PACKAGE CONTENT

- 6 x ROBOHEAD
- 1 x CONTACTING PCB
- 1 x LiPo BATTERY
- 1 x CHARGER INCL. WALL-PLUG
- 7 x LOCK NUT & RING WASHER
- 1 x WRENCH

TronicalTune

Index

Insert Battery

ATTENTION: BE CAREFUL INSERTING THE BATTERY. PAY ATTENTION TO THE SLOTTED DESIGN TO GUARANTEE PROPER ORIENTATION. SLIDE IN THE BATTERY WITH THE TIP SIDE ONLY.

DO NOT APPLY ANY FORCE AS YOU MAY CAUSE DAMAGE TO THE ELECTRONICS.
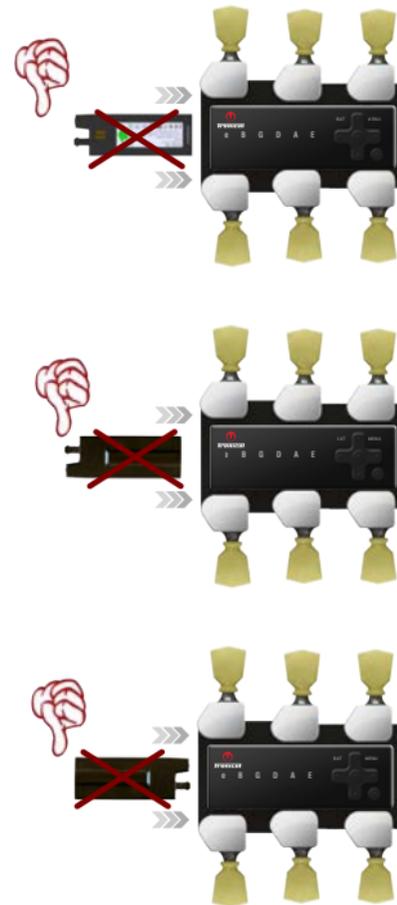
CHARGING:
Charge the battery if
BAT led switches red.

BATTERY PACK
3.7v 340mah 1258mwh Li-polymer

The capacity of the battery could be reduced if it is used infrequently.
You may need to recharge it a number of times. When the battery level is low,
the **LED** flashes red.

CAUTION:
1. Do not connect improperly.
2. Do not dispose of in fire or expose to excess heat.
3. Do not crush, puncture, incinerate or short-circuit external contacts.

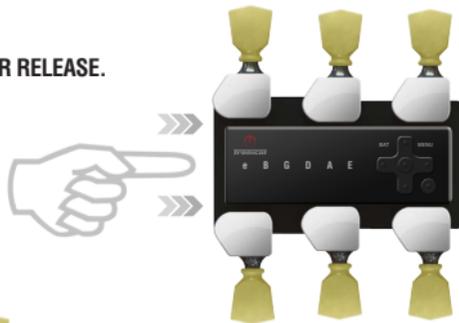Battery is **CHARGING**   Battery is **CHARGED**

ATTENTION: Be careful inserting the battery. Pay attention to the slotted design to guarantee proper orientation. Slide in the battery with the tip side only.

Do not apply any force as you may cause damage to the electronics.

1. PUSH THE BATTERY FOR RELEASE.

2. SLIDE OUT THE BATTERY

Getting started

Install the system on the guitar

NOTE: do not use any tools on the Lock Nut and do not over tighten. Instead use a **1 CENT COIN** to tighten the locknut, otherwise you may damage the gear wheels by applying too much force.

Use only supplied wrench or torque wrench to tighten the Hex Nuts (the recommended torque for the Hex Nuts of the RoboHeads is 1.5 Nm - 1.65 Nm (13.27 in.lbs - 14.6 in-lbs))

It is recommended to use a contact cleaning liquid (such as ethyl alcohol) before installing the RoboHeads to the contacting PCB. Ensure that all contacts have a good connection before tightening the Hex Nuts entirely.

Use caution when inserting the battery. Pay attention to the slotted design to guarantee proper orientation!

At first remove all original tuners from the headstock.

Place the contacting PCB onto the backside of the headstock. Make sure that the Tronical logo appears the right way up.

Make sure that all PCB drill holes line up with the headstock's tuner holes. Insert the RoboHeads through the Tuner holes.

Apply the Washers and mount the Hex Nuts.

Use the wrench that comes with the set to tighten the Hex Nuts of the RoboHeads.

The recommended torque for the Hex Nuts of the RoboHeads is 1.5 nm - 1.65 nm (13.27 in.lbs - 14.6 in-lbs)
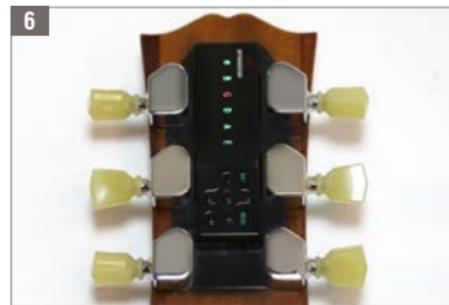
Now TronicalTune is ready for string up.

Getting started
String your guitar

NOTE: do not use any tools on the Lock Nut and do not over tighten. Instead use a **1 CENT COIN** to tighten the locknut, otherwise you may damage the ROBOHEAD by applying too much force.

