ MLB TLA BLK-GNSS BMT RMA	Level-Plane 16 Radio with accessories LP16 Radio Controller SferaZERO with accessories Magnetic Level Bracket Frame for LP16R BLK and GNSS Adapter Soft Bag for Level Plane 16R Soft Bag for accesories
BMA	Soft Bag for accesories



The "STOP & GO" system for topographic survey with Laser Scanner 3D and GNSS receivers includes:

- 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)
- BLK and GNSS Adapter, is a support designed to surmount the LP16R with Leica BLK360 and GNSS receiver

(GNSS receiver not included)

Level - Lift Box

Manual lifter of 1,00 mt height for vehicle roof

Level-Lift Box has been created in order to take advantage of the Level-Plane 16R in land, infrastructural, architectural and structural surveying.

It's composed of compact lifting box with hydraulic system, aluminum frame and a handle for manual lifting.



By using Level-Lift Roof combined with Level-Plane 16R and raising the 3D Laser Scanner gripping point it's possible to obtain:

- significant increase of measurement range
- decrease of the scan sessions number
- saving of surveying time

• improving measurement quality due to the increased verticality of the gripping point



TECHNICAL DATA

- Dimensions closed system
- Dimensions opened system
- Dimensions opened system with LP16R
- Maximum load
- Weight
- Temperature limit for use of the equipment
- Temperature limit for the storage of equipment

45 x 35 x h. 40 cm 45 x 35 x h. 100 cm 45 x 35 x h. 140 cm 50 kg 35 Kg - 15° C + 40° C - 30° C + 50° C

> Level-Lift Box can be used with any 3D Laser Scanner brands !

Level - Lift Box

Part number LLB

LEVEL-LIFT BOX

<u>Composed of</u>		
LLB	Level-Lift Box	
STA	Roof bar brackets	
FR	Frame	
HDL	Handle for manual lifting	

(LP16R not included)



Example:





Level - Lift Roof

Lifting extensible system for vehicle roof

Level-Lift Roof has been created in order to take advantage of the Level-Plane 16R in land, infrastructural, architectural and structural surveying.

It's composed of 4 pneumatic extensible segments (max 3.00 m height), a support plate for Level-Plane 16R and a solid frame that allows mounting on the roof rack of any vehicle. The system is made from anodized aluminum.

Once the engine of the vehicle is off and the pole fully extended the system remains firm and stable during the scan session.



By using Level-Lift Roof combined with Level-Plane 16R and raising the 3D Laser Scanner gripping point it's possible to obtain:

- significant increase of measurement range
- decrease of the scan sessions number
- saving of surveying time

• more detailed scans by cutting out balcony shadows, trays of windows and high parts, not visible from the ground

• improving measurement quality due to the increased verticality of the gripping point



TECHNICAL DATA

• Dimensions closed system 125 x 48 x h. 35 cm

4

2

45 kg

55 Kg

12V 16A

- Extended pole height 3,00 mt
- Extension
- Maximum load
- Weight
- Electrical engines
- Integrated compressor
- Power supply
- Temperature limit for use of the equipment
- Temperature limit for the storage of equipment

(maximum absorption load of the air compressor)

- 15° C + 40° C - 30° C + 50° C

> Level-Lift Roof can be used with any 3D Laser Scanner brands !

Part number LLR

LEVEL-LIFT ROOF

<u>Composed of</u>	
LLR	Level-Lift Roof with Aluminium frame
STA	Roof bar brackets
UCLR	LLR Controller
CLR	Connecting cable from LP16R to LLR
CPC	Power Cable with connection to the car-lighter
PCP	Support plate for LP16R
QBK	Quick Bracket
BMA	Soft bag for accessories
	-

(LP16R not included)



Example:



Lifting system with pneumatic telescopic column, compact and easy for transportation



Kangur-Lift is a telescopic column made of anodized aluminum with pneumatic extensions by hand pump, complete with manual locks that allow to stop the column at the desired height, with maximum height of 6.00 meters.

The column is mounted on a cart with rubber wheels.

Provided with adjustable feet combined with a spherical bubble to ensure the vertical position of the pole and a set of wind bracing ropes.

