# Position Partners

## Your Partner in Productivity

# Catalogue
## 2010

To all of our valued customers,

Welcome to the new decade 2010.

With a fresh approach and a heritage in strong customer service, it has been a little over a year since Position Partners emerged as your national partner and Australian distributor for Topcon.

Our plan was to retain quality, local response and a friendly hand whilst offering you access to a depth of service and support capabilities across the country.

The new Position Partners 2010 catalogue embodies these aims at a time when the outlook for positioning applications in landforming, infrastructure and building looks brighter than ever.

It's a bright outlook for the products too. Reliability and ease are at the top of the designers minds. There are new products and new services with extra benefits from clever technology and design. They feature in the catalogue alongside some of the tireless companions you have worked with in the past, especially Topcon. The 2010 Position Partners catalogue is fashioned to give you an easy directory of positioning systems, tools and accessories.

So leaf through the pages of your new catalogue for a wealth of positioning solutions and keep it in a handy place. We're here to assist when you have a few questions so don't hesitate to keep in touch with us directly or via our website at www.positionpartners.com.au.

**Martin Nix**
Business Development Manager

Position Partners – Incorporating:

VIC / TAS
LASER BEAMS

QLD
ABC LASERS

WA
stadia instruments

NSW
LASERQUIP

SA / NT
ROSS INSTRUMENTS

Your Partner in Productivity

TOPCON
Australian Distributor

**Position** *Partners*

## PIPE AND CABLE LOCATORS

### C.SCOPE CABLE AVOIDANCE TOOL

The C.Scope cable avoidance tool is a full function, industry standard locator which every ground working operative will find familiar and easy to use.

Better by design, the budget priced Cable Avoidance Tool is rugged, lightweight and packed full of features. With Fingertip controls you can adjust sensitivity and rapid switching between the locator's three operating modes. Moisture and dust resistant to IP65, Railtrack approved. Add the powerful C.Scope accessories and the Cable Avoidance Tool becomes a versatile pipe and cable tracing system.

- On/off control on handle, activated when in use
- Three position function select switch:
  - P - Power mode for detecting live, imbalanced cables
  - R - Radio mode for detecting re-radiated radio signals
  - G - Generator mode for detecting conductors carrying the signal generated by the optional generator
- Sensitivity control
- Detachable loudspeaker
- User replaceable base protector
- Display shows signal strength, battery condition, operating mode

Depth of detectionThe C.A.T. will typically detect conductors to the following depths:

- P - 3 metres
- R - 2 metres
- G - 3 metres

Please note that site conditions such as soil, moisture and temperature can affect these depth performance levels.

#10101

### C.SCOPE METAL COVER LOCATOR

The CScope Metal Cover Locator has been designed specifically for the exacting requirements of the water industry and ground working contractor

This detector is a low cost solution to the problem of finding lost or hidden metal objects in the ground. Typical targets will be manhole covers and stopcock boxes covered by tarmac or earth, steel reinforcement rods in concrete road surfaces, metal pipes, valve heads and buried fuel tanks

The CScope designed Induction Balance operating system provides maximum sensitivity to solid metal objects whilst ignoring the small metal clutter which causes false signals in cheap inferior metal detectors. A 'target hold' facility enables the operator to trace out the shape and size of the located object - less time wasted uncovering the wrong target!

The CS880 has been carefully thought out in every detail. It is vital equipment for the Water Company Inspector, Engineer and Ground Work Operative. Every feature of the CS880 has been devised in close consultation with industry specialists

- Heavy duty control box
- Twistlock height adjustment
- Fascia mounted loudspeaker
- Socket for optional headphones
- Collapsible stem
- Sealed battery compartment
- Comfortable hand grip with armrest
- Waterproof highly robust search coil
- Push button controls and LED panel indicators
- 8 x AA clip in battery pack
- Moisture and dust protected to IP65

#10175

### SIGNAL CLAMP

Extend the powerful versatility of the C.Scope signal generator. Clip the signal clamp around a cable and safely transfer the generator signal.

Internal diameter 75mm may be clipped round pipe or cable. Robust spring loaded jaws.

#10176

### MINITRAN TRANSPONDER SONDE

Trace non-metal pipes and find pipe blockages before digging. Track the movement of the self powered Minitran in-pipe transmitter being fed inside a pipe or conduit on a drainage rod. the progress is tracked from the surface by the C.Scope locator.

- Length 102mm
- Diameter 38mm
- Output frequency 33kHz continuous. Tracked by C.A.T. in G mode
- Maximum detection range 5 metres
- Thread size M10
- Battery - 1 AA
- Battery life approximately 50 hours

#10177

### SIGNAL GENERATOR

C.Scope Signal Generator SG-A is designed to operate in conjunction with the Cable Avoidance Tools in a wide variety of tracing applications.

A 33kHz signal can be applied to a pipe or cable and traced along its length using the Cable Avoidance Tool. Smart robust styling, extra features and all round greater operating efficiency resulting in longer battery life.

#10178

VISA  MasterCard  eftpos

# General Equipment

## BATTERIES

### INDUSTRIAL ALKALINE BATTERIES

Stay up and running with the alkaline industrial battery system, designed to provide an economical power source for modern devices that require high power input and/ or frequent use.

Alkaline batteries are by far more powerful, reliable and economical than standard "Heavy Duty" batteries.

| AAA | Alkaline 1.5v | **#10102** |
| --- | --- | --- |
| AA | Alkaline 1.5v | **#10103** |
| C | Alkaline 1.5v | **#10104** |
| D | Alkaline 1.5v | **#10105** |
| 9v | Alkaline 1.5v | **#10106** |

## SURVEY STAKES

Stakes:
• 900 x 25 x 25mm (A)
Boundary Pegs:
• 300 x 50 x 50mm (B)
Dumpy Pegs:
• 150 x 50 x 50mm (C)

(A)

(B)          (C)

**#10108**

## OPTICAL SQUARE

Double penta prism for fast right angle sighting in either direction. There is also a slotted hollow handle for attaching a plumbob cord. The extra wide viewing window makes targeting easy. Protective metal cover rotates to expose prism. Comes with a carry case.

**#10107**
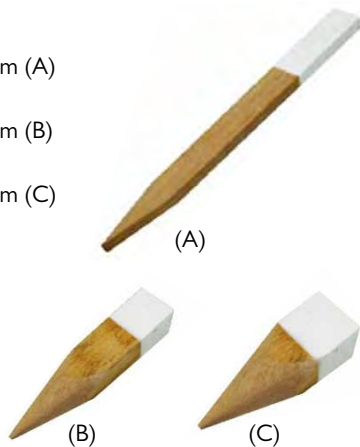
## MARKER PENS & CRAYONS

### MARKER PENS

For marking hard to mark surfaces. It is fast drying on most surfaces. Replacement tips available.

Available in other colours.

**#10109**

### MARKER CRAYONS

For marking timber, steel, concrete, stone and almost any surface. Made in all colours, non injurious and waterproof. Packed 12 per box, sold by box

**#10110**

FOR ALL ENQUIRIES CALL: **1300 867 266**

VISA   MasterCard   eftpos

Position Partners

## ROTOSURE

### ROTOSURE 500

Wheel Circumference
500mm

Wheel Diameter
16cm

Maximum Distance
9999.9m

Reading
Metres, Decimetres

Weight
1.1kg

This model has a 500mm circumference wheel. The tyre is manufactured from hard wearing, abrasive resistant P.V.C. The Rotosure 500 has a tough aluminium handle and a pistol grip for maximum comfort. This measure wheel has two quick release clips that allow the handle to fold down.

### ROTOSURE 1000 STANDARD

Wheel Circumference
1m

Wheel Diameter
32cm

Maximum Distance
9999.9m

Reading
Metres, Decimetres

Weight
2.36kg

This model has a 1m circumference wheel. The Rotosure 1000 ST has a kick down stand, a tough aluminium handle and a pistol grip for maximum comfort. This measure wheel has a quick release clip that allows the handle to fold down.

### ROTOSURE 1000 DELUXE

Wheel Circumference
1m

Wheel Diameter
32cm

Maximum Distance
9999.9m

Reading
Metres, Decimetres

Weight
2.36kg

The Rotosure 1000 Deluxe model features a trigger brake on the comfortable pistol grip handle. This model has a 1m circumference wheel, kick down stand and a quick release clip that allows the handle to fold down for easy storage.

### ROTOSURE PROFESSIONAL

Wheel Circumference
1m

Wheel Diameter
32cm

Maximum Distance
9999.9m

Reading
Metres, Decimetres

Weight
2.36kg

This is the best measure wheel available. Packed with features, this model has a 1m circumference wheel. The Rotosure Professional has a kick down stand, a push button counter reset in the handle and on the counter, it has a tough oval aluminium handle and a pistol grip for maximum comfort. The handle also has a trigger-brake to stop the wheel rotation when changing measurement location. This measure wheel has a quick release clip that allows the handle to fold down.

MADE IN SOUTH AFRICA

#10111     #10112     #10113     #10114

# General Equipment

## MEASURE WHEEL CARRY BAGS

These tough nylon carry bags are the perfect way to transport and protect your Rotosure measure wheel.

• Small to Suit Rotosure 500 model
• Large to Suit Rotosure 1000/Classique models

**#10115**

## STEREOSCOPES

### GEOSCOPE POCKET STEREOSCOPE

The Pocket stereoscope is the easy way to view arial photos in 3D. The Geoscope 2x magnification pocket stereoscope from Stereo Aids is ideal for students and professionals both as a field and office tool. The use of high quality glass lenses and strong construction ensures top quality images.

Features an adjustable eyepiece, 2x magnification, protective vinyl carry pouch, tough ABS plastic body, glass lenses and it weighs in at only 120g.

**#10116**

### GEOSCOPE DESKTOP MIRROR STEREOSCOPE

The Geoscope mirror stereoscope is constructed from tough and durable ABS plastic, chrome surface mirrors and crown glass lenses making it suitable for the rigors of class rooms, field and office work. The use of high quality mirrors and lenses ensure crystal clear images at a fraction of the cost of its competitors.

The Standard Geoscope mirror stereoscope includes:
1.2x Magnification Eyepiece
Parallax Wedge Carry Case

**#10117**

## STOPWATCHES

### SILVA STOPWATCH STARTER

A stopwatch with clear design and attractive shape. Suitable for schools, associations and youth activities that require a simple, functional stopwatch. Stop Watch Starter has the most important basic functions.

FEATURES:

• Stopwatch with 1/100 second
• Split time
• Clock
• Alarm
• Calendar

**#10118**

### SILVA STOPWATCH COACH

A stopwatch with increased functionality, the next level up in Silva's Stop Watch range. Countdown function and split times to help you keep an eye on whether you are maintaining an even tempo or not. Works excellently for a wide variety of activities. Waterproof down to 30 metres.

FEATURES:

• Stopwatch with 1/100 second
• 100 Split times
• Countdown time
• Pacer
• Clock
• Alarm
• Calendar
• Waterproof

**#10119**

FOR ALL ENQUIRIES CALL: **1300 867 266**

# General Equipment

## ABNEY LEVELS & HAND LEVELS

### A54 ABNEY

Graduated 0 to ± 90°, 0 to ± 100% on a stationery arc. Vernier reads to 10'. Scale pointer has friction movement. 5 inches in length with a flat base, square aluminium body and arc. Comes with a carry case.

#10120

### HAND LEVEL

Ideal for preliminary survey and simple distance estimation. Sturdy impact-resistant body and easy to read protected vial.

#10121

### M70S ABNEY (5X MAG) WITH STADIA

Graduated 0 to ± 90°, 0 to ± 100% on a stationery arc. Vernier reads to 10'. Scale pointer has friction movement and locks with the turn of a thumb screw. 5x magnification. The eyepiece slides out to focus cross hair and bubble. Objective lens slides out to focus target. 7.5 inches in length with a flat base, and an aluminium arc.

#10122

### M80S HAND LEVEL (5X MAG)

5x magnification. The eyepiece slides out to focus cross hair and bubble. Objective lens slides out to focus target. 7.5 inches in length.
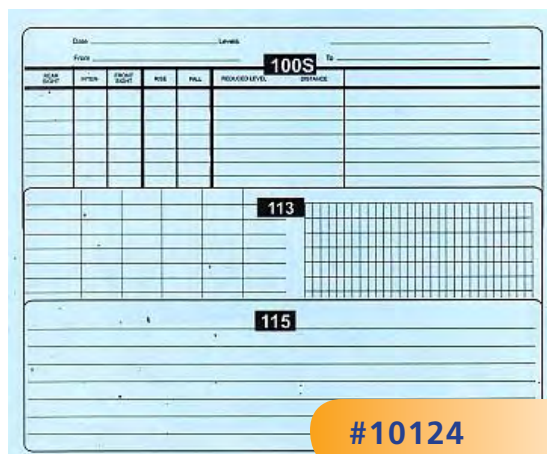
#10123

## FIELD BOOKS

### MARKRITE-CHARTWELL 2416 LEVEL BOOK - 100

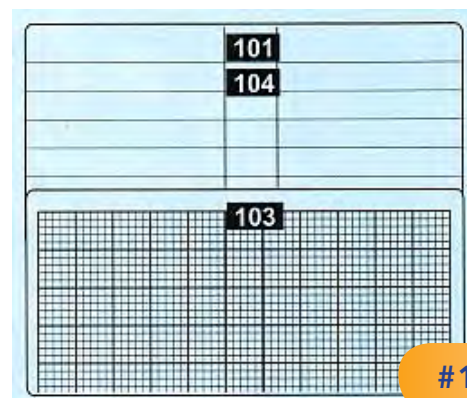The Chartwell range of fieldbooks are hard covered and water resistant.

#10124

### MARKRITE-CHARTWELL 2006 NOTE BOOK - 101

The Chartwell range of fieldbooks are hard covered and water resistant.

*Other kinds available, please call for details*

#10125

# General Equipment

## PANASONIC TOUGHBOOK COMPUTER

Look to Panasonic for a line of tough notebook computers with as much power and as many features as any desktop system. Some of our TOUGHBOOK® computers combine rugged features and performance for corporate users.

We manufacture a full line of rugged and semi-rugged notebook computers designed to withstand the demanding conditions of mobile professionals in fields that include law enforcement, military, utility, and emergency services. Ruggedized features include a full or partial magnesium case that's 20 times stronger than ordinary plastic, a shock-mounted hard drive, and sealed keyboards that resist the hazards of dirt, dust and spills.

*Other brands available, please call for details*

**#10179**

## TALLY COUNTERS

### HAND TALLY COUNTER

Count from 0 to 9999. Fits comfortably in the hand, with the handy finger ring. White figures on a black background for an easy to read display, all the figures reset back to zero by turning one knob. Tough metal construction.

**#10126**

### DESK TALLY COUNTER

Count from 0 to 9999. With metal base and holes for screwing on to a desk or board (fit a row of counters to a board to keep tally of several things at once). White figures on a black background for an easy to read display, all the figures reset back to zero by turning one knob. Tough metal construction.

**#10127**

## PELICAN CASES

*At Position Partners, we offer a huge range of the world famous Pelican brand cases. Just give us a call with the dimensions and we will find the right case for your needs.*

**#10180**

# General Equipment

## TWO WAY UHF RADIOS

### GME TX680 UHF RADIO

The GME Electrophone TX680 is the latest in GME's line of compact UHF 40 Channel Handheld Transceivers. Not only is the TX680 packed with features, its circuit design incorporates a super sensitive receiver with front end filtering and a powerful 3 Watt transmitter.

The TX680 is not just another one of the many compact units currently on the market today. GME have spent a considerable amount of time engineering the TX680 to fulfill the needs of our users and meet the performance expectations that GME products are renown for.

What sets the TX680 apart from the rest of the pack is its superior performance. The TX680 has a full three Watt RF output which is four times the power of many units on the market today. For close range communications the transmitter can be switched to one Watt to increase the available talk time. The receive sensitivity and front end filtering of the TX680 meets GME's high standards and you will find the unit is unbeatable in all areas.

The TX680 comes complete with a Leather Carry Case, desktop charger and a 1000 mAh Li-ion Rechargeable Battery Pack with enough power for a full days work.

**#10181**

### GME TX670 UHF RADIO

Line of sight distance up to 6km.   The GME Electrophone TX670 sets a new benchmark in compact 40 channel UHF handheld transceivers. Not only is the TX670 packed with features, its circuit design incorporates a super sensitive receiver with front end filtering and a powerful 2 Watt transmitter.

The TX670 is not just another one of the many compact units currently on the market today. GME have spent a considerable amount of time engineering the TX670 to fulfill the needs of our users and meet the performance expectations that GME products are renown for.   What sets the TX670 apart from the rest of the pack is its superior performance. The TX670 has a full two Watt RF output which is double the power of most units on the market today. The receive sensitivity and front end filtering of the TX670 meets GME's high standards and you will find the unit is unbeatable in all areas.

The TX670 also comes complete with Nicad batteries, and a charger.

**#10183**

### GME TX650 TWIN PACK OF UHF RADIOS

The TX650 is GME's newest compact UHF 40 Channel Handheld Transceiver. Not only is the TX650 packed with features, its also extremely slim and light without compromising performance.

The TX650 is not just another one of the many compact units currently on the market today.

GME have spent a considerable amount of time engineering the TX650 to fulfill the needs of users and meet the performance expectations that GME products are renown for.

What sets the TX650 apart from the rest of the pack is its tiny size and superior performance. The TX650 is just 12mm thick yet has a full one Watt RF output (gives up to 5km line of sight). For close range communications the transmitter can be switched to 0.5 Watts to increase the available talk time. The receive sensitivity and front end filtering of the TX650 meets GME's high standards and you will find the unit is unbeatable in all areas.

The TX650 comes in a pack of 2 rechargeable radios, cradle charger, AC adaptor, 2 ear microphones and 2 neck lanyards.

**#10182**

### GME TX6200 UHF RADIO

The TX6200 is not only a fully featured 40 channel UHF CB Transceiver but also incorporates a wide band receiver capable of storing an extra 20 channels between 403 and 520 MHz. These extra channels can be included in the scan sequence of normal CB channels.  The full 5 Watt output power combined with a super sensitive receiver (-123 dBm threshold), gives maximum range when transmitting and receiving.

The front cover is manufactured from a thick polycarbonate ABS blend and includes a rubber 'standout' to protect the LCD window against scratching.

Another useful feature is the battery pack's own charging socket so the battery can be trickle charged at home or in a vehicle* without being attached to the transceiver (*optional vehicle charger BCV001required).

**#10184**

**VIC** – Campbellfield **(03) 9930 7111**   **SA** **(08) 8346 1180**   **NSW** **(02) 9898 0066**   **WA** **(08) 6241 4700**

**VIC** – Dandenong **(03) 9706 9966**   **NT** **(08) 8981 1800**   **QLD**  **(07) 3717 2111**   **TAS** **(03) 6398 1051**   **7**

## PLANIMETERS

### PLACOM KP-90N

The only way to go with a planimeter.

Quick and easy to use with accuracy of ± 0.2%. Clear LCD screen display reading up to 8 digits. 6-digit pulse count allows you to measure an area up to 10m2, 100 times larger than with an ordinary planimeter (up to .1m2).

KP-9ON can easily convert the measured area value into a new area value in a newly desired unit and with a newly desired scale value.

Automatic shifting of Unit to upper Unit when the measured area value overflows the displayed figures of 8 digits, the measured area value is calculated and displayed by an upper unit. When the overflow occurrs in the uppermost unit, km2, acre, the measurement can be continued by pulse count display.

In order to get better result of measurement, Mean Value Measurement is recommended. This measurement can be easily done on with the KP-90N.

Measurement of an Area with different lateral and longitudinal scale is also very simple. Auto-Power-Off function for energy saving.

APPLICATIONS

• Construction and Civil Engineering
• Land Developing Planning
• Forestry Area - Machine Designing
• Ship Designing . Medical Research
• Agriculture . Data Analysis in Statistics
• Teaching Materials in school.

#10128

## YAMAYO MEASURING TAPES

### 30M FIBREGLASS

Fibreglass measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10129

### 50M FIBREGLASS

Fibreglass measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10131

### 100M FIBREGLASS

Fibreglass measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10133

### 30M STEEL

Nylon coated steel measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10130

### 50M STEEL

Nylon coated steel measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10132

### 100M STEEL

Nylon coated steel measuring tape. Open frame for easy cleaning and care. Strong reliable design ABS case with a metal hook end.

#10134

# General Equipment

## MOISTURE METERS

### GE PROTIMETER MINI BLD2000

The low-cost, general purpose moisture meter for building, surveying, timber inspection and a very broad range of other applications. With an ergonomic design and tactile grip for comfort and ease of use, and ultra bright display featuring sixty LED's for clear visibility. Measurement range is 6-90 for versatility. Comes complete with pouch, moisture probe, 'Calcheck" and wood calibration table.

**#10135**

### GE PROTIMETER SURVEY MASTER SM BLD5360

The Surveymaster incorporates two modes of operation - Search and Measure - that enable the user to distinguish surface moisture from sub-surface moisture - essential information when trying to establish the extent and cause of a moisture problem. Moisture level values are shown on a digital display along side a scale of colour coded lights that indicate the moisture condition of the material. In the measure mode the meter can be used with A two-pin head-and-lead for awkward corners and under work.

A set of 'Deep Wall Probes' are included that are insulated except for their tips providing quantitative WME readings at depth, regardless of surface moisture and surface contamination.

The instrument is supplied with pouch, moisture probe, deep wall probes, calibration check device and wood calibration table.

**#10136**

### GE PROTIMETER HAMMER ELECTRODE BLD5055

The low-cost, general purpose moisture meter for building, surveying, timber inspection and a very broad range of other applications. With an ergonomic design and tactile grip for comfort and ease of use, and ultra bright display featuring sixty LED's for clear visibility. Measurement range is 6-90 for versatility. Comes complete with pouch, moisture probe, 'Calcheck" and wood calibration table.

**#10185**

### GE PROTIMETER EIFS PROBE FOR POLYSTYRENE BLD5070

The Protimeter EIFS Probe has 4" long replaceable needles and a protective holster with belt loop. The needles are insulated and will only take measurements at the tip enabling the user to make profile measurements.

The EIFS Probe is recommended for use with the Surveymaster, but can also be used with the Mini and MMS.

**#10186**

### REPLACEMENT PINS

We stock a wide range of pins and needles for the Protimeter Moisture meters and accessories.

| | |
|---|---|
| 20 pack of pins for BLD5360 & BLD2000 | |
| 10 pack of pins Pins for BLD5000 | |
| 2 pack of pins Pins for BLD5070 | |
| 10 pack of pins Pins for BLD5055 | **#10187** |

## DISTO

### DISTO CORNER TARGET

The ideal solution to use your Disto laser distance measure to measure to exterior corners. With this reusable target plate, just stick it to a corner with a piece of Blu-Tack and you are ready to measure - one man.