Use only supplied wrench or torque wrench to tighten the Hex Nuts (the recommended torque for the Hex Nuts of the RoboHeads is 1.5 Nm - 1.65 Nm (13.27 in.lbs - 14.6 in-lbs))

LOCK NUT
The Lock Nut holds the string.

STRING RECESS
The string recess guides the string.

STRING SHAFT
The string shaft winds the string.

HEX NUT
Use the wrench that comes with the set to tighten the Hex Nut.
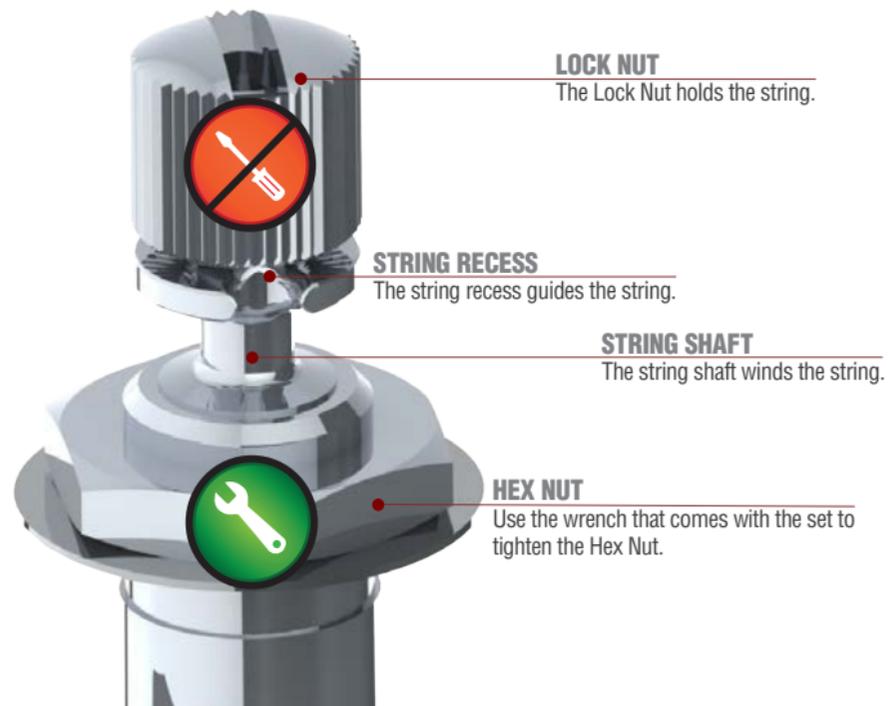
String up your guitar (bass strings)

Take off the Lock Nut and make sure that the recess is at 90 degrees to longitudinal direction of the neck.

You can turn the key manually or use the string-up mode.

Wind the string around the string shaft under the recess and bring it up through the recess.

Wind up the string **CLOCKWISE** around the string shaft once above the recess.

Hold the string tight and apply the Lock Nut.

NOTE: TronicalTune systems Type C (six-in-a-row tuner headstocks) do work with "bass" RoboHeads only.

Tighten the Lock Nut with a small coin easily by hand.

NOTE: Do not use any tool to fix the Lock Nut and **DO NOT OVER TIGHTEN!** Use a **1 CENT COIN** to tighten the Lock Nut, otherwise you may damage the RoboHeads!

Recommended max. torque is 1.0 Nm (8.85 in-lbs)

Cut the end of the string close to the string shaft.

Done!

String up your guitar (treble strings)

1

Take off the Lock Nut and make sure that the recess is at 90 degrees to longitudinal direction of the neck.

You can turn the key manually or use the string-up mode.

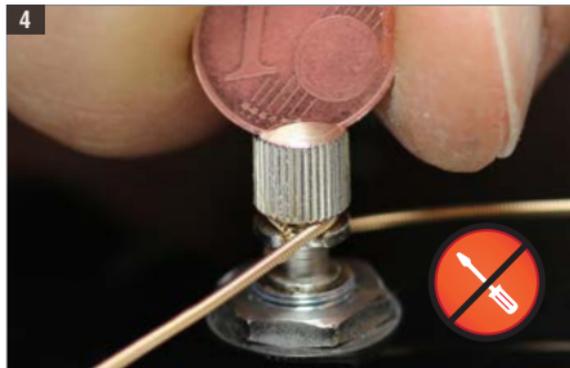Wind the string around the string shaft under the recess and bring it up through the recess.

2

Wind the string around the shaft once above the recess.

3
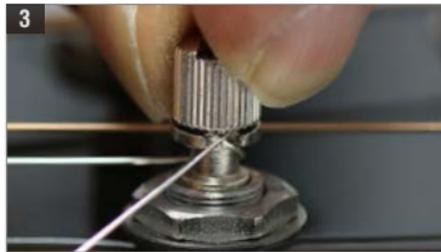
Hold the string tight and apply the Lock Nut.

