

# Tape King

Talking Tape Measure,  
Clinometer and Spirit Level



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## 1. INTRODUCTION

Tape King is a robust, smart talking tape measure for length up to 16.4 feet (~5 meters) and it is a talking clinometer and acoustic spirit level.



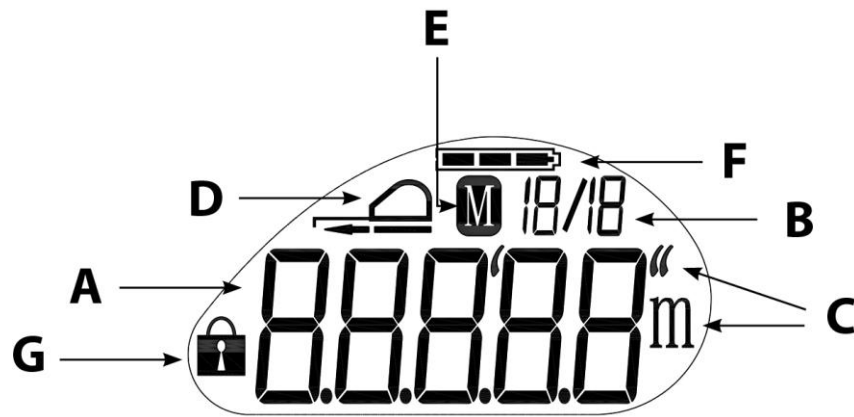
### Read instructions first!

Do not operate Tape King before having read this user manual and getting accustomed to the device and its accessories. Keep the manual handy for quick reference and store it together with the device.

## 2. DESCRIPTION OF THE DEVICE



## Display



- A ... Measurement value
- B ... Fraction for values in inches
- C ... Units
- D ... Measurement mode with or without case
- E ... Memory usage indicator
- F ... Battery level indicator
- G ... Indicator for retain value/difference mode

Place the device in front of you with the inclined top on the left hand side and the belt clip on the far side pointing away from you.

### Front

A large LCD display covers the upper part of the front panel. Underneath the display are four horizontally aligned push-buttons (keys): Far left is the round on/off key (KEY #1), followed by two smaller oval keys. The left oval key is the PLUS-key (KEY #2) and it is marked with a single tactile dot. The right oval key is the MINUS-key (KEY #3) which is marked with two tactile dots. The fourth key in line is square and is marked with five tactile dots. It is the MENU-key (KEY #4).

### Side

At the bottom side of the device towards the right there is a USB port situated. It is covered up with a rubber flap. This port is only used as a service port by the manufacturer and is of no significance for consumers. On the left, narrow side of the Tape King's body you will find the actual measuring tape, which can easily

be pulled outward. Above the duct for the tape – in the middle of the left slope – there is a large ribbed button for retracting the tape. Please note that the tape should only be retracted using this button in order to avoid inaccurate measurements. To the right of the retraction button is the ribbed speaker which is followed by the lid of the battery compartment. To open the battery compartment press the vise action latch and pull the lid to the right. The lid opens to the right and remains attached to the Tape King at its hinge. In the actual battery compartment there are two palpable battery contacts.



**Caution:** If the measuring tape is extended more than 1 foot (30 cm) always stabilise the loose end with your hand when retracting the tape to avoid injuries.

## Rear

On the reverse side of the case you will find a clip to attach Tape King for example to your belt.

## 3. POWER SUPPLY

To open the battery compartment press the vise action latch and pull the lid to the right. The lid opens to the right and remains attached to the Tape King with its hinge. In the actual battery compartment there are two palpable battery contacts. Put two 1.5 Volt AAA, LR03 micro batteries or rechargeable batteries into the battery compartment. Make sure that the negative pole (the smooth side) of each battery points towards the respective palpable battery contact spring. After inserting the batteries close the lid of the compartment until it locks in place.

Now the Tape King is ready for use. Turn the device on by pressing KEY #1 (ON/OFF key), the left of the 4 keys. After three minutes of inactivity Tape King warns with an acoustic signal and turns off automatically. To avoid shut down, press any key. To turn off the device manually (and in order to save battery power) press and hold KEY #1 (ON/OFF-key) until you hear the shut down signal. The device is now turned off.

