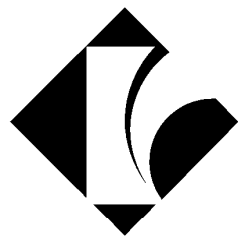


SMART WEIGHING SOLUTIONS



rinstrum

**X-series Scale Base
Reference Manual**

X00A-601-101

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1. Contents of Box



Figure 1: Box contents

The box should contain the following:

- 1 x scale assembly, including:
 - 1 x Base frame
 - 1 x Loadcell and loadcell mounting hardware
 - 1 x Post mount hardware
 - 4 x adjustable feet with locking nuts
 - 8 x silicon shock absorbing grommets
 - 4 x overload bolts with locking nuts
- 1 x scale base cover
- 1 x indicator mounting pipe.
- 1 x specified weighing indicator with cable and post mount fitted.
- 1 x Plug pack or battery charger, if ordered.

2. Introduction

This scale base, coupled with our recommended indicator, will provide the operator with consistent and accurate weight readings.

This instrument is a precision digital scale, designed and built to the highest quality standards for use in a wide variety of environments and working conditions (refer to the environmental rating IP for specific conditions).

All individual components included with this product have been manufactured from premium grade materials, and all welding and machining work has been carried out by the finest engineers available.



Figure 2: *XK scale base*

3. Specifications

	XK	XT	XS	XA
IP Rating	IP69K	IP69K	IP67	IP65
Top and bottom frame	Stainless Steel Grade 316	Stainless Steel Grade 304		Mild Steel powder coated
Base cover	Stainless Steel Grade 316	Stainless Steel Grade 304		
Load Cell	Stainless Steel	Stainless Steel	Alloy	
Indicator Mounting Pipe	Stainless Steel Grade 316	Stainless Steel Grade 304		
Pipe Bushings	Nylon			
Adjustable Feet	Stainless Steel Grade 316	Stainless steel thread Glass reinforced Nylon Base Synthetic Rubber anti-vibration pad		
Operating Environment - Temperature - Humidity	-10 to +50°C ambient <90% non-condensing			
Storage	-20 to +50°C ambient			
Packing Weights	Scale Base without indicator: 15kg			

4. Installation/Assembly

4.1. General Warnings

- Scale base is not to be subject to shock, excessive vibration or extremes of temperature (before or after installation).
- Indicator inputs are protected against electrical interference, but excessive levels of electro-magnetic radiation and RFI may affect the accuracy and stability.
- The instrument should be installed away from any sources of excessive electrical noise.
- For full EMC or for RFI immunity, termination of cable shields and correct earthing of the instrument is essential.
- DO NOT OVERLOAD THE SCALE BASE.

4.2. Electrical Safety

- For your protection all mains electrical hardware must be rated for environmental conditions of use.
- Pluggable equipment must be installed near an easily accessible power socket outlet.
- To avoid the possibility of electric shock or damage to the instrument, always switch off or isolate the instrument from the power supply before maintenance is carried out.

4.3. Assembly

The following steps are required to set up the scale base:

1. Inspect the box contents
2. Attach the post to the base
3. Attach the indicator to the post
4. Adjust the overload protection
5. Level the scale

4.3.1. Inspect the box contents

- The scale components should be in good condition. Ensure there is no obvious transport damage.

4.3.2. Attach the post to the base

- Insert the post into the support pipe attached to the base. Tighten the post mount screw until the post is firmly fixed. The post mount screw is located on the inside of the scale base assembly, where the support pipe is fixed.
- *Tools required – 5mm Allen key*

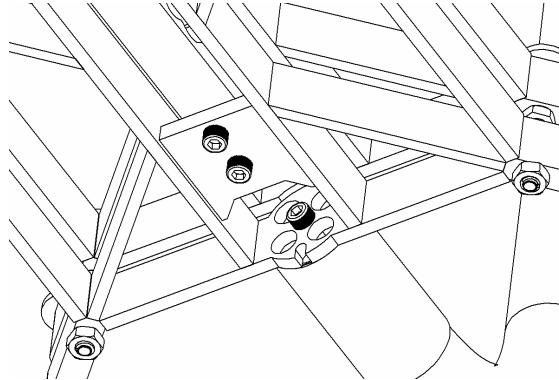


Figure 3: Pipe bushing tightening bolt

4.3.3. Attach the indicator to the post

- Feed most of the excess cable into the post for protection.
- Insert the pipe bushings into the post until the indicator mounting bracket has made contact with the post.
- Tighten the post mount screw until the indicator is fixed.
- *Tools required – 5mm Allen key*