NOTE: To ensure that the 1st (e) and 2nd (B) string are securely locked, we recommend to perform **TWO WINDINGS** around the string shaft before tightening the Lock Nut.
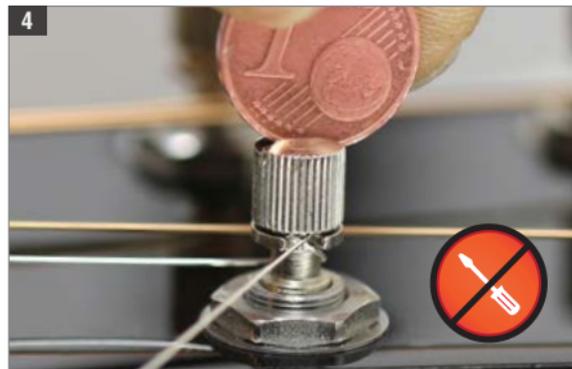
4

Tighten the Lock Nut with a small coin easily by hand.

NOTE: Do not use any tool to fix the Lock Nut and **DO NOT OVER TIGHTEN!** Use a **1 CENT COIN** to tighten the Lock Nut, otherwise you may damage the RoboHead!

Recommended max. torque is 1.0 Nm (8.85 in-lbs)

5

Cut the end of the string close to the string shaft.

6

Done!

LEFT / RIGHT

ENTER

ON / BACK / OFF

UP / DOWN
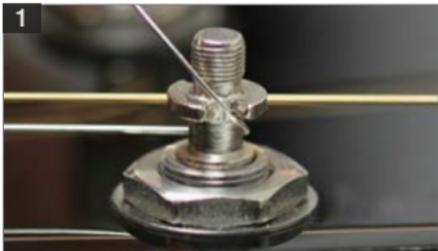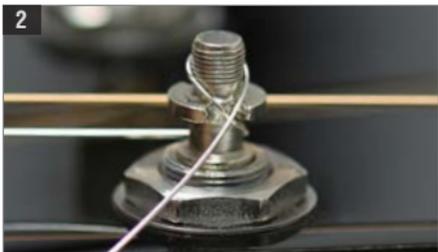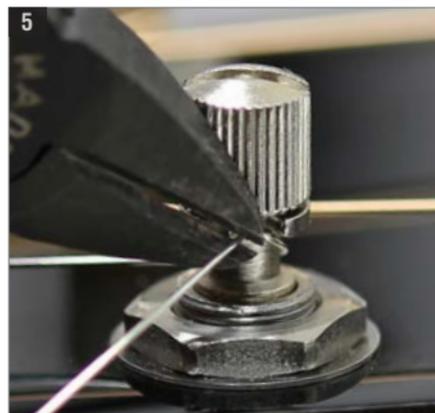
- 🔴 NOT IN TUNE
- 🟢 IN TUNE
- 🔵 RoboHead MOVING
- 🟣 OUT OF SNAP
- 🟡 CALCULATING
- ⚪ INTERFERENCE

Basic Functions:
Start Here

PERFORM STANDARD TUNING
- Press the **ON** button. Strum all strings once.
- When all LEDs are `GREEN`, all six strings are in tune. TronicalTune turns off automatically.

SINGLE STRING OPERATION
- Press and hold the **ON** button until the `RED E` LED lights.
- Pluck the string with the `RED` LED. Pluck each string individually until its LED is `GREEN`, and TronicalTune automatically switches to the next string.
- When all LEDs are `GREEN`, all six strings are in tune. TronicalTune turns off.

HERE'S THE REALLY GREAT PART!!! PLAY IN A DIFFERENT TUNING
- Press the **ON** button twice.
- Press **UP/DOWN** to navigate through tuning preset banks (`RED`, `GREEN`, `BLUE`)
- Press **LEFT/RIGHT** to get to individual tunings.
- Press **ENTER** briefly - wait until all LEDs are `RED` - strum once (the tuners start working when you press **ENTER**).
- When all LEDs are `GREEN`, all six strings are in tune. TronicalTune turns off.
- The latest tuning is now your default.

RETURN TO STANDARD TUNING
- Press the **ON** button twice (**2X**).
- Press **UP/DOWN** for the `RED` tuning bank, then press **LEFT/RIGHT** until the `RED E` LED is on. Press **ENTER**, strum once. Standard tuning is now set as default again.

YOU CAN TURN TRONICALTUNE OFF BY PRESSING AND HOLDING THE ON BUTTON

DO's AND DON'Ts

- Don't use string winding tools. The string up/string down function works better.

- Don't tune manually while TronicalTune is active.

- Do check the BAT LED periodically. `GREEN` = charged, `YELLOW` = acceptable, `RED` = time to recharge.

- Do charge the battery before using it for the first time.

- Do read the rest of the manual to take advantage of the advanced Functions.

- Do visit www.tronical.com for news and updates about the system.

RED MAIN TUNING PRESET BANK

LED	STRING	E	A	D	G	B	e
E	Standard	E	A	D	G	B	E
A	DADGAD	D	A	D	G	A	D
D	Whole step	D	G	C	F	A	D
G	Drop D	D	A	D	G	B	E
B	E flat	E^b	A^b	D^b	G^b	B^b	E^b
e	Double drop D	D	A	D	G	B	D

GREEN MAIN TUNING PRESET BANK

LED	STRING	E	A	D	G	B	e
E	Open E	E	B	E	G$^\#$	B	E
A	Open A	E	A	E	A	C$^\#$	E
D	Open D	D	A	D	F$^\#$	A	D
G	Open G	D	G	D	G	B	D
B	Dobro	G	B	D	G	B	D
e	All 4ths	E	A	D	G	C	F

BLUE MAIN TUNING PRESET BANK

LED	STRING	E	A	D	G	B	e
E							
A							
D							
G							
B							
e							

Main Tuning Preset Bank
Default Tunings

The **BLUE** **USER TUNING PRESET BANK** defaults to standard tuning (E, A, D, G, B, e).
Use the chart to note your custom tuning names and tunings.

