SCALEX®

●PlanWheel™

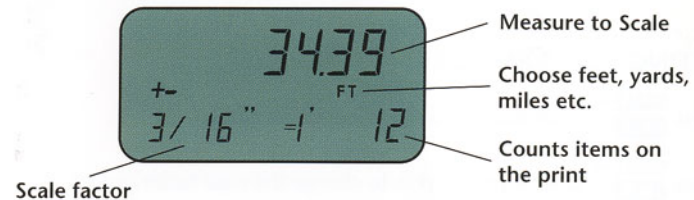## Instantly measure plans in any scale!

Ready to Use

Includes 2 AAA Batteries and Instructions

One Year Limited Warranty

SCALEX®

●PlanWheel™

The Scalex Plan Wheel is easy to use:

❶ Select the scale factor to match your plans.

❷ Roll the wheel on the plans and read the measurement.

```
        34.39          — Measure to Scale
+ -            FT       — Choose feet, yards, miles etc.
3/ 16" = 1'      12     — Counts items on the print
```

Scale factor

- 52 built-in and 3 user-defined scale factors. Includes all common architectural, engineering, mapping and metric
- Measures in feet, yards, miles, inches, kilometers, meters and centimeters
- Calculates square and cubic dimensions for regular areas and volumes
- Counter and adder buttons on probe tip let you count items or add fixed lengths as you scale
- Calculate auto-scale factor from reduced, enlarged or odd-scale drawings
- Create, store and retrieve 3 user-defined scale factors
- Clear, audible tone indicates wheel movement
- Automatic shut-off assures long battery life
- Low battery indicator

ASSEMBLED IN MEXICO

SPECIFICATIONS

Accuracy: ± 0.25%
Resolution: 1.0mm (.04")
Batteries: 2 x AAA (included)

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www.scalex.com   7010010D

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Protective Plastic Case

Scaler not included

Protect your investment today with its own hard plastic protective case. Purchase this accessory case and help ensure that your scaler is ready for work when you need it!

WARNING: This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class "A" digital device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user, at his own expense, will be required to correct the interference.

Changes or modifications not expressly approved by SCALEX CORPORATION could void the user's authority to operate the equipment.

Scale-Link™
Computer-Input Plan Scaler

Automatically scale dimensions into virtually any software program!
Just roll the wheel of the Scale-Link scaler along your print and automatically transfer measurements into any Windows software program. Works with spreadsheets such as Lotus 1-2-3, Excel, Quattro-Pro and all estimating programs.

Make error-free measurements with Scale-Link.
Scale-Link saves you thousands of keystrokes and many hours previously wasted through manual input. Not only do you save valuable time, but transposition errors become a thing of the past.

Scale-Link software is easy to learn and use.
The Scale-Link scaler includes all the same features as Plan Wheel, so you already know how it works. In addition, the intuitive software makes using the Scale-Link scaler even easier.

Scale-Link comes complete!
Everything you need to scale dimensions into your software program is included: Scaler, Cable, Software, Protective Case, User's Guide and Batteries. Connects to a serial port.

Scalex Corporation
Sales (800) 653-3532 Product Support (800) 653-5016
Fax (760) 438-5539

CHANGING THE ADDER CONSTANT

If necessary, press **UNITS** ⊙ to select the units for the new constant.

Press and hold **ADDER** ← **K** for two seconds. The left-most digit of the constant will begin to flash.

The new constant may now be entered. (See ENTERING NUMBERS.)

MEASURING AREAS AND VOLUMES

The Plan Wheel can be used to measure regular area or volume. Regular measures are those with straight, perpendicular sides.

To Measure Area

Set the scale factor and roll the Plan Wheel as usual along one side of the rectangular area to be measured.

Press **SQ/CU** ↑. The square measure symbol (⊡) will begin flashing ❾.

Roll the wheel along the other side of the rectangle. The Plan Wheel will display the resulting area.

To Measure Volume

Scale the area shown on the plan as described above.

Press **SQ/CU** ↑ a second time. The cubic measure symbol (⊡) will flash ❾.

Roll the wheel over a distance equal to the height. (Since most drawings are flat plan layouts, it may be necessary to draw a small line equal to this distance.) The Plan Wheel will display the resulting volume.

To cancel the square or cubic measurement entirely or to start over, press **SQ/CU** ↑ to cycle back to normal operation.

ENTERING NUMBERS

When one digit is flashing on the Plan Wheel display, you are ready to enter a number according to the blue symbols:

← Move flashing digit one to the left.
→ Move flashing digit one to the right.
↑ Increase flashing digit.
↓ Decrease flashing digit.

When the number is correct, press **UNITS** ⊙. The Plan Wheel will return to normal operation.

Or to cancel, press **CLEAR** ⊘. The Plan Wheel will return to normal operation without entering the new value (the old value is kept).

METRIC MEASUREMENTS

While holding down **CLEAR** ⊘, press **UNITS** ⊙ to select the desired indicators ❼:

MI YDS FT IN	Standard indicators.
KM CM	Metric indicators.
MI YDS FT IN KM CM	Both.

After you release **CLEAR** ⊘, press **UNITS** ⊙ to select the units you want.

OPERATING YOUR PLAN WHEEL

Remove the two AAA batteries from the battery compartment. Take off the plastic wrapper and re-insert them into the compartment. Observe polarity.

The Plan Wheel automatically shuts off if it is not used for about seven minutes.

Turn the Plan Wheel on again by pressing any button. The display will contain all the same information, including the same scale factor, as when it was last used.

Battery life depends on many factors such as the type of battery and the temperature. Expect about 100 to 400 hours of operation (on-time) from one set of batteries. The batteries will last about 2 to 6 months in a Plan Wheel which is turned off.