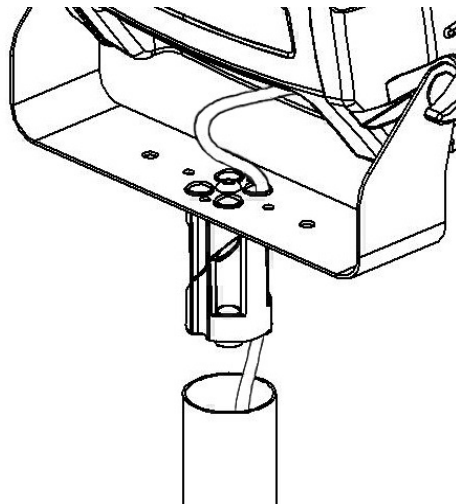


Figure 4: Indicator Mounting

4.3.4. Adjust the overload protection

- Loosen the securing nuts on the overload bolts and lower them.
- For each corner in turn:
 - Apply a load just greater than scale capacity to each quarter of the load receiving frame.
 - Adjust the overload bolt to ensure there is a small gap (0.2mm) between the head of the bolt and the upper frame.
 - Tighten the securing nuts. Re-confirm the spacing after tightening, to ensure no movement during tightening.
- *Tools required – 13mm ring spanner / socket, 0.2mm feeler gauge*