Low Tuning **Preset Bank**
Default Tunings

WHITE **(Low Tuning Preset Banks)**						
LED	**STRING**	**E**	**A**	**D**	**G**	**B**	**e**
E	C tuning	C	F	A#	D#	G	C
A	Low C	C	G	D	G	A	D
D	C sharp	C#	F#	B	E	G#	C#
G	B tuning	B	E	A	D	F#	B
B	Dropped C	C	G	C	F	A	D
e	Dropped B	B	F#	B	E	G#	C#

YELLOW **(Low Tuning Preset Banks)**						
LED	**STRING**	**E**	**A**	**D**	**G**	**B**	**e**
E	Open C	C	G	C	G	C	E
A	Open C6	C	A	C	G	C	E
D	Open B	B	F#	B	F#	B	D#
G	Double drop C#	C#	G#	C#	F#	A#	C#
B	Double drop C	C	G	C	F	A	C
e	Double drop B	B	F#	B	E	G#	B

MAGENTA USER TUNING PRESET BANK						
LED	**STRING**	**E**	**A**	**D**	**G**	**B**	**e**
E						
A						
D						
G						
B						
e						

The **MAGENTA** **USER TUNING PRESET BANK** defaults to standard C tuning (C, F, A#, D#, G, C).
Use the chart to note your custom tuning names and tunings.

6 ROBOHEADS
with string locking mechanism

LED-DISPLAY
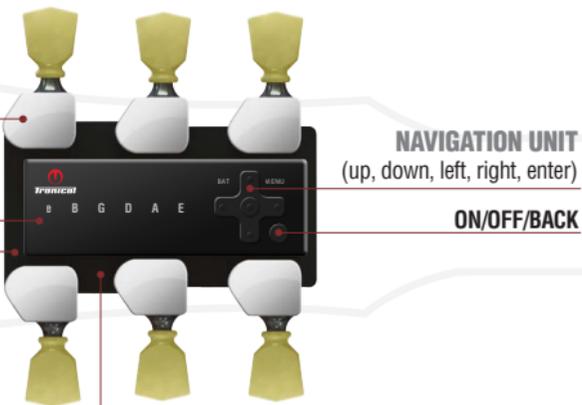(6 string LEDs, 1 menu LED, 1 charge level LED)

BATTERY
Exchangeable, rechargeable 3.7V, Li-Polymer, approx. 300 tunings

NECK CPU INCL. CONTACTING PCB
black printed circuit board to fit in RoboHeads

NAVIGATION UNIT
(up, down, left, right, enter)

ON/OFF/BACK

Overview: how to choose, access, and edit advanced functions

AVAILABLE SPARE PARTS

Li-Po Battery

Charger with wall-plug

RoboHeads in different Designs

Neck CPU incl. Contacting PCB

Wrench

Lock Nuts & Ring Washers

TRONICALTUNE is easy to use. The most common functions are: tuning a guitar to standard and alternate tunings - takes a few button presses. The string LEDs (from "E" for the 6th, lowest-pitched string to "e" for the 1st, highest-pitched string) show the system status. TronicalTune stores standard, alternate, and custom tunings in presets. Each preset contains a tuning. This can be a factory default tuning, or a custom tuning you create and store.

In addition to all of the basic functions you can access the advanced tuning functions to increase performance if necessary. Here's an overview of how to choose, access, and edit the advanced tuning functions.

CATEGORIES:
The advanced function menu consists of six main categories.

• After pressing the **ON** button three times (*don't press too fast*), press the **LEFT/RIGHT** buttons to select a **CATEGORY**, and then press **ENTER**.

• Each category is associated to a color. Examples: The YELLOW category is associated to advanced software functions. The MAGENTA category handles string pitch offsets.

• When choosing a category, the Menu LED *flashes* in the category's color.

FUNCTIONS.
Each category offers various functions.

• After selecting a **CATEGORY**, press the **LEFT/RIGHT** button to select a **FUNCTION** within the **CATEGORY**, and then press **ENTER** to access the function.

• When the menu LED lights up in the color of the category, you can edit the **FUNCTION** with the **UP/DOWN/LEFT/RIGHT** and **ENTER** buttons.

ON/BACK/OFF button. The **ON** button becomes a **BACK** button when editing. It can also turn TronicalTune **OFF**.

• If TronicalTune is in a **FUNCTION**, press the **ON** (Back) button to return to the function's **CATEGORY**.
• Press the **BACK** button again, and TronicalTune is in **TUNING SELECTION** mode.

• Press and hold the **ON** (Off) button to turn off TronicalTune (if the tuner doesn't turn off, release the button then press and hold again).