Wind Bracing ropes keep firm the pole, evoiding any movement of it caused by sudden wind or passing cars.

Kangur-Lift is useful in inaccessibile places for vehicles, when it is necessary to have scans at different heights, removing shadows and obstacles, for example:

- Building interiors
- Historical buildings, churches, museums, etc..
- Alleys and inner courtyards

Benefits:

- Safe use by a single operator
- Short setup and uninstall time (approxymately10 min)
- Easy movement among scanning stations
- Significant increase of the 3D Laser Scanner measuring range
- Small size, allows passages trough doors.

Kangur-Lift combined with the Level-Plane 16R permits scans perfectly leveled

The Level-Plane 16R on the top of Kangur-Lift system can automatically compensate the vertical alignment of the column.

155 cm



TECHNICAL DATA

•	Height closed column	1,40 mt
•	Maximum height opened column	6,00 mt
•	Extensions	6
•	Maximum load	30 kg
•	Dimensions closed column	71 x 32 x h.
•	Weight	37 Kg
•	Power supply, external battery	12V 12Ah

Kangur-Lift can be used with any 3D Laser Scanner brand!

Kangur-Lift system to use with Level-Plane 16 Radio

Part number KL60-S

KANGUR-LIFT SYSTEM

Lifting System for Level Plane 16R, made up of telescopic column extensible by hand pump, up to mt 6,00

Composed of

KL60	Kangur-Lift
KCV	Wind bracing kit
PFR-M	Quick fastening bolt - 5/8" standard
CCLB	Connecting cable from LP16R to Battery
EKB-NB	Electric kit for connecting LP16R to battery
BC	Battery charger 12V-12Ah
PCP	Support plate for LP16R
SUC	Support for LP16R controller
BMA	Soft bag for accessories

(LP16R not included)





Kangur-Lift to use without Level-Plane 16 Radio

Part number KL60

KANGUR-LIFT

Lifting System for 3D Laser Scanner, made up of telescopic column extensible by hand pump, up to mt 6,00

Composed of:

KL60	Kangur-Lift
KCV	Wind bracing kit
PFR-M	Quick fastening bolt - 5/8" standard
BMA	Soft bag for accessories







KangurGO max height 3,00 mt

Lifting system with pneumatic telescopic column, compact and easy to use, equipped with stabilizer wheels



KangurGO is a telescopic column made of anodized aluminum with pneumatic extensions by hand pump, complete with mechanical block that allows to stop the column at the desired height, with maximum height of 3,50 meters (with LP16R).

The column is mounted on a cart with large rubber wheels.

Wind Bracing ropes keep firm the pole, evoiding any movement of it caused by sudden wind or passing cars.

KangurGO is equipped with stabilizer wheels that ensure fast movements between the scan sessions without setting down or dismounting the laser scanner.

KangurGO is useful both for infrastructural and interior building surveys, when it is necessary to have scans at different heights, removing shadows and obstacles, for example:

- Historical building, churches, museums, etc..
- Alleys and inner courtyards
- Roads etc..

Benefits:

- Safe use by a single operator
- Short setup and uninstall time (approx.10 min)
- Easy movement among scanning stations
- Increase of the 3D Laser Scanner measuring range
- Small size

KanguGO combined with the Level-Plane 16R permits scans perfectly leveled. The Level-Plane 16R on the top of KangurGo can automatically compensate the columns vertical alignment.



TECHNICAL DATA

- Height closed column
- Maximum height opened column
- Extensions
- Maximum load
- Dimensions closed column
- Weight
- Power supply, external battery for LP16R
- 1,300 mt 3,500 mt (with LPE16) 3 30 kg 71x 32x h.144 cm 30 Kg 12V

KangurGO can be used with any 3D Laser Scanner brand!

KangurGO

Part number KGO

KANGURGO

Lifting System for Level Plane 16R , made up of pneumatic column extensible by hand pump, equipped with stabilizer wheels, up to mt 3,50 with LP16R.