## 4. TAPE KING'S FUNCTIONS

## 4.1. MEASUREMENT

In order to activate the Tape King press and hold KEY #1 (ON/OFF key) until you hear the starting theme and the announcement '0 millimeter'. If the tape was not retracted properly Tape King will announce "Tape is not in the case!" After pulling the tape end for a little distance press the retraction button (the ribbed button above the tape end) until the tape is completely retracted.



**Caution:** In case of the Tape Kings announcement "Tape is not in the case!" first pull the tape out for a couple of inches and then press the tape retract button in order to completely retract the tape into the case.

With the Tape King turned on and ready for use the procedure for measuring is as follows:

- Press KEY #1 (ON/OFF key) and you will hear the announcement "0 inches" respectively "0 millimeters" which shows you that the tape is completely retracted and ready for use.
- Pull the tape end forward as far as required. You will hear the announcement of the exact length.

## 4.2. MEASUREMENTS WITH AND WITHOUT THE CASE

- Sometimes you will need to carry out measurements including the Tape King's case (e.g. within door-frames or inside closets). Tape King offers you this possibility at the press of a button.
- Pull the tape end forward as far as required. With a short simultaneous press onto the KEY #1 (ON/OFF) and the KEY #4 (MENU key) Tape King will announce the value measured "with case".
- To hear the same measurement without the case, press (again simultaneously) the KEYS #1 and #4 (ON/OFF- and MENU-key). This function may also be accessed via the menu-function (see below).

### 4.3. METRIC AND IMPERIAL SYSTEM

In order to switch between the announcements in the metric in the imperial system, press simultaneously both oval keys (KEY #2 and KEY #3, the PLUS- and the MINUS-key). This function may also be accessed via the menu-function.

Within the metric system the announcements may be given either in meter, centimetre and millimetres (for example: 2 meter, 32 centimetre and 5 millimetre) or in centimetre and millimetre (for example: 232 centimetre and 5 millimetre) as well as in millimetre only (for example: 2325 millimetre).

Within the imperial system the announcements may be given in decimal feet (for example: 16,4 feet) or in feet and inches (for example: 16 feet, 4 and 5/16 inches), or in decimal inches (for example: 197,5 inches) as well as in inches and its fractions (for example: 196 and 3/16 inches).

To switch between options in the respective system (metric or imperial) press and hold simultaneously the KEY #2 (PLUS-key) and KEY #3 (MINUS-key).

### 4.4. DIFFERENCE MEASUREMENT - RETAIN CURRENT VALUE

Tape King enables you to retain values independently from the standard memory function. After announcing of the measurement result press KEY #3 (MINUS-key). Tape King announces the measurement result and status "retained". For all subsequent measurements Tape King will always announce the difference between the retained value and the current value. This function enables you to compare different length more easily. Press KEY #3 (MINUS-key) to return to standard measurement mode. You will hear the status info "last measurement released" and the value is shown on the display. To listen to this last result Press KEY #1 (ON/OFF-key) to play the announcement of this last result.

### 4.5. MEMORY AND MEMORY FUNCTIONS

To add a current measurement to the memory, press KEY #2 (PLUS-key) and the respective announcement follows (for example: "5cm and 3mm added to memory"). Measurement values can be added in memory to enable measuring of length of up to three million feet (~568 miles).

The values in memory are permanently stored even if Tape King is turned off. Please, make sure to check the memory prior saving a new value. If necessary delete the memory.



**Caution:** Check if the memory already contains measurement values before you are going to save a new value.

- Recall memory: with pressing and holding the KEY #2 (PLUS-key) the content of the (total) memory will be recalled. (for example: „total value in memory is 25 m and 10 cm“). If so far no value has been added to the memory the tape will announce “memory clear”.
- Delete memory: to delete the values in the memory, press and hold the KEY #3 (MINUS-key) until you hear the announcement „memory deleted“.

#### 4.6. CLINOMETER AND SPIRIT LEVEL FUNCTIONS

Tape King includes the functionality of a spirit level and of a clinometer.

Press and hold KEY #4 (MENU-key) to switch to the spirit level and clinometer functions or select those functions using the voice menu as described in the section “Voice Menu Functions” in this manual.

The position of Tape King is signalled with tones. If the device is horizontally or vertically aligned it produces a steady, continuous tone to indicate that the alignment is perfectly horizontal or vertical. E.g. alignment with the floor ( $0^\circ$ ), with the ceiling ( $180^\circ$ ) or with a wall ( $+90^\circ$  or  $-90^\circ$ ).