After pressing **ENTER** to complete a function, TronicalTune usually returns to the function selection to allow you to select another function quickly. Or if you're done, press and hold the **ON** (Off) button to turn off TronicalTune.

Tuning Functions
White Category

E	String Up/Down
A	Custom Tuning Mode
D	Reference Tuning
G	Firmware Version
B	Battery Level
E	Global Tuning Offset

1. ENTER CATEGORY
Press **ON** three times. Press **ENTER**.

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** buttons to select a subcategory (**E-e**). Press **ENTER.**

E STRING UP/DOWN.
Wind or unwind strings automatically

• When TronicalTune is switched off, press **ON** three times. Then press **ENTER** twice.
• The LED for the string to wind or unwind flashes RED . The **LEFT/RIGHT** buttons select a string.
• Press and hold **DOWN** to wind down, **UP** to wind up.

> **NOTE:** During String Up/Down, Single-String Tuning Mode (tunes each string individually) is active. When approaching the correct pitch during string wind up, release the Up button and pluck the string. A flashing YELLOW string LED indicates that the string is close to the pitch defined by the last completed tuning. TronicalTune takes over, tunes the string to correct pitch and moves automatically to the next string. (Pluck the string until the LED switches to GREEN .)

A CUSTOM TUNING
Create a custom tune and store it as a user tuning preset in the blue tuning preset bank.

• When TronicalTune is switched off, tune your guitar to a custom tuning.
• Press **ON** three times. Press **ENTER**.
• Press the **LEFT/RIGHT** button to select the WHITE A LED, then press **ENTER**.
• When a string flashes RED , pluck it.

(HINT: Mute a string after its´ string LED turns green to speed up the process.)
• When a string LED flashes BLUE , use the **LEFT/ RIGHT** buttons to select a preset slot from the BLUE bank. Press **ENTER** = stores the tuning in the selected preset slot.

A CUSTOM TUNING
WITH "PITCH ASSISTANCE" MODE
Create a custom tuning and store it as a pitch-corrected user preset in the blue tuning preset bank.

Enabling **PITCH ASSISTANCE MODE** before saving a custom tuning automatically pitch-corrects notes that are within 40 cents of correct pitch.

• When TronicalTune is switched off tune your guitar to a custom tuning manually.

• Press **ON** three times. Press **ENTER**.

• Press the **LEFT/RIGHT** button to select the WHITE A LED, then press and hold **ENTER** for more than 3 seconds to engage Pitch Assistance.

• When a string flashes RED , pluck it. *(HINT: Mute a string after its string LED turns green to speed up the process.)*

• When a string LED flashes BLUE , use the **LEFT/ RIGHT** button to select a preset from the BLUE bank. Press **ENTER** = stores pitch-corrected tuning in the selected preset slot.

Tuning Functions
White Category

D REFERENCE TUNING
Tune the guitar with respect to one maually tuned string as reference

EXAMPLE: A piano is in tune with itself, but slightly flat. Tune one string with respect to the piano and make this string the reference pitch so the guitar will be in tune with the piano.

NOTE: Loading any other tuning will erase the reference tuning. To save this tuning as a user tuning preset, treat it as a Custom Tuning and follow the steps in **A CUSTOM TUNING** above.
Do not use Pitch Assistance!

• When TronicalTune is switched off, tune one string to the new reference pitch.

• Press **ON** three times. Press **ENTER**.

• Press the **LEFT/RIGHT** button to select the **WHITE D** string LED. Press **ENTER**.

• **E** string flashes **RED**. Use the **LEFT/RIGHT** button to select the string you tuned as reference pitch.

• Pluck the string. When the string LED lights up **GREEN** and all others are **RED**, strum to tune the guitar.

• LEDs turn off = reference tuning is complete.

G FIRMWARE VERSION
Display TronicalTune's firmware version

• When TronicalTune is switched off, press **ON** three times. Press **ENTER**.

• Press the **LEFT/RIGHT** button to select the **WHITE G** string LED. Press **ENTER**.

• You'll see three sequences of LEDs. The number of **GREEN** LEDs is the version number's first digit, the number of **BLUE** LEDs is the second digit, and the number of **RED** LEDs is the third digit. All **WHITE** LEDs = zero.

EXAMPLE: 2 **GREEN** LEDS + 3 **BLUE** LEDs + 1 **RED** LED = version 2.3.1

• This is a fast sequence. If you need to see it again, press **ENTER AGAIN**.

B BATTERY LEVEL
Indicates the charge level of the battery

• When TronicalTune is switched off, press **ON** three times. Press **ENTER**.

• Press the **LEFT/RIGHT** button to select the **WHITE B** string LED. Press **ENTER**.
More LEDs = stronger charge.
If only one or two **RED** LEDs are lit, recharge the battery.

• This is a fast sequence. If you need to see it again, press **ENTER**.

e TEMPORARY GLOBAL TUNING OFFSET
Change reference from A=440 Hz to between 434 Hz and 446 Hz

A = 440 Hz is an international tuning standard. However, some orchestras tune to A = 442 Hz or 443 Hz, and some musicians tune to a higher pitch for a "brighter" sound.

• When TronicalTune is switched off, press **ON** three times. Press **ENTER**.