Composed of

KGO KCV EBKG-NB	KangurGO with electric system Wind bracing kit Electric kit for connecting LP16R to battery (battery not included)
BC	Battery charger 12V-12Ah
PCP	Support plate for LP16R
SUC	Support for LP16R controller
BMA	Soft bag for accessories

(LP16R not included)









Telescopic elevator with mechanical winch



UPLIFT is a telescopic lifter made of painted steel, with mechanical lifter composed of 2 extensions (+ 1 additional extension of 1 mt.). The maximum height is 2.20 mt., and reaches 3.20 mt with the additional element.

Easy to carry thanks to its small size and weight. Equipped with round plates fitted with rubber feets and braking wheels.

Useful in all inaccessible places when is necessary to have scans at different heights, removing shadows and obstacles, for example:

- Building interiors
- Historical buildings, churches, museums, etc..
- Alleys and inner courtyards

Benefits:

- Light and compact design
- Easy to use
- Short setup and uninstall time (approxymately10 min)
- Easy movement among scan stations
- Significant increase of the 3D Laser Scanner measuring range

Technical data

- Maximum height
- Maximum height with additional element
- Extensions
- Base diameter
- Maximum load
- Closed dimensions
- Weight

220 cm 320 cm 2 + 1 (additional element) 125 cm 55 kg 20 cm x 20 cm x h. 120 cm 9,5 Kg



Uplift an be used with any 3D Laser Scanner brand!

Part number UP22

UPLIFT

Telescopic elevator with mechanical winch for 3D Laser Scanner, up to mt. 3,20 $\,$

Composed of:

UP22	Uplift220
RPF	Round plates fitted with rubber feets
RS	Equipment support
BW	Braking wheels
UP1E	Additional element of 1mt
BMTU	Transport bag





Uplift500

Steel Telescopic Lifter

UPLIFT500 is a telescopic lifter made of painted steel, with manual lifting composed of 4 sections, the laser scanner to be positioned at maximum height of 5,00 mt.

Combines stability with great sturdiness.

All metallic components (articulated parts, pressure knobs, leg braces, etc.) guarantee maximum durability and strength.

It is equipped with:

- double safety locking system by means of safety-bolt
- pressure knob
- heavy duty non-slip rubber feet
- Wind bracing kit

Useful in all inaccessible places when is necessary to have scans at different heights, removing shadows and obstacles, for example buildings, alleys and courtyards

Benefits:

- Easy to use
- Short setup and uninstall time (approxymately10 min)
- Easy movement among scanning stations
- Significant increase of the 3D Laser Scanner measuring range

Technical data

Height when closed	178 cm
Maximum Height	500 cm
Basic diameter	170 cm
Extension	4
Maximum load	10 kg
Weight	16 kg
 Dimension when closed 	178x20x20 cm





Uplift500 can be used with Laser Scanner FARO LEICA BLK360 - RTC360

Uplift50C

Part number UP500

UPLIFT500

Telescopic lifter made of painted steel, with manual lifting for 3D Laser Scanner, up to mt. 5,00, with braking wheels. Possible to use with or without the wheels.

Composed of:

UP500	Uplift550
KCV	Wind bracing kit
BW	Braking wheels
BMA	Soft bag for accessories





Part number EKB-NB

Electric kit for connecting LP16R to the battery (battery not included)

Composed of

CCLB	Connecting cable from LP16R to Battery
EBT-NB	Electric kit for battery (battery not included) - Soft bag with fixing hook
BC	Battery charger 12V-12Ah

Soft bag provided with hook for fixing to Kangur-Lift System, connetting power cable and battery charger with connecting cable.

Part number BT

Battery 12.0 Ah

Battery 12V 12Ah, 14 hours authonomy (around 70 leveling sessions)

Available only for the European market

Part Number TRL

Trilock

Topographic tribach with blocked footscrews. Advised for using with LP16R.

Trilock has been realized to fix, any type of Laser Scanner in a safe and perfectly leveled way, to the 5/8'' thread of the upper plate, part of our leveler LEVEL-PLANE 16R. In this way the leveling of the LP16R will be integral with the compensator of the equipment installed above.

Part number MLB

Magnetic Level Bracket

Magnetic bracket for positioning of the reference Target

Magnetic level Bracket is equipped of adapter plate with 5/8" universal screw and three magnetic feet to adapt on the vehicle bonnet. The adjustable knobs enable the leveling even with strong inclination.