**#10137**



| Model | D2 | D3 | D5 | A6 | A8 |
|---|---|---|---|---|---|
| Maximum Range | 60m | 100m | 200m | 200m | 200m |
| Accuracy (mm) | ± 1 | ± 1 | ± 1 | ± 1.5 | ± 1.5 |
| Area & Volume | ✔ | ✔ | ✔ | ✔ | ✔ |
| Iluminated Dsiplay | ✔ | ✔ | ✔ | ✔ | ✔ |
| Points memory | 10 | 20 | 20 | 20 | 30 |
| IP54 Water resistant | ✔ | ✔ | ✔ | ✔ | ✔ |
| Fold-out endpiece | ✔ | ✔ | ✔ | ✔ | ✔ |
| Indirect heights | ✔ | ✔ | ✔ | ✔ | ✔ |
| Angle finder | ✔ | ✔ | ✔ | ✔ | ✔ |
| Optical viewfinger | ✔ | ✔ | ✔ | ✔ | ✔ |
| Digital Viewfinder | ✔ | ✔ | ✔ | ✔ | ✔ |
| Bluetooth® comms | ✔ | ✔ | ✔ | ✔ | ✔ |
| Carry pouch | ✔ | ✔ | ✔ | ✔ | ✔ |
| Battery | 2 AAA | 2 AAA | 2 AA | 2 AA | 2 AA |
| + & - measurement | ✔ | ✔ | ✔ | ✔ | ✔ |
| Metric and Imperial | ✔ | ✔ | ✔ | ✔ | ✔ |

### DISTO TARGET CARDS

Push your Disto measurements to the max with the Disto target cards. Double sided, the Disto target cards have a specially designed copper coloured metalic pigmented surface which is the perfect surface for your Disto to measure to when you need some extra distance.

A4 Size card measures 210 x 297 mm



**#10138**

### DISTO D5

Worlds first digital laser measuring tool with Full Color Display with 4X Zoom.

The Leica DISTO D5 has the only high resolution 2.4" digital color Point-finder display and a 45-degree tilt sensor in the industry. These features combined with a host of calculation functions make the Leica DISTO D5 the best hand-held digital laser distance meter ever made.

FEATURES:
- Digital Color Point-finder with 4X Zoom
- Distance, Area, Volume Measurement
- Bright red laser pointer
- Min, Max and continous Measurement
- Indirect Height
- Addition, Subtraction
- Large Color TFT 320x240 2.4" display
- Illuminated LCD display
- Multifunction End Piece
- Memory of the last 20 points stored
- Tripod Mount
- Splash Proof / Dust Proof (IP54)
- Tilt sensor ± 50

SPECIFICATIONS:
- Measuring accuracy: ± 1mm
- Range: 0.05m to 100m (200m with optional target plate)
- Batteries: 2 AA
- Dimensions: 143 X 55 X 29mm
- Operating Temp. Range: -10OC to 50OC



**#10139**

## DISTO

### DISTO D2

The compact and handy base model was specifically designed for indoor applications. Shortcut keys for addition, subtraction, area and volume calculation make measuring fast and very reliable. The last 10 measurements are also stored. As with all Leica laser distance meters, the laser dot is clearly visible. You can always see your targeting point, even if the target object is in a hard to access area. Leica DISTO™ D2 - you will never use a measuring tape again!

**FEATURES:**

- Distance, Area, Volume Measurement
- Bright red laser pointer
- Minimum and maximum measurements
- Memory of the last 10 points stored
- Continuous measurement
- Addition, Subtraction
- Illuminated 3 line LCD display
- Flip-out end-piece Measure from edges or corners
- Stake out function Stake-out equal distances
- Time delay release Measure without shake
- Indirect measurement by Pythagoras

**SPECIFICATIONS:**

- Measuring accuracy: ± 1mm
- Maximum measuring range: 60m
- Waterproof: IP54 (Splash & dust proof)
- Warranty: 1 Year

**#10140**

### DISTO D3

The DISTO D3 is a multi-functional instrument to ensure simple, quick and reliable measurements. You can measure distances with absolute accuracy past obstructions and determine angles quickly and precisely. The integrated tilt sensor also provides you with a horizontal distance measurement. Another sensor detects the lighting conditions and automatically switches on the display and keypad illumination so you can rely on your DISTO D3 while working in the dark.

**FEATURES:**

- Minimum and maximum measurements
- Continuous measurement
- Addition/subtraction
- Staking-out function, multiple
- Area/volume measurements
- Room calculations
- Memory of the last 20 points stored
- Angles
- Indirect measurement by Pythagoras
- Indirect measurement with tilt sensor

**SPECIFICATIONS:**

- Measuring accuracy: ±1.0mm
- Maximum measuring range: 100m
- Stores Constants: 1
- Measurements per battery set: Up to 5,000
- Batteries: 2 X AAA
- Dimensions: 125 x 45 x 24 mm
- Weight: 110g With Batteries
- Operating Temp: -10degrees up to 50degrees

**#10141**

### DISTO A6

The measuring process on the Disto A6 isn't over with the display of the results: integrated Bluetooth® technology, combined with software designed to let you export measurement readings straight into various programs (e.g. Word Excel, AutoCad) without the use of cables. Take the hard work out of measuring.

**FEATURES:**

- Distance, Area, Volume Measurement
- Bright red laser pointer
- Minimum and maximum measurements
- Memory of the last 10 points stored
- Continuous measurement
- Addition, Subtraction
- Illuminated 3 line LCD display
- Flip-out end-piece Measure from edges or corners
- Stake out function Stake-out equal distances
- Time delay release Measure without shake
- Indirect measurement by Pythagoras

**SPECIFICATIONS:**

- Measuring accuracy: ± 1mm
- Maximum measuring range: 100m (200 with targ)
- Waterproof: IP54 (Splash & dust proof)
- Warranty: 1 Year

**#10188**

### DISTO A8

**NEW - With digital viewfinder and tilt sensor simply perfect!**

The digital viewfinder and the integrated tilt sensor make the Disto A8 an innovation worldwide and open up completely new possibilities. Comfortably find your target with the three-fold digital zoom made even easier with the blended in crosshairs. The brightness of the greyscales display can be manually adjusted; ideal for poorly contrasting targets! The tilt sensor does not only indicate angles, but also real horizontal distances and various indirect height measurements.

**FEATURES:**

- Tilt sensor measures slope by just placing the A8 on the surface
- Digital viewfinder (3-fold zoom) - Essential for far distances and in sunshine.
- Indirect height measurements - By using the tilt sensor and the digital viewfinder, heights can be determined easily
- Precise, fast and reliable measurements
- Power Range Technology™ - Measure over long distances (approx. 100 m) without target plate
- Memory of the last 20 points stored
- Greyscales display - Best contrast possible with 9 brightness settings

**SPECIFICATIONS:**

- Measuring accuracy: ± 1.5mm
- Maximum measuring range: 100m (200 with target)
- Waterproof Standard: IP54 (Splash and dust proof)
- Warranty: 1 Year

**#10189**

**Position** *Partners*

## MAP AND PLAN MEASURERS

### SILVA MECHANICAL MAP MEASURE

This convenient, hand held, easy to read mechanical map measure, is the economical way to accurately measure distances on maps of the following scales 1:750 000, 1:500 000, 1:400 000, 1:200 000, 1:100 000, 1:50 000, 1:25 000, 1:15 000.

#### #10142

### SILVA ELECTRONIC MAP MEASURE PLUS

Digital map measurer with a modern waterproof design. Measures kilometres, miles and nautical miles. Given a known speed it can also calculate how long it will take to cover the rest of the route.

#### #10143

### SCALEX SA 2 PLAN WHEEL

This stand-alone version offers all the same great features of the Scalex PlanWheel XLU 2, without the computer interface option.

Here's the perfect tool for taking fast accurate scaled measurements from blueprints, maps, and plans. Just select from the 111 built-in scale factors or enter up to 3 of your own to match the plan and roll the PlanWheel, the measurement is displayed instantly. Ideal for architects, forestry, surveyors, contractors, quantity surveyors etc. Calculates square and cubic dimensions for regular areas and volumes. Measures in kilometers, meters, centimeters, feet, yards, miles and inches. Calculate auto-scale factor from reduced, enlarged or odd-scale drawings. With an impressive accuracy of ± 0.25% and a resolution of 1.0mm.

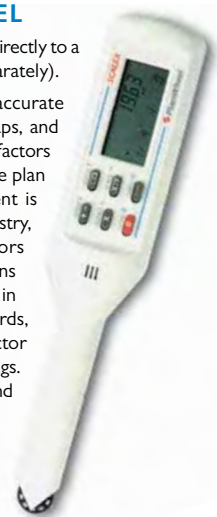A hard protective case is also available (sold separately)

#### #10190

### SCALEX XLU 2 PLAN WHEEL

This model has the ability to be connected directly to a computer using the interface kit (sold separately).

Here's the perfect tool for taking fast accurate scaled measurements from blueprints, maps, and plans. Just select from the 111 built-in scale factors or enter up to 3 of your own to match the plan and roll the PlanWheel, the measurement is displayed instantly. Ideal for architects, forestry, surveyors, contractors, quantity surveyors etc. Calculates square and cubic dimensions for regular areas and volumes. Measures in kilometers, meters, centimeters, feet, yards, miles and inches. Calculate auto-scale factor from reduced, enlarged or odd-scale drawings. With an impressive accuracy of ± 0.25% and a resolution of 1.0mm.

A hard protective case is also available (sold separately)

#### #10144

### SCALEX XLU 2 INTERFACE KIT

Software to transfer PlanWheel XLU 2 measurements into any Windows program using your computers USB port. Ideal for use with spreadsheets such as Microsoft Excel, as well as construction estimating software programs.

Requires a Scalex XLU 2 Plan Wheel (sold separately)

#### #10191

### SCALEX SCALE-LINK KIT

Professional Planwheel take-off tool for entering linear measurements from you blueprints, maps or plans into any Window program. Just roll the scaler wheel along your print, then click to instantly transfer the measurements into your program.

The Scale-Link Kit 3.0 includes Planwheel, connecting cable and transfer software, Protective case and manual.

#### #10145

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# General Equipment

## HEADLAMPS

### SILVA L4

L4 is an extremely compact and traditionally styled LED headlamp. The L4 is powered by 3 AAA batteries (included) integrated in the headlamp body making it extremely compact and lightweight. Equipped with 4 LEDs (3 white and 1 red), the L4 gives the user a perfect flood light for any close range work application. The red light is used in applications where night vision has to be kept at it's optimum.

- Five light modes: Red on, Power Save, Medium, Bright, Blinking
- Batteries: 3 AAA (included)
- Light range: Up to 15 meters
- Discharge time up to 90 hours (using "Power Save" light mode)

L4 Headlamp standard colour (pictured)

L4 Headlamp camoflage colour

**#10146**

### SILVA L1

Experience the real power of the Ultra-Bright 3-Watt Luxeon LED. State of the art technology that delivers such a dramatic brightness it leaves other headlamps in the shade!  Included with the L1 headlamp is an external battery case (clips to belt or goes in your pack) for 4 C Batteries which increases the discharge time by 300%.

- Four light modes: Power Save, Medium, Bright, Blinking
- Batteries: 4 AA (included)
- Light range: Up to 63 meters
- Discharge time up to 200 hours (using "Power Save" light mode)

L1 Headlamp standard colour (pictured)

L1 Headlamp camoflage colour

**#10147**

### SILVA L1 RUNNERS KIT

The Runner's Kit is compatible with the L1 headlamp.  Comprising of a power lead extension cable and battery waistband, the Runner's Kit allows the user to dispose of the headband battery compartments, carrying them on the waist where the weight is evenly distributed and hardly noticeable. Without the battery pack the L1 headlamp is only 69g.

**#10148**

### SILVA L2

The Light-Weight L2 is a Super-Bright headlamp perfect for outside activities when on the move.  The 1-Watt Luxeon LED gives that extra brightness just when you need it!

- Four light modes: Power Save, Medium, Bright, Blinking
- Batteries: 2 AA (included)
- Light range: Up to 35 meters
- Discharge time up to 85 hours (using "Power Save" light mode)

L2 Headlamp standard colour (pictured)

L1 Headlamp camoflage colour

**#10149**

### SILVA LX

The top model in Silva's LED headlamp range, with an impressive beam length of 75 metres, thanks to a 5-watt LED. Four light modes.  The rechargeable battery can be attached to a belt, or put in a pocket or a rucksack. With this solution you avoid carrying the weight on your head - even including the headband, the LX weighs just 73 grams.  LX is a user-friendly, lightweight alternative for those who don't really need the power of the 478 and 480 headlamps.

- Weight: 73 grams (battery on the belt)
- Max beam length: 75 metres
- Max illumination time: 45 hours (using light mode Power Save)

**#10150**

### SILVA L1, L2, L3, LX LENS DIFUSER SET

Plastic lenses that are pushed onto the lamp head to increase the width of the light cone. In additional, one of the lenses is coloured red so that night vision is not lost when map reading in the dark.

**#10151**

### SILVA HELMET CLIPS

Set of 4 plastic clips, to help keep the headband of your Silva L series (and some Petzel's) in place while worn over a climbing or caving helmet.  There is no need to remove the strap to thread them on, you simply clip each one on to the elastic band, then clip it on to the rim of the helmet.

**#10152**

**Position** *Partners*

### SMART LEVELS

Most levels can only read level and plumb. Only the Smart Level can read angles in a 360° range.  So installing a deck, stair rail or extending a roof is now simpler and less time consuming. The user can recalibrate the Smart Level in seconds, this means you can always rely on the Smart level to be reading true. Smart levels read in degrees, % slope or pitch. The smart level also has two built-in spirit bubbles for quick level and plumb checks.  The Smart Level has  an accuracy of 1/10 of a degree.

| | |
|---|---|
| 600mm model | **#10153** |
| 1200mm model | **#10154** |

### BOSCH DWM 40L ANGLE MEASURE

The digital angle measurer calculates exact angles faster and more precisely.   With the simplest possible operation, each angle is determined not only with superior accuracy of ±0.1°, but values can also be applied precisely to work pieces.

SPECIFICATIONS:

Measuring range:   0 - 220°
Measuring accuracy:  ±0.1°
Measuring accuracy, vials:   0.057° = 1mm/m
Power supply:   4 x 1.5v LR6 (AA)
Staple length:   40cm
Length:   400mm
Width:   33mm
Height:   60mm

**#10192**

### SMART LEVELS

If you have an application that is in a confined space and the Smart Tool just won't fit, you can get the electronic module as a stand alone unit.  Ideal for setting pitch on a skill saw blade, custom machinery etc. This unit operates exactly as the Smart tool, but it also had a battery compartment on the rear (the Smart Tool has the battery compartment under one end cap).

**#10155**

### SPIRIT LEVEL CARRY BAGS

Made tough from Gunbag reinforced nylon to protect your Smart Tool, Stabilla or any other carpenters level of the same size while on the job or in the truck.  Keeps your level clean and dust free when not in use.

| | |
|---|---|
| 600mm bag | **#10156** |
| 1200mm bag | |

# General Equipment

## LEVELLING STAFF BUBBLES & ROD LEVELS

### MYZOX RL-60

Adjustable level staff/prism pole level. Circular white glass vial with three top mounted adjusting screws. Powder coated aluminium body.

**#10157**

### MYZOX PA-20

Clip on precision model. Adjustable prism pole level. Circular white glass vial with three top mounted adjusting screws. Powder coated aluminium body with a metal clip to hold it in place on a pole.

**#10159**

### CST ROD LEVEL

Adjustable level staff or prism pole level. Circular white glass vial with three bottom mounted adjusting screws. Painted aluminium body.

**#10158**

### CRAIN LEVEL VIAL ASSEMBLY

Suits prism poles and carbon GPS poles.

**#10193**

## PLUMBOB ACCESSORIES

### PLUMB-RITE PZB-400

Universal plum bob setter with commercial grade 14oz bob. With a setting pin for wood and drywall surfaces, a strong magnet for steel frames and an adjustable ratchets to cinch onto beams or hook onto nails or studs. The braided nylon line extends and holds at lengths up to 14 ½ ft and retracts into it's case automatically. The unique plumb bob features a quick-stabilizing cap that reduces bob wobble and spin. Adjustable for plumbobs weighing from 3.5 oz to 35 oz.

**#10208**

### GAMMON REEL

An aid to set up and deploy a clean, accurate plumb. Slip the reel into your palm and draw the bob to desired position and stop with finger pressure. Steel clock spring zips the string back into the case.

| 7 FT | **#10160** |
| 12 FT | **#10161** |

### BRASS PLUMBOBS

Precision manchined brass plumbob for perfect balance and lacquered for a lasting finish. Replaceable Hardened steel point. Available in a range of weights.

### LEATHER PLUMBOB SHEATH

Pigskin leather sheath to protect your plumbob and keep it hanmdy on your belt.

16 OZ    **#10162**    **#10194**

# General Equipment

**Position Partners**

## SCOPE & LASER RANGEFINDERS

### BUSHNELL GOLF SCOPE

Bushnell has introduced a 5 power monocular that provides distance from 50-200 meters to a flag. Knowing distance to the flag enables a golfer to determine the correct club to execute a shot or clear a hazard. Knowing correct distance ultimately improves confidence and scores on the course. The 5x20 bushnell Golf Scope is compact enough to fit into a pocket and very simple to use. Looking through the 5x focus-free monocular brings objects five times closer to your eye, providing sharp crisp detailed images. Within the Bushnell golf scope is an etched rangefinder reticle. Once you have the base of the flag lined up to the bottom line of the reticle, simply determine distance to the flag by reading the numbers on the reticle that align with the top of the flagstick, it's that easy.

**#10195**

### BUSHNELL YARDAGE PRO SPORT 450

Hunters looking for a compact rangefinder, look no further than the new Yardage Pro® Sport™ 450. Featuring a weather-resistant design with a textured grip, 5-yard minimum distance – and new for 2005, a sleek streamlined casing. Comes standard with the outstanding performance you've come to expect from Bushnell® laser rangefinders.

RANGE: Reflective 5-910m, Tree 410m, Deer 180m, Flag 180m

**#10163**

### BUSHNELL YARDAGE PRO TROPHY

Bushnell's new Yardage Pro® Trophy.® This 7.6-oz. compact is heavy with features and light on price. Gun and bow hunters alike will appreciate its advanced laser technology, which delivers outstanding range performance on targets from 5 to 800 yards away. The Yardage Pro Trophy features 5x magnification, multi-coated optics, and through- the-lens distance display. Comes with popular scan mode and ± 1 yard accuracy. A 9-volt battery powers the unit, and it comes in Trophy green.

RANGE: Reflective 5-850m, Tree 5-480m, Deer 5-270m, Flag 5-270m

**#10198**

### BUSHNELL YARDAGE PRO TOUR

The Bushnell Yardage Pro Tour Laser Rangefinder is a golfer's friend, offering great performance in a compact package. It fits in the palm of your hand, is weather resistant and instantly displays accurate distances up to 700 yards on large objects, 570 yards on trees and 225 yards on the flag. Designed specifically to be convenient for golfers, it uses no reflectors or special devices, and the automatic scan feature makes ranging the flag from farther distances much easier. The optical scope has 20mm of eye relief allowing for easy use when wearing glasses. Laser is class 1 eye safe. Includes a belt-loop style black nylon carrying case.

RANGE: Reflective 10-670m, Tree 10-530m, Flag 10-210m

**#10196**

### BUSHNELL ELITE 1500 PINSEEKER

Hunters seeking the ultimate in rangefinders need look no further than the new Elite® 1500. Accurate measurements from 5 to 1,500 yards. Fully multi-coated optics for superior resolution. An internal low-light LED for dusk and dawn conditions. 100% waterproof construction and Rainguard® coatings for a better, brighter view in nasty weather. Selective targeting modes: Standard with automatic SCAN, BullsEye™ and Brush.™ You get the idea; this is one impressive piece of equipment. If you think you can find a better rangefinder anywhere, go ahead and look. The Elite will be waiting here for you when you get back.

RANGE: Reflective 5-1350m, Tree 5-915m, Deer 5-450m, Flag 5-320m

**#10197**

### BUSHNELL YARDAGE PRO QUEST

This innovative product combines the function of a waterproof 8x36 pair of binoculars with the advanced technology of a laser rangefinder, so you can scout game and estimate the range at the same time. A "must-have" for hunters who seek to minimize the amount of gear they carry. The Quest is also a valuable tool for big-game and waterfowl hunters where accurately estimating range is critical to success. The Yardage Pro Quest is everything you'd expect from a quality pair of Bushnell binoculars with an impressive list of features it becomes an indispensable optical "multi-tool".

RANGE: Reflective 10-1150m, Tree 10-640m, Deer 10-410m, Flag10-300m

**#10199**

**Position** *Partners*

## SCOPE & LASER RANGEFINDERS

### TRUPULSE 200

Take distance measurements up to 1,000m away without a reflective target. Results are displayed in feet, yards, or meters. An integrated tilt sensor allows you to measure horizontal or vertical distance and calculate an object's height instantly by using the built-in three-shot routine. The "Closest" operating mode distinguishes near and far objects and identifies the closest target, and the "Farthest" mode allows you to lock on the farthest target and shoot distant features through brush and foliage. "Continuous" mode provides constant updates while locking on multiple targets. The TruPulse also features a "Brush Filter" mode. The TruPulse's diopter adjustment allows for comfortable viewing even for eyeglass wearers. An RS 232 serial port allows for data downloading. Carrying case, lens cloth, neck strap, and manual included. Water and dust resistant. Distance: Accuracy: ±0.3m, Resolution: 0.1m, Range: 1,000m (2,000m max to reflective target), Communication: serial RS 232.

**#10200**

### TRUPULSE 200 WITH BLUETOOTH®

With all the same features and specifications as the regular Trupulse 200 laser rangefinder/hypsometer, this model also features built-in Bluetooth® for even easier communication with a compatible device.

**#10202**

### TRUPULSE 360

TruPulse 360° Rangefinder/Hypsometer In addition to the TruPulse 200's features, the TruPulse 360° also includes a built-in digital compass sensor which allows you to shoot from any angle. TruVector technology provides the best possible compass accuracy regardless of the laser's orientation. The instrument can be tilted, rolled, or even used upside down and is ideal for taking measurements in difficult or impossible-to-reach areas. The TruPulse 360° also warns you when calibration is needed and can be easily calibrated in the field. Compass range: 0 to 359.9°. Compass accuracy: ±1° typical.

**#10204**

### TRUPULSE 360 WITH BLUETOOTH®

With all the same features and specifications as the regular Trupulse 360 laser rangefinder/hypsometer, this model also features built-in Bluetooth® for even easier communication with a compatible device.

**#10201**

### TRUPULSE FOLIAGE FILTER

Use to measure through foliage and detect pulses returned from a reflective target only.

**#10203**

### TRUPULSE DOWNLOAD CABLE

4-pin to DB9 Serial port.

**#10205**

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**WA** (08) 6241 4700
**TAS** (03) 6398 1051

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**Position** *Partners*

## COMPASSES

### SILVA FIELD 7

Probably the world's best selling compass. Fantastically simple to use and a perfect compass for land navigation. Soft, easy-grip compass housing in DryflexTM. Map measuring scales in millimetres, 1:50.000 and 1:25.000.

#10164

### SILVA RANGER 3

The all round compass for orienteering and outdoor activities. Magnifying glass and black/red North-South lines.

Graduation 360°. Scales mm and 1:15 000 on the scale slide, 1:25 000 and 1:50 0000 on the baseplate.

#10167

### SILVA EXPEDITION 54

Considered by many as top of the Silva range of traditional base plate designed compasses. With a precision sighting system, which allows for bearings accurate to ± 0.5 degrees to be taken. With the addition of measuring scales and silicon grip feet, this is a top of the range compass.

#10206

### SILVA FIELD 26

Compact light weight design sighting mirror compass. Perfect for any hunter or outdoor enthusiast. For water sports it floats. Protective lid with large mirror. Black/red North-South lines.

#10165

### SILVA RANGER 15TDCL

Sighting mirror compass with a built-in clinometer making it the ideal instrument for Mountaineers, Foresters, Surveyors, Soldiers, Geologists, Builders and Engineers.

#10168

### SILVA RANGER 15TDCL-B

Sighting mirror compass with a built-in clinometer making it the ideal instrument for Mountaineers, Foresters, Surveyors, Soldiers, Geologists, Builders and Engineers. This model also features a built-in bubble vial to help keep the compass level.

