

CubiCal™

w a l k a b o u t

User Guide



Welcome

Congratulations on your purchase of CubiCal Walkabout, a portable and affordable system for measuring the dimensional weight (dim.wt) of boxed freight.

To obtain the full benefit from CubiCal Walkabout, please read these instructions.

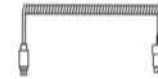
Contents

The CubiCal Walkabout kit contains:

CubiCal PM1-15



Printer interface cable



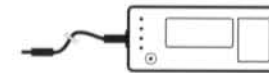
Belt holster and strap



Thermal printer



110v/240v fast charger



Cleaning pen



CubiCal™ ...cube it and prove it!

web site: www.cubical.com

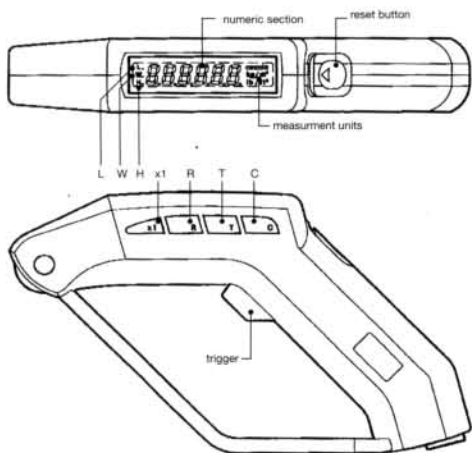
Settings

Installing your CubiCal Walkabout

The CubiCal Walkabout consists of a CubiCal PM1-15 hand-held electronic reader and a thermal printer. Before you can use your CubiCal Walkabout, your first need to:

1. Plug the interface cable attached to the CubiCal PM1-15 into the printer. The printer comes fully charged. **Note: Do not remove the cable from the CubiCal PM1-15 (voids warranty).**

CubiCal PM1-15 features



L - flashes to show when to measure the length of the carton.

W - flashes to show when to measure the width of the carton.

H - flashes to show when to measure the height of the carton.

Numeric section - used to convey information to the operator. Generally used to show dimensions but can also display error messages, agent identification, date etc.

Measurement unit - the appropriate measurement unit will be displayed.

C - press C and squeeze trigger to toggle between conversion factors

Reset button -press Reset button to remove all previous data

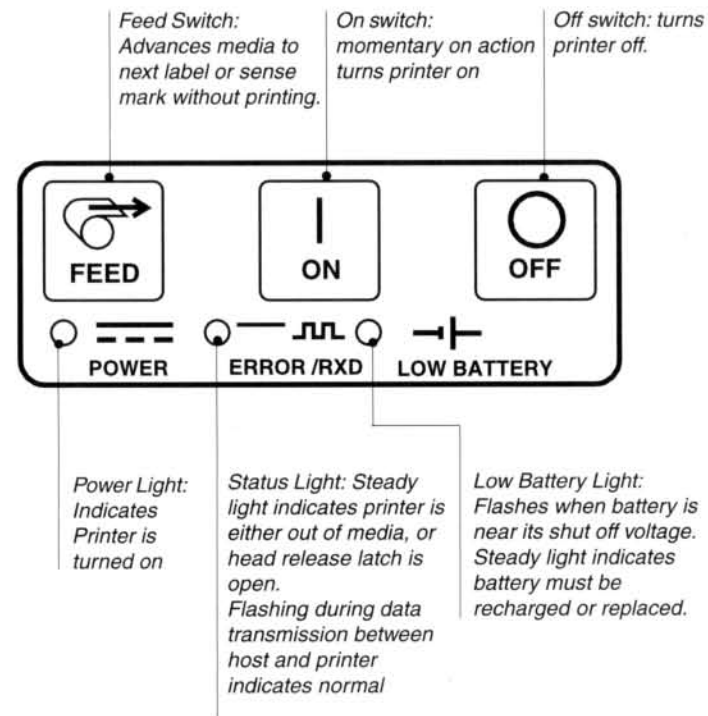
X1- when measuring multiple parcels (same size), measure as normal, then use the X1 key to scroll the number of parcels.

R- use if you overshoot.

T- when measuring multiple parcels (different sizes), measure first parcel as normal, then press T. Continue to press T after each parcel measured.

Trigger - press to confirm measurement.