• Press the **LEFT/RIGHT** button to select the **WHITE e** string LED. Press **ENTER**.

• All string LEDs flash **WHITE** (if an offset is already active, TronicalTune displays the offset amount with **GREEN** or **RED** LEDs - explanation below.)

• Each **LEFT** button-press raises the pitch by 1 Hz and lights a **GREEN** LED. Each **RIGHT** button press lowers pitch by 1 Hz and lights a **RED** LED. *(PLEASE NOTE: if you have a left-hand or reverse system the navigation steps will be vice versa).*

• Press **ENTER** to store the offset temporarily.

NOTE: TronicalTune applies this offset when you tune using the current tuning preset. Loading a new tuning preset reverts to the 440 Hz standard. To retain the offset until you change it, refer to the **YELLOW** category, **B** Tuning Offset Mode (Permanent or Temporary) on page 39.

Reset Function
Red Category

E	Reset **RED** Tuning preset bank
A	Reset **GREEN** Tuning preset bank
D	Reset **BLUE** Tuning preset bank
G	Reset **WHITE** Tuning preset bank
B	Reset **YELLOW** Tuning preset bank
e	Reset **MAGENTA** Tuning preset bank
E	Reset to original **FACTORY SETTINGS**

1. ENTER CATEGORY
Press **ON** three times. Use **LEFT/RIGHT** button to select the category (**E**). Press **ENTER.**

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** button to select a subcategory (**E, A, D, G, B, e, E**). Press **ENTER.**

RESTORE FACTORY DEFAULT TUNING PRESETS FOR THE SELECTED TUNING PRESET BANK

1. When TronicalTune is switched off, press **ON** three times.
2. Press the **LEFT/RIGHT** button to select **RED e** string LED. Press **ENTER**.
3. Use the **LEFT/RIGHT** button to select the string LED associated with the function. The remaining procedure is the same for each reset function.
4. Press and hold the **ENTER** and **UP** buttons simultaneously.
5. LEDs flash sequentially in the same color as the bank = reset confirmed.
6. To reset additional banks, repeat steps 3-5.

NOTE: After a reset, use **CALIBRATION MODE** to re-calibrate the guitar (P. 33)

RESTORE TO ORIGINAL FACTORY SETTINGS
(also highly recommended when changing string gauges)

- When TronicalTune is switched off, press **ON** three times.
- Press the **LEFT/RIGHT** button to select **RED e** string LED. Press **ENTER**.
- Press the **LEFT/RIGHT** button to select **E** LED lights **CYAN**.
- Press and hold the **ENTER** and **UP** buttons simultaneously.
- **CYAN** LEDs light sequentially = reset confirmed.
- After a reset, use **CALIBRATION MODE** to re-calibrate the guitar (Page 33).

NOTE: This procedure erases all custom tunings.

Advanced Hardware Functions

Cyan Category

1. ENTER CATEGORY
Press **ON** three times. Use **LEFT/RIGHT** button to select CYAN category (**A**). Press **ENTER.**

ENTER
LEFT / RIGHT
ON /BACK

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** button to select a subcategory (**E-B**). Press **ENTER.**

SWITCH BETWEEN FUNCTIONS

ENTER
LEFT / RIGHT

CATEGORY FUNCTIONS

E Calibration Mode
A Accuracy Level
D RoboHead Delay
G RoboHead Speed
B Interference Level

E CALIBRATION MODE

Before calibration tune the guitar to standard pitch! (red tuning bank **E** LED).

1. When TronicalTune is switched off, press the **ON** button.

2. Strum the open strings once.

3. When all LEDs are GREEN, all six strings are tuned. TronicalTune turns off automatically *(if any LEDs are not green, pluck those strings individually).*

NOTE: You must calibrate TronicalTune:
- after installing the TronicalTune for the first time
- if you change your strings' gauge, type, or brand
- if you perform a master system reset or firmware update
- if you are facing issues like erratic ROBOHEAD movements, strings not tuning properly, etc.

CALIBRATION:
1. Press **ON** three times. Press the **LEFT/RIGHT** button to select CYAN A.

2. Press **ENTER** twice. The string LEDs blink RED.

3. Strum all strings once. All lights should shine GREEN briefly then turn off. If the LEDs continue to flash RED, mute all strings and then strum again.

4. Once the strings have turned off from being GREEN, or show a combination of BLUE and RED LEDs, mute all strings. Then all string LEDs blink RED.

5. Repeat steps 3 and 4 until the LEDs light **SEQUENTIALLY** and one string LED is lit.

Advanced Hardware Functions

Cyan Category

A ACCURACY
Balance tuning accuracy vs. speed

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **CYAN A**. Press **ENTER**.

2. Again, press the **LEFT/RIGHT** button to select **CYAN A**. Press **ENTER**.

3. The **LEFT/RIGHT** button selects the accuracy. More lit LEDs = higher accuracy/tuning takes a little longer. Fewer lit LEDs = accuracy is a little lower/ faster tuning speed.

4. Press **ENTER** = accuracy setting stored.

D ROBOHEAD DELAY
Set a delay before the ROBOHEADS start turning after initiating a function

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **CYAN A**. Press **ENTER**.