#10170

### SILVA SM360 LMG

With the SM360 LMG, the sighting is done through a high quality lens. The compass card is aluminium with a precision scale and a sapphire jewel bearing for a short settling time.

The scale is a 360° bearing. This model has a heavy duty plastic housing with a lanyard cord and a protective rubber armour.

#10166

### SILVA SM360 LA

Sighting is done through a high quality lens. The compass card is aluminium with a precision scale and a sapphire jewel bearing for a short settling time.

The scale is a 360° bearing. This model has a heavy duty aluminium housing with a lanyard cord and a protective rubber armour.

#10169

### SILVA MICRO 28

A real base plate compass, just miniaturized and with a fixed housing, making it very easy to use. Ideal for keeping in your pack, pocket, glovebox or on your jacket zipper.

#10207

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# General Equipment

Position
**Partners**

## CLINOMETERS

### SILVA CM360 LA

Sighting is done through a high quality lens. The clinometer card is aluminium with a precision scale and a sapphire jewel bearing for a short settling time.

The scale is ± 90°. This model has a heavy duty aluminium housing with a lanyard cord and a protective rubber armour.

**#10171**

### SILVA 2015 LA HEIGHTMASTER

Sighting is done through a high quality lens. There are three scales in this model, the standard ± 90° scale and two height scales, simply measure 15 or 20m from the base of an object you want the height of, then sight to the top of the object and read the height of the scale. With protective rubber armour.

**#10172**

### SILVA CM360 PA

Sighting is done through a high quality prism. The clinometer card is transparent with a precision scale and a sapphire jewel bearing for a short settling time.

The scale is ± 90°. This model has a heavy duty aluminium housing with a lanyard cord and a protective rubber armour.

**#10173**

### SILVA SURVEYMASTER

This patented double instrument is a combination of the SightMaster compass and the ClinoMaster clinometer – especially well suited for professionals who need to measure vertical angles/heights and compass bearings. Typical users of this kind of instrument are: Surveyors, geologists, miners, satellite dish installers, engineers, telecommunications etc.

Sighting is done through the high quality lenses. The cards are aluminium with precision scales and sapphire jewel bearings and liquid damping for a short settling time.

The clinometer scale is ± 90° and the compass has a 360° bearing. This model has a heavy duty aluminium housing with a lanyard cord.
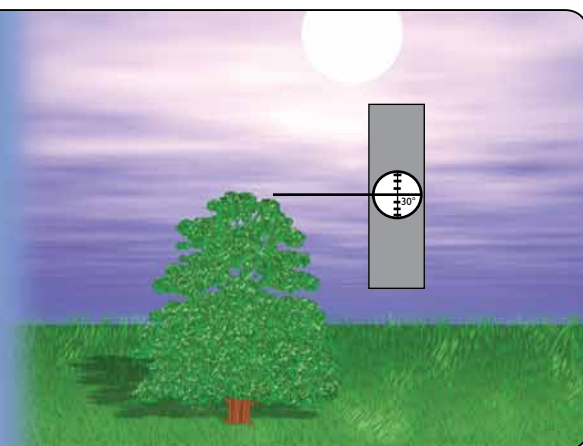
**#10174**

### HOW TO USE A SILVA CLINOMETER

Keep both eyes open when using a clinometer. Use one eye to look through the lens while the other sights along the clinometer housing. An optical illusion takes place and the horizontal index mark will appear to project out the side of the clinometer housing. Place this line on to the target and read off the scale.

### MEASURING SLOPES

To measure a slope, sight parallel with the ground to a target, aiming at a point that is equal to the height of your eye above the ground.

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## DYMARK MARKING PAINT

### DYMARK SPRAY AND MARK LAYOUT PAINT

Australia's most popular fluorescent marking paint. A range of popular colours in 350g inverted spray cans, for a range of applications, including construction, landscaping, civil works and surveying. Spray & Mark is suitable for use with the Long Arm Handle, 2 wheel Spot Marking Handle and Measuring Wheel, also available from Dy-Mark.

Available in: Red, Green, Blue, Fluro red, Fluro pink, Fluro orange, Fluro Green, Fluro Yellow, Black, White, Yellow

Per unit

Pack of 12    **#20100**

### DYMARK LINE MARKING PAINT

A fast drying acrylic paint specially formulated to provide long lasting lines. The 500g can will provide approximately 80 – 100 metres of quality line when used in the Dy-Mark Line Marking Machine.

Available in: Clear, Black, red, Bule, Green, Yellow, Orange, White, Grey

**#20102**

### DYMARK LINE MASTER - Line Marking Machine

- Built-in side line attachment
- Heavy duty steel construction
- Lightweight, removable handle for spot marking
- Includes utility tray and storage for up to 5 cans of Dy-Mark's Line Marking Paint
- Line width adjustable between approximately 60mm and 100mm

**#20103**

### DYMARK SPRAY ARM

The Spray & Mark aluminium spot marking arm is great for marking out jobs such as trench digging and landscaping.

**#20101**

### DYMARK SPRAY ARM WITH WHEELS

The Spray & Mark long arm handle provides extra reach when needed and assists in the prevention of back strain, and also aids in painting straight lines.

**#20104**

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# Safety & Marking

## VINYL FLAGGING TAPE

Thick, strong, brightly coloured, non adhesive vinyl flagging tape for surveying, search and rescue, mapping, trail marking, forestry, environmental studies, parties and decorating etc.

25mm x 100m rolls

Available in various colours including: Dayglo Pink, Dayglo Orange, Blue, Yellow and Red.

**#20105**

## SAFETY TAPE

Made from virgin polyethylene, with lead free colour pigment. Red/White stripe. 50m rolls.

**#20116**

## BARRIER MESH

### BUDGET BARRIER MESH

Lightweight 'onion-bag' style material in bright orange and yellow for complete safety around the job-site. Comes in 50m rolls.

**CALL FOR QUANTITY DISCOUNT**

**#20115**

### SILT FENCING

Silt (or sediment) fencing has been proven effective to prevent erosion on new plantings, especially on grades. 100m roll, 940mm high.
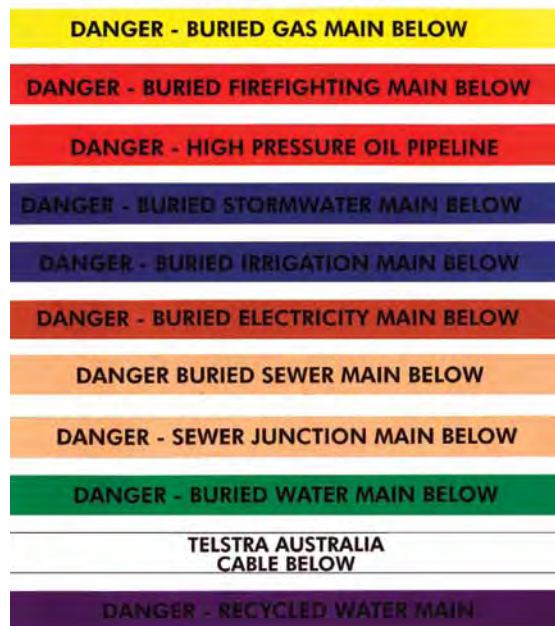
**#20106**

## MAINS MARKER TAPE

Available in both detectable and undetectable, this tape is made from virgin polyethylene, with lead free colour pigment. Manufactured to AS/NZS 2648 part 1 1995.

Roll Length 250m, Tape width 100mm.

**#20117**

# Safety & Marking

## SAFETY VESTS

Material conforms to AS/NZS4602. 1999. Highly visible fluro orange vests are made from breathable light weight polyester.

**#20118**

## RESPIRATORY PROTECTION

### DISPOSABLE RESPIRATORS

Two strap dust mask, conforms to Australian standard for mechanically generated particles, dusts and mists.

**#20119**

## HEAD GEAR

### HARD HATS

Conforms to Australian standard AS1801. Light weight with 6 point terylene harness for comfort and balance. Contoured over ears to allow fitting of hat earmuffs.

Available in Yellow or White.

**#20107**

### HARD HAT SUN

Cotton sun brim and neck cover to suit hard hats. Provides extra sun protection while retaining all the safety advantages of a hard hat.

**#20108**

## SAFETY GLASSES

### PANTHER

Fashionable outdoor safety glasses. Adjustable and extendable arms for fit and comfort. Black frame - Smoke lenses

**#20109**

### PANTHER

Fashionable outdoor safety glasses. Adjustable and extendable arms for fit and comfort. Black frame - Blue lenses

**#20110**

### SN160

Safe wrap-around design with perforated side vents for air flow. Clear frame - Clear lenses

**#20111**

FOR ALL ENQUIRIES CALL: **1300 867 266**

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# Safety & Marking

## TRAFFIC CONES

Flexible, long life 450mm PVC road traffic cones. With a weighted base for extra stability on uneven surfaces. Fluorescent colour for high visibility.

**#20112**

## BOLLARDS

Highly visible moulded plastic bollard will help protect vulnerable walls, worksites and walkways, from accidental collisions. Supplied with a reflective band for night time safety.

**#20113**

## STAR PICKETS

Various lengths steel 'star pickets' for quick easy fencing and barriers.

Various sizes available.

**#20114**

## REO CAPS

For safe capping of star pickets, use Reo caps. Safety yellow. Supplied in bags of 100.

**#20120**

## EAR PLUGS

Laserlite, 27.5 dba, tapered foam with cord or without.

**#20122**

## RIGGER'S GLOVES

Riggers general purpose cowhide gloves. Unlined and wrist length.

**#20121**

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# Hire

## GOOD REASONS TO HIRE

### QUALITY GUARANTEED

*All the hire equipment available is tested before going out on hire to meet manufacturer's specification.*

### BACK-UP SERVICE

*Dealers Australia wide have dedicated pick-up and delivery vehicles. It is our aim to offer the very best service in the industry.*

### CALIBRATION

*No expense has been spared on our Service Facilities. The latest test equipment ensures all instruments are calibrated correctly. A Calibration Certificate is provided with each instrument.*

### LATEST EQUIPMENT

*We have instituted a policy of updating our equipment on a regular basis. This ensures you gain from the most modern and best performing equipment available, ask about green beams.*

### DAMAGE PROTECTION COVER

*For a small fee we offer Damage Protection Cover in case of accidents. (Conditions Apply)*

### PURCHASE OPTIONS

- *We do not charge for weekends when you hire for a week or more*
- *You can avoid the cost of purchasing by hiring as you need to.*
- *You can write off all your charges as a tax deduction.*

## CABLE LOCATION

Our locators are quick and simple to use. Save time and money by doing it yourself

Locate a wide range of buried metals, manhole covers, pipes, reinforcing bars etc. Locate the position of buried power cables using Power mode

Trace the route of services by inducing a signal directly in to a pipe or cable using the SG-A, then tracking it using Generator mode

## SURVEY GPS

We carry a full range of hire GPS equipment from static to RTK

# Hire

## RANGE

### ROTATING LASERS

- *Site Levelling*
- *Building*
- *Formwork*
- *Concrete*

### INTERIOR LASERS

- *Computer Floors*
- *Curtain Wall*
- *Ceilings*
- *Partitions*

### PIPE LAYING LASERS

- *Tunnels*
- *Drainage*
- *Stormwater*
- *Sewer*

### GRADE LASERS

- *Site Preparation*
- *Tennis Courts*
- *Playing Fields*
- *Agriculture*
- *Mining*

### DISPLAY SYSTEMS

- *Backhoes*
- *Excavators*
- *Dozer-Drott*
- *Bobcats*
- *Graders*

### AUTOMATIC SYSTEMS

- *Dozers*
- *Graders*
- *Trenchers*
- *Excavators*
- *Laser Scraper*

### LASER TRACTOR

- *Cricket Pitches*
- *Bowling Greens*
- *Tennis Courts*
- *House Pads*
- *Golf Tees*

### SURVEY EQUIPMENT

- *Total Stations*
- *GPS Systems*
- *Levels*
- *Theodolites*

# Lasers

## LASER RECEIVERS

### TOPCON RECEIVER HOLDER 6 CLAMP

Topcon's laser sensor holder 6 clamp, fits Topcon LS-50/LS-70/LS-80 style receivers. Quick simple set-up, rugged design and built-in level bubble.

This is Topcon's third generation laser receiver clamp, with improved design, stronger construction and better clamping, to ensure a firm quick clamping action with ease of movement when you need it.

**#30100**

### TOPCON LS-80A "SMART" RECEIVER

A single crewmember can take this durable, rugged sensor and quickly, accurately finish a range of jobs from sub-base leveling to concrete finishing. 11 bands of grade accuracy from out-of-range to on-grade inform you of your position with 5mm incriments for even more control over your leveling. The LS-80A also features a second display panel on the rear for ease of reading when working from behind the receiver.

Topcon's LS Series SmartReceiver™ is perfect with your Topcon laser, and compatible with all of your other lasers. Aadjustable volume, easy snap-in battery change, quick find, durable rubber bumper protection and auto shut off.

**#30102**

### TOPCON LS-B10 MACHINE CONTROL RECEIVER

The LS-B10 laser receiver delivers a versatile, low cost indicate solution for grade checking and machine control grade applications. Compact and light weight, with an integrated magnetic mount . The LS-B10 can be easily installed on a vast array of machines, and with its small, lightweight design, the LS-B10 with Holder-6 is excellent for manual grade checking too!

The LS-B10 provides cost-effective solutions for grade control on small machines such as backhoes, mini-excavators, skid steer loaders, and other compact equipment. The LS-B10 features a magnet mount for quick attachment when used on equipment or can be combined with the optional holder for use on a grade rod.

**#50103**

### TOPCON LS-80B RECEIVER & HOLDER 6 CLAMP COMBO

LS-80B Receiver, Complete with Holder 6 Clamp.

A single crewmember can take this durable, rugged sensor and quickly, accurately finish a range of jobs from sub-base leveling to concrete finishing. Five bands of grade accuracy from out-of-range to on-grade inform you of your position.

Topcon's LS Series SmartReceiver™ is perfect with your Topcon laser, and compatible with all of your other lasers. Aadjustable volume, easy snap-in battery change, quick find, durable rubber bumper protection and auto shut off.

**#30101**

### TOPCON LS-80A RECEIVER & HOLDER 6 CLAMP COMBO

LS-80A Receiver, Complete with Holder 6 Clamp.

A single crewmember can take this durable, rugged sensor and quickly, accurately finish a range of jobs from sub-base leveling to concrete finishing. 11 bands of grade accuracy from out-of-range to on-grade inform you of your position with 5mm incriments for even more control over your leveling. The LS-80A also features a second display panel on the rear for ease of reading when working from behind the receiver.

Topcon's LS Series SmartReceiver™ is perfect with your Topcon laser, and compatible with all of your other lasers. Aadjustable volume, easy snap-in battery change, quick find, durable rubber bumper protection and auto shut off.

**#30103**

### TOPCON LS-B10W MACHINE CONTROL RECEIVER
(Bluetooth® Wireless – Remote Display Compatible)

The advanced LS-B10W offers built-in wireless technology and CANopen (Controller Area Network) connectivity to provide the ultimate in communications flexibility. The new RD-10W in-cab remote display brings grade information via wireless link in front of the operator – where it is needed most.

LS-B10W     **#50104**

RD-10W     **#50105**

FOR ALL ENQUIRIES CALL: **1300 867 266**
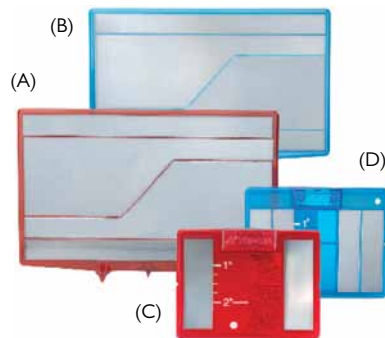
VISA   MasterCard   eftpos

# Lasers

## LASER ACCESSORIES

### REPLACEMENT SCANNING CARDS FOR TOPCON "SMARTSCAN" LASERS

Replace your worn, damaged or missing SmartScan Cards today!

Red auto alignment card (A)

Blue auto alignment card (B)

Red scan card (C)

Blue scan card (D)

(B)

(A)

(D)

(C)

**#30105**

### TOPCON RC-30 REMOTE

With the added advantage of hands-free operation using Topcon's RC-30 radio remote, you can control every function of the RL-VH3DR from up to 85m away. The RC-30 features selectable frequencies so you can use more than one RL-VH3DR in the area without interruption. A red LED indicates that the RC-30 is sending radio signals, and a single 9 volt battery provides up to 120 hours of continuous use.

**#30107**

### TOPCON PIPE LASER TARGET & INSERTS

Topcon's pipe laser targets are strong, easy to clean and easy to read. Available in red to suit red beam lasers or blue to suit Green beam lasers.

SM Target

**#30109**

### TOPCON PIPE LASER RC200 REMOTE

Replacement remote control for use with Topcon's TPL-3 and TPL-4 series pipe lasers. Controls power, target scanning mode, left and right alignment and beam modes from either the front of the laser or the back.

**#30106**

### TOPCON PIPE LASER PC-17 12V CABLE

Topcon PC-17 Power Cable 12v. Suits Topcon TP-3/4 Pipelasers. Save on battery power and also charge your battery while powering from a 12v battery.

**#30108**

### TOPCON PIPE LASER ALKALINE BATTERY PACK

Never worry about flat batteries for your Topcon TPL-4 Pipe Laser again! Now if the battery pack has been put back without being charged, you only need to pop down to a local garage to get 4 d size alkaline batteries and you are ready to work again.

DB-53

**#30110**

# Lasers

## LASER ACCESSORIES

### TOPCON WALL MOUNT WM-1C

To attach your Topcon Laser to the wall for ceiling installation etc.

Fully adjustable for height and positioning.

**#30111**

### LASER ENHANCE GLASSES

Red is the best colour to view a red laser against, as it does not absorb the red beam, it reflects it back to the eye. These red filtered glasses work in the same way to enhance the visibility of Red laser beams in bright light conditions.

*PLEASE NOTE: These are not safety glasses. They enhance laser light, not filter it out.*

**#30112**

### LASER SAFETY SIGN

Ensure that people on your job site are aware of the laser equipment being used.

CLASS 2 LASER IN USE
DO NOT STARE INTO BEAM

**#30113**

## PACIFIC LASER SYSTEMS

### PLS3 - 3 BEAM POINT LASER

3 Beam hand held self levelling laser providing the user with clear and stable reference points.

The PLS5 system is a basic layout kit, giving you level and plumb up and down.

**FEATURES**

- Level, plumb up and down
- Accuracy <6mm @ 30m
- 30m working range
- 8 degree self levelling range
- Out of level indicator
- Includes case

**#30114**

### PLS5X - 5 BEAM EXTERIOR POINT LASER

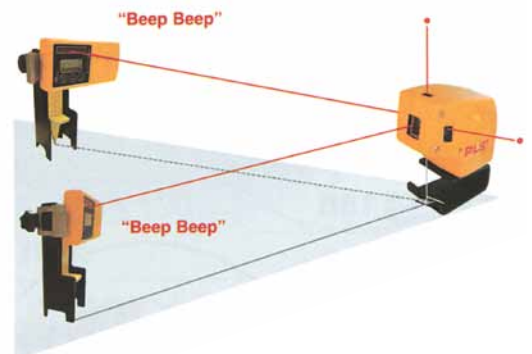5 Beam hand held self levelling laser with inside and outside capability.

The PLS5X is designed to be used for layout control points and lines in outdoor conditions and bright sunlight. Layout foundations, anchor bolts and square on slab faster then before. With the receiver you working range can be increased to 75m working range.

### FEATURES

- Exterior model
- Level, plumb up and down, square (left & right)
- Accuracy <3mm @ 30m
- 75 m working range (with receiver)
- 8 degree self levelling range
- Laser can be used inside without the receiver (up to 50m)
- Includes hard carry case, floor stand, layout target, magnetic wall mount
- Includes 1 detector

"Beep Beep"
"Beep Beep"

**#30115**

VISA   MasterCard   eftpos
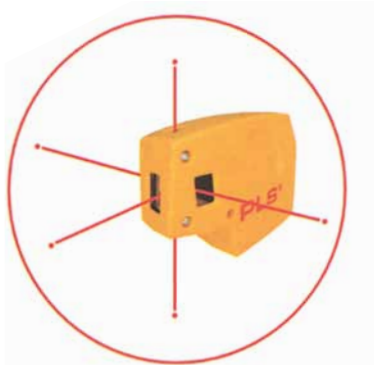
# Lasers

## PACIFIC LASER SYSTEMS

### PLS5 - 5 BEAM POINT LASER

5 Beam hand held self levelling laser providing the user with clear and stable reference points.

The PLS5 system is a complete layout kit including layout target and wall bracket. The unit is accurate, giving you level, plumb up and down, square (left and right)

#### FEATURES

- Level, plumb up and down, square (left and right)
- Accuracy 75mm @ 30m
- 30m working range
- 8 degree self levelling range
- Out of level indicator
- Includes case, floor stand, layout target, magnetic wall mount

#### #30116

### PLS SLD RECEIVER

A PLS-SLD receiver can be used with the PLS 180, PLS 360 and the PLS 90 to increase the range of the laser by up to 80m when used outdoors.

#### #30117

### PLS90
### 90 DEGREE ANGLE LASER

Designed to tackle one of the most challenging layout tasks on the job...

Precise 90° visible and pulsed reference lines for interior and exterior layout of square on the jobsite.

#### FEATURES

- Accuracy <3mm @ 30m
- Range up to 75m with PLS SLD
- Self Leveling: Up to 6 degrees
- Fine Tune Adjustments for Precise Layout
- PLS90 includes universal base-tripod adapter, floor target and case

#### #30118

### PLS180 - 180 DEGREE ANGLE LASER

Hold the future of Jobsite Layouts in the Palm of your Hand.

This plumb, level and square laser line tool is brighter than most rotary lasers at a fraction of the cost. Fast, accurate and portable, the PLS180 Palm Laser saves you time and money when your bubble via level or rotary laser is too cumbersome or too limited for the job.

#### FEATURES

- Unique optic technology
- Self Leveling
- Internal shock frame impact protection
- Accurate to <3mm @ 10m
- Longest lines, vertical-horizontal
- Pulsed beams for exterior applications
- Range 80m with our new PLS SLD compact laser receiver

#### #30119

### PLS360 - 360 DEGREE ANGLE LASER

The PLS360 is fully self levelling and provides a 360 degree line for reference.

The PLS360 is easy to use, accurate and rugged for indoor and outdoor applications.

