



# Rugged, reliable and easy to use. A pipe laser for tough use.

The AC 1 is developed for the toughest of laser applications - pipe laying. It has a shock proof and water tight metal housing.

It features a fully built-in battery with a very long operating life from each charge. The large control panel and the long range, visible laser beam makes the AC 1 easy to use. Unique automatic functions enable very fast and accurate setup.



## Pipe laying - a tough application

The AC 1 is engineered to withstand heavy wear during many years of hard use. The housing is manufactured in aluminium. Even the remote control is made out of metal, water proof and rugged.

The battery is completely enclosed to avoid problems with leakage and poor contact found with interchangeable battery packs, or inconvenience with external power cables.

### Ease of use

The AC 1 is designed for easy operation. The laser beam is clearly visible and workable over a range of up to 200 m. Push button symbols and commands are logical and easy to understand. Advanced functions that make operation easier for the experienced user, are hidden and will not distract the inexperienced user.

The display is large and legible, and it is angled upwards to be easily read from above. Its back light can be operated from the remote control to make the display visible in poor light.

The AC 1 has a large battery capacity. A full 7 hour charge will give well over a working week's operation. In emergency cases, 30 minutes of charge will give you a full day's use. The AC1 can also be powered off an external battery.

# **Quick set-up**

The AC 1 is quick and simple to set up for a new job.

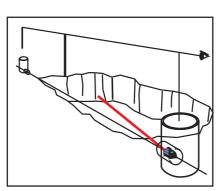
The laser beam travels fast. It will rarely take more than 10 seconds from power on to full accuracy. This means fast set-up.

The AC 1 can be placed in the pipe with a large cross-axis tilt (+/- 3°). The grade is automatically compensated to full accuracy. This makes it easy to get the laser in place even in tricky positions.

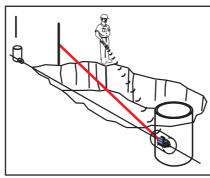
The automatic plum line beam travel enables you to side align the beam at any height. The beam will always travel vertically, even if the laser is placed with a large cross-axis tilt angle. You can place a stave on the edge of the trench in line with both manholes, pull up the beam with the remote control (up to 40% grade) and side align the beam onto the stave. Thereafter you let the beam go down to the working grade - the AC 1 keeps the side alignment accurate.

### **Specifications**

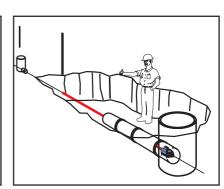
Specifications	
Laser source:	Laser diode
Wavelength:	635 nm
Laser safety class:	Class 3R
Range:	200 m
Beam diameter @ 100 m:	15 mm
Accuracy	+/- 5mm at 100m
Side alignment range:	20 m at 100 m
Levelling range in beam direction:	+/- 10°
Grade range:	-10% to +40%
Grade increment:	0.002% per step
Cross axis tilt range:	+/- 3°
Automatic tilt compensation:	Compensated to full grade accuracy within cross axis tilt range
Vertical beam travel:	Optional, alignment error <60 mm at 100 m over 10% grade travel within cross axis tilt range
	0000 1 5000
Operating temperature:	-20°C to +50°C
Operating temperature: Sealing:	Waterproof, sealed, purged with nitrogen
	Waterproof, sealed, purged with
Sealing:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7
Sealing: Power source:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions
Sealing:  Power source:  Battery life, full charge:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h
Sealing:  Power source:  Battery life, full charge: Charging time:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases
Sealing:  Power source:  Battery life, full charge: Charging time: Stand by function:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases battery life per charge
Sealing:  Power source:  Battery life, full charge: Charging time: Stand by function: Length:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases battery life per charge 295 mm
Sealing: Power source: Battery life, full charge: Charging time: Stand by function: Length: Diameter:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases battery life per charge 295 mm 147 mm
Sealing:  Power source:  Battery life, full charge: Charging time: Stand by function:  Length: Diameter: Weight:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases battery life per charge 295 mm 147 mm 4.5Kg
Sealing:  Power source:  Battery life, full charge: Charging time: Stand by function:  Length: Diameter: Weight: Remote control:	Waterproof, sealed, purged with nitrogen Built-in NiCd. Life more than 7 years normal conditions 80 h 7 h From remote control,increases battery life per charge 295 mm 147 mm 4.5Kg Waterproof, metal housing • Side alignment • Display backlight • Stand by, on/off



1. Put a stave in line with manholes on the edge of the trench.



Pull up the beam with the remote control and side align onto the stave.



Let the beam go down to working grade - the beam is side aligned.