2. Press the **LEFT/RIGHT** button to select the **CYAN D** LED. Press **ENTER**.

3. The **LEFT/RIGHT** button selects the delay. Each unlit LED increases the delay by 0.5 seconds.

4. Press **ENTER** = delay setting stored.

G ROBOHEAD SPEED
Slow down the ROBOHEAD speed to accommodate guitars whose neck relief or neck stability degrades tuning accuracy.

1. When Tronicaltune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **CYAN A**. Press **ENTER**.
2. Press the **LEFT/RIGHT** button to select the **CYAN G**. Press **ENTER**.
3. Use the **LEFT/RIGHT** button to select the speed. Each unlit LED decreases the speed.
4. Press **ENTER** = speed setting stored.

B INTERFERENCE FILTER
Reduce the interference among the strings if a wrong ROBOHEAD is turning instead of the one that you are plucking the string for.

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **CYAN A**. Press **ENTER**.
2. Press the **LEFT/RIGHT** button to select the **CYAN B** LED. Press **ENTER**.
3. Use the **LEFT/RIGHT** button to select the degree of filtering. Each unlit LED increases the filtering degree to reduce interference.
4. Press **ENTER** = interference filter setting stored.

NOTE: Raising this setting to six lit LEDs may increase performance but increases also the vulnerability of the e and B strings to incorrect tuning, even if TronicalTune indicates they are in tune. If this occurs, lower the Interference Filter setting to three or four lit LEDs.

Advanced Software Functions

Yellow Category

1. ENTER CATEGORY
Press **ON** three times. Use **LEFT/RIGHT** button to select **YELLOW** category(**D**). Press **ENTER.**

ENTER
LEFT / RIGHT
ON /BACK

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** button to select a subcategory (**E-B**). Press **ENTER.**

ENTER
LEFT / RIGHT

◀ ◀ ◀ SWITCH BETWEEN FUNCTIONS ▶ ▶ ▶

CATEGORY FUNCTIONS

E Gain
A Guitar Type
D Pitch Window
G Low Tunings
B Tuning Offset

E GAIN
Increase gain if string LEDs don't turn yellow when first plucked; decrease gain in environments with high ambient noise. The default is recommended.

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **YELLOW D** .

2. Press **ENTER** twice. The **LEFT/RIGHT** button selects the gain amount. More lit LEDs = higher gain/increased system sensitivity.

3. Press **ENTER** = gain setting stored.

NOTE: The calibration process (page 33) optimizes gain. We strongly recommend keeping the default gain setting. However when you are tuning in loud environments, decreasing the gain temporarily and/or tuning in Single-String Tuning mode can improve performance.

A GUITAR TYPE
Set up TronicalTune for electric or acoustic guitar

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **YELLOW D** .

2. Press **ENTER**. Press the **LEFT/RIGHT** button to select the **YELLOW A** string LED. Press **ENTER**.
3. The **LEFT/RIGHT** button selects **E** for electric, **A** **E** for acoustic, or **D** **A** **E** for short scale guitars.
4. Press **ENTER** = guitar type setting stored.

D PITCH WINDOW
If you try to use Multi-String Tuning mode but a string is considerably out of tune, TronicalTune switches to Single-String Tuning mode automatically. This function sets how far off-pitch a string must be before TronicalTune switches to Single-String Tuning mode.

1. When TronicalTune is switched off, press **ON** three times.

2. Press the **LEFT/RIGHT** button to select **YELLOW D** . Press **ENTER**.

3. Press the **LEFT/RIGHT** button to select **YELLOW D** . Press **ENTER**.

4. The **LEFT/RIGHT** button selects the pitch window.

1 lit LED	=	150 cents
2 lit LEDs	=	100 cents
3 lit LEDs	=	75 cents
4 lit LEDs	=	50 cents
5 lit LEDs	=	35 cents
all LEDs lit	=	25 cents

5. Press **ENTER** = pitch window setting stored.

G **ACTIVATE LOW TUNINGS AND/OR ADDI-TIONAL USER TUNING PRESET BANKS**
Unblocks three additional tuning preset banks (White, Yellow, and Magenta).

This function activates three additional tuning preset banks. The **WHITE** and **YELLOW** banks default to write-protected presets for music with low tunings (heavier gauge strings are necessary for low tunings). The **MAGENTA** bank, like the **BLUE** bank, defaults to be write-enabled for storing user tuning presets.

However, you can also convert any of these tuning preset banks to store presets. See Block/Unblock Banks for Custom Tunings (**BLUE** category) on page 42 for details.

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **YELLOW D** .

2. Press **ENTER**. Press the **LEFT/RIGHT** button to select the **YELLOW G** LED. Press **ENTER**.

3. Use **LEFT/RIGHT** button to activate low tunings and additional preset banks (**e B G** LEDs flash **GREEN**) or to deactivate low tunings and addition-al preset banks (**D A E** LEDs flash **RED**).

4. Press **ENTER** = low tuning/additional banks settings stored.

B **TUNING OFFSET MODE**
(Permanent or Temporary)

The Global Tuning Offset (**WHITE CATEGORY**) is temporary and applies only until loading a new tuning preset. This function retains offset when changing tuning presets.

1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **YELLOW D** .

