



Automatic  
Construction Level

# **GK0A** **THE RUGGED** **ONE**



# Stands Up Under Punishment

The Kern GK0-A is ruggedly built so that it can withstand shock and vibration without affecting its operation. This toughness is due to:

**Compact Die Cast Housing of High-Strength, Corrosionproof Light Metal**

**Objective Protected by Extension of Housing**



**Strongly Built Eyepiece**



**Bull's-eye Level Mounted within the Housing**

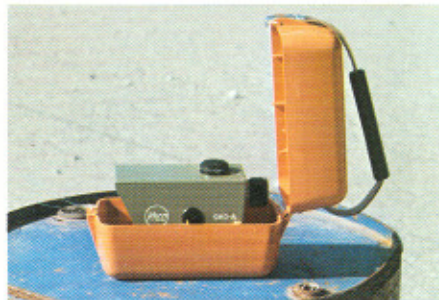
This level is easily observed from above and from the eyepiece end even under poor lighting conditions.



**Built-in Horizontal Circle protected from damage and from dirt.**

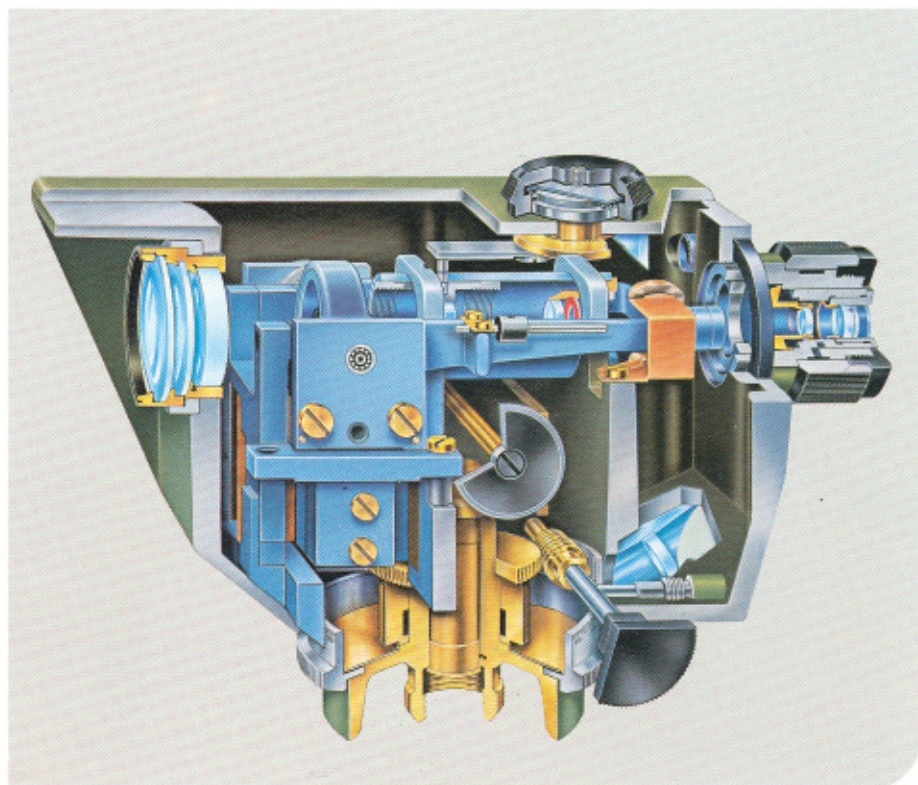
**Robust Carrying Case**

The case is made of an especially tough plastic, Makrolon, and has a vivid orange color.



## **Ball Bearing Pendulum Compensator**

The compensator which dispenses the observer from the leveling of the line of sight before each rod reading is supported, not by sensitive metal strips or wires, but by a strong precision ball bearing on a steel axis. Shock and vibration, even falls, do not harm the GK0-A compensator.





# Simple and Reliable in Operation

The Kern GK0-A is so simple to use that even inexperienced observers quickly become familiar with the instrument and obtain reliable results from the beginning. The convenient operation and high reliability of the GK0-A are due to the following features:

## Jointed-head Principle without Footscrews

This construction feature is common to all Kern levels. It provides a very stable setup and is unexcelled in the simplicity and rapidity of the preliminary leveling of the instrument.

1. Place instrument on the tripod head and secure with the fastening screw



2. Shift the instrument over the spherical surface of the tripod head until the bull's-eye level is centered



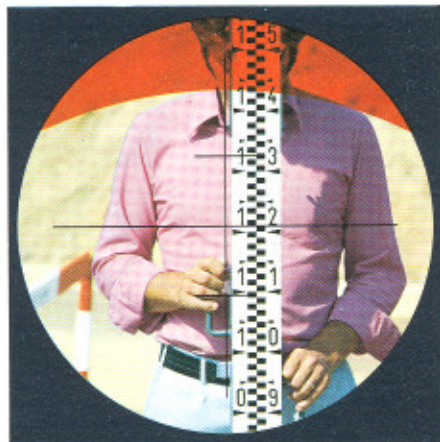
3. Tighten the fastening screw.