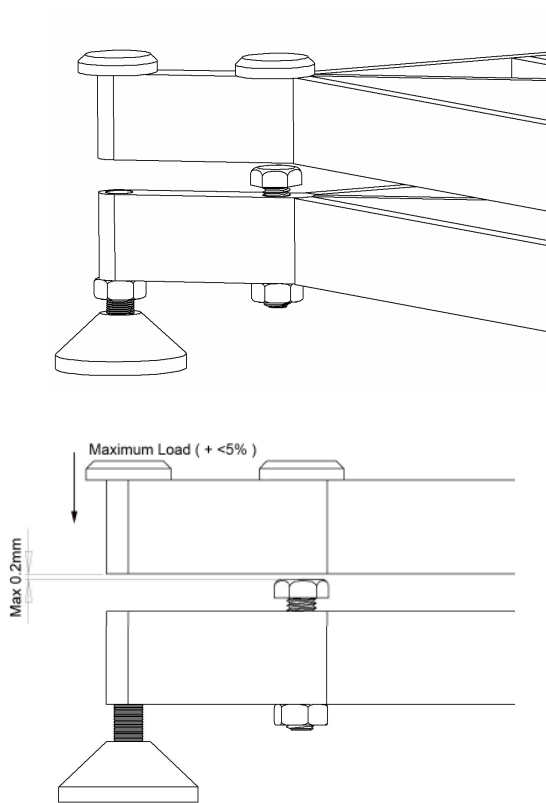


Figure 5: Overload Protection

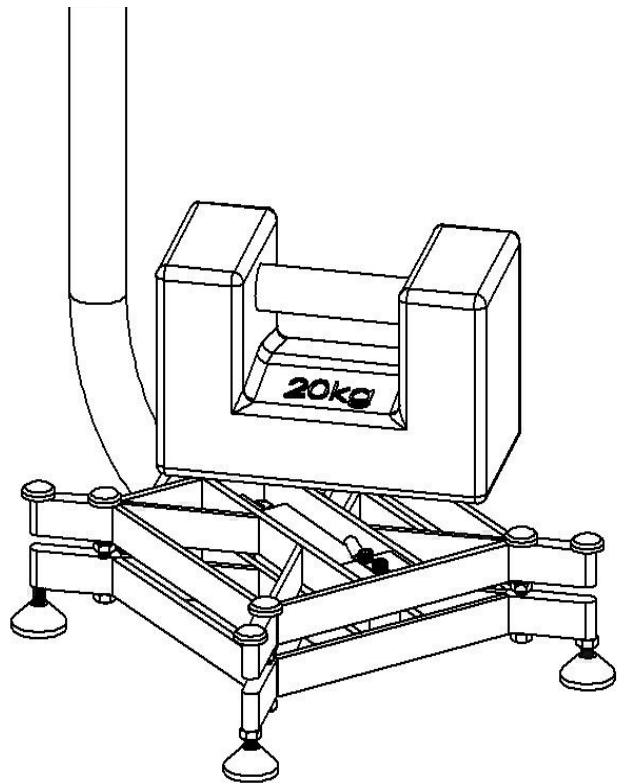


Figure 6: Load placement

4.3.5. Level the scale

- Place the scale in its installed location
- Loosen the lock nuts securing the feet
- Adjust the feet height until the scale is level according to the level bubble (ensure the bubble is centred within the circle).
- Ensure that all feet are making contact with the floor or bench.
- Tighten the lock nuts.

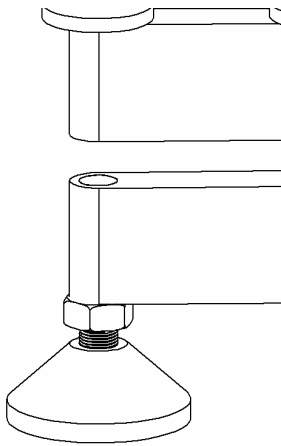


Figure 7: Adjustable Foot

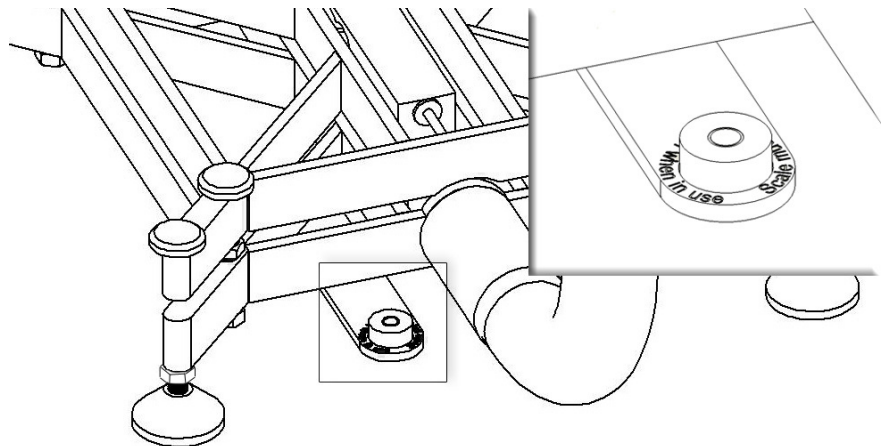


Figure 8: Level indicator

4.3.6. Setup and configuration

- The indicator is factory calibrated. However, in most cases, an on site calibration needs to be performed. See the indicator manual for calibration instructions.
- Your indicator has many other features. See the indicator manual.

5. Maintenance

5.1. Overview

- This scale is designed to be reliable during years of service. It requires very little general maintenance.
- Inspect for damage occasionally and replace damaged parts. Damage can affect the weight reading.
- For non-trade applications, recalibration every 2 years is recommended.

5.2. General Warnings

- Scale base is not to be subject to impacts, shock, excessive vibration or extremes of temperature.
- Indicator inputs are protected against electrical interference, but excessive levels of electro-magnetic radiation and RFI may affect the accuracy and stability.
- The instrument should be installed away from sources of excessive electrical noise.
- **DO NOT OVERLOAD THE SCALE BASE – refer to the label to confirm the scale capacity.**

5.3. Electrical Safety

- To avoid the possibility of electric shock or damage to the instrument, always switch off or isolate the instrument from the power supply before maintenance is carried out.

