### **Avery Weigh-Tronix**

# ZK840 COUNTING SCALE CHECKWEIGHING BENCH SCALE

High resolution industrial digital scale

Frequently Asked Questions

### 1. Can a ZK840 indicator be removed from the base like the ZK830 can?

Yes, it can easily be moved up to 50 ft away from the base.

### 2. Can I change out my ZK830 indicator and replace it with a ZK840 indicator?

Yes, the mounting point allows either indicator to fit on the mounting bracket. The new ZK840 indicator will need to be recalibrated to the BSQ.

This makes it ideal for rental type applications where you can match bases with indicators to meet your client's requirements.

#### 3. What application comes standard with the ZK840?

The main application that comes standard with the ZK840 is our counting with inventory control database. Other applications are available via the Ztools application library.

### 4. Are the applications used in the ZK840 configurable or programmable?

The applications have been designed to be both. Each application has been fully designed to work out of the box with a wide range of flexible, configurable features that can be turned on or off to meet most customers' applications. All applications can be modified or customized using Lua programming.

#### 5. What applications are available for the ZK840?

We have a range of applications for the ZK840, including:

- > Counting with inventory controlled database
- > Balance application with GLP and density formulation
- > High accuracy average checkweighing
- > Pick list recipe
- Grading
- › General weighing

### 6. Can I use the ZK840 applications in any other products?

Yes, all ZK840 applications have been designed to allow them to work within the ZM615 indicator.

#### 7. Is the database in the counting application also available in any of the other applications? If so, how do I turn it on?

Yes, the internal database used in the ZK840 has been designed to be fully configurable and flexible for most applications used in the scale.

#### 8. What size is the internal database?

The internal database is fully configurable, with a wide range of predefined and user defined data fields that can be easily turned on if needed. Depending on the applications being used, the most commonly used data fields will be pre-populated. Based on using the pre-defined data fields, the internal database can hold around 1000 PLUs or 3500 PLUs if the microSD card is installed.

If a lot of the other data fields have been activated, or the application program is heavy on print formats, the number of PLUs stored internally will be limited to around 500.

### 9. Can I change any of the stored fields within the database to best fit the customer's requirement?

Yes, even though the ZK840 internal database is setup with the most popular data fields activated, this can easily be configured to allow a wide range of other data fields to be used and stored.

#### 10. Can I select what data I want displayed on the scale?

Yes, there is a large configurable range of data fields that can easily be displayed on the screen, depending on the screen space available.

### 11. Is there a way to enter data in any alphanumeric data through the ZK840 indicator?

7K840 PRECISION SCALE

Yes, the ZK840 comes with a built-in touch screen QWERTY keyboard to allow easy access for entering data. Any USB keyboard can be plugged in to one of the side USBs to facilitate entering large amounts of data.

### 12. Can I plug in a standard USB keyboard to make keying in data easier?

Any USB keyboard can be plugged in using one of the USB ports on the side of the ZK840. No configuration setup is required to make it work.

### 13. What is the largest Micro SD card that can be used in the ZK840 and where is the card holder located?

Up to 32GB Micro SD card can be used to allow a wider range of data to be stored for Archive/Tally Roll or application databases. The card holder is located on the main board. Removal of the back cover is required to install.

#### 14. What can I use the Micro SD card for on the ZK840?

The Micro SD card allows a range of extra data to be stored within the scale.

- Expands internal data base capacity to allow more PLUs to be stored
- > Expands audit trail data storage capability
- Stores a wide range of Distributor applications (ideal for any rental units)

### 15. Can I store buffered data on the side USB port like on the ZQ375?

Yes, data sent to the side USB port will buffer until a USB memory drive is plugged in, at which point all the data will be automatically transferred to the USB memory drive.

#### 16. How many option cards fit into the ZK840 indicator?

The ZK840 supports up to two option cards installed internally. Either up to two analog 5V scale options, or single analog 5V scale and wireless option card can be installed inside the ZK840.

#### 17. Can I add more option cards externally?

Yes, by using the AWT05-508875 ZM option expansion-RS232 card or box that connects into the ZK840's RS232 Com port, up to four ZM option cards can be installed (two for each AWT05-508875 installed). The AWT05-508265 external I/O interface also allows SSCU-8 I/O expansion options to be used with the ZK840.

#### 18. Can I fit a draft shield?

Yes, the ZK840 uses the same draft shield as the BSQ and ZK830.

#### 19. How many outputs are available on the ZK840?

The ZK840 has three inputs and three outputs as standard.