Turning the device clockwise or counter-clockwise out of alignment increases respectively decreases the pitch of the tone and breaks the continuous tone into a sequence of tones with increasing pauses.

When pressing KEY #1 (ON/OFF-key) for a short time the currently measured angle will be announced and displayed. Press KEY #4 (MENU-key) to exit the spirit level and clinometer mode.

#### 4.7. CALIBRATION OF CLINOMETER AND SPIRIT LEVEL

You ought to calibrate Tape King’s spirit level before using it the first time. Then repeat calibration when travelling or if you suspect the measurement results to be inaccurate. This step is necessary to adapt to local changes in the gravitational field.



To access the calibration mode enter the MENU-function and choose item number 5 “spirit level calibration”. Press either KEY #2 (PLUS-key) or KEY #3 (MINUS-key) and you will hear the announcement “calibration, step one: hold the Tape King on an even surface and press KEY #1”. Then Tape King announces “calibration, step two: rotate the device 180° degrees and press again KEY #1”. Tape King then announces “calibration finished”.

Now the calibration of Tape King’s clinometer and spirit level is finished.

#### 4.8 HISTORY OF LAST 10 MEASUREMENTS

Within the voice MENU function 6 “history of measurements” you can display and hear the last 10 measurements which have been saved. To store a measurement, press KEY #1 (ON/OFF-key) immediately after measuring.



**Caution:** Do not forget to press KEY #1 (ON/OFF-Key) after the measurement. Otherwise this measurement will not be saved in history and cannot be accessed anymore.

To retrieve the last 10 stored measurements, enter the MENU with KEY #4 (MENU-key) and choose function 6 “history of measurements”. Browse the measurements either with KEY #2 (PLUS-key) or KEY #3 (MINUS-key). If there are no measurements stored you will hear an error signal.

IMPORTANT NOTE: The history of measurements gets deleted when you turn off Tape King.

#### 4.9 BATTERY LEVEL

To hear the current battery level enter the voice MENU with KEY #4 (MENU-key) and choose function 7 “battery level”. Tape King will announce its battery status for example: “Battery level is on 95%”.

## 5. VOICE MENU FUNCTIONS

By shortly pressing KEY #4 (MENU-key) you will enter the voice menu. Press KEY #4 repeatedly to step through the menu. To toggle between settings within a particular menu function use KEY #3 (MINUS-key) and KEY #2 (PLUS-key).

The menu functions are as follows:

1. spirit level / clinometer
2. measurements with / without case
3. volume level from 1 to 10
4. unit of measurement: metric / imperial system
5. spirit level calibration
6. history of measurements
7. battery level

## 6. FUNCTIONS OF THE KEYS

KEY	Action	Function
KEY #1: ON/OFF (left round key)	Short press	– Announcing measurement value
	Long press	– Power On / Off
KEY #2: PLUS (left oval key; marked with tactile dot)	Short press	– Add measurement to memory
	Long press	– Recall memory
KEY # 3: MINUS (right oval key; marked with two tactile dots)	Short press	– Retain/Release current value
	Long press	– Delete memory
KEY #4: MENU (right square key, marked with five tactile dots)	Short press	– Menu
	Long press	– Clinometer and spirit level function

## 7. SHORTCUT KEY COMBINATIONS

The most often used functions can be accessed via key shortcuts which are described in the table below:

Shortcuts (press simultaneously)		press (short/long)	function
<b>MENU-key</b>	<b>PLUS-key</b>	<b><i>SHORT</i></b>	Increase volume
<b>MENU-key</b>	<b>MINUS-key</b>	<b><i>SHORT</i></b>	Decrease volume
<b>MENU-key</b>	<b>ON/OFF-key</b>	<b><i>SHORT</i></b>	Switch between with / without case
<b>PLUS-key</b>	<b>MINUS-key</b>	<b><i>SHORT</i></b>	Switch between metric / imperial
<b>PLUS-key</b>	<b>MINUS-key</b>	<b><i>LONG</i></b>	Switch between unit of measurement

## 8. SAFETY INSTRUCTIONS

- Only for non-commercial, indoor use.
- Do not expose the device to extreme humidity or liquids.
- Do not use when device is damaged or does not function normally.
- Do not use Tape King at extreme temperatures. Safe and accurate operation is warranted at temperatures between 32 °F and 104 °F (0 °C and 40 °C).
- Remove batteries when storing the device for a longer period of time to avoid damage from leaking batteries.
- Keep out of reach of children! Tape King is not a toy.