#### FEATURES

- Single button operation
- Mounted on wall or tripod
- Accuracy <3mm @ 30m
- 60m working range
- ±6° levelling range
- Ultra lightweight

#### #30120

**VIC** – Campbellfield **(03) 9930 7111**
**VIC** – Dandenong **(03) 9706 9966**
**SA** (08) 8346 1180
**NT** (08) 8981 1800
**NSW** (02) 9898 0066
**QLD** (07) 3717 2111
**WA** (08) 6241 4700
**TAS** (03) 6398 1051

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# Lasers

## TOPCON LINE LASER

### MULTILINE LASER LC-4X

**SPECIFICATIONS:**

- Line Accuracy:
  Horizontal: ±2mm @ 10mm
  Right Angle on Ceiling: 90' ±2mm @ 10m
  Plumb Down Point: ±1.0mm @ 1.5m
- Class 2 Laser Product
- Power Supply: 3 x AA Alkaline
- Operating Time: 5hrs (using all beams)
- Operating Temperature: –5 to 40°C
- Self Levelling Range:
  -2.5 Degree/±0.5 Degree
- Dust/Water Resistance: –IP54
- Weight: –0.9kg

**FEATURES:**

- Highly Visible and Focused Laser Beams
- Emits three Vertical Beams and one Horizontal Beam
- Fine Motion Rotation Screw: 240mm Travel of 10m
- LS-VHX Laser Detector
- Detection Range: 1 to 20m
- Height of Detection Window: –15mm
- LED Colour: RED / Blue
- Audio Tone – Loud/Normal/Off
- Power: 9v Alkaline/15hrs Operating Time
- Complete in Carry Case with Laser Enhancing Glasses, Receiver (LS-VHX) and Clamp, Alignment Target

**#30121**

### ECHO 777

**SPECIFICATIONS:**

- Horizontal accuracy: ±1mm/5m
- Vertical accuracy: ±1mm/5m
- Self-leveling range: Approx. ±2.5°
- Cross accuracy: 90°±30''
- Zenith accuracy:±1mm/3m
- Self-leveling range: ±4°
- Wavelength:
  Vertical & Horizontal: 8x635nm
  Down point: 1x650nm
- Laser intensity: Under 1mw (Class II)
- Working distance – Radius:
  Approx.10m
  Approx. 50m (using detector)
- Working temperature: –10 to 45°C
- Power: DC 4.8V-- 6V
- Continuous working time: Approx. 6hrs
- Dimension: 140(∅) x 221(H)mm
- Weight: 1.75kg

**FEATURES:**

- Electronic self-leveling, wide leveling range, high precision and stability.
- With MCU control, easy operation, highly trustiness.
- With laser diode, wavelength 635nm, highly visible and focused laser beams.
- Emit four vertical line and four horizontal line, plumb point.
- With fine adjustment for convenient working.
- With indoor & outdoor switch function.

**#30121**

## FUTURA LT-710

An affordable, automatic true self-leveling single slop laser with –10% to +15% grade capacity. The LT-710 is an easy-to-use flat laser with LCD display for digital slope readout. Rugged, reliable, and accurate, the LT-710 is designed for any level or sloped application, and can be packaged with a standard receiver or the CR5 combination hand-held, rod or machine mounted receiver.

**SPECIFICATIONS**

- Operating Range: 600m diameter
- Accuracy: ± 15 arc seconds
- Self Leveling Range: ± 3°
- Batteries: Makita
- Battery Life: Aprox 60 hours

**FEATURES**

- Fully automatic
- Visible spotting beam to eliminate multiple set-ups and covers on large jobsites
- LCD digital slope input with 0.01% increments and 0.01% grade accuracy
- Smart Charging technology senses when battery is fully charged
- Simple four-button operation for all laser functions

**#30123**

# Lasers

## PLS HVR 505 G/R

The PLS HVR 505 is a compact, mid range rotary laser designed for light commercial, residential and remodeling projects. Horizontal and vertical applications; the PLS HVR505 is versatile for short and mid range layout with an accuracy of <3mm @ 30m. DUAL SLOPE AXIS.

### FEATURES
- Maximum utility for your mid-range exterior/interior layout projects
- Fully Automatic
- Horizontal and Vertical Applications
- Self Leveling

### SPECIFICATIONS
- Accuracy <3mm @ 30m
- Working Range 150m
- Self Leveling Range 5 degrees
- NiCad Batteries
- Indoor - Outdoor usage
- Dimensions: 130 x 120 x 150mm

### PLS HVR 505 R SYSTEM
Includes: HVR 505RedLaser, Carrying Case, RC 505 Remote Control, Ceiling Bracket, HVD 505 Detector, Operating Manual, 1 Yr Warranty.



**#30124**

### PLS HVR 505 G SYSTEM
Includes: HVR 505GreenLaser, Carrying Case, RC 505 Remote Control, Ceiling Bracket, HVD 505 Detector, Operating Manual, 1 Yr Warranty.



**#30125**

## TOPCON RL-H3C - GENERAL CONSTRUCTION

Fully automatic self-leveling at an unbeatable price - only Topcon has it. With a host of world-leading features at an inexpensive price, the RL-H3C is an excellent general construction laser for any contractor's needs.

The RL-H3C features include fully automatic self-levelling with no footscrews to adjust, medium range 300m operating diameter, manual overide for manual grade ability, machine control compatiblity and has an accuracy of 2.1mm @ 30m.

The RL-H3C comes with the LS-80A SmartSensor receiver and holder for simple one-person operation. Set-up the RL-H3C and use the LS-80A SmartSensor to check grade. It offers 11 levels of precise visual and audible grade verification and even alerts you when the laser has been bumped or when the batteries are low. The holder also lets you position the LS-80A on the grade rod quickly and accurately.

### FEATURES

- Horizontal rotating laser
- Full Automatic Self Leveling
- No Bubbles or footscrews
- Water and dust Proof (IP56)
- Manual mode
- Rapid leveling
- Height of instrument alert (HI alert)
- Long 300m diameter operating range
- Machine control compatible
- Used by almost all of Australia's largest construction companies

### SPECIFICATIONS

- Operating Range: 300m diameter
- Accuracy: ± 15 arc seconds
- Self Leveling Range: ± 3°
- Batteries: 4 C size alkaline batteries
- Battery Life: Aprox 60 hours

**MOST POPULAR LASER**

## *One of Australia's most popular lasers*

From one-man builders to almost every major construction company in Australia, more and more people are switching to professional lasers from Topcon, because of their ease of use, rugged design, great pricing and outstanding after sales service and backup.
Call us today to get Australia's most popular lasers working on your site.

| | |
|---|---|
| LS-80 A | **#30127** |
| LS-80 B | **#30126** |

# Lasers

## TOPCON RL-H3CS - MANUAL SLOPE CONTROL

Fully automatic self-levelling at an unbeatable price. With simple, intuitive manual slope match capability with automatic cross axis self-levelling. The RL-H3CS offers all the features of the popular RL-H3C with the added versatility of single-slope capability. All at an affordable price. Once you see the RL-H3CS for yourself, you'll know right away it's the best value in general construction/slope lasers today. With impressive Topcon technology and an affordable price, you'll definitely want to put it to work for you! Fully automatic self-levelling at an unbeatable price. Only Topcon has it. With a host of World-Leading features at an inexpensive price, the RL-H3CS is an excellent general construction laser for any contractor's needs.

The RL-H3CS features include fully automatic self-levelling with no footscrews to adjust, manual overide for manual grade ability, machine control compatiblity and has an accuracy of 2.1mm @ 30m.



SINGLE SLOPE          FLAT PAD

### FEATURES

- Horizontal rotating laser
- Slope buttons with with automatic cross axis self-levelling
- Full Automatic Self Leveling
- No Bubbles or footscrews
- Water and dust Proof (IP56)
- Manual mode
- Rapid leveling
- Height of instrument alert (HI alert)
- Long 300m diameter operating range
- Machine control compatible
- Used by almost all of Australia's largest construction companies

### SPECIFICATIONS

- Operating Range: 300m diameter
- Accuracy: ± 15 arc seconds
- Self Leveling Range: ± 3°
- Batteries: 4 C size alkaline batteries
- Battery Life: Aprox 60 hours



SLOPE

AUTO LEVELLING

ACCURACY
±15 arc seconds
±2.1mm over 30m
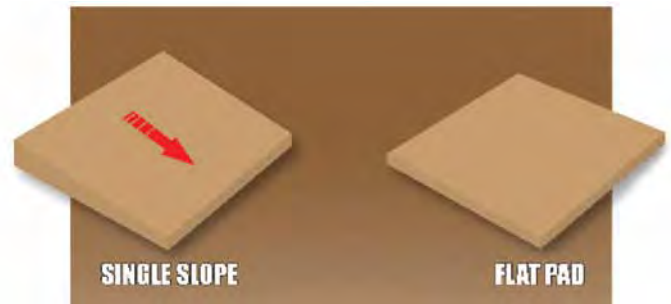
**#30128**

## TOPCON RL-H3CL - LONG RANGE GENERAL CONSTRUCTION

With its 600 rpm rotation speed, accuracy of ±10 arc seconds and a beam radius of 250m, the RL-H3CL is an excellent transmitter for machine control operations. It will operate up to 60 hours on four C-size batteries, has fully enclosed optics and is fully ready for any jobsite environment.

Once you see the RL-H3CL for yourself, you'll know right away it's the best value in long-range general construction lasers today. With impressive Topcon technology and an affordable price, you'll definitely want to put it to work for you!

### FEATURES

- Long 500m operating diameter radius
- 10 arc second accuracy
- Horizontal rotating laser
- Full Automatic Self Leveling
- No Bubbles or footscrews
- Water and dust Proof (IP56)
- Manual mode
- Rapid leveling
- Height of instrument alert (HI alert)
- Long 500m diameter operating range
- Machine control compatible

### SPECIFICATIONS

- Operating Range: 500m diameter
- Accuracy: ± 15 arc seconds/± 10 arc seconds
- Self Leveling Range: ± 3°
- Batteries: 4 C size alkaline batteries
- Battery Life: Aprox 60 hours

#10129

## TOPCON RL-VH4X SERIES

### TOPCON RL-VH4DR HIGH POWER - INTERIOR / EXTERIOR

The Topcon RL-VH4DR now makes it even easier to afford the quality of the Topcon interior lasers - Incredibly affordable and still offers the high-end features you won't find in any other low-end laser available.

Patented scanning technology for horizontal applications: Beam scanning lets you place a concentrated line of laser light anywhere you need it. By locking the beam onto the magnetic target, scanning keeps the beam bright providing easy alignment for ceilings, floors, and cabinet installations.

Integrated adjustable feet for vertical applications. Fast setup of wall track and easy verification of vertical stud placement, the beam creates a laser "chalkline" from floor to ceiling with the use of a simple scan target. Plus you can use the 90° split beam to ensure precise placement of corners and Tees.

Self-levelling and slope capabilities let you shave valuable minutes off of setup time without compromising accuracy. Fast, accurate levelling motors find level automatically so you can start working right away. You can also choose cross-axis self-levelling when matching slopes of up to ±5°.

Available as an interior set, or an exterior set with the addition of a receiver and clamp

#### FEATURES
• Patented Beam Scanning
• Self-Leveling
• Horizontal/Vertical Split Beams
• Perfectly round spot quality
• Dual manual slope
• Includes remote control RC-30
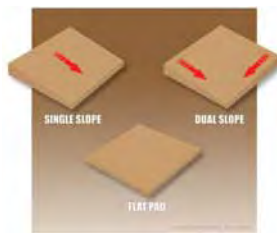
#### SPECIFICATIONS
• Operating Range: 300m diameter
• Accuracy: ± 15 arc seconds
• Self Leveling Range: ± 3°
• Batteries: 4 D size alkaline batteries
• Battery Life: Aprox 60 hours

#10130

### TOPCON RL-VH4G - GREEN BEAM - INTERIOR / EXTERIOR

The new RL-VH4G leaves the competition far behind on features and value. Competitive green beam lasers don't compare with its beam visibility, battery life, operating temperature range or other features!  Featuring Topcon's world's first ultra-visible GreenBeam® technology, the new RL-VH4G is a professional interior laser thats right for all jobs and all budgets. Fast, dependable, durable, accurate and visible - 4 times more visible than red beam lasers! With Topcon's exclusive SmartScan® technology, you can simply draw a laser line on any surface, to any length you need, for as long as you need it. It's another world's first from Topcon!

#### FEATURES
• Ultra-visible GreenBeam® - 4 times more visible than red beam lasers!
• Beam scanning technology -SmartScan
• "virtual chalkline" SmartLine™
• Vertical beam
• Remote Control Included
• Exclusive SmartScan® easily delivers ultimate control and visibility
• Built-in floor mount and simultaneous 90° beam for squaring and layout
• Removable laser guard delivers full 360° laser sweep with no pillar "gaps".
• Omni-directional RC-30 radio remote control gives a range up to 91 Meters.

#### SPECIFICATIONS
• Accuracy: ± 2.2mm over 30m (Horizontal and vertical)
• Beam Type: 532 nanometers, Green Laser diode
• Range With Optional LS-70G receiver: 300 meters
• Scanning Range Diameter : 60 Meters
• Rotation Speed/Rate: 10  ~ 300 RPM
• Levelling Mechanical System: 2 axis manual
• Batteries: 4 D size alkaline batteries
• Battery Life: 27 standard hours
• Water/Dust resistance: IP54
• Dimensions (LxWxH): 182 x 167 x 240 Millimeters

#10131

**VIC** – Campbellfield **(03) 9930 7111**    **SA (08) 8346 1180**    **NSW (02) 9898 0066**    **WA (08) 6241 4700**
**VIC** – Dandenong **(03) 9706 9966**    **NT (08) 8981 1800**    **QLD  (07) 3717 2111**    **TAS (03) 6398 1051**

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## GRADE LASERS

### TOPCON RT-5SW GRADE LASER

The RT-5SW was built from the ground up with long range, high precision dual slope applications in mind. From agricultural land leveling to large construction sites, there isn't another laser available that can deliver dual slopes this accurately or easily. It features an integrated RF remote controller ("RC300W") which is capable of two way communication up to 300 meters in range. And with the RT-5SW's unique Auto-Alignment feature, set up is fast and accurate!

### FEATURES

- World's first 5 arc second repeatability system
- Two-way, RF remote delivers 300 meters communication
- 1200 meter diameter working range
- Auto alignment has range of up to 150 meters
- Grade matching function
- Electronic beam masking
- Long battery life; 30hrs on Ni-MH rechargeable, 40 hrs on alkaline
- Dustproof/waterproof, rugged design

For fast, accurate setup, Topcon incorporated a version of their patented SmartLine™ system. SmartLine™ lets you match the previous day's grade simply and quickly. Simply place the alignment target on your alignment point and use the remote control to select the auto-alignment function. The RT-5SW will automatically scan until it finds the target, and then it will rotate the transmitter's grade mechanism to line up be perfectly on the exact center of the alignment target. That's it! You're right where you left off the day before and ready to go to work.

The control panel for the RT-5SW is actually the RC-300W remote. Simply remove the remote from the RT-5SW after set-up and you're in complete control of the RT-5SW from up to 300 meters away. All of the information you need is at your fingertips and control!

### SMARTLINE™ ALIGNMENT SYSTEM

- Fast, accurate set-up
- Eliminates human error
- Aligns from centre pivot point, not a top-mounted scope
- Automatic second day set-up. Always matches previous day's hubs

### AUTOMATIC GRADE SETTING

- Simple accurate grade matching
- One person set-up
- Eliminates hassle of manually finding detector
- Works up to 150m

RC 300 Remote

Weather protected, flexible antenna folds down for storage

Removable SmartRemote™ with large LCD provides full operation of the laser up to 300m away

Dustproof and waterproof rugged cast aluminium housing holds up to everyday bangs and bumps. And dual side, sturdy handles prevents accidents

Heavy duty glass protects "lighthouse", rubber bumpers protect remote

Selectable rotation speeds from 300 to 900 rpm

Patented SmartLine™ system makes second day set-ups easy and accurate

Battery compartment with secure hold battery tray, and run/charge capability with a converter that won't allow charging when alkaline batteries are being used

Large grade axis indicators for easy alignment

**#30132**

## GRADE LASERS

### TOPCON RL-100 SERIES GRADE LASER

### TOPCON RL-1001S - SINGLE STEEP GRADE

Topcon's RL-1001S' revolutionary encoding system provides the highest grade repeatability (5 arc seconds) of any other laser on the market! No one else even comes close. Setup-after-setup, time-after-time, you're always right on grade!

The RL-1001S provides single slopes from −5% to up to a huge +25% and comes complete with Topcon's new LS-80 laser receiver, receiver holder, and alkaline batteries. Everything you need to get right to work.

### TOPCON RL-1002S - DUAL STEEP GRADE

This is as good as you can get! Topcon's RL-1002S' revolutionary encoding system provides the highest grade repeatability (5 arc seconds) of any other laser on the market! No one else even comes close. Setup-after-setup, time-after-time, you're always right on grade!

The RL-1002S provides dual slopes up of ±10% in the x axis and an industry leading ±25% in the y axis. The working range has now been increased to an incredible 770m.

The RL-1002S standard package includes the LS-80B laser sensor, sensor holder, Rechargeable battery pack, charger, plus the all-new RC-400 remote that allows complete control of all the RL-1002S' functions including grade input from up to 100m away!

#### FEATURES
- Dial in Grades
- Full Automatic Self Leveling
- Steep slope capable up to 25%
- Long range
- Standard and Recharge batteries
- Machine control compatible
- Full remote control

#### SPECIFICATIONS
- Operating Range: 770m
- Accuracy: 5 arc seconds
- Self Leveling Range: ± 3°
- Batteries: 4 D size or Rechargeable Pack
- Battery Life: Aprox 60 hours (alkaline)



SINGLE SLOPE    DUAL SLOPE    FLAT PAD
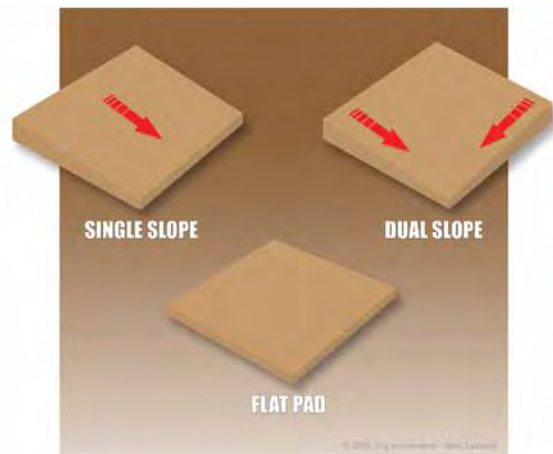
| | |
|---|---|
| RL-1002S  LS-80 B | **#30134** |
| RL-1001S  LS-80 B | **#30133** |

## PIPE / DRAINAGE LASERS

### TOPCON TPL-4B PIPE LASER - BASIC RED BEAM MODEL

Topcon's economy pipe laser from the TPL-4 series. With all the great Topcon features like the standard crisp clear red beam from the TP-L4A, Auto line centreing, Auto grade zeroing and Plumb LED indicator, but without the Auto align feature. Now you can afford to have the reliability and great features of Topcon's TPL-4 series working for you on your next drainage job.

### TOPCON TPL-4A PIPE LASER - DELUXE RED BEAM MODEL

Topcon's TP-L4A has all of the advanced features of Topcon's TP-L4G in a bright, perfectly round red beam.

The TP-L4A has SmartLine® for fast, simple alignment. Just set the target at the far end of the last section of pipe and push the alignment button on the RC-200 remote. The beam automatically centres on the target for perfect alignment every time. Other TP-L4A features include: SmartGrade™ for super-fast, precise grade alignment. Industry's brightest LED line pivot locator. Bright, easy-to-read rear display. World's Best long-range spot quality. RC-200 radio remote for complete control of all TP-L4A functions from up to 660 feet away. All metal, waterproof housing so you know it'll survive even under the toughest conditions.

**#30135**

### TOPCON TPL-4BG PIPE LASER - BASIC GREEN BEAM MODEL

Have your eye on Topcon's Green Beam® technology but think you can't afford it? Well, the TP-L4BG is the pipe laser for you. In fact, Topcon's TPL-4BG offers you the industry's only Green Beam® technology at prices lower than other red beam lasers. Topcon's innovative Green Beam® technology gives you the advantage of a beam that's four times brighter than conventional beams. That means you never lose track of it - even in direct sunlight! With the TP-L4BG Green Beam® setups are faster and easier than ever before. Other TP-L4BG features include: SmartGrade™ for super-fast, precise grade alignment. RC-200 radio remote for complete control of all TP-L4BG functions from up to 660 feet away. Industry's brightest LED line pivot locator. Bright, easy-to-read rear display. All metal, waterproof housing so you know it'll survive even under the toughest conditions.

### TOPCON TPL-4G PIPE LASER - DELUXE GREEN BEAM MODEL

Unbeatable visibility, patented scanning technology, simple operation. Once you see it, the TP-L4G will be the only pipe laser you'll use. Topcon's innovative Green Beam® technology gives you the advantage of a beam that's four times brighter than conventional beams. That means you never lose track of it - even in direct sunlight! With the TP-L4G Green Beam® setups are faster and easier than ever before. The TP-L4G also has SmartLine® for fast, simple alignment. Just set the target at the far end of the last section of pipe and push the alignment button on the RC-200 remote. The beam automatically centers on the target for perfect alignment every time. You can even use SmartLine™ for quick above ground setups!