#### 20. How many outputs can I use if I add four SSCU8 boxes?

The ZK840 can run up to 64 outputs per external expansion I/O card (8 x SSCU8 per box) or 128 if both external option I/O cards are installed.

#### 21. How many Ethernet channels does the ZK840 have?

The ZK840 has a single 10/100 Ethernet port available with up to 10 connections.

#### 22. If I use the USB VCP port will I lose one of the RS232 channels?

Yes, the USB VCP port and RS232 Com port 2 share the same hardware, so only one may be used at a time.

#### 23. How many serial ports can be used on the ZK840?

The ZK840 has two RS232 Com ports.

#### 24. Can I adjust the brightness of the screen?

The brightness is fixed, but the contrast of the display is adjustable.

#### 25. What base and load cell does the ZK840 use?

The ZK840 has been specially designed to maximize the performance, strength and accuracy of our high resolution Quartzell<sup>™</sup> digital BSQ base. This modular design makes it ideal for rental fleet counting scales that allow a wide range of base capacities to be mixed and matched to best meet the customer's requirements. Please refer to our BSQ FAQ and Specification for more detailed information.

### 26. Does the ZK840 automatically come attached to a BSQ base?

Yes, the ZK840 comes as standard attached and calibrated to a single BSQ base, making it ideal for counting, checkweighing or high resolution weighing applications.

### 27. Can I buy the ZK840 indicator separately to attach it to other BSQ bases that I already own?

Yes, it is possible to purchase the ZK840 indicator module separately to allow for connection to other existing BSQ bases.

### 28. Is the BSQ base software compatible with the new ZK840 indicator headwork?

Yes, the BSQ base software is fully compatible to work with the new ZK840 indicator. However, due to accuracy enhancements carried out during the ZK830 and ZK840 development the current BSQ base software has been enhanced slightly. Any BSQ bases with version 1.0.3.0 software and above will have slightly improved count stabilization accuracy to allow faster sampling to take place.

### 29. Can I down range the ZK840 to offer different capacities than what is listed on the price page?

Yes, the ZK840 is fully configurable to allow it to be quickly set up to cover lower capacities if required.

#### 30. Is the ZK840 more accurate than the ZK830?

Both the ZK830 and ZK840 offer the same outstanding sample accuracy as seen from the ZK830. The ZK840 has greater flexibility when it comes to displaying more data with enhanced step by step prompts.

### 31. What is the minimum recommended piece weight I can weigh on the ZK840?

This depends on the minimum sample weight and the quantity of samples being counted. In dribble mode the minimum sample

size is calculated based on 0.01% of the base capacity being used.

Base Capacity	Minimum Sample Weight	Piece Weigh (50 off)
2 lb (1kg)	0.000004 lb (2 mg)	0.00022 lb (0.1 g)
10 lb (5kg)	0.000022 lb (10 mg)	0.0011 lb (0.5 g)
70 lb (35kg)	0.000154 lb (70 mg)	0.0077 lb (3.5 g)
175 lb (80kg)	0.000352 lb (160 mg)	0.0176 lb (8 g)

### 32. How long is the battery life on the ZK840 battery option?

The battery option that sits on the rear of the BSQ base can give up to nine hours of continuous usage between recharges with a four hour recharge time. To recharge, plug the scale into an AC outlet. It is recommended that the scale is connected to AC power whenever possible to keep the batteries fully charged at all times.

If AC power is temporarily lost, the scale will remain in operation through the charged batteries. NiMH batteries can lose their charge when not used for long periods of time, but they have excellent recharge capabilities. They can be recharged thousands of times, providing a long life of operation.

- > ZK840 w/BSQ = 9 hours
- > ZK840 w/BSQ & WiFi = 7 hours
- > ZK840 w/BSQ & 1x5V Scale Card 1x350 Loadcell = 7.5 hours
- > ZK840 w/BSQ & 1x5V Scale Card 4x350 Loadcell = 6 hours

Using the auto off feature when not in use can prolong the battery life by up to 80%.

### 33. Can the battery option be fitted by a distributor out in the field?

Yes, due to the internal charging requirements fitted within the base the battery option is currently only available as a factory fitted option or as a distributor fit option.

#### 34. Can I run the ZK840 scale from a larger battery?

The ZK840 indicator and BSQ base communication requires a minimum of 9V to 36V DC to power the indicator and base, so a 12V lead acid battery will work well as an external battery pack. This can be powered directly from the rear of the indicator or from the rear of the BSQ base by a center positive barrel plug connector. This makes cable management much neater when the indicator is mounted away from the base, by powering the base directly from the indicator.