## Extremely Large Working Range of $\pm 30'$ for Automatic Leveling of Line of Sight

### Automatic Operating Control

When the compensator reaches either limit of its working range, a red warning diaphragm appears at the upper or lower edge of the telescope field of view. It says: "Stop! Before continuing to level you must relevel the instrument".



### Upright Telescope Image

The telescope is exceptionally achromatic and produces a sharp, high-contrast image. All optical parts have an antireflection coating on both sides.

### Friction Coupling and Horizontal Slow-motion Screw

The usual clamping screw is replaced by a friction coupling. The horizontal slow-motion screw may be operated with the left or the right hand.

### Endless Focusing Drive

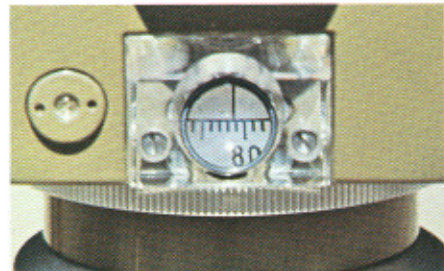
Whether the focusing screw is turned right or left, the image will be in sharp focus within a half turn.



# Versatile in Application

### Horizontal Circle

For measurement and lay out of angles the GK0-A is optionally available with a  $360^\circ$  or  $400$  gon horizontal circle and a reading magnifier (Model GK0-AC).



### Cross Sight

Instruments without horizontal circles are equipped with an optical square. Horizontal sights at right angles to the line of collimation may be taken to either side.



**Shortest Focusing Distance: only 2.5 ft.**

### Adapter Plate Available for Use on Kern Centering Tripod

### Kern GK0-A, the Ideal Automatic Construction Level

The rugged construction, the simplicity of the preliminary leveling, the upright telescope image and the compensator with warning diaphragm are features that make the GK0-A the ideal construction level for:

- Vertical control on work above and below ground
- Profile leveling and cross-sectioning
- Grading, surveys in flat terrain



Checking measurements at the natural gas pipeline Netherlands-Italy



Leveling on a runway under construction at the Zurich Intercontinental Airport



Kern & Co. Ltd.  
CH-5001 Aarau, Switzerland  
Optics, Electronics,  
Precision Mechanics  
Telephone 064 26 44 44  
Telefax II/III 064 24 80 22  
Telex 981 106

### Specifications

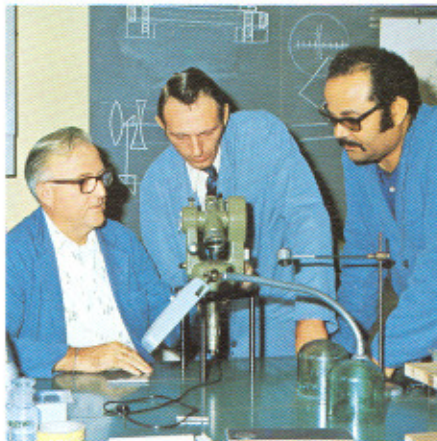
Mean error  
in 1 km (double run)  $\pm 0.008$  ft./2.5 mm  
Telescope magnification 21  $\times$   
Objective aperture 1.2 in./30 mm  
Shortest focusing  
distance 2.5 ft./0.75 m  
Diameter of field at 1000 ft. 30 ft.  
Stadia multiplication constant 100  
Stadia addition constant 0  
Sensitivity  
of bull's-eye level 20' per 2 mm  
Compensator working range  $\pm 30'$   
Compensator centering precision  $\pm 3''$   
Weight of instrument 4.2 lbs./1.9 kg  
Weight of carrying case 1.8 lbs./0.8 kg  
Dimensions of carrying case  
10.2  $\times$  5.9  $\times$  4.7 in./26  $\times$  15  $\times$  12 cm

### Details for Ordering

**L**evel GK0-A with cross sight in plastic carrying case with tool set  
**L**evel GK0-AC with horizontal circle 360° or 400 gon in plastic carrying case with tool set  
**T**ripod 150B with telescoping wooden legs painted a vivid orange  
**T**ripod 150A with fixed wooden legs painted a vivid orange  
**A**dapter plate No. 112.290.4001 for setting the GK0-A on all Kern centering tripods  
**S**etting and leveling rod No. 1, length 3 m, 4 m and 5 m  
**L**eveling and stadia rod No. 5E, folding, length 3 m and 4 m  
The complete line of leveling rods is described in Prospectus No. 106e

### Worldwide Kern Service

The proverbial reliability of Kern instruments is ensured by the dependable service offered by our foreign representatives. They maintain efficient repair facilities, staffed with factory-trained personnel and backed-up by an adequate supply of spare parts.



### Manufacturing Program

For more than 160 years Kern has manufactured surveying instruments and drawing equipment that have an outstanding reputation in all parts of the world. The present manufacturing program includes:

- Levels
- Optical-mechanical and electronic theodolites
- Reduction tachymeters
- Electro-optical distance meters
- Industrial measuring systems
- Computer-aided systems for surveying and photogrammetry
- Photogrammetric equipment
- Lenses for motion pictures and still cameras
- Binoculars
- Optical instruments for military use
- Special optical equipment

We reserve the right to make changes in keeping with technical developments.  
140e 6.87.ER Printed in Switzerland