5.4. Cleaning

XK	XS and XT	XA
XK base and indicator can be cleaned in accordance with IP69K (1450psi jet at 80°C) and IP68.	XS bases can be washed down in accordance with IP67 (strong jets). XT bases can be cleaned in accordance with IP69K (1450psi jet at 80°C) and IP68. Check the indicator IP rating.	XA bases can be washed down in accordance with IP65 (low pressure jets). Check the indicator IP rating.
Alternately, clean with common household solvents and cleaning agents.	Alternately, clean with most common household solvents and cleaning agents.	Alternately, clean with common household cleaning agents. Warning 1: Do not use solvents or solutions containing: Chlorinated Hydrocarbons, Esters or Keytones. Warning 2: Do not use abrasive cleaners or cutting compounds.

6. Line Diagrams

6.1. Dimensions

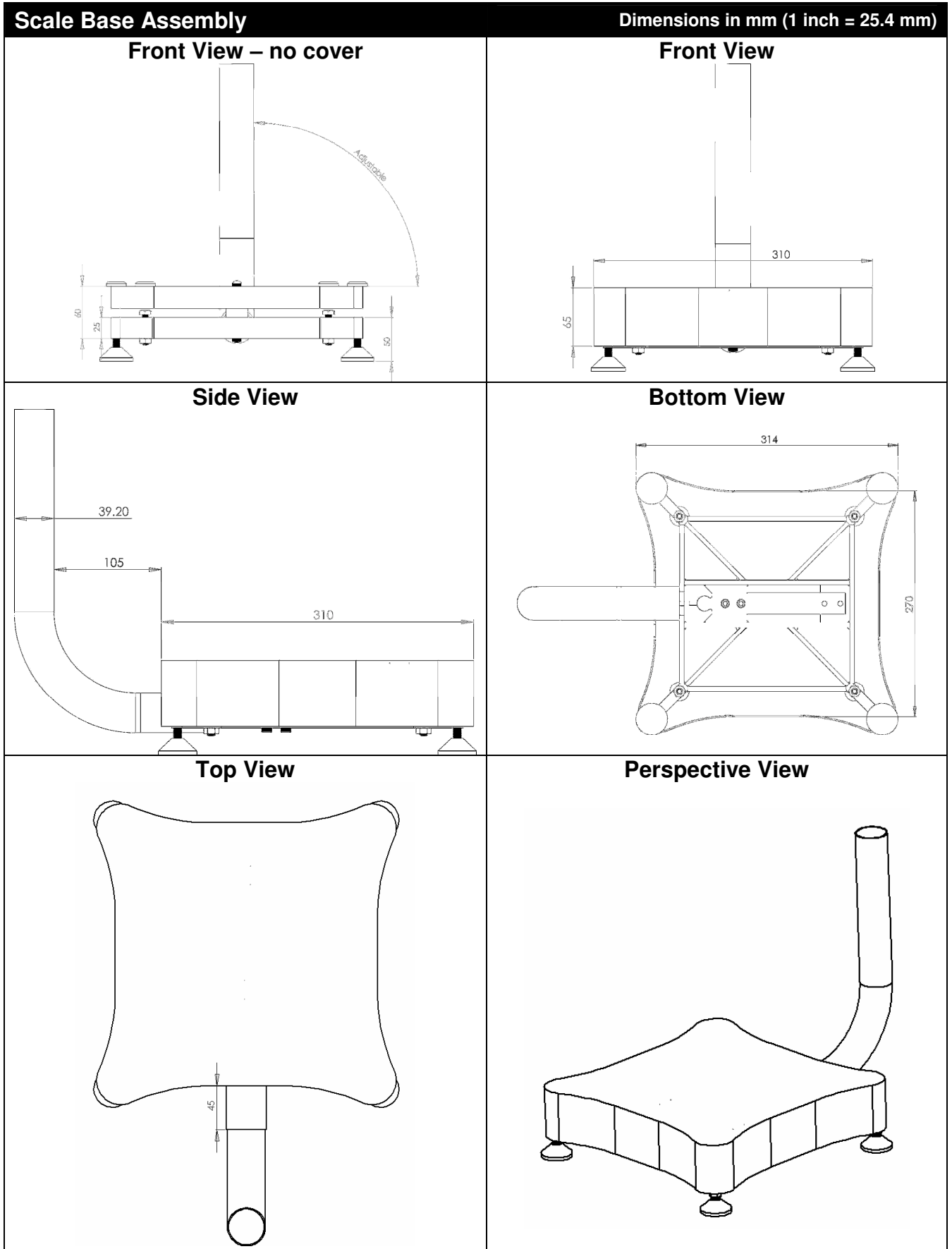


Figure 9: Dimensions

6.2. Base with Indicator

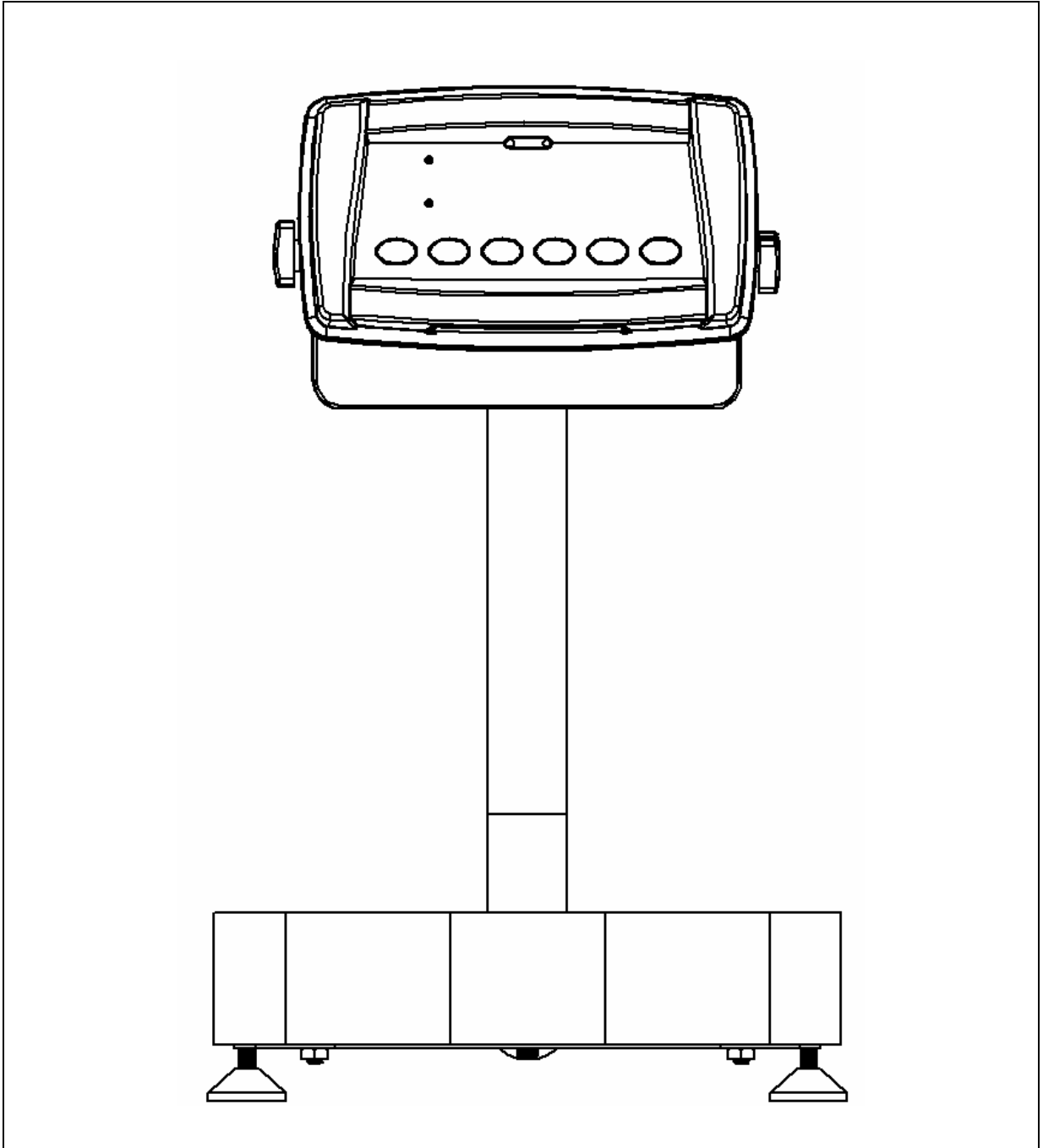


Figure 10: XK Base with IP69K Indicator

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