## 9. TROUBLE-SHOOTING

- Tape King alerts you with the sound of an emergency siren to the fact that the batteries are almost empty. You should change the batteries as soon as possible. When changing the batteries the retained measurement value gets lost but all values stored in memory remain intact.
- If you do not hear Tape King speaking after you have replaced the batteries with new ones and turned the device on, please, check the polarity of the inserted batteries (see chapter 3 power supply).
- If the tape has been pulled out a lot like 5 ft. (1.5 m) or more, it may retract slowly. You can easily speed it up by slightly tilting the duct tape towards the floor while continuing to retract the tape.

## 10. CLEANING

Only use a soft cloth slightly moistened with water or rubbing alcohol to clean Tape King's surface! Avoid strong acid or scrubbing cleansers. Do not scrub the surface with sharp objects or rough sponges, as it could damage the case of the device.

## 11. TECHNICAL DATA

<b>Measuring units:</b>	<ul style="list-style-type: none"><li>• Metric system</li><li>• Imperial system</li></ul>
<b>Measuring accuracy:</b>	<ul style="list-style-type: none"><li>• Class II</li><li>• Tolerance between measured and announced value up to 2 mm (~0,08")</li></ul>
<b>Measuring length:</b>	up to 196.85 inches, 16.4 feet, 5 meter
<b>Power supply:</b>	2 x 1,5 V Alkali batteries or rechargeable batteries, Type AAA, LR03 Micro
<b>Dimensions:</b>	4.1 x 3.0 x 1.3 inches (103 x 75 x 33 mm)
<b>Weight:</b>	10.4 oz (295 g) (incl. batteries)
<b>Storage temperature:</b>	14 °F to 122 °F (-10 °C to +50 °C)
<b>Operating temperature:</b>	32 °F to 104 °F (0 °C to +40 °C)
<b>Included in box:</b>	Tape King, alkali batteries, pouch, instruction manual
<b>Measuring spirit level</b>	Tolerance between measured and announced value up to 0,5° on calibrated axis

## 12. GUARANTEE AND SERVICE

Warranty periods from date of purchase:

- Twenty-four (24) month on the device itself
- Twelve (12) months on the accessories (e.g. power supply, batteries, earphones, etc.)
- Six (6) months on wear parts (e.g. battery, case, etc.)

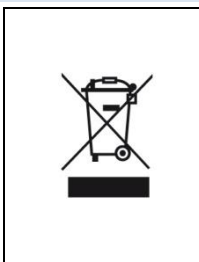
- For storage devices (CDs, SD cards, etc) as well as for batteries no guarantee is provided

During the warranty periods mentioned above, the product will be either repaired or replaced free of charge. In no event shall CareTec be liable for indirect, special or consequential damages. The exposure of the device to liquids, strong electromagnetic fields, heat as well as dropping the device or opening the case causes immediate loss of guarantee. In case of problems please contact CareTec or your local distributor before returning the device without any apparent reason. We will then inform you about the necessary procedures. The device may only be opened by authorized personnel!

CareTec reserves the right to make any changes or improvements to its products without further notice.

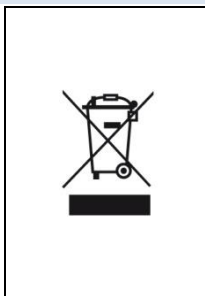
## 13. LEGAL NOTICE ON THE DISPOSAL OF ELECTRONIC DEVICES

### 13.1 DISPOSAL OF USED ELECTRONIC DEVICES



This product must be disposed of separately from household waste at specially designated collection and recycling points. For further information please contact your local authorities.

### 13.2 BATTERY DISPOSAL



Batteries must not be disposed together with household waste. As a consumer you are legally obligated to bring your old batteries to public collecting points (in your community or any shop that provides these batteries).




The following sign indicates contamination of the batteries: "Pb-Cd-Hg"

Pb = containing lead

Cd = containing cadmium

Hg = containing mercury

#### 14. SYMBOLS USED

	Caution
	Dispose of separately from household waste
	Manufacturer

## 15. MANUFACTURER



CareTec International GmbH  
Stubenbastei 1  
A 1010 Vienna, Austria  
Is the manufacturer of this product.

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Tape King EN V1.7 10/2015 