Other TP-L4G features include: SmartGrade™ for super-fast, precise grade alignment. Industry's brightest LED line pivot locator. Bright, easy-to-read rear display. World's Best long-range spot quality. RC-200 radio remote for complete control of all TP-L4G functions from up to 660 feet away. All metal, waterproof housing so you know it'll survive even under the toughest conditions.
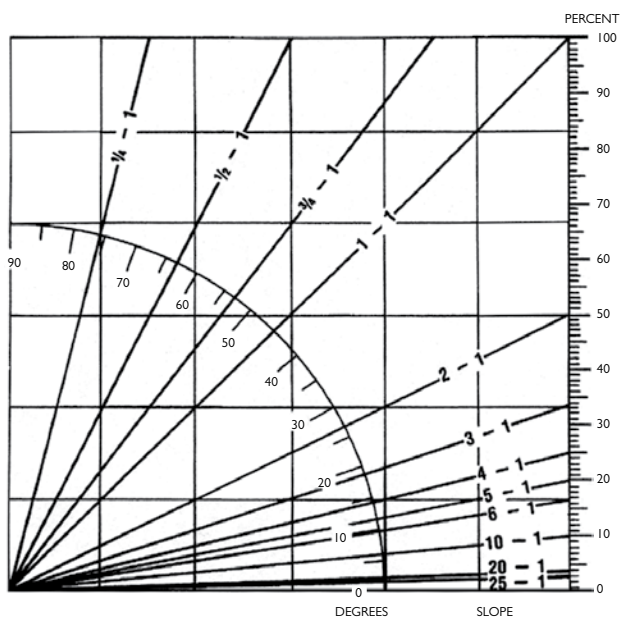
| SPECIFICATIONS | | | | |
|---|---|---|---|---|
| | **TPL-4B** | **TPL-4A** | **TPL-4BG** | **TPL-4G** |
| **Beam Power** | 633nm Red diode | 633nm Red diode | 532nm Green diode | 532nm Green diode |
| **Auto Alignment** | No | Yes | No | Yes |
| **Auto line Centering** | Yes | Yes | Yes | Yes |
| **Auto Grade Zeroing** | Yes | Yes | Yes | Yes |
| **Plumb LED Indicator** | Yes | Yes | Yes | Yes |
| **Grade Range** | -15%~+40% | -15%~+40% | -15%~+40% | -15%~+40% |
| **Line Range** | ± 15% | ± 15% | ± 15% | ± 15% |
| **Horizontal Accuracy** | ± 10" | ± 10" | ± 10" | ± 10" |
| Batt life alkaline/recharge | 70hrs/48hrs | 70hrs/48hrs | 45hrs/32hrs | 45hrs/32hrs |

## GRADE CALCULATOR

| RATIO | % | RATIO | % | RATIO | % | RATIO | % | RATIO | % | RATIO | % | RATIO | % | RATIO | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1:1 | 100.00 | 1:40 | 02.50 | 1:79 | 01.27 | 1:118 | 00.84 | 1:157 | 00.64 | 1:196 | 00.51 | 1:375 | 00.27 | 1:950 | 00.11 |
| 1:2 | 50.00 | 1:41 | 02.44 | 1:80 | 01.25 | 1:119 | 00.83 | 1:158 | 00.63 | 1:197 | 00.51 | 1:380 | 00.26 | 1:975 | 00.10 |
| 1:3 | 33.33 | 1:42 | 02.38 | 1:81 | 01.24 | 1:120 | 00.83 | 1:159 | 00.63 | 1:198 | 00.51 | 1:385 | 00.26 | 1:1000 | 00.10 |
| 1:4 | 25.00 | 1:43 | 02.33 | 1:82 | 01.22 | 1:121 | 00.83 | 1:160 | 00.62 | 1:199 | 00.50 | 1:390 | 00.26 | 1:1050 | 00.10 |
| 1:5 | 20.00 | 1:44 | 02.27 | 1:83 | 01.20 | 1:122 | 00.82 | 1:161 | 00.62 | 1:200 | 00.50 | 1:395 | 00.25 | 1:1100 | 00.09 |
| 1:6 | 16.67 | 1:45 | 02.22 | 1:84 | 01.19 | 1:123 | 00.81 | 1:162 | 00.62 | 1:205 | 00.49 | 1:400 | 00.25 | 1:1150 | 00.09 |
| 1:7 | 14.29 | 1:46 | 02.17 | 1:85 | 01.18 | 1:124 | 00.81 | 1:163 | 00.61 | 1:210 | 00.48 | 1:410 | 00.24 | 1:1200 | 00.08 |
| 1:8 | 12.50 | 1:47 | 02.13 | 1:86 | 01.16 | 1:125 | 00.80 | 1:164 | 00.61 | 1:215 | 00.47 | 1:420 | 00.24 | 1:1250 | 00.08 |
| 1:9 | 11.11 | 1:48 | 02.08 | 1:87 | 01.15 | 1:126 | 00.79 | 1:165 | 00.61 | 1:220 | 00.45 | 1:430 | 00.23 | 1:1300 | 00.08 |
| 1:10 | 10.00 | 1:49 | 02.04 | 1:88 | 01.14 | 1:127 | 00.79 | 1:166 | 00.60 | 1:225 | 00.44 | 1:440 | 00.23 | 1:1350 | 00.07 |
| 1:11 | 09.09 | 1:50 | 02.00 | 1:89 | 01.12 | 1:128 | 00.78 | 1:167 | 00.60 | 1:230 | 00.43 | 1:450 | 00.22 | 1:1400 | 00.07 |
| 1:12 | 08.33 | 1:51 | 01.96 | 1:90 | 01.11 | 1:129 | 00.78 | 1:168 | 00.60 | 1:235 | 00.43 | 1:460 | 00.22 | 1:1450 | 00.07 |
| 1:13 | 07.69 | 1:52 | 01.92 | 1:91 | 01.10 | 1:130 | 00.77 | 1:169 | 00.59 | 1:240 | 00.42 | 1:470 | 00.21 | 1:1500 | 00.07 |
| 1:14 | 07.14 | 1:53 | 01.89 | 1:92 | 01.09 | 1:131 | 00.76 | 1:170 | 00.59 | 1:245 | 00.41 | 1:480 | 00.21 | 1:1550 | 00.06 |
| 1:15 | 06.67 | 1:54 | 01.85 | 1:93 | 01.08 | 1:132 | 00.76 | 1:171 | 00.58 | 1:250 | 00.40 | 1:490 | 00.20 | 1:1600 | 00.06 |
| 1:16 | 06.25 | 1:55 | 01.82 | 1:94 | 01.06 | 1:133 | 00.75 | 1:172 | 00.58 | 1:255 | 00.39 | 1:500 | 00.20 | 1:1650 | 00.06 |
| 1:17 | 05.88 | 1:56 | 01.79 | 1:95 | 01.05 | 1:134 | 00.75 | 1:173 | 00.58 | 1:260 | 00.38 | 1:510 | 00.20 | 1:1700 | 00.06 |
| 1:18 | 05.56 | 1:57 | 01.75 | 1:96 | 01.04 | 1:135 | 00.74 | 1:174 | 00.57 | 1:265 | 00.37 | 1:520 | 00.19 | 1:1750 | 00.06 |
| 1:19 | 05.26 | 1:58 | 01.72 | 1:97 | 01.03 | 1:136 | 00.74 | 1:175 | 00.57 | 1:270 | 00.36 | 1:530 | 00.19 | 1:1800 | 00.06 |
| 1:20 | 05.00 | 1:59 | 01.70 | 1:98 | 01.02 | 1:137 | 00.73 | 1:176 | 00.57 | 1:275 | 00.36 | 1:540 | 00.19 | 1:1850 | 00.05 |
| 1:21 | 04.76 | 1:60 | 01.67 | 1:99 | 01.01 | 1:138 | 00.72 | 1:177 | 00.56 | 1:280 | 00.35 | 1:550 | 00.18 | 1:1900 | 00.05 |
| 1:22 | 04.54 | 1:61 | 01.64 | 1:100 | 01.00 | 1:139 | 00.72 | 1:178 | 00.56 | 1:285 | 00.35 | 1:560 | 00.18 | 1:1950 | 00.05 |
| 1:23 | 04.35 | 1:62 | 01.61 | 1:101 | 00.99 | 1:140 | 00.71 | 1:179 | 00.56 | 1:290 | 00.34 | 1:570 | 00.18 | 1:2000 | 00.05 |
| 1:24 | 04.17 | 1:63 | 01.59 | 1:102 | 00.98 | 1:141 | 00.71 | 1:180 | 00.56 | 1:295 | 00.33 | 1:580 | 00.17 | 1:2500 | 00.04 |
| 1:25 | 04.00 | 1:64 | 01.56 | 1:103 | 00.97 | 1:142 | 00.70 | 1:181 | 00.55 | 1:300 | 00.33 | 1:590 | 00.17 | 1:3000 | 00.03 |
| 1:26 | 03.85 | 1:65 | 01.54 | 1:104 | 00.96 | 1:143 | 00.69 | 1:182 | 00.55 | 1:305 | 00.32 | 1:600 | 00.17 | 1:3500 | 00.03 |
| 1:27 | 03.70 | 1:66 | 01.52 | 1:105 | 00.95 | 1:144 | 00.69 | 1:183 | 00.55 | 1:310 | 00.32 | 1:625 | 00.16 | 1:4000 | 00.03 |
| 1:28 | 03.57 | 1:67 | 01.49 | 1:106 | 00.94 | 1:145 | 00.69 | 1:184 | 00.54 | 1:315 | 00.32 | 1:650 | 00.15 | 1:4500 | 00.02 |
| 1:29 | 03.45 | 1:68 | 01.47 | 1:107 | 00.93 | 1:146 | 00.68 | 1:185 | 00.54 | 1:320 | 00.31 | 1:675 | 00.15 | 1:5000 | 00.02 |
| 1:30 | 03.33 | 1:69 | 01.45 | 1:108 | 00.92 | 1:147 | 00.68 | 1:186 | 00.54 | 1:325 | 00.31 | 1:700 | 00.14 | 1:5500 | 00.02 |
| 1:31 | 03.23 | 1:70 | 01.43 | 1:109 | 00.91 | 1:148 | 00.68 | 1:187 | 00.53 | 1:330 | 00.30 | 1:725 | 00.14 | 1:6000 | 00.02 |
| 1:32 | 03.12 | 1:71 | 01.41 | 1:110 | 00.90 | 1:149 | 00.67 | 1:188 | 00.53 | 1:335 | 00.30 | 1:750 | 00.13 | 1:6500 | 00.02 |
| 1:33 | 03.03 | 1:72 | 01.39 | 1:111 | 00.89 | 1:150 | 00.67 | 1:189 | 00.53 | 1:340 | 00.29 | 1:775 | 00.13 | 1:7000 | 00.01 |
| 1:34 | 02.94 | 1:73 | 01.37 | 1:112 | 00.88 | 1:151 | 00.66 | 1:190 | 00.53 | 1:345 | 00.29 | 1:800 | 00.12 | 1:7500 | 00.01 |
| 1:35 | 02.86 | 1:74 | 01.35 | 1:113 | 00.88 | 1:152 | 00.66 | 1:191 | 00.52 | 1:350 | 00.29 | 1:825 | 00.12 | 1:8000 | 00.01 |
| 1:36 | 02.78 | 1:75 | 01.33 | 1:114 | 00.87 | 1:153 | 00.65 | 1:192 | 00.52 | 1:355 | 00.28 | 1:850 | 00.12 | 1:8500 | 00.01 |
| 1:37 | 02.70 | 1:76 | 01.32 | 1:115 | 00.86 | 1:154 | 00.65 | 1:193 | 00.52 | 1:360 | 00.28 | 1:875 | 00.11 | 1:9000 | 00.01 |
| 1:38 | 02.63 | 1:77 | 01.30 | 1:116 | 00.85 | 1:155 | 00.64 | 1:194 | 00.52 | 1:365 | 00.27 | 1:900 | 00.11 | 1:9500 | 00.01 |
| 1:39 | 02.56 | 1:78 | 01.28 | 1:117 | 00.85 | 1:156 | 00.64 | 1:195 | 00.51 | 1:370 | 00.27 | 1:925 | 00.11 | 1:10000 | 00.01 |



| DEGREES | % | DEGREES | % | DEGREES | % |
|---|---|---|---|---|---|
| 1 | 1.8 | 21 | 38.4 | 41 | 86.9 |
| 2 | 3.5 | 22 | 40.4 | 42 | 90.0 |
| 3 | 5.2 | 23 | 42.4 | 43 | 93.3 |
| 4 | 7.0 | 24 | 44.5 | 44 | 96.6 |
| 5 | 8.8 | 25 | 46.6 | 45 | 100.0 |
| 6 | 10.5 | 26 | 48.8 | | |
| 7 | 12.3 | 27 | 51.0 | | |
| 8 | 14.0 | 28 | 53.2 | | |
| 9 | 15.8 | 29 | 55.4 | | |
| 10 | 17.6 | 30 | 57.7 | | |
| 11 | 19.4 | 31 | 60.0 | | |
| 12 | 21.3 | 32 | 62.5 | | |
| 13 | 23.1 | 33 | 64.9 | | |
| 14 | 24.9 | 34 | 67.4 | | |
| 15 | 26.8 | 35 | 70.0 | | |
| 16 | 28.7 | 36 | 72.7 | | |
| 17 | 30.6 | 37 | 75.4 | | |
| 18 | 32.5 | 38 | 78.1 | | |
| 19 | 34.4 | 39 | 81.0 | | |
| 20 | 36.4 | 40 | 83.9 | | |

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## DIGITAL LEVELS

### TOPCON DL-103

Topcon's DL-103 Electronic Level combines ease-of-use with a high degree of accuracy. With a measurement time of only 2 seconds, the DL-103 will dramatically improve your productivity in the field.

The DL-103 uses bar code measuring technology, so the operator does not have to read the staff, the DL-103 does it automatically, thereby eliminating human error.

The DL-103 takes ease of operation and accuracy to a new level.

Height-difference mode offers the difference of height between the reference point and the other measured points. For quick "cut and fill" work.

The DL-103 is designed to resist almost any conceivable situation in the field, such as vibration, shade, rain conditions, etc. Continuous 20 hour operation, Power remaing indicator and Auto Cut-off all make this series unbeatable value.

**#40147**

### TOPCON DL-101C/102C

Topcon's DL-101C/102C take accuracy and ease of operation to a higher level with its Advanced Image Processing Technology. The outstanding features make the DL-101C/102C ideal for high precision applications including the performance of 1st and 2nd order levelling and deformation monitoring.

When used with Topcon's unique barcode patterned staff, height and distance can be automatically determined digitally by the DL-101C/102C. Since it's a fully automatic electronic measurement, there is no need to make an optical reading! You just sight the staff, focus, and press the measurement button. It's that simple! The results appear in the clearly visible display window after about four seconds.

**#40148**

## AUTOMATIC LEVELS

### STADIA 240

| | |
|---|---|
| Magnification | 24x |
| Minimum focus | .5m |
| Accuracy 1km double run leveling | ± 2mm |
| Gas filled waterproof telescope | |

The Stadia 240 is ideal for builders. Low cost, but with all the features of instruments almost twice the price.

**#40100**

### TOPCON AT-G6

| | |
|---|---|
| Magnification | 24x |
| Minimum focus | .5m |
| Accuracy 1km double run leveling | ± 2mm |
| Gas filled waterproof telescope | |

When you need higher specifications like 24x magnification and gas filled telescope, the Topcon AT-G6 is the popular choice for more accurate levelling work on large construction sites.

**#40101**

## AUTOMATIC LEVELS

### TOPCON AT-G4

| | |
|---|---|
| Magnification | 26x |
| Minimum focus | .5m |
| Accuracy 1km double run leveling | ± 2mm |
| Gas filled waterproof telescope | |

When you are working over longer distances, you need greater magnification, that's why Topcon provide a wide range of instrument specifications. The AT-G4 is the same as the AT-G6, but with 26x magnification.

**#40102**

### TOPCON AT-G3

| | |
|---|---|
| Magnification | 30x |
| Minimum focus | .5m |
| Accuracy 1km double run leveling | ± 1.5mm |
| Gas filled waterproof telescope | |

Not just a large step up in magnification, but also a large step up in accuracy. The most popular level for engineering work.

**#40149**

### TOPCON AT-G2

| | |
|---|---|
| Magnification | 32x |
| Minimum focus | 1m |
| Accuracy 1km double run leveling | ± 7mm |
| Gas filled waterproof telescope | |

When your levelling work demands high accuracy, and extra long distances the Topcon AT-G2 is ideal, huge magnification, and top accuracy.

**#40150**

### TOPCON AT-G1

| | |
|---|---|
| Magnification | 32x |
| Minimum focus | .9m |
| Accuracy 1km double run leveling | ± 7mm |
| Gas filled waterproof telescope | |

The same high accuracy as the AT-G2, but with the addition of a glass circle for ultra precise horizontal angles.

**#40151**

## THEODOLITES

### TOPCON DT-200 SERIES

The Topcon DT-200 Digital Theodolite series, replaces the successful DT-100 series, which set the standard in today's theodolite market. The latest models feature an absolute encoder, which removes the need to move horizontal and vertical angle scales when turning on. Battery life is also improved over previous models to over 140 hours, more than 3 x the life of other theodolites. All models feature IP66 weatherproof construction allowing for use in any wet weather or dust environment. The biggest benefit of the new theodolites is the lower price over outgoing models.

**#40152**

### EDT-10 DIGITAL THEODOLITE

The GXI Digital Theodolite is the perfect low cost option for builders and construction companies who require both horizontal and vertical angles.

Great quality and very easy to use with it's large clear LCD screen and keypad. We have selected this instrument over many other low cost brands, as it is economical but still very good quality. Comes complete with a NiMH battery pack for charging without the need to flatten the battery first.

**#40103**

### HORIZON ET-1005L DIGITAL LASER THEODOLITE

The Horizon Digital Laser Theodolite is the perfect instrument for Long Range Vertical Applications such as Grid Set Out, Vineyard Development and Fencing Contractors.

The ET-1005L Laser Theodolite has an incorporated laser module in the handle of the instrument providing a calibrated telescope to the vertical laser beam.

The unit can be used as a standard theodolite with Dual LCD displays allowing the operator to turn both horizontal and vertical angles.

This unit comes standard with both alkaline and NIMH battery Packs with an Ac Charger complete in Carry Case.

Instrument Accuracy – 10Arc Seconds.

**#40104**

### TOPCON DT-200L SERIES

Available in three affordable models delivering 5", 7", or 9" angle accuracy, there is a DT-200L theodolite perfect for any job. They feature waterproof and dustproof construction that stands up to even the toughest conditions so you don't have to worry about downtime due to inclement weather. All models are also compact and lightweight for easy portability; and their simple operation provides precise measurement in a functional, hassle-free package.

**#40153**

# Survey

## TOTAL STATIONS

### TOPCON GTS-100N SERIES
### TOTAL STATIONS

**CADASTERAL TOTAL STATIONS**

Topcon's GTS-100N series are designed for construction and contractors, as an entry-level great value total value Total Station. Built with legendary Topcon precision and durability, the GTS-100N provides the construction professional with a dedicated lay-out solution. Use the on-board software to layout points in the field, confident that with Topcon, you'll be right on target. Or use with a field controller and one of the large range of software packages we have available to tailor suit your applications.

• Economical, value priced measuring solution
• Rugged, durable, water resistant design
• Two accuracies to choose from 2" & 5"
• Expanded, Full numeric keypad
• On board programs & 24,000 point data storage
• Ideal as a construction stakeout total station
• Perfect when combined with FC field controller and software

**#40154**

### TOPCON GPT-3100W SERIES
### REFLECTORLESS

**CADASTERAL TOTAL STATIONS**

Topcon was the first to bring a completely wireless total station to the surveying industry. Now, with the GPT-3100W series reflectorless total stations, Topcon gives you the convenience of wireless technology on the total stations with the longest reflectorless range in their class. The GPT-3100W series provides the highest measuring precision available due to its dual-optical design, so you get incredible results every time, in all situations. Topcon's GPT-3100W uses a dual laser optics system, one narrow beam for non-prism functions, and a broader beam when using a prism. This stabilizes the beam over long distances providing accurate measurement, even in adverse atmospheric conditions such as heat shimmer.

• Dual-Optical Design - Reflectorless measuring requires a finely focused beam for pinpoint accuracy. Prisms need a wider pattern to prevent off-center measuring degradation. Topcon's dual-optical system gives you both for the maximum measuring accuracy all the time.
• Precise Pulse-Laser Reflectorless - Topcon's pulse-laser " time-of-flight" system eliminates measuring errors caused by the overlapping signals used in phase measuring systems. Accurately measuring corners or through objects such as a chainlink fence is always fast and reliable.
• Longest Reflectorless Range - Up to 350m, the longest reflectorless range in its class! Measures up to 3000m with a prism. The dualoptical design allows you the extended range using a class 1 laser— safe for all conditions—making it ideal for use in high-traffic and other heavily populated areas.

**#40155**

## TOTAL STATIONS

### TOPCON GPT-3000LW SERIES REFLECTORLESS

#### CADASTERAL TOTAL STATIONS

With its revolutionary 1200m reflectorless range the 3000LW sets a new standard for EDM range, delivering the power for difficult shots that others just can't measure up to! The Topcon 3000LW series measures nearly four times farther than any other competitive total station, once again demonstrating the technology advantages that Topcon offers.

Topcon's GPT-3000LW uses a dual laser optics system, one narrow beam for non-prism functions, and a broader beam when using a prism. This stabilizes the beam over long distances providing accurate measurement, even in adverse atmospheric conditions such as heat shimmer.

- 1200 Meter Reflectorless range
  - New long range reflectorless mode leaves competitors far behind.
- Bluetooth® communications
- Precise measurements to difficult targets such as hanging wires or dark asphalt.
- Dual Laser optics
- Visible laser pointer is a Class 1 laser, so it is so safe, you can use it in heavy traffic areas.
- Most reflectorless instruments use a laser for distance measurement, with varying spot quality over distance. Topcon's GPT-3000LW uses the industries most advanced, highly focused infrared beam for a very stable, sharp spot that is less resistant to "spreading" over distance.

#40156

### TOPCON GTS-750 SERIES

#### TOPOGRAPHICAL/CADASTERAL TOTAL STATIONS

The new GTS-750 series total stations are the most advanced, state-of-the-art technology available for the professional surveyor. Powerful? How about its 400MHz Intel processor running Windows CE, or the unprecedented 3000 meter prism range of the GPT-751 and 753. And the on-board TopSURV software quickly and easily guides you through the most demanding field applications.

Available in 1", 3", or 5" accuracy models, the GTS-750 can fit any job requirement without breaking your budget. The 1" and 3" versions have dual displays, while the 5" versions sport a single display. Range to a single prism is 3,000 meters for all models except the GTS-755, which is 2000 meters.

- Advanced 400MHz Intel Windows CE operating system with TopSURV on-board software
- Larger, backlit keypad with bright, color LCD touch-screen display
- CF card, USB Type A and USB mini slots delivers new storage and transfer capabilities
- Increased battery capacity (5000mAh) and operating time
- Slimmed down size…8% smaller than the GPT-7000 or GTS-720
- Increased performance with no increase in price

#40157

VISA   MasterCard   eftpos

## TOTAL STATIONS

### TOPCON GPT-7500 SERIES REFLECTORLESS

**TOPOGRAPHICAL/CADASTERAL TOTAL STATIONS**

The new GPT-7500 series total stations are the most advanced, state-of-the-art technology available for the professional surveyor. Powerful? How about its 400MHz Intel processor running Windows CE, or the unprecedented 2000 meter non-prism range. That is 4 times longer than some competitors. And the on-board TopSURV software quickly and easily guides you through the most demanding field applications.

Available in 1", 3", or 5" accuracy models, the GPT-7500 can fit any job requirement without breaking your budget. The 1" and 3" versions have dual displays, while the 5" versions sport a single display. Prism Range to a single prism is 3,000 meters for all models except the GPT-7505, which is 2000 meters.

- Longest non-prism range – now 2000 meters; with 350 meter range to almost any surface
- Advanced 400MHz Intel Windows CE operating system with TopSURV on-board software
- Larger, backlit keypad with bright, color LCD touch-screen display
- CF card, USB Type A and USB mini slots delivers new storage and transfer capabilities
- Increased battery capacity (5000mAh) and operating time
- Slimmed down size…8% smaller than the GPT-7000 or GTS-720
- Increased performance with no increase in price



**#40158**

### TOPCON GPT-7000I SERIES REFLECTORLESS, IMAGING

**TOPOGRAPHICAL/CADASTERAL TOTAL STATIONS**

Capture reality – don't just measure it! With its integrated digital camera technology, the Topcon GPT-7000i imaging total station makes your field data come alive. Captured job site photos are incorporated into your measurement data, or use the onboard imaging technology to superimpose design points or stakeout points. By adding optional digital imaging software you can combine multiple job site photos and create 3D models and point clouds! Never miss a required shot again!

The GPT-7000 series gives you up to 250m reflectorless range, the longest in its class! Measure up to 3000m with a prism. The unique dual optical EDM design takes pulse laser reflectorless measurement to a higher level. Even at long distances, it maintains focused beam accuracy and allows you to measure only the target you select.

Windows CE technology on the GPT-7000 total station provides a bright graphic display, touch screen display, more functionality, better support for standard accessories like Bluetooth® wireless technology, and more available software. It provides the ideal user interface for an integrated, on-board solution for the GPT-7000 total stations.

Our robust 32-bit multitasking environment allows application developers to get the best out of our modern microprocessor design.

- Dual-view integrated CCD camera: wide and finder view
- Windows CE.NET 4.2 operating system
- Extra-large QVGA LCD TFT color display
- Pinpoint reflectorless measuring up to 250m
- Single prism measuring up to 3000m
- Advanced Long Range Prismless Measurement Capability



**#40159**

| **VIC** – Campbellfield **(03) 9930 7111** | **SA** **(08) 8346 1180** | **NSW** **(02) 9898 0066** | **WA** **(08) 6241 4700** |
| **VIC** – Dandenong **(03) 9706 9966** | **NT** **(08) 8981 1800** | **QLD** **(07) 3717 2111** | **TAS** **(03) 6398 1051** |

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## TOTAL STATIONS

### TOPCON IS - IMAGING STATION

#### REFLECTORLESS IMAGING TOTAL STATIONS

Topcon's IS combines the best of two worlds, advanced imaging and high-accuracy surveying, incorporating real-time field imagery with spatial data. The IS's powerful functionality is controlled using Topcon's exclusive ImageMaster software that produces "photography with dimension", a revolutionary and cost effective alternative to laser scanning. Reality captured for results unimaginable.

SS Wireless Radio Built-in

Assist Focus with Focus Knob

Powerful 6,500' (2,000m) Reflectorless EDM

Servo Motors with Auto Track

Digital Camera Wide 4X View

Protected CF Card Slot

Live Color Image Display

Windows CE Touch Screen

On-Board Battery

Coaxial Digital Camera 30X View

*Set points to scan on the LCD with a tap …*

A Robot at Heart…

The IS doesn't forsake its robotic roots. The IS has all the features of our GPT-9000A robotic total station and more.