Thermal printer features



How to use

CubiCal PM1-15 functions

Measurement technique

To ensure accurate measurement please observe the following points:

- i) Place the small measuring wheel located in the tip of the CubiCal PM1-15 over the edge of the carton to be measured. Pull the CubiCal towards you to measure the carton.
- ii) Do not push the CubiCal away from you.
- iii) You must measure all three dimensions ie length, width and height. Ensure you follow a straight line.
- iv) Release the trigger between each measurement.

Measuring single and multiple cartons

Single cartons

Switch on the CubiCal (press RESET button) and press and hold the trigger. The display shows L flashing. Continue to press the trigger and run the wheel along the Length dimension. Then release the trigger. The display shows the carton Length [or an icon] and flashes W. Press the trigger and run the wheel along the Width dimension then release the trigger. The display shows the carton Width and flashes H. Press the trigger and run the wheel along the Height dimension. Then release the trigger. The display shows the dimensional weight. Press the trigger to print a label. To print additional labels, pull trigger. Where fitted, you may toggle between conversion factors by pressing the C button and squeezing the trigger. Push RESET forward to measure next carton.

Multiple parcels (same size)

Measure first parcel as above, then use X1 key to select the number of parcels by scrolling. Use R if you overshoot. Press C to convert, then squeeze trigger to print label.

Multiple parcels (different sizes)

Measure first parcel as above, then press T. Continue to press T after each parcel measured. On completion of all parcels measured squeeze trigger to print label.

Cancel measurements

To cancel measurements of last parcel measured hold R and press T. The last set will be subtracted from the shipment total. The message Abort will issue for one second and then re-issue the prompt.

Measurement errors

If, during measurement, you attempt to record a very small dimension, or you inadvertently press the trigger before pulling the wheel across the carton surface, an under length message will be displayed. If, during measurement, you attempt to record a very large dimension that is outside of the system capability, an over length message is displayed.

Conversion factor (F)

During the switch on sequence the CubiCal displays the conversion factor(s) in use. The system is available with dual conversion capability for both metric and imperial. Press C and squeeze trigger to toggle between conversion factors.

Thermal printer functions

Self test

The thermal printer can perform a self test which will print a solid black line to insure all elements of the print head are working, and then print out the version of software loaded in the printer. Refer to the Troubleshooting section for more details on interpreting the self-test. The self test is activated by the following key sequence:

1. Press the FEED key
2. While still holding down the FEED key, turn on the printer by pressing and releasing the ON key.
3. Release the FEED key

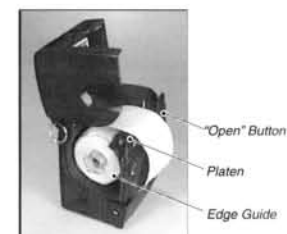
The printer will perform the self test and then remain on.

Media installation

The printer can print and separate labels automatically using its built in label peeler, and print on conventional media or print continuous batches of labels without using the peeler. The following details how media installation for these two modes.

Peeler not in use (journal, linerless, or batch quantities of labels)

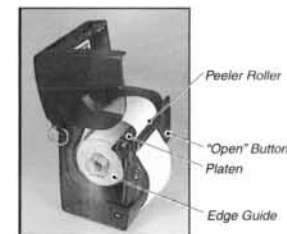
1. Turn unit off.
2. Press and hold the OPEN button on the front of the unit. Rotate the top back to reveal the paper compartment
3. Remove the edge guide and install the paper roll on the spindle. Lead the free end over the rubber roller (platen). Paper should feed from the top of the paper roll.
4. Slide the edge guide back over the spindle and against the roll of media. Roll should be against the inside wall of the paper compartment.
5. Close the top and insure it is securely latched before beginning to print.



Media Installation: Peeler not in use

Peeler in use (do not use the label peeler when printing a batch quantity of labels)

1. Turn unit off.
2. Press and hold the OPEN button on the front of the unit. Rotate the top back to reveal the paper compartment
3. Remove the edge guide and install the paper roll on the spindle. Lead the free end over the rubber roller (platen). Paper should feed from the top of the paper roll.
5. Slide the edge guide back over the spindle and against the roll of media. Roll should be against the inside wall of the paper compartment.
6. Close the top and insure it is securely latched before beginning to print. Insure labels feed over the peeler bar. Units equipped with label presence sensor: If the sensor is activated, further printing will be inhibited until the most recently printed label is removed.