#### 35. What battery saving features are available?

The ZK840 has an auto-off feature which will power the scale down after a set time of inactivity. This feature helps to extend the battery life by up to 80%.

#### 36. Where is the calibration data stored?

To give maximum performance to this product, the ZK840 calibration data is currently stored within the ZK840 indicator.

#### 37. How many peripherals can I connect to the ZK840?

The ZK840 has the ability to run two serial ports, one Ethernet port and two side USB ports at the same time, along with two separate analog sockets to allow a second and third base to be connected. The remote analog card must be installed inside the indicator to allow a second and third analog base to be used. **Please note:** Even though there are two full duplex RS232 ports and one Mini USB VCP port on the rear of the ZK840 indicator, only two out of these three ports can be used at the same time. This allows you to run a wide range of devices from a single unit.

#### 38. How many Ethernet channels are there in the ZK840?

The ZK840 has 10 sockets, which can work as client or server.

### 39. Can I wire in a printer and scanner and a second remote digital base to my ZK840?

Yes, as long as the printer or scanner is USB or Ethernet , the ZK840 has 10 Ethernet connection sockets and two extra host USB ports mounted on the side of the indicator. If an RS232 port has to be used and split to operate a printer and scanner this can only be done via Lua programming.

### 40. Can I link up the ZM201 indicator into the ZK840 to run as a remote display?

Yes, this can be set up using one of the serial outputs found on the rear of the ZK840 indicator. This will allow weight or counts to be viewed on a larger display, ideal when linked to a larger remote platform and when viewing from a distance.

#### 41. Can I link in an optional light stack?

Yes, the ZK840 has the ability to run an optional light stack that will attach to the rear of the BSQ base and take power and outputs directly from the rear of the indicator. This is ideal for repetitive checkweighing or check-counting applications.

#### 42. How many bases can I get to connect to the ZK840?

The ZK840 can have up to five bases connected to it: one local BSQ, two remote BSQs and two analog bases. Each additional BSQ base will use up one RS232 port.

Analog bases will require the analog option card to be installed inside the indicator.

### 43. Can all bases be active and shown on the screen together?

Yes, it can display all the weights at the same time if set up that way. The ZM615 general application can be used to display all of the base weights at the same time.

The main ZK840 applications can operate all bases individually using the the scale select key. also if one base fails, the remaining will continue to operate.

### 44. What capacity limitations are there with a remote base option?

The ZK840 has fully configurable capacity and resolution ranges for the local and all remote bases attached to it, making it very flexible to fit most customers' capacity requirements.

### 45. Can I fit the side mounted remote keypad to any ZK840 like I can on the ZK830?

No, the ZK840 is a fully touch screen display that does not require a remote keypad option like the ZK830 to allow data to be entered.

The ZK840 also has a side USB socket to allow any USB keyboard to be used when entering lots of alphanumeric data.

### ZK840 PRECISION SCALE

### 46. Can I copy the internal database to a PC and reload it into another ZK840?

Yes, the database found within the ZK840 can easily be uploaded or downloaded to allow data transfer to other ZK840 scales or to and from a PC. This can be done with our easy-to-use PC data transfer tool, PLU data editor, which can be found with the latest version of Ztools or on the secure side of the Avery Weigh-Tronix website.

#### 47. Can I link the ZK840 to a separate PC database?

PLU Lookup, our multi-scale PC software package allows 100,000 parts and piece weights to be easily stored and retrieved by up to 32 different scales.

### 48. Can I download data to a USB port even if there is no USB device connected and retrieve it at a later date?

Like the ZQ375, the USB port found on the side of the ZK840 allows the data to buffered up and stored until a USB memory drive is connected to the port. At this is point all the data is automatically transferred.

#### 49. How are the embedded web servers used in the ZK840?

All the ZK840 applications come standard with embedded web browsers to allow a variety of PC and mobile devices to access the scale's web page for displaying and viewing a wide range of data.

These web pages also allow a range of commands to be sent back to the scale for better supervisor control and monitoring.

### More online

- > Technical specifications
- User manuals
- > News and information

www.averyweigh-tronix.com/zk840



## **Avery Weigh-Tronix**

www.averyweigh-tronix.com

Avery Weigh-Tronix is an ITW company



Avery Weigh-Tronix is a trademark of the Illinois Tool Works group of companies whose ultimate parent company is Illinois Tool Works. Inc ("Illinois Tool Works"). Copyright © 2017 Illinois Tool Works. All rights reserved. This publication is issued to provide outline information only and may not be regarded as a representation relating to the products or services concerned. This publication is of supely of any product or service at any time. reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service at any time.