Our 9000A series robotic system features sophisticated technology unique to Topcon– our one-touch quick lock feature that set the standard in robotic target acquisition has taken another step forward, with the sleek new RC-3 system. All 9000A series robotic systems offer reflectorless measurement superior to any other instrument available – capable of precision measurements at a mind-boggling 2000 meters! Packed with a wide variety of advanced technologies, the Topcon GPT-9000A series robotic total station demonstrates why Topcon continues to be the world's leader in precision survey instrumentation:

The X-TRAC 7 robotic system upgrade is now available for the IS instrument. This enhancement to firmware and software affects the robotic tracking, quick-lock, radios, and data collector performance.

### FEATURES

- Photo Fieldbook - creates a 360° Photo Fieldbook. In seconds.
- IntelligentScan automatically recognizes significant features in the images. Its 20 pps scan rate is ideal for most applications, and its 2000m precision reflectorless range is tops in its class.
- ImageDrive lets you visually operate from the controller and easily switch from imaging to prism tracking.
- First with Independent Control to allow complete control from your computer, WiFi- equipped FC-2500, and other compatible devices.
- Integrated dual-camera array with wide-area and 30x scope view so you can zoom in on the detail you need.
- Innovative, completely cable-free system design
- Full-color, graphical Windows Mobile instrument & field controller interface
- The most advanced, longest range, and most powerful reflectorless technology available
- Integrated interference free 2.4 GHz SpSp robotic data communications
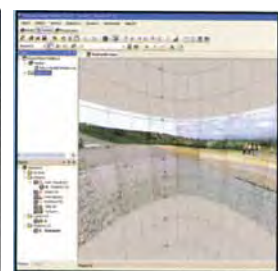
*Feature Scan*

*Photo Fieldbook*

#40160

## TOTAL STATIONS

### TOPCON GTS-900A SERIES ROBOTIC

**AUTO-TRACKING TOTAL STATIONS**

Smaller-Lighter-Faster-Longer. The Topcon GTS 900A series of robotic total stations boast a completely new modern design, faster motors, wireless technology and X TRAC prism tracking technology. The one touch quick locking X TRAC system set the standard for remote target acquisition in the robotics industry. Now this feature has been further refined to assure longer ranges, and faster target acquisition. The wireless RC-3 that is at the heart of the system increases range and utilizes the same batteries as the FC-200 field controller.

Available in 1, 3, and 5 second angle accuracies, to best fits your requirements. The 900A series offers flexibility, performance and industry leading technology all in one package.

A new, backlit keyboard provides a smart new user interface that combines efficiency and convenience. Standard rechargeable batteries power the entire Topcon instrument and field controller product lines. The new waterproof, dustproof instrument design is ready to live up to Topcon's strict quality standards, and is ready to take the punishment of even the harshest job site conditions.

With the new 2.4 GHz spread spectrum radio built into the 900A series, off board dedicated channel radios for remote operation are a thing of the past. A startling 1000m range between the instrument and the controller mean that you will never have to worry about communications range between the components of your system.

- Innovative, completely cable-free system design
- New RC-3 with Superior XTRAC™ Quick-Lock tracking technology
- Integrated interference free 2.4 GHz SpSp robotic data communications
- New FC-200 with optional, snap-in radio module
- Faster servo motor technology, faster tracking technology
- Full-color, graphical Windows Mobile instrument & field controller interface
- Lighter weight than the competition



**#40161**

### TOPCON GPT-9000A SERIES REFLECTORLESS ROBOTIC

**AUTO-TRACKING TOTAL STATIONS**

Smaller-Lighter-Faster-Longer. The Topcon GPT 9000A series of reflectorless robotic total stations boast a completely new modern design, 2000 meter reflectorless range, faster motors, wireless technology and X TRAC prism tracking technology. The one touch quick locking X TRAC system set the standard for remote target acquisition in the robotics industry. Now this feature has been further refined to assure longer ranges, and faster target acquisition. The wireless RC-3 that is at the heart of the system increases range and utilizes the same batteries as the FC-200 field controller.

Available in 1, 3, and 5 second angle accuracies, to best fits your requirements. The 9000A series offers flexibility, performance and industry leading technology all in one package.

A new, backlit keyboard provides a smart new user interface that combines efficiency and convenience. Standard rechargeable batteries power the entire Topcon instrument and field controller product lines. The new waterproof, dustproof instrument design is ready to live up to Topcon's strict quality standards, and is ready to take the punishment of even the harshest job site conditions.

With the new 2.4 GHz spread spectrum radio built into the 9000A series, off board dedicated channel radios for remote operation are a thing of the past. A startling 1000m range between the instrument and the controller mean that you will never have to worry about communications range between the components of your system.

- Innovative, completely cable-free system design
- 2000 meter reflectorless range
- New RC-3 with Superior XTRAC™ Quick-Lock tracking technology
- Integrated interference free 2.4 GHz SpSp robotic data communications
- New FC-200 with optional, snap-in radio module
- Faster servo motor technology, faster tracking technology
- Full-color, graphical Windows Mobile instrument & field controller interface
- Lighter weight than the competition



**#40162**

**Position** *Partners*

## PRISMS AND HOLDERS

### PRISM 64 / 65MM
Top of the line, Topcon prisms are ideal in any standard survey holder.

**#40105**

### AK-10 SINGLE TILTING HOLDER
Topcon's renown quality, this single tilting prism holder has always been very popular with both rural and town surveyors throughout Australia. Allows 0 or -30 prism constant.

**#40107**

### AK-30 TRIPLE TILTING HOLDER
Topcon's renown quality, this triple tilting prism holder is ideal where extra long measurements are required. Holds three prisms, or can also be used with just one. Allows 0 or -30 prism constant.

**#40109**

### LEICA STYLE PRISM
Traditional Leica/Wild style copper coated prism to fit Leica holders.

**#40106**

### AK-16 LEICA STYLE TILTING HOLDER
Top quality Leica/Wild style prism holder with bayonett fitting. Just press the locking button to attach to Leica poles or tribrach adapters.

**#40108**

### LEICA STYLE TRIPLE TILTING HOLDER
Top quality Leica/Wild style prism holder with bayonett fitting. Ideal where extra long measurements are required. Holds one two or three prisms.

**#40110**

### TOPCON 360° PRISM
Genuine Topcon 360° prism for use with robotic Total Stations. .

**#40164**

### TOPCON MINI PRISM
For surveyors who demand the best, the Topcon mini prism is the best quality mini prism available. Can be used as 0 or -30 prism constant.

**#40165**

### ADS-102 MINI PRISM SET
Great value complete mini prism set. Can be used as 0 or -30 prism constant, and comes with all the accessories pictured here.

**#40111**

FOR ALL ENQUIRIES CALL: **1300 867 266**

VISA  MasterCard  eftpos

# Survey

## PRISMS AND HOLDERS

### FIXED TRIBRACH ADAPTERS

Basic, low cost, non-rotating tribrach adapters available with either a standard 5/8 thread or a Leica bayonett fitting on the top.

5/8th thread

Leica bayonette

**#40112**

### ROTATING TRIBRACH ADAPTER

Just clips in to your tribrach, giving you a standrd 5/8 thread with the flexibility of being able to rotate the adapter to help alignment.

**#40114**

### PRISM TARGETS

We offer a range of targets for almost all brands of prisms, just give us a call for prices and models.

**#40169**

### ROTATING TRIBRACH ADAPTER

Attaches to your tribrach giving you not only an accurate levelling bubble, but also the now industry standard clamping lug system. Comes complete with clamping lug to 5/8 thread adapter.

**#40166**

### TOPCON ROTATING TRIBRACH ADAPTER WITH OPTICAL PLUMMET

Attaches to your tribrach giving you not only an accurate levelling bubble, and clamping lug system, but also an optical plummet, for precise set up over a ground mark. Comes complete with clamping lug to 5/8 thread adapter.

**#40167**

### ROTATING TRIBRACH CARRIER WITH OPTICAL PLUMMET

Attaches to your tribrach giving you not only an accurate levelling vial, and clamping lug system, but also an optical plummet, for precise set up over a ground mark. Comes complete with clamping lug to 5/8 thread adapter.

**#40115**

### TRIBRACH WITH OPTICAL PLUMMET - TOPCON YELLOW

Tribrach with bulls eye bubble, a smooth accurate clamp and an optical plummet, for precise set up over a ground mark.

**#40113**

### TOPCON TRIBRACH

The best quality tribrach available. Complete with a bulls eye bubble and a smooth accurate clamp.

**#40168**

### TOPCON TRIBRACH WITH OPTICAL PLUMMET

The best quality tribrach available. Complete with a bulls eye bubble, a smooth accurate clamp and an optical plummet, for precise set up over a ground mark.

**#40170**

**VIC** – Campbellfield **(03) 9930 7111**
**VIC** – Dandenong **(03) 9706 9966**
**SA** (08) 8346 1180
**NT** (08) 8981 1800
**NSW** (02) 9898 0066
**QLD** (07) 3717 2111
**WA** (08) 6241 4700
**TAS** (03) 6398 1051
49

## TRIPODS

### FLAT TOP ALUMINIUM

The standard 165cm survey tripod with a 5/8 thread. Suits 99% of Levels, Lasers, theodolites, prisms etc... This tripod uses quick release clamps, rather then the traditional style wing nuts.

Quick release clamps not only speed set-ups, but are also easier to maintain and less prone to damage by over-tightning.

**#40121**

### DOME TOP ALUMINIUM

This standard 165cm survey tripod with a 5/8 thread, has the addition of a dome head. The dome head speeds up levelling of most lasers and levels (not all instruments match this tripod, so give us a call if you are in doubt). Suits most Levels, Lasers, theodolites, prisms etc... This tripod uses quick release clamps, rather then the traditional style wing nuts.

Quick release clamps not only speed set-ups, but are also easier to maintain and less prone to damage by over-tightning.

**#40124**

### HEAVY DUTY WOODEN

When you want the best, you can't go past this tripod. 180cm tall survey tripod with a 5/8 thread. Suits Total Stations or any instrument requiring more stability.

**#40122**

### PRISM POLE TRIPOD

Heavy duty steel construction, this tripod is the ideal way to hold a prism pole stable. Just set up the tripod, and place the pole in the sprung loaded jaws.

**#40171**

### ELEVATOR TRIPOD

An excellent time saver for laser setups. A standard aluminium survey tripod with a 5/8 thread, that has an elevator column built-in. Just set the tripod up, put on the laser level, and crank the height up or down to match and existing datum. Suits most laser levels. Uses traditional wingnut clamps.

**#40123**

### MACHINE CONTROL TRIPOD

Heavy duty tripod built specifically for machine control applications. Rugged aluminium alloy construction makes it light weight, easy to transport and set up. Comes with points or wheels.

**#40172**

FOR ALL ENQUIRIES CALL: **1300 867 266**

VISA    MasterCard    eftpos

# Survey

## TRIPODS & BIPODS

### TRIPOD FLOOR STAR

The Floor Star is made from lightweight aluminium and provides a secure base for your tripod. Ideal for tripod placement on concrete floors and multi story construction.

#### #40173

### FUKUDA EV-38B

When you want the best, you can't go past this tripod. 180cm tall survey tripod with a 5/8 thread. Suits Total Stations or any instrument requiring more stability.

#### #40174

### CRAIN THUMB RELEASE BI-POD

The Bi-Pod was designed specifically for use in difficult conditions like extremely wet soil and forestry applications.

#### #40175

### FUKUDA EV-38

Ultra-portable and expandable, the tripod can be adjusted for the perfect height. Its quick-release, convenient, and ideal for your interior laser. Also suits the Robovector Laser level.

#### #40176

### BI-POD

Heavy duty BI-Pod used to hold up a prism pole. Ergonomic thumb-operated locks allow easy plumbing of the pole. Comes complete carry case.

#### #40125

### CRAIN THUMB RELEASE BI-POD

The Thumb Release Bi-Pod is the bipod of choice for many field applications. Ergonomic thumb-operated locks allow easy plumbing of the pole.

#### #40177

## PRISM AND RANGE POLES

**A**  LEICA STYLE MINI POLE
100mm fixed height. Ideal for measurments to low confined places. With Leica bayonette top.

**B**  CRAIN MINI POLE
400mm fixed height. Complete with replaceable point and topo boot. Ideal for measurments to low confined places. With standard 5/8 thread.

**C**  MYZOX 2m RED AND WHITE RANGE POLE
Telescopic pole with 20cm red and white bands. Flat capped top with no thread. Plastic coated steel twist-lock. Ideal for accurate set-outs.

**D**  LEICA STYLE 2.15m POLE
Made in Germany. Aluminium 2.15m with a comfortable foam rubber hand grip. 1m extensions available. Metric graduation, with Leica bayonette top.

**E**  CRAIN 2.6m POLE
Metric graduation, Quick Lok clamp, adjustable top and built-in bubble. With standard 5/8 thread.

**F**  CRAIN 3.5m POLE
Metric graduation, Quick Lok clamp, adjustable top and built-in bubble. With standard 5/8 thread.

**G**  CRAIN 4.6m POLE
Metric graduation, Quick Lok clamp, adjustable top and built-in bubble. With standard 5/8 thread.

**H**  CRAIN CARBONLITE 2m GPS POLE
2m fixed height 2 section carbon fibre GPS pole. Complete with a bubble and replaceable point and topo boot. With standard 5/8 thread.



A     B     C     D     E     F     G     H

| | | | |
|---|---|---|---|
| A | #40126 | F | #40131 |
| B | #40127 | G | #40132 |
| C | #40128 | H | #40146 |
| D | #40129 | | |
| E | #40130 | | |

# Survey
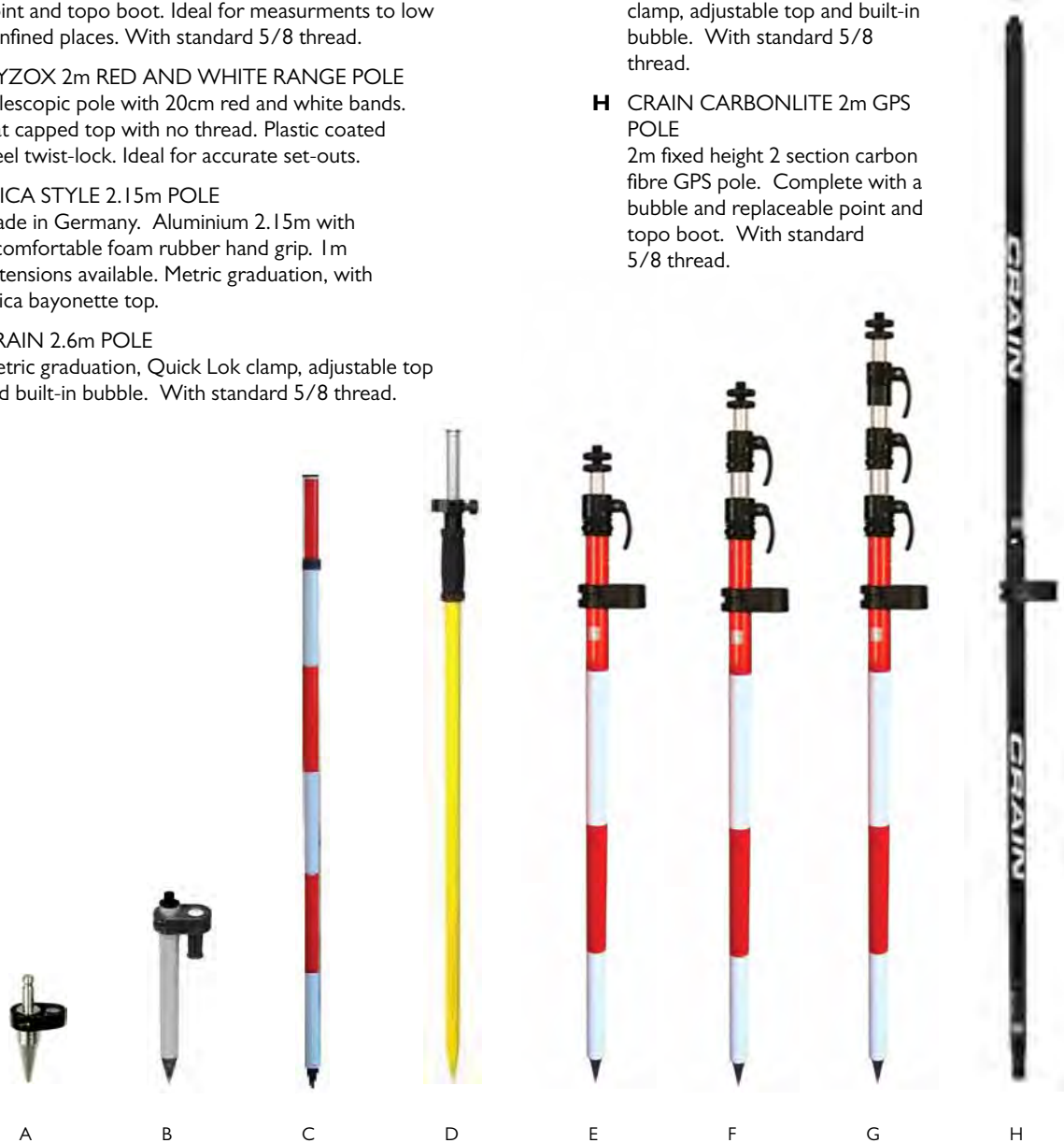
## LEVELLING STAVES

**A** STAFF COVER

Strong nylon staff pouch, to help protect your
ALG 55 and ALG 55EB size staff.

**B** 5m "½" FACE
Aluminium 5m 5 section staff with 5/10mm reading.

**C** 5m "E" FACE
Aluminium 5m 5 section staff with 10mm E style
reading.

**D** 5m FIBREGLASS
Fibreglass 5m 5 section staff with 10mm E style
reading.

**E** 7m "½" FACE
Aluminium 7m 4 section staff with
5/10mm reading.
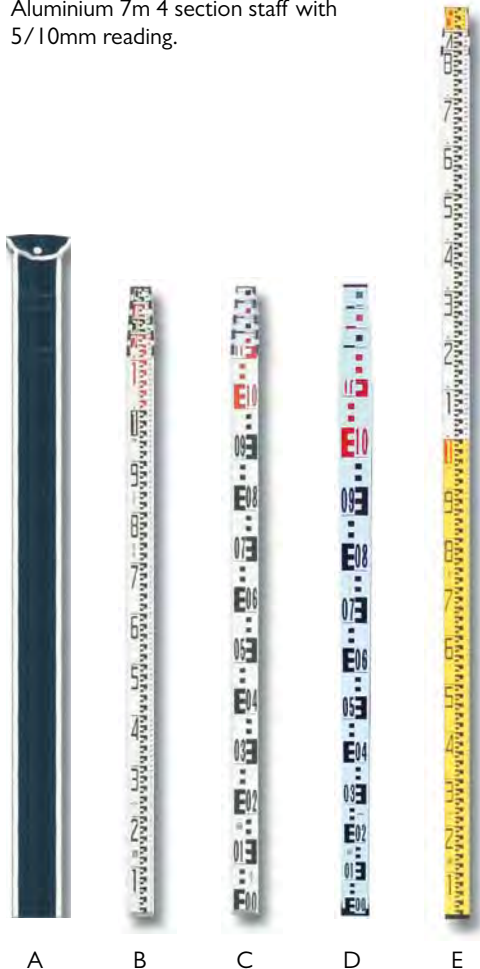
|   | A | B | C | D | E |
|---|---|---|---|---|---|

| A | **#40133** |
|---|---|
| B | **#40134** |
| C | **#40135** |
| D | **#40136** |
| E | **#40137** |

## CUT AND FILL ROD

### CUT AND FILL ROD

*"A normal Staff requires two handed operation!"*

This one handed operation Staff allows the user to easily
take and transfer levels on a job site.

Simply attach any receiver to the orange block and by the
flick of the black lever raise or lower the Receiver to find
your level.

Graduated in
Millimetres, ideal
for Concretors,
Builders, Plumbers,
Earthmovers and
many more!

**#40138**

# Survey

## ADAPTERS & POINTS

### MINI PRISM POINT
Anodised aluminium point to allow mini prism to be used off the ground, without the need for a pole.

**#40139**

### PRISM POLE POINT
Stainless steel replacement point suits most prism poles..

**#40140**

### PRISM POLE TOPO SHOE
Replace your prism pole point with this shoe to provide a flat surface to ensure accuracy of heights.

**#40141**

### 5/8 THREAD TO LEICA ADAPTER
Turns a standard 5/8th survey thread in to the Leica/Wild bayonette fitting.

**#40144**

### LEICA TO 5/8 THREAD FIXED
Turns the Leica/Wild bayonette fitting in to a standard 5/8th survey thread. Place over the Leica bayonette and fasten using the hex-key screw on the side. The adapter is now fixed in place, leaving a 5/8th thread.

**#40143**

### 5/8 THREAD TO LEICA ADAPTER
Turns a standard 5/8th survey thread in to the Leica/Wild bayonette fitting.

**#40142**

### TRIBRACH CARRIER PLUG
5/8 thread lug to fit in to rotating tribrach carriers for attaching standard prism holders and assemblies.

**#40145**

## TOPCON GMS-2 AND GMS-2 PRO

### *Handheld GIS Mapping Solution*



Setting the standard for handheld GPS systems, the GMS-2 incorporates more functionality in to one device than ever conceived of before now! With the ability to be used as a GIS Mapping system, an L1 static survey grade receiver or a field controller for both GIS and high precision surveying. The GMS-2 will become the preferred choice for GIS professionals and surveyors alike.

The GMS-2 is the World's first GPS handheld system to be introduced in the GIS Market with Dual Constellation tracking and an integrated digital camera.



### GPS+ GLONASS VS. GPS ONLY

GPS is the satellite system developed by the US military. The GLONASS system is the Russian satellite system which is now maintained as a joint venture between India and Russia. The GPS+ Glonass system gives up to 50% more satellite coverage than GPS alone, which can make all the difference between getting a signal or not getting a signal. This is particularly important when working in suburban areas where a clear view to the sky may be blocked by trees, buildings or hills etc.

### DIGITAL CAMERA

GIS is all about data capture, the more the better. With it's built-in digital camera you can also have your GMS-2 to take a picture of the item you are storing a position for. Images get linked to the stored point, so there is no need to sit for hours back in the office going through photos trying to figure out which one goes with which point.

### ELECTRONIC COMPASS

Need an accurate bearing to another point or landmark? The GMS-2 has that covered too, with it's built-in precise electronic compass. Again, bearings are automatically linked to the stored point eliminating the need to make detailed notes.

### BLUETOOTH®

No need to mess around with a tangle of cables to download your stored data, just use the integrated Bluetooth® communication to send the data wirelessly to any compatible device.

### FIELD CONTROLLER

The whole GMS-2 is built inside a rugged, full colour touch screen field computer running Windows CE. If you have experience with ArcPAD or ArcGIS software from ESRI, you will love the TopPAD software. TopPAD has been designed on ArcPAD with the added functionality to support Topcon's additional GIS solutions.

### ACCURACY

The GMS-2 has a standalone accuracy of 2-5m, or using the services of a differential data supplier, you can receive sub-metre results on the spot, real time. The GMS-2 can be used in pairs with the optional PG-A5 antenna as a base and rover giving you post-processed static results at ± 5mm +1.5ppm.