Media Installation: Peeler in use

Removing and replacing batteries

Low battery shutdown

When the printer battery is depleted, it can be recharged using the 110v/240v fast charger. The charger takes approximately 1 hour 20 minutes to fully charge the battery.

Batteries are removed from the printer by the following procedure:

1. Face the front of the printer. Push the battery release button on the right side of the printer towards the top of the printer.
2. Firmly slide the battery pack out of the printer until it is clear while still keeping the battery release button raised.

Batteries are replaced by the following procedure:

1. Align the battery pack to the printer so that the battery contacts (the metal plates on the top of the battery) are oriented towards the front of the printer.
2. Slide the pack into the printer.
3. The battery will engage with a distinct "click" and the ridges on the front of the battery pack will be lined up with corresponding ridges on the printer body.

Troubleshooting

Thermal printer

Self test

Perform the SELF TEST as described in the HOW TO USE section. Unit should print a solid black line and two reports. The first report indicates model, ROM version, serial number, baud rate, etc. The second report contains application information. If no second report appears, there is no application loaded.

Problem	Corrective Action
No power	a) Check battery, recharge or replace as necessary.
Media does not feed:	a) Be sure print head is closed and latched. b) Check spindle holding media for any binding. c) If unit is equipped with label presence sensor: Insure most recently printed label is removed. Also insure label sensor is not blocked.
Poor or faded print:	a) Clean print head. b) Check battery/replace. c) Check quality of media.
Partial/missing print:	a) Check media alignment b) Clean print head. c) Insure printhead is properly closed and latched.
Garbled print:	a) Check baud rate.
No print:	a) Check baud rate b) Replace battery c) Check cable to terminal d) Invalid label format or command structure — use Hex Dump Mode for troubleshooting.
Reduced battery life	a) Check battery date code — after charging: if one to two years old, short life may be normal aging. b) Recondition battery. c) Replace battery.
Error light flashing:	a) No application: reload program. b) If using wireless communications: normal indication while data is being received.
Error light always on:	a) Check media is loaded and print head is closed and securely latched.
Skips labels:	a) Check media for top of form sense mark or label gap. b) Check print field has not been exceeded on label. c) Insure bar/gap sensor is not blocked or malfunctioning
Communication error:	a) Check media is loaded, head is closed and error light is off. b) Check baud rate. c) Replace cable to terminal.
Label jam:	a) Open head release latch. b) Generously apply alcohol to printer in area of jammed label.

Never use any sharp objects on printer mechanism as it could damage the print head. Use the cleaning pen for cleaning the printer.

Maintenance

Thermal printer

Maintenance

The thermal printer will provide years of reliable service provided a few simple guidelines are followed. **The printer should be cleaned each time you load a new set of labels.** Components of the printer that require periodic maintenance are the print head, print roller, label peeler and the sensors. When cleaning, please use only isopropyl alcohol, the same type included in the cleaning pen.

Cleaning the print head:

- Always turn the printer off prior to any cleaning operation.
- Open the printer by pressing the "Open" button on the front of the unit.
- Swing the print head open.
- Use the cleaning pen to clean the surface of the print head, the print roller, the peeler bar and the peeler roller.

Cleaning the platen (print roller):

- Open the printer by pressing the OPEN button on the front of the unit.
- Swing the print head open.
- Gently clean the platen with the cleaning pen.

Cleaning the peeler roller:

- Gently clean the ridges of peeler roller with the cleaning pen to remove label adhesive residue. Rotate the peeler roller as needed.

Cleaning sensors: Bar/gap sensor:

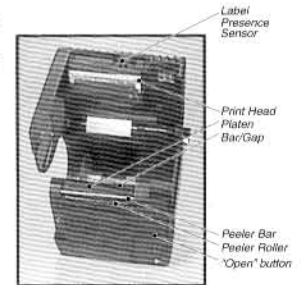
- The bar/gap sensor is located in the right side of the media compartment behind the platen. Blow out any dust deposits carefully, then finish cleaning with the cleaning pen.

Label presence sensor:

- The label presence sensors are located on the outside of the print head. Remove any material blocking the lenses, blow out any dust deposits carefully, then finish cleaning with the cleaning pen.

Warranty and customer service

For further information or assistance please visit www.cubical.com or contact your local dealer.



Cleaning the printer