When the batteries get low, the low battery indicator flashes ❺. Replace both batteries at the same time. Observe the correct polarity as shown inside the battery compartment.

The Plan Wheel requires no maintenance. However, you should keep the wheel clean and free from dirt. Check the correct operation of the Plan Wheel occasionally by rolling it over a known distance.

If you store the Plan Wheel for an extended period, remove the batteries.

MAKING A MEASUREMENT

If necessary, press **UNITS** ⊙ to select the units of readout, such as miles, yards, feet, or inches ❼.

Press **CLEAR** ⊘ to zero the measurement.

The tip of the Plan Wheel is pointed to make it easier to take accurate measurements. Roll the wheel along the plan and read the measurement on the Plan Wheel display ❽.

If you scale a distance which is too large to display, the display will show all dashes (------). In this case, you may be able to recover the measurement by switching to a larger unit, for example from feet to yards.

SENSE BUTTON

Press **SENSE** ↓ to change the way the scaler adds length ❸:

+ - Add in forward, subtract in reverse. (If you scale past the end, simply back up.)

+ Add in both directions. (Scale in any direction.)

- Subtract in both directions.

BEEPER

The Plan Wheel beeps when you roll it. The beep is slightly longer when adding length and shorter when subtracting.

To turn the beeper off, hold down **CLEAR** ⊘ and press **SQ/CU** ↑.

Repeat to turn the beeper back on.

Rugged Roller Wheel for Accurate Measurement

Beeper

3 Sense

Square/Cubic Indicator
9 (not shown)

8

Scaled Measurement

7

Units of Measurement

6 Counter

5 Low Battery Indicator (not shown)

4 Scale Factor

1 +1 Count Button (far side)

2 +K Add Button (far side)

SETTING SCALE FACTORS

Press **SCALE→ X:Y** . The scale factor **4** will begin to flash.

Press **SCALE→ X:Y** again if you need to to change the scale factor group:

Group 1 Metric	Group 2 Engineering	Group 3 Engineering	Group 4 Map	Group 5 Architectural	Group 6 Auto-Scale
1:1	1" : 10'	1" : 100'	1" : 1000'	1/32" = 1'	✹
1:2	1" : 20'	1" : 166 2/3'	1" : 1200'	1/16" = 1'	
1:5	1" : 30'	1" : 200'	1" : 2000'	3/32" = 1'	
1:10	1" : 40'	1" : 250'	1" : 3000'	1/8" = 1'	
1:20	1" : 50'	1" : 300'		3/16" = 1'	
1:33	1" : 60'	1" : 333 1/3'		1/4" = 1'	
1:50	1" : 83 1/3'	1" : 400'		3/8" = 1'	
1:100		1" : 416 2/3'		1/2" = 1'	
1:250		1" : 500'		3/4" = 1'	
1:500		1" : 583 1/3'		1" = 1'	
1:1000		1" : 600'		1-1/2" = 1'	
1:1250		1" : 625'		2" = 1'	
1:2500		1" : 666 2/3'		3" = 1'	
		1" : 750'		4" = 1'	

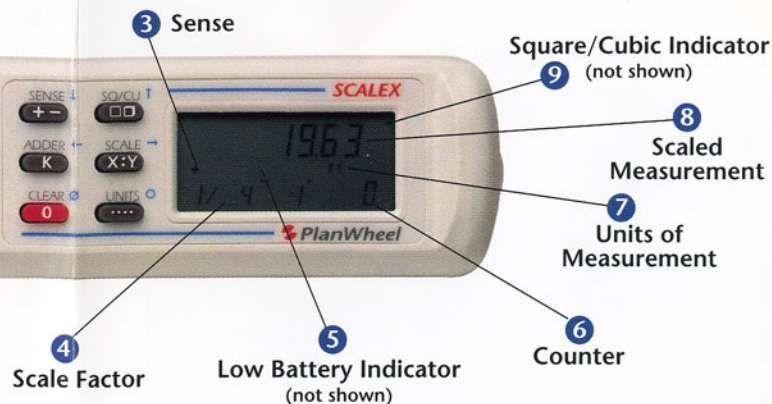After you reach the group you want, press **UNITS○ ....** until you reach the scale factor you want.

Press **CLEAR⊘ 0** to lock in the scale factor. The scale factor will stop flashing and the Plan Wheel will return to normal operation.

USER SCALE FACTORS

If the correct scale factor is not listed, you may enter it yourself:

Press **SCALE→ X:Y** until the correct group appears. (Cannot be used with Group 5 Architectural).

Hold **SCALE→ X:Y** down for two seconds. The left-most digit of the scale factor will begin to flash. Enter the new scale factor. (See ENTERING NUMBERS.)

User scale factors are saved. Press **SCALE→ X:Y** until the wheel symbol appears, then press **UNITS○ ....** to select from the last 3 user scale factors.

AUTO-SCALE FACTOR

You may also calculate the scale factor from a known distance on the plan:

Press **SCALE→ X:Y** until the ✹ appears.

Hold **SCALE→ X:Y** down for two seconds until the display shows all zeroes.

Roll the Plan Wheel over the known distance.

Enter the distance onto the display (See ENTERING NUMBERS).

COUNTER

Press **CLEAR⊘ 0** to zero the counter **6**.

Press +1 to count items **1**.

The count is independent of the wheel. Count each item as you roll the wheel past it or count separately.

The SENSE affects the counter:

+ - Counts up.

+ Counts up.

- Counts down.

The counter can count up to 999 or down to -99.

ADDER

Press +K **2** to add a constant to the length.

To see the constant, press **ADDER← K** . The constant is displayed in place of the length and "K= " appears in the upper left of the display.

Press K again to return to normal operation.