SferaZERO

Part number SZ

SferaZERO

Spherical reference target for SCAN&GO DRIVE

<u>Composed of</u>

Adapter for GNSS receivers Spherical target made of plexiglass and polycarbonate Soft bag for transport

The SferaZERO center coincides with the GNSS receiver phase center. (or differs by few millimeters) Compatible with all GNSS receivers.

BLK-GNSS Adapter

Part number BLK-GNSS

BLK and GNSS adapter

Support designed to surmount the Level-Plane 16 Radio with Leica BLK360 and GNSS receiver

Composed of

Pole adapter for GNSS receivers Frame made of polycarbonate Adapter 3/8"

OUICK BRACKET

Part number QBK

Quick Bracket

System for easy and safe installation of laser scanner on the Level-Lift Roof with Level-Plane $16 \mbox{R}$

Composed of

Plate for Laser Scanner Plate for Level-Plane 16 R

(LP16R not included)













Adapter for tribrach - 3/8"



ADAPTER FOR TRIBRACH - 3/8"

Adapter to be used with tribrach or trilock, above screw 3/8" female

Adapter for tribrach - 5/8"

Part number ADP-T-58

ADAPTER FOR TRIBRACH - 5/8"

Adapter to be used with tribrach or trilock, above screw 5/8" female

Adapter 1/4"

Part number ADP-14

ADAPTER - 1/4"

Adapter to reduce the 5/8" attack to 1/4"

Adapter 3/8"

Part number ADP-38

ADAPTER - 3/8"

Adapter to reduce the 5/8" attack to 3/8"











Part number BMT

SOFT AND PADDED BAG FOR LEVEL-PLANE 16R

External dimesions : 47 x 37 x 33 cm

- Practical and spacious
- Abrasions resistant
- Supplied with two removable and padded dividers
- Reinforced handles for comfortable grip



Part number BMA

SOFT AND PADDED BAG FOR ACCESSORIES

External dimesions : 12 x 40 x h20 cm

- Practical and spacious
- Abrasions resistant
- Supplied with two removable and padded dividers
- Reinforced handles for comfortable grip



Accessories for 3D survey

Target Plate 20x20

Part number TP16

TARGET PLATE 20X20

Reference target for 3D Laser Scanner, size 20cm x 20cm with support for GNSS receiver and 360° prisms.

- under screw 5/8 " female
- above screw Leica pin
- Including Leica pin adapter 5/8" male

TP16-S : Target plate with black/white chessboard

TP16-C : Target plate with black/white circular target



TP16-S

TP16-C

Easy Target

Part number ET-TG

EASY TARGET

Plastic reference target with16x16cm chessboard.

360° vertical and horizontal rotation. Simple and versatile, with many options of use.



KIT EASY TARGET

Easy target Kit , composed of n° 6 targets plus transport case.

Part number ET-ID

TARGET ID

Useful for assigning an identification number to the Easy Target. Writeable with erasable markers.

Part number ET-AM

ADAPTOR WITH MAGNET

Useful for an easy positioning of the Easy target on ferrous surfaces.







Accessories for Scanner: Faro e Trimble

Coaxial Bracket



COAXIAL BRACKET

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

Made following perfectly the shape of the instrument, the locking points are safe and non-invasive.

This support allows the simultaneous measurement of the position of the gripping point of the scanner, together with the scan itself, avoiding subsequent classic topographic operations for the union of scans made in sequence.

The low weight of the support and the equipment installed does not create any kind of mechanical or measuring problem during scans.

TECHNICAL DATA

- Maximum load: 10 Kg
- Adaptor: 5/8" male

Coaxial Bracket for FARO FOCUS 3D, FARO X serie, TRIMBLE TX5

Part number CB-TFX

COAXIAL BRACKET FOR FARO FOCUS 3D, FARO X SERIE AND TRIMBLE TX5

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



Coaxial Bracket for FARO S and FARO M serie

Part number CB-SM

COAXIAL BRACKET FOR FARO S AND FARO M SERIES

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





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seguici su ...



<u>Reseller</u>