Integrated Digital Camera & Electronic Compass

Dual Constellation Satellite Tracking

50 channel TPSCORE Chip Technology

Optional External Antenna port

Stylus Holder

Multiple software support; - Topcon TopPAD - Topcon TopSURV-GIS

Multiple Accuracy Levels from Sub-metre to CM Range

Dual use performance as GIS or field computer

Internal Bluetooth® Wireless Connectivity

Ultra sharp colour TFT touch screen

SD Memory Slot, USB Port, Serial Port, Power Port

Removable rechargeable Li-ion battery

**#40178**

# Survey

## TOPCON GRS-1

### WORLD'S FIRST ALL-IN-ONE, HANDHELD, DUAL FREQUENCY GNSS RECEIVER AND FIELD CONTROLLER

Topcon, the company that brought you the first integrated GPS receiver now brings you the first fully integrated handheld GNSS receiver and field controller!

• Small & Lightweight Design—ideal network rover

• Scalable & Expandable—handheld or on-the-pole

• Multi-function—survey/map/navigate/communicate

Topcon's new GRS-1 (Geodetic Rover System) is the world's first fully integrated dual constellation network enabled RTK rover system. It is an all-in-one handheld GNSS receiver and field controller featuring high-speed processor, increased memory, built-in camera and digital compass. Also integrated are an SD memory card slot, optional internal GSM or CDMA modem, and wireless connectivity via Wireless LAN and Bluetooth® wireless technology.

The GRS-1 achieves three primary and evolutionary goals for a GNSS receiver: small size, minimal weight, and affordability. It provides DGPS capability via an internal L1 antenna, perfect for the GIS and navigation space. Instantly move to centimeter RTK accurate dual frequency / dual constellation GNSS by simply adding a carbon-fiber pole with Topcon's PGA-1 external antenna then connect to your local GNSS network via the internal modem. As an added benefit, the GRS-1 can also be used as a static post processed receiver system.

• Smallest, lightest RTK rover receiver
• 1cm RTK accuracy
• Dual-frequency, 72 channel GPS + GLONASS receiver
• Fastest receiver—100Hz
• Integrated cell phone (GSM, CDMA)
• 806MHz XScale Processor
• Bright, touch screen display
• Integrated camera &amp; compass
• Windows® Mobile 6.1 Operating System
• Built-in Bluetooth® wireless technology and Wireless LAN connectivity

### INTERNAL MAGNETIC COMPASS

Utilizing compass bearing with GNSS positioning, the magnetic compass allows for additional measurements to be taken from a single location.

### BUILT-IN 2.0 MEGAPIXEL CAMERA

That's right, the GRS-1 comes with a 2.0 megapixel camera with autofocus for taking pictures. Store photos on-board with the 1GB of Flash memory or use the external SD card slot for additional memory.

### EXTRA MEMORY

With 1GB Flash standard, the GRS-1 is loaded with memory. But if you need more, the SD card slot and the mini USB Host functionality can provide additional memory. Use the USB mini port as both a Host and Client. This functionality allows for expanded memory and easy file transfer through USB flash drives or SD memory cards.

### EXPANSION CONNECTOR

Weatherproof expansion port allows for the addition of the RH-1 unit. The RH-1 will allow the GRS-1 to communicate with radio based base stations for RTK operation. It is compatible with all previous radio types that are currently in use with Topcon GNSS systems. This includes Digital UHF, Spread Spectrum, and FCS enabled UHF radios from all previous Topcon systems.

### BLUETOOTH® AND WIRELESS LAN

Built-in Bluetooth® wireless technology and Wireless LAN connectivity come standard. No need for expensive upgrades or CF cards. Use your device in a typical Hotspot to surf the web, check weather or e-mail files back to the office. When not in use, Topcon also provides a way to turn Bluetooth® and Wireless LAN off to conserve battery power.

### TOPSURV 7 FIELD CONTROLLER SOFTWARE FOR SURVEYING AND DATA COLLECTION

TopSURV 7 is a whole new experience from field to finish. From its all-new, super-efficient database engine to its near-universal exporting abilities, TopSURV 7 delivers the power to simplify and speed your data collection and delivery.

### SPEED, GUI, AND A FEEL FOR THE ROAD

The new engine has cut file sizes by an amazing 60%, but that's just what's under the hood. Its new graphical user interface and intuitive operation are where the rubber meets the road. Icon driven, with no more than four clicks to get to any operation, TopSURV 7 helps you quickly negotiate the trickiest turns—both on the controller and onboard. Real-time re-computation of recorded data puts an end to time-wasting pit stops.

### ADVANCED IMPORT/EXPORT, CODING, AND SETUP

Stock or custom, TopSURV 7 supports all major file formats and lets you visually create custom codes and ordering to insure a perfect transfer every time. Its new station offset and string list features bring added versatility and efficiency to setup and operation.

### FEATURES INCLUDE:

• Large Graphical User Interface (GUI)
• Intuitive User Interface
• Graphical Stakeout
• Map View Data Collection
• Fast Job Management and Storage
• Integrated Camera Function

**#40179**

# Survey

## TOPCON SURVEY GPS

### GR-3

*Triple Constellation receiver*

It is the World's First G3 (GPS, Glonass, Galileo) capable GNSS receiver, and a clear indication of Topcon's technology leadership in the satellite positioning industry!

Topcon's GR-3 receiver, the next generation of system design and tracking technology, is now available with a completely new digital UHF radio system utilizing DSP technology. This technological advancement delivers far greater reliability and performance than older analog UHF technology of the past and sets new standards for performance, accuracy and innovative design.

GPS receiver design has taken a quantum leap forward with the new GR-3. It starts with 72 "universal" channels that support all current and planned satellite positioning signals. Then there's the micro-tuned, precision antenna capable of receiving all G3 positioning signals with Topcon's patented center-mount radio antenna for superior signal tracking and interference reduction.

The GR-3 receiver incorporates a unique dual communication system, featuring both cellular and radio technology. Offering a 915 MgHz Spread Spectrum internal Tx/Rx* or Digital UHF radio, the GR-3 can serve roles as either an RTK base or rover system. And by utilizing the optional internal GSM/GPRS/CDMA modem communication system via the easily accessible cellular SIM card slot, a user can extend their range far beyond radio capability or utilize both receivers as rover systems off a fixed base station or a network system.

- Digital UHF or Spread Spectrum radio
- Advanced Rugged System Design
- Bluetooth® Wireless Technology
- 72 Universal Tracking Channels
- G3 Satellite Tracking (GPS, Glonass, Galileo)
- Optional Internal GSM/GPRS Cellular Communication

#40180

### HIPER® GA

*Economical RTK Solution*

The HiPer® Ga model receiver has standard GPS satellite tracking capability with the added bonus of GLONASS satellite tracking upgradeability via OAF activation code. No hardware changes or modifications are required. Use the HiPer® Ga as a cable free RTK base and rover system; or as two rover receivers from a fixed base station or a GNSS network system by way of radio or cellular communication.

- Innovative, cable-free system design
- Complete GPS and Glonass satellite system tracking
- Advanced Digital Radio Communications System
- Integrated Bluetooth® Wireless Technology
- owerful 40 channel GNSS board operating at up to 20Hz
- User selectable and upgradeable internal memory
- Rugged, waterproof, field proven system design

If you need an economical RTK solution that provides advanced technology, wireless system design, and rugged, waterproof construction, it's time to think green. It's time for Topcon and the new Green Label HiPer® receivers!

#40181

## TOPCON SURVEY GPS

### HIPER® LITE+

#### Cable Free RTK GPS

Shut out cable hassles and run up your productivity with the Topcon HiPer® Lite +! Only Topcon lets you ad the entire GLONASS satellite network, providing you with stronger solutions that can keep you working when others can't. Exclusive Advanced Multipath Reduction (AMR) and Co-op Tracking™ help you acquire sat-lock faster and maintain it longer in difficult working conditions. And because the HiPer® Lite + is 100% cable-free, set-up is faster and there's no box full of cables to maintain – just precision GPS+ positioning at work for you!

- Super-fast and easy base station setup – tripod, tribrach, and HiPer® Lite + – you're done!
- Cable-free rover works with Bluetooth® wireless technology equipped field controllers
- Integrated spread spectrum radio works with HiPer® Lite + and standard HiPer® Lite rovers up to 2.5km away
- No FCC licensing requirements
- 40-channel dual-frequency GPS plus GLONASS availability
- Exclusive AMR and Co-op Tracking™ technology

The secret to HiPer® Lite is the advanced internal radio technology, developed by Topcon specifically for our GPS receivers, that allows us to create an integrated system that doesn't require the typical mess of cables. The advanced design incorporates a high performance 915 MHz Spread Spectrum radio that provides superior interference-free communication up to 2.5km on the job site. Combined with the center-mount antenna design, the HiPer® Lite is a robust short range positioning system. HiPer® Lite+ is not only free from cable hassles, it's also Lite on your wallet as well. Starting at a price well below a typical RTK GPS+ system, the Topcon HiPer® Lite+ removes price barriers to provide affordable advanced technology precision GPS+.



**#40182**

### MILLIMITER GPS

#### GPS Precision now with mm vertical accuracy

Imagine taking your GPS rover and transforming it into a super-precise measuring device that rivals a robotic total station. Or enabling your highly productive 3D-GPS+ stakeless grading systems to speed through your highest precision work. At a fraction of the cost of a robotic total station system, and without the single-user limitation.

Millimeter GPS™ only works with Topcon GPS+ systems and can be added anytime in the future. To get millimeter accurate GPS when you need it, get Topcon GPS+ today!

Combine Lazer Zone™ with GPS to achieve millimeter accuracy. Lazer ZoneTM transmitter provides wide vertical measurement area - 600m/2000ft diameter, 10m/33ft height. Simply set up your Topcon RTK GPS+ system as usual, add a PZS-1 sensor to your mobile rover, and set up the PZL-1 transmitter to get instant millimeter accurate elevations anywhere in the Lazer Zone!

- World's first millimeter accurate GPS system – up to 300% more accurate than standard GPS!
- Lazer Zone™ transmitter provides wide vertical measurement area – 600m diameter, 10m height
- Multiple rover support (machine or pole mounted)
- Works with existing Topcon GPS+ systems

At the heart of the Millimeter GPS™ system is Topcon's Lazer Zone™ technology. This revolutionary system brings together the simplicity of a rotating laser, the accuracy of a robotic total station, and the flexibility and multiple user capabilities of GPS, into one complete jobsite solution!





**#40183**

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## TOPNET G3 AUSTRALIA

The NET-G3, incorporating Topcon's new G3 chip technology, is the World's first reference receiver to provide Universal Signal Tracking – all signals from all three global satellite positioning constellations (GPS-Glonass-Galileo). Using a unique patented technology, the NET-G3 incorporates 72 Universal Tracking Channels, capable of tracking all signals from all satellite systems that are currently in use and planned for the future.

The benefit for the consumer of reference network hardware is the new NET-G3 receiver put in place today, will provide the most complete signal tracking technology available now and well into the future, eliminating the hassles of upgrading hardware as satellites signals change. With the incorporation of GPS, GPS L2C and L5, as well as Glonass and Galileo signals; Topcon offers the ultimate network receiver solution, providing the very best reference station solution for your network users.

NET-G3 FEATURES INCLUDE:
• Paradigm-G3 Chip – Triple Constellation Technology
• Super low power consumption
• 72 universal channel satellite tracking
• Superior signal tracking and performance
• 100 percent compatible with all signals for both existing and future planned satellite navigation systems

Along with the new G3 technology, the NET-G3 boasts complete system connectivity. USB, Ethernet, and four serial ports combined with an industry leading 20Hz data rate, the NET-G3 offers high speed connections both in and out of the reference station.

When used with its companion the CR-G3 choke ring antenna the NET-G3 receiver is the reference station of today and for tomorrow. Offer network users a complete signal solution – the new NET-G3 with Topcon's revolutionary G3 satellite tracking technology. All positioning constellations – all signals – all the time. Only from Topcon, the World leader in advanced positioning technologies.
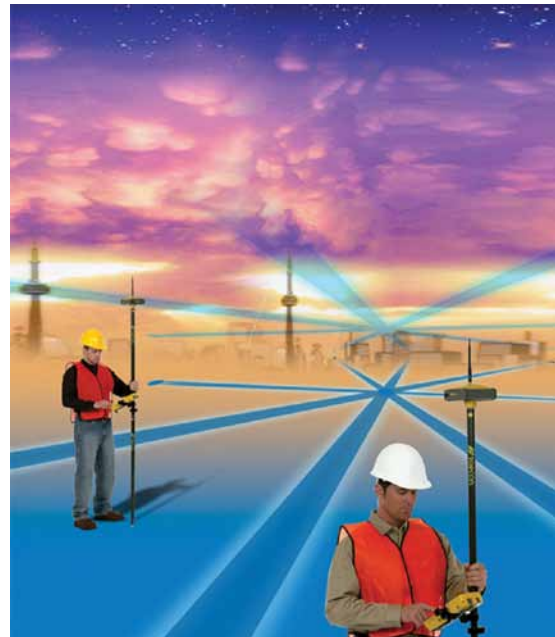




Network coverage in all capital cities, expanding into regional areas.

#40184

## TOPCON POCKET 3D

*Easy to use contractors data collection.*

Pocket-3D is comprised of powerful software programs that run on a Windows CE® platform field controller like the FC-100. Pocket-3D simplifies contractors' data collection, allowing you to to check cuts and fills, layout points and survey all or part of the jobsite better and more conveniently than ever.

With an intuitive touch screen interface, there's no need to be intimidated by dozens of buttons you will never use. Simply touch the screen to select your function and away you go.

Grade checkers and Foremen can use Pocket-3D to check grade anywhere on the site. No need to drive stakes or pull stringline. Cut/fill information is constantly displayed on the screen. One person can now control grade over the entire project for multiple machines.

FEATURES
- Instant cut/fill anywhere on the job
- Stakeout top and toe of slopes, daylight lines, centerline of roadway, kerbs and sidewalks
- Mark manholes and other structures for easy location after grading or paving
- Rough stake a project for scrapers & dozers
- Topo existing ground to verify accuracy of plans
- Topo design to ensure accurate progress payments
- Create a 3D model in the field
- Design 3D road alignment

**#40185**

## CARLSON SURVCE

The innovative Windows CE data collection software for land surveying professionals. SurvCE is a complete data collection system for Real Time (RTK) GPS and Total Stations with in-field coordinate geometry. The current version is 1.50 SurvCE supports most major brands of total stations and GPS.

FEATURES
- Raw File in RW5 format, for both Total Station and GPS
- Auto Linework in Real Time
- GEOID GDA94 (AUS) and EGM 96 (worldwide) Support for GPS
- Offset Staking and Slope Staking with Cutsheet Export
- Initialization of Static Data Collection for GPS Post-Processing, Storage of Baseline Files in Real-Time GPS Base or Rover Localization Procedure in GPS
- Display of Residuals in Multi-Point, Rover-Based localization.
- Compatible Stakeout Graphics and Procedures
- Real-Time Graphics - Points and Line-work appear on the screen in real-time as they are measured
- Command Line in Graphics, with AutoCAD-like options, including Layer Control
- Offset Stake to Pre-Defined Station/Offset/Elevation List (no "paper" in field)
- Centerlines and Profiles can be Imported from TDS/SDR/LDD Formats
- Import and Export SHP files for ESRI GIS applications
- Import and Export DXF files for AutoCAD and MicroStation
- NEW!  Raw file editor with full audit trail.
- NEW!  Localization 2 Pt Rotate Only:  This option adds the ability to localize to two points.  The first point is the fixed point for X,Y,Z, and the second point is held for rotation only.
- NEW!  Some GPS receivers now have the ability to store and recall user defined modem settings providing a simple interface for switching connections to various base stations on a GPS network.

**#40186**

# Survey
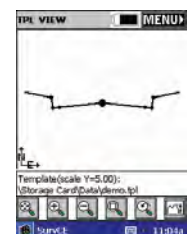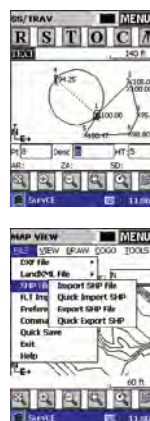
## FIELD CONTROLER

### TOPCON FC-120

If you are looking for a compact controller that provides big-time results, look no further than Topcon's FC 120. The FC-120 field controller incorporates the graphical Windows® CE operating system on a crisp, bright, color touch screen display that makes your field data come alive. This powerful operating system, combines with the versatility of dual removable media for data storage and transfer, the easy-access long-life "camcorder" style rechargeable battery and the compact design that is small on size, but not in performance. All these features make the FC-120 the perfect field controller for any job. Built-in Bluetooth® wireless technology.

- Easy access Compact Flash AND SD Media card slots
- Powerful 520MHz Intel Xscale processor, 128Mb or 256Mb built-in ROM
- Ultra-bright, TFT sunlight-active, color touch screen display
- Optional wireless connectivity to Topcon GPS & W-series total stations
- Compact size fits in the palm of your hand!

**#40187**

### TOPCON FC-200

The FC-200, designed as an integral part of the GPT-9000 series robotic total station system, is packed with the hottest mobile computing technology. Built on the latest, powerful Intel Xscale processor, operating at 520 megahertz, the FC-200 is the fastest compact field computer available! Running Windows CE. Net, the FC-200 will also allow you to run a variety of Windows-based applications. With built-in Bluetooth® wireless technology, the FC-200 provides cable-free connection with the RC-3 quick-lock system or the GR-3 GPS receiver. In addition, the FC-200 also provides wireless LAN and 2.4 GHz spread spectrum radio options like completely cable-free, ultra long-range base to rover communications.

- Optional snap in RS-1 2.4 GHz radio module
- WiFi connectivity
- Two memory options; 256MB or 512MB
- 520 MHz Intel XScale Processor
- SD and CF card slots
- USB and USB2 and serial ports
- Internal Bluetooth® technology
- Removable, Rechargeable Lithium Ion camcorder battery

**#40189**

### TOPCON FC-2500

The FC-2500 has an add-on connection on the back of the unit to control a spread spectrum radio for robotics communication. Use this connector and an RS-1 to have a cablefree radio connection to the Topcon robotic instruments. Additional packs may be possible in the future.

he FC-2500 has an add-on connection on the back of the unit to control a spread spectrum radio for robotics communication. Use this connector and an RS-1 to have a cablefree radio connection to the Topcon robotic instruments. Additional packs may be possible in the future.

The FC-2500 is rated at IP-67, which means it can be accidentally submersed in water. The unit also has a 3 foot drop proof rating.

- 624MHz XScale processor
- 5.17 megapixel camera and bar code reader
- 256Mb RAM, 2Gb ROM  (4X the competition)
- Built-in wireless Bluetooth® and WiFi connectivity
- Windows CE.NET 5.0 operating system
- Add-on robotic radio design
- 55 key alphanumeric keyboard
- 8 way directional arrow and enter key
- Easy access USB flash drive
- Accessible, rechargeable and hot swappable batteries

**#40188**

### ALLEGRO CX

The ultra-rugged Allegro CX Field PC is built to perform in the most demanding outdoor or industrial environments.

Features include a fast Intel XScale 400 MHz processor, Windows CE .Net V4.2, wireless capability with integrated Bluetooth®, and a color display option that is highly visible in direct sunlight. The Allegro CX features 62 large keys that are can be used easily with gloved hands. It weighs only 1.8 lbs. The rechargeable battery operates for more than 14 hours on one charge.

You expect ruggedness, reliability, and flexibility from the Allegro. The Allegro CX has these features and more to make field data collection even more productive.

- Ultra tough
- Powerful 400MHz Intel Xscale processor
- Full featured keyboard
- High visibility colour TFT display
- USB Dock and charging cradle
- Built-in Bluetooth® wireless technology

**#40190**

# Survey

## CIVILCAD

*Engineering design software you can trust*



**Civilcad comprises five main modules:**

- *Survey*
- *Roads*
- *Drainage*
- *Sewer*
- *Intersections*

Developed in Australia, Civilcad is a unique and powerful software application for Surveying and Civil Engineering professionals. Since its inception in 1982, Civilcad has been used extensively in Australia and internationally for topographic survey, road and drainage design, terrain modeling and volume calculations. Civilcad has been owned and developed by Topcon Australia, since 1989 and is acknowledged as one of the leading PC packages of its type.

Civilcad is used by private enterprises, surveying companies and government authorities. It allows quick and easy adaptation by the new user to the efficiency of computer aided design. For many years Civilcad software has provided the nucleus for civil design within Australia and International Surveying and Civil Engineering companies. Users have been able to utilize the extensive range of options within Civilcad and provide themselves with a valuable competitive edge.

Civilcad is supported by an extensive network of dealers.

Civilcad 6 is designed and developed for optimum use within the modern 32-bit Windows environment.

Civilcad 6 has unlimited undo and can display unlimited views simultaneously. It also allows multiple jobs to be viewed. Civilcad 6 can export various popular CAD file formats like DXF, DWG and GENIO.

The survey module uses a unique Neutral Editor for viewing and processing surveyed data. It also has a comprehensive and easy to use Properties Bar. Extensive cogo functions are available for geometric computations and data creation.

The roads module incorporates a powerful string and template design which can handle unlimited number of strings. A curve length calculator is provided to simplify vertical curve design.

The drawing editor allows creation of the drawings linked to the survey data, or roading data, enabling changes made to survey or roads data to be automatically updated in the current drawing.



#40191

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**Position** *Partners*

# decrease time – increase accuracy

**quest**

www.questestimating.com.au

## Quest Civil Estimating Systems

*Quest Estimating's automated earth-measuring and costing systems can save valuable time and help minimize the possibility of costly mistakes.*

Measure bulk earthworks and underground utilities

Measure pipeline excavation, bedding, and spoil volumes

Measure cross sectional roadworks

Measure and price civil works from digital plans (pdf or any file format)

*industries supported*

- *Bulk Earthworks* • *Roadworks*
- *Underground Utilities*
- *Demolition*

## Quest Building Estimating Systems

*Quest Estimating's powerful integrated takeoff and estimating features help estimators reduce time and decrease costly errors.*

Measure from digital plans PDF, CAD, JPEG, or any others

Measure and price as an integrated system

*industries supported*

- *Commercial* • *Residential*
- *Plumbing* • *Electrical* • *Concrete*
- *Plastering* • *Landscaping*

*Developed by contractors for contractors, Quest Estimating systems will make a real impact on your companies profits!*

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**VIC** – Dandenong **(03) 9706 9966**   **NT** **(08) 8981 1800**   **QLD** **(07) 3717 2111**   **TAS** **(03) 6398 1051**

## SLOPE METER

### SLOPE METER NO. 2 NS

Slope-Meter No. 2 NS has a larger indicator tube and larger numerical scale for easier reading with a quick glance. It is desirable for applications where the Slope-Meter is mounted at some distance from the operator. It aids the operator and speeds work on motor graders, asphalt pavers, wheel ditches, tunneling machines, and other equipment where exacting specifications are required. It is installed at the factory by three leading asphalt paver manufacturers.

**#50100**

### RIEKER SLOPE METER

#### MODEL 5012P SPECIFICATIONS

| | |
|---|---|
| Dimensions: | 8"w X 2 7/8"h X 3/8"d |
| Degree Range: | Upper ±1.5" per ft-rise grade |
| | Lower ±13% Grade |
| Degree Markings: | Upper 1/8" increments |
| | Lower 1% increments |
| Case Materials: | Black Acrylic, engraved backfilled white markings |
| Tube Construction: | Glass with black ball on white background |

**#50101**

### REIKER DIGITAL BALL BANKING DEVICE

#### RDS7-BB-C SPECIFICATIONS

• ± 25 Degree Total Range
• ± 10 Degree Factory Set Audible Alarm Trip Angle
• Adjustable Trip Angle Option Available
• LCD Display Shows Angle in Degrees
  (Optional Percent Grade or Inch per Foot Rise)
• 0.01 Degree Display Resolution
  (Optional 0.1Degree Available)
• Auto Levelling using Relative Zero Button
  (no need for a level mounting service)
• Easy Mounting for Quick Installation & Removal
• 12v Cigarette Lighter Power
• Min/Max Reading (freezes the highest Left & Right corner readings)
• RS232 Serial Output (Continuous output right to your PC Laptop)

**#50102**

### Scraper Cutting Back Slopes

The Slope-Meter can be mounted any convenient place on a scraper, that maintains a fixed "side-tilt" relationship with the cutting edge.

1. Scraper traveling empty - operator notes the Slope-Meter indicates that point "A" is high.

2. Scraper takes cut to form step.

3. By watching the Slope-Meter, the operator can cut off the step exactly on the required slope.

# Machine Control

Position Partners
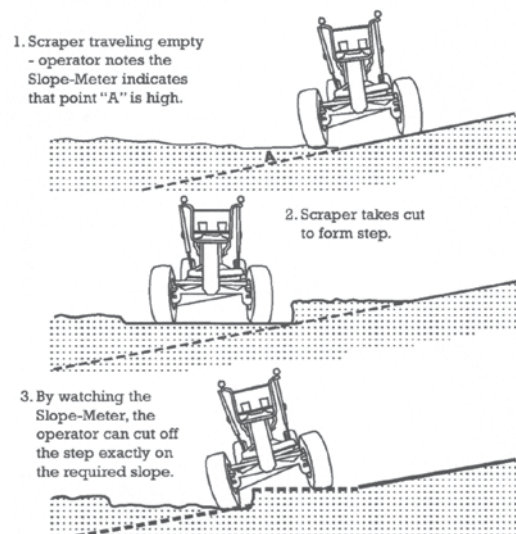
## GLOBAL POSITIONING SYSTEM (GPS)

*Welcome to the next generation of precision job site control technology!*

Imagine taking your GPS rover and transforming it into a super-precise measuring device that rivals a robotic total station. Or enabling your highly productive 3D-GPS+ stakeless grading system to speed through your highest precision work. At a fraction of the cost of a robotic total station system, and without the single-user limitation. That's the power of MILLIMETER GPS™

**TOPCON**

**MILLIMETRE GPS**™

A new dimension of precision and productivity

**LAZER ZONE**™
Rotating Elevation Measurement Laser System

**WORLD'S FIRST**

**MILLIMETRE GPS**™

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## LPS-900 MACHINE CONTROL



3D GPS+ and 3D-millimeter GPS+ systems work extremely well when machines are capable of receiving GPS satellite signals, but what happens when the jobsite does not have visibility to open sky? Working between buildings or in heavy tree coverage can limit the performance of a 3D-GPS controlled machine. In these situations Topcon's LPS-900 (Local Positioning System) is ideal.

Rather than GPS signals, Topcon's LPS-900 utilizes a high-accuracy, fast auto-tracking Total Station to maintain machine position information via machine mounted prism. As it tracks the machine/prism, the Total Station maintains exact machine position / grade information per an internally loaded digital site plan. Grade adjustments are then transmitted to the machine 20 times per second via radio from the Total Station. It's simple, reliable, and the perfect alternative when GPS reception is limited. Compatible with Topcon's machine mounted GPS grade control components, it's a quick and easy change to swap LPS for GPS and keep productivity to a maximum.

Based on our popular 900/9000 robotic total station platform, the LPS-900 offers high accuracy position control over your entire site, to within a few millimeters. Topcon's new robotic total stations utilize the patented XTrak technology to track machines at speeds up to 35 MPH. Machine and blade position is updated 20 times per second, fast enough to meet the tightest jobsite specs. This speed and accuracy makes difficult and complex sites easy to grade.

Switching existing GPS+ systems to LPS-900 is simple. Put up the total station on a control point, place a 360° prism on the vibration pole and a radio in the MC-R3 and you're ready to go to work. The robotic total station locates the 360° prism and sends the X, Y, Z position of the cutting edge to the machine via radio link. The operator can now work as before, but with very high accuracy. Obstructions to the sky no longer hinder your work or slow you down. Whatever the conditions are at the job, Topcon LPS-900 can help you get it done fast and accurately.

### FEATURES
- Topcon Xtrak prism tracking technology
- 20Hz update rate
- Long range 2.4Ghz interference free radio communications
- GX-60 control box runs LPS, GPS and all 3D controls
- Visual graphic on display for acquiring lost beam

### BENEFITS
- Insures all your jobsites have 3D control 24/7
- High accuracy for tight tolerance projects
- Simple & fast conversion between LPS and GPS
- Same robot used with Pocket 3D as layout/grade checking tool

### FOR USE WITH MOTOR GRADERS AND BULLDOZERS
LPS-900 - an EASY upgrade to Topcon's G63 Motor Grader and Z63 Bulldozer 3D GPS+ systems

Topcon's LPS-900 grade control system is a seamless upgrade to Topcon's 3D GPS+ based G63 Motor Grader and Z63 Bulldozer grade control systems. G63 / D63 3D-GPS+ systems feature:

Topcon's G63 and Z63 3D grade control systems feature the most advanced Operator interface available, Topcon's GX-60 touch sensitive control box. Light and compact with a full-color LCD touch sensitive screen, Topcon's GX-60 is a fully functioning Windows® computer that provides the operator with real-time grade information and control. Constructed of a strong cast housing and sealed internals, the GX-60 will be a refreshingly simple alternative to other operator interfaces.

### GX-60 CONTROL BOX FEATURES INCLUDE:
- 512 Mb Internal Compact Flash Drive
- 650 MHz Intel CPU
- Windows XP Operating System
- USB, Ethernet, RS-485, CAN, and RS-232 ports
- Sealed Housing with Gortex Vent
- Audio Speaker
- Internal Backup Battery
- Ambient Light Sensor for Sharp Contrast on the Display
- Bluetooth® Wireless Technology

### MC-R3 – MACHINE CONTROL RECEIVER 3
Topcon's MC-R3 houses the LPS-900 controller and radio board in a built-to-last housing. Providing either solid brackets for permanent mounting or magnetic mounting for portability. A built-in MINTER panel provides status lights and function keys for easy performance verification and system checks. The MC-R3 can be easily upgraded to add GPS capabilities providing the utmost in system upgradability.



#50107

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# Machine Control

## 3D MACHINE CONTROL - GLOBAL POSITIONING SYSTEM (GPS)

*It's here, and it's only from Topcon... GPS Automatic Grade Control for dozers! 3D-GPS is the World's First and Only automatic site-plan-based global positioning system.*

*Based on Topcon's industry-leading LPS system, 3-Dimensional Machine Control, 3D-GPS works seamlessly with your existing System Five components, making rough grading directly from site plans easier than any other system available:*

### UPGRADING TO 3D-MC GPS:

Getting started with 3D-GPS is easy. The 3D-GPS base station is set up over a known control point on the site where it remains for the duration of the job, unlike lasers that often have to be repositioned as the job progresses. Because it never needs to be moved from it's initial location, the errors associated with base station setup are minimized. The base station data is always available to send precision grade corrections to the machine with 3D-GPS.  Outfitting the machine with its appropriate components is easy. Before you know it, you're working with automatic GPS control!

### HOW DOES IT WORK?

It's simple... Satellites send positioning data to the GPS antenna/receiver combination at the base station and to the GPS antenna/receiver combination on the machine. Each antenna receives its own positioning data and, in order to maintain accuracy, the base station sends its positioning data via a radio antenna to the machine to be controlled. At the machine, the data is processed to accurately provide the GPS computer the real-time position of the machine in three dimensions. This positioning data is updated ten times per second and, with the engineers' digital site plans, controls the blade of the machine for elevation and slope automatically!

### WHY UPGRADE?

3D-GPS is not only accurate to plus or minus 20mm, but it's also an incredible time saver! Because it uses System Five's valve control, it's fully automatic without installing extra components. There's virtually no staking or re-staking required because 3D-GPS works right from site plans and satellite positioning data. And unlike laser control, 3D-GPS allows the use of multiple machines even on hills, with just a single base station. Plus, you're free to move thousands of feet from the base station and still receive grade corrections via the radio antenna. No headaches! Just fast, automatic grade control!

*Control Box*

*360° Tilt Sensors*

*GPS+ Antennas*

*GPS+ Receivers*

#50108

## TOPCON 2DXI/2DXE AND 3DXI/3DXE

### Advanced grade indication for excavators

The new 2DXi solution for excavators is an affordable basic system that can quickly and easily be upgraded to full 3D GPS+ control. In this system, core sensor infrastructure is installed, allowing an excavator to work in a variety of everyday grading applications. 2DXi can be used for cutting slopes, excavating trenches for utilities as well as digging footings and basements. The easy-to-learn, easy-to-use 2DXi system includes the GX-60 touch screen graphical display and four 360 degree tilt sensor all connected via a CANBus configuration. An optional LS-B10W laser receiver can be added to provide a constant elevation benchmark for the machine when it moves to a new position.

With a simple password, the 2DXi can be quickly upgraded to a 3DXi-GPS+ indicate control system, to work off a digital site model increasing productivity even further. 3DXi allows the user to receive multi-constellation signals - GPS and GLONASS - for maximum signal reception in all conditions. In the new 2DXe system, Topcon offers a high-performance, low-cost option that is ideal for large or small excavators and backhoes for use in applications where basic indicate control is all that is needed. The 2DXe offers the same level of reliability contractors expect of Topcon products at a more economical price. This system consists of four tilt sensors, the new GX-40 graphical display and a detachable light bar for grade indication. In place of a touch screen display, the GX-40 display offers a high level of functionality using easy-to-read keypad buttons. Topcon's 2DXi and 2DXe systems represent a giant leap in excavator grade indication. The systems are built to withstand the harshest construction environments and designed to be user friendly and flexible enough to apply to even the most difficult jobs. The benefit of a 2D system, Lodge said, is you'll eliminate over-excavation, plus control material usage which will save time and money. That's possible because 2D gets you to grade fast and keeps you there, even in deep, blind-cut situations or even digging under water. With the new systems the operator can 'see' bucket position at all times, he said. "Final grade, and the distance of the bucket teeth from it, is clearly displayed, allowing total control in every job situation.





**Create and cut complex designs – another Topcon World's First!**
Multi-section on jobs just got a whole lot faster and easier! Topcon's X42/X62 lets the operator create complex designs involving several different elevations and slopes, and execute them continuously from a single reference. No more re-setting for each cut, or re-establishing a reference point when you move the machine.
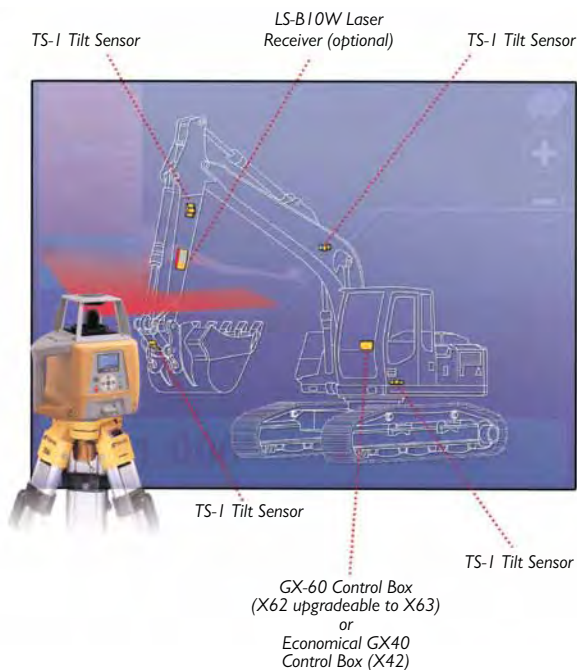


**LS-B10W Laser Receiver**
• Small, lightweight design
• 270° detection
• Rugged and waterproof
• CAN support
• Bright indicator lights
• Magnetic mount: use anywhere



**TS-1 Tilt Sensor**
• Environmentally sealed
• No moving parts
• 3-axis, 360° sensor
• CAN port interface
• 0.01 degree resolution



*TS-1 Tilt Sensor*

*LS-B10W Laser Receiver (optional)*

*TS-1 Tilt Sensor*

*TS-1 Tilt Sensor*

*TS-1 Tilt Sensor*

*GX-60 Control Box (X62 upgradeable to X63) or Economical GX40 Control Box (X42)*



**#50109**

## MACHINE MOUNTED LASER RECEIVERS

### TOPCON LS-B10 MACHINE CONTROL RECEIVER

The LS-B10 laser receiver delivers a versatile, low cost indicate solution for grade checking and machine control grade applications. Compact and light weight, with an integrated magnetic mount . The LS-B10 can be easily installed on a vast array of machines, and with its small, lightweight design, the LS-B10 with Holder-6 is excellent for manual grade checking too!

The LS-B10 provides cost-effective solutions for grade control on small machines such as backhoes, mini-excavators, skid steer loaders, and other compact equipment. The LS-B10 features a magnet mount for quick attachment when used on equipment or can be combined with the optional holder for use on a grade rod.

**#50103**

### TOPCON LS-B10W MACHINE CONTROL RECEIVER (Bluetooth® Wireless – Remote Display Compatible)

The advanced LS-B10W offers built-in wireless technology and CANopen (Controller Area Network) connectivity to provide the ultimate in communications flexibility. The new RD-10W in-cab remote display brings grade information via wireless link in front of the operator – where it is needed most.

| | |
|---|---|
| LS-B10W | **#50104** |
| RD-10W | **#50105** |

## TOPCON LS-B100 SERIES MACHINE CONTROL RECEIVER

### LS-B100

Looking for a great value on a Laser Sensor for your earth moving machines?

Check out the LS-B100. Fast to set up and easy to use, this affordable depth control sensor can be mounted to your equipment and working within minutes. This unit is packed full of features such as an Accuracy Mode and Battery Life Indicator. Plus, it has a Power Save/Auto Cut Off function to save your battery life.

The LS-B100 is a low-cost grade indicate solution that makes any operator more productive.

### LS-B110

With the added Slope and Plumb Indicators, your grading and excavating accuracies are tighter than ever with Topcon's LS-B110.

Plus, the new LS-B 110 enables you to offset the "on-grade " position with one touch. This gives you an even greater working range.

Compatible with Topcon's family of Control Boxes for all your earth moving equipment the LS-B110 can also be used in "automatic" mode to hydraulically control the elevation and/or the slope of the cutting edge. This takes your production and materials savings up to a whole new level.

### LS-B110W (Bluetooth® Wireless)

The LS-B110W is a Laser Sensor with a Wireless Remote Display. It is loaded with all the time saving features as the other LS-B units and also perfect for your larger machines where the Sensor is out of view. This equipment offers the total solution in grade management. With the one touch "On Grade" matching, MC automatic capability and built-in Plumb and Slope Indicator, you can't go wrong.

Put the LS-B110 W on your Dozer, then move it to your Scraper and then onto your Excavator. This equipment does it all on virtually all your machines.

**#50106**

# Machine Control

## TOPCON 3D-MC² DOZER CONTROL

### TWICE the Speed, TWICE the Accuracy, over any 3D Machine Control Dozer

- Increase Speeds Up To 200% Over Existing 3D Systems
- Smoothness and Grading Accuracy Comparable to Motor Graders
- Same Easy-To-Use Interface As Previous Topcon Machine Automation Systems
- Unmatched Productivity That You Will Have To See To Believe


Conventional D System


New 3D-MC² System

Radio Antenna   GX-60 Box   MC-A1 Antenna



Hydraulic Valve   MC-R3 GPS Receiver   MC² Sensor

### HOW IT WORKS

3D-MC2 utilizes our Topcon's GX-60 control box, GPS + antenna, MC-R3 receiver and new MC2 sensor and pairs them with advanced new controlling software to provide position updates up to 100 times per second. The MC2 sensor combines a gyro, compass and inertial sensor to measure the X, Y & Z position as well as the roll, pitch, yaw and acceleration of the dozer. 3D-MC2 is essentially using rocket science to provide the most stable and responsive control system possible.

### IMPROVED OPERATOR PERFORMANCE

3D-MC2 is built on our same easy to use interface so your operators will have no problem putting it to work right away. As a matter of fact, with the advancements of 3D-MC2 your less experienced operators will be able to compete with even your most skilled operators. More for less, what could be better.

### TOPCON 3D-MC2 ADVANTAGE

Fine grading with a dozer has been typically done in first gear. Not anymore. Now you can move more material at higher speeds and at a tighter accuracy with one machine. That's the Topcon advantage.

#50110

FOR ALL ENQUIRIES CALL: **1300 867 266**

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# Machine Control

## TOPCON PAVER SYSTEM FIVE MACHINE CONTROL



Topcon's reliable Paver System Five is designed to make your job faster and more profitable. Utilizing the best that technology has to offer, System Five is a single-function machine control platform featuring the latest operator interface and proportional valve control technologies.

Sound complicated? Don't worry, System Five is not only the most advanced automatic screed control system, it's also exceptionally operator-friendly.

Topcon's patented Sonic Tracker IIs™ emit sound pulses and record the time it takes for an echo to return after striking a reference marker such as a curb or stringline. The easy-to-use control box then receives that information and displays it to the operator with bright LED indicators. In one quick glance to the control box, the operator knows if the machine is on grade, freeing him to concentrate on production and safety.

System Five is also highly upgradable with Smoothtrac and 3D-MC. The Smoothtrac Sonic Averaging System (SAS) offers users the ability to pave continuously and accurately with the world's first non-contacting ski.  With 3-Dimensional Machine Control, System Five steps into the future with high-speed, high-precision, site-plan-based machine control. When you start with Paver System Five, you start with the confidence that as you company's needs grow, so can your paving system.

**#50111**

## TOPCON 2D GRADER SYSTEM FIVE MACHINE CONTROL





Topcon's revolutionary Motorgrader System Five gives you the advanced automatic machine control technology needed for a competitive edge in today's market.

Operators don't want a system that's hard to learn or a hassle to use. That's why Topcon's System Five features a control box with an easy-to-use icon-based interface for superior machine control with less effort. The large graphic LCD screen is even simple to train so that even novice operators can work like experts. Push-button control and on-screen help also add to the simplicity of it's operation. You can even program up to three memory settings for fast setup.  Best of all, System Five's control box is laptop programmable so you can update or revise the software in the field.

System Five also features a host of innovative Topcon technologies to help your production rates soar. It puts operation at your fingertips with remote "Smart" Switches for convenient multi-function control. The durable 100% capable slope sensor is 4 times more slope capable than the competition, and it's level vial provides a better response than ever. High resolution Sonic Tracker IIs™ provide accurate tracking from virtually any reference. Even the hydraulic valve is improved with a high flow hydraulic rate that allows a fast, precise response to even the smallest grade corrections. Automatic control doesn't get any better than this!
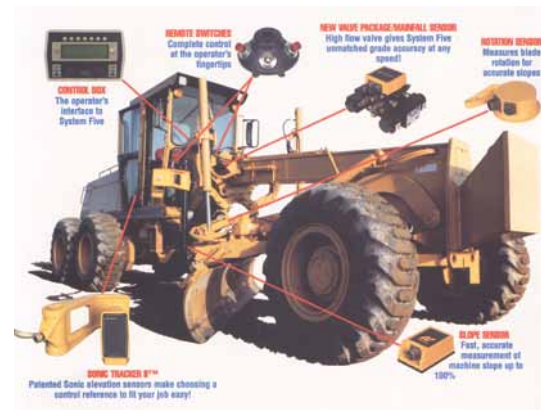
Whether working on flat or sloped pads, roads, or airports, System Five gives you the tightest material control for reduced grade costs and improved productivity. But what you might not know is that System Five is also fully compatible with Topcon's 3-Dimensional Machine Control system. Using System Five and 3D-MC, your business will be ready today for the future of machine control.

*System 5 control box*

**#50112**

# Service & Training

## OUR SERVICE CENTRES



*Our factory trained technicians offer the highest standard of service facilities for your laser and surveying equipment. We repair most makes and models and guarantee all our work.*

Calibration certificates are supplied to meet your QA requirements.

We service and repair all brands of lasers, dumpy levels, theodolites, total stations, and all well known brands of machine control.

We have fully qualified service technicians experienced in the repair of: Mikrofyn, Topcon, Spectra-Physics, Pro-Shot, Laser-Alignment, Sokkia, Leica, MCE and Stoltz – just to name a few.

Our service centres are backed up by field service representatives and a fully maintained hire fleet to minimise down time whilst your equipment is being serviced. In addition to this, we provide reliable telephone support to help assist in solving simple problems immediately, saving you time and money.

### 10 SERVICE TIPS FOR EVERY DAY USE

- Check calibration before the start of each job
- Encourage employees to report any damage
- Engrave your name and driver's licence no. on the instrument
- Never put a wet instrument back in its case
- Remove batteries before long periods without use
- Always use 'alkaline' or re-chargeable batteries
- Record serial numbers in a safe place
- Wipe lenses and glass with a soft cloth
- Close the lid of the carrying case when instruments are in use
- Bring in your instrument for service at least once a year

*It's also a nice chance for us to make you a coffee!*

## TRAINING
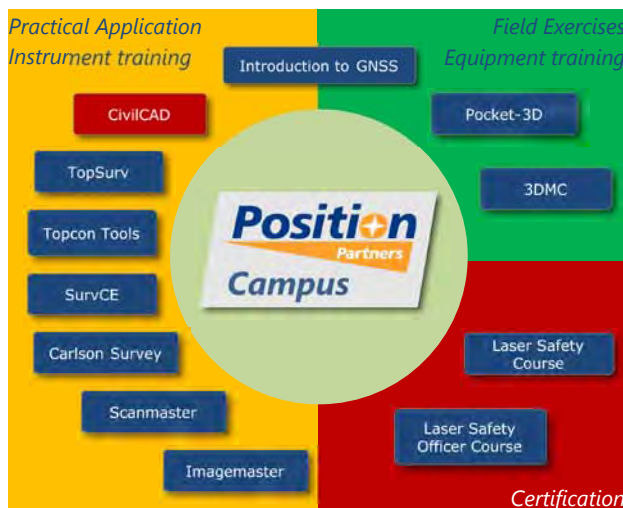


*We offer the most comprehensive classes on all aspects of Topcon equipment and allied software. With the continuous changes affecting our industry we pride ourselves on providing the courses that maintain our users' competitive advantage.*

Our trainers have experience in all aspect of survey applications, as well as GPS/laser controlled systems. Our experience also include digital file preparation for machine control applications, site control and construction stakeout. We seek out the best training for our trainers with certification courses that assist in our supplying quality courses to our students. Our campus also provides certification courses for laser use and management within Australian Standards AS2397 and AS2211.

### WE INSTRUCT IN:

- Skills and techniques for project works
- Process methods for data management
- A wide range of software, equipment and instrument courses.

Position Partners develops most of its own course notes and course structures. The bases of a few of courses are developed from our partner material and adapted for our Australian conditions. Using a review process, our campus courses are being continually evaluated by our students. Change is inevitable and our courses are constantly evolving with the changes in methods and market needs. We recommend our courses to our clients with pride.

FOR ALL ENQUIRIES CALL: **1300 867 266**

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WA — stadia instruments

NSW — LASERQUIP

SA / NT — ROSS INSTRUMENTS

Your Partner in Productivity

TOPCON — Australian Distributor

## Position Partners

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(formerly Ross Instruments)

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Office Location: 483 South Road,
Regency Park, SA 5010

**Phone: (08) 8346 1180**
Fax: (08) 8346 1140

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Mailing Address: PO Box 343,
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Office Location: 17 Learoyd Rd,
Acacia Ridge, QLD 4110

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Fax: (07) 3717 2121

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**Phone: (02) 9898 0066**
Fax: (02) 9898 0070

**TASMANIA**

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Fax: (03) 6398 1057

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