2. Press **ENTER**. Press the **LEFT/RIGHT** button to select the **YELLOW B** LED. Press **ENTER**.

3. The **LEFT/RIGHT** button selects the permanent tuning offset (**e B G** LEDs flash **GREEN**) or the temporary tuning offset (**D A E** LEDs flash **RED**).

4. Press **ENTER** = tuning offset mode setting stored.

Per-String Pitch Offset
Magenta Category

1. ENTER CATEGORY
Press **ON** three times. Use **LEFT/RIGHT** button to select MAGENTA category (G). Press **ENTER.**

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** button to select a subcategory (E-e). Press **ENTER.**

Apply an offset to any string with individual pitch up/down to ±12 cents (a cent is 1/100th of a semitone)

> **NOTE:** Pitch Offset applies to the last completed tuning. Please choose, select and tune to a tuning preset before applying the per-string pitch offset. Pitch offset will remain applied to this tuning until you change its pitch offset, reset the bank or reset the system.

1. When TronicalTune is switched off, press **ON** three times.
Press the **LEFT/RIGHT** button to select MAGENTA G. Press **ENTER**.

2. The **LEFT/RIGHT** button choose the MAGENTA LED for the string you want to offset. Press **ENTER**.

3. Press the **LEFT/RIGHT** button to change the string's pitch offset:

• If no previous offset exists, all string LEDs flash WHITE. Each **LEFT** button press lights a GREEN LED and offsets the pitch by +1 cent (up to +6 cents). Continuing to press the **LEFT** button lights YELLOW LEDs. Each lit YELLOW LED offsets the pitch by another +1 cent (+7 to +12 cents maximum).

• Each **RIGHT** button press lights a RED LED and offsets the pitch by -1 cent (up to -6 cents). Continuing to press the **RIGHT** button lights MAGENTA LEDs. Each lit MAGENTA LED offsets the pitch by another -1 cent (-7 to -12 cents maximum).

• If an offset already exists, TronicalTune displays the offset amount as described above. In this case **RIGHT** or **LEFT** button presses continue on from the existing offset. Example: If 12 MAGENTA LEDs are lit to indicate -12 cents of offset, pressing the **LEFT** button will turn off successive MAGENTA LEDs, then turn off successive RED LEDs, then start lighting GREEN LEDs.

4. Press **ENTER**. To offset additional strings, repeat steps 2- 4.
Otherwise, press and hold the **ON/BACK/OFF** button to turn off TronicalTune.

> **PLEASE NOTE:** if you have a left-hand or reverse system the navigation step 3 will be vice versa.

Unblock Banks for Custom Tunings

Blue Category

1. ENTER CATEGORY
Press **ON** three times. Use **LEFT/RIGHT** button to select **BLUE** category (**B**). Press **ENTER.**

2. SELECT SUBCATEGORY
Use **LEFT/RIGHT** button to select a subcategory (**E-e**). Press **ENTER.**

CATEGORY FUNCTIONS

E	**RED** Bank Activation
A	**GREEN** Bank Activation
D	**BLUE** Bank Activation
G	**WHITE** Bank Activation
B	**YELLOW** Bank Activation
e	**MAGENTA** Bank Activation

TURN WRITE PROTECTION ON/OFF FOR ANY TUNING PRESET BANK

The **BLUE** bank defaults to a user tuning preset bank for custom tuning presets.

For low tunings, the **MAGENTA** bank (see **G** **ACTIVATE LOW TUNINGS** and/or **ADDITIONAL USER TUNING PRESET BANKS**) defaults to a user tuning preset bank for custom tunings (low tunings or otherwise).

The remaining banks contain factory tuning presets and are write-protected. However, any of the six banks can have the write protection turned off to store custom tunings, or turned on to prevent overwriting custom tunings.

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1. When TronicalTune is switched off, press **ON** three times. Press the **LEFT/RIGHT** button to select **BLUE B**.

2. Press **ENTER**. The **LEFT/RIGHT** button selects the **COLOR** of the bank to write-enable or write-protect. Press **ENTER**.

3. The **LEFT/RIGHT** button enables writing to the selected bank (**E B G** LEDs flash **GREEN**). Or write-protects the selected bank (**D A E** LEDs flash **RED**).

4. Press **ENTER**. **GREEN** or **RED** LEDs light sequentially to confirm your choice.

5. You can now save a custom tuning to any write-enabled bank.

NOTE: If a bank is blocked you will not be able to access it with the **UP/DOWN** buttons when saving a custom tuning (see page 27). However, the **BLUE** bank is a special case. When you create a custom tuning you are first given a chance to save it to the **BLUE** bank, regardless of whether it's blocked, so that even if all the other banks are blocked you can still save your tuning. However, as soon as you use the **UP/DOWN** buttons to select a different bank to save a custom tuning, the **BLUE** bank will no longer be available if it's blocked.

Capo Mode

Adding a capo often requires retuning a guitar. TronicalTune can detect a capo in the range of the 1st to 6th fret, then tune while taking the capo position into account. Yes, this is amazing.

ENTER CAPO MODE

1. Capo Mode applies to the last completed tuning. Select and tune to a tuning preset before entering Capo Mode.

2. Once TronicalTune has turned off attach your capo on the 1st to 6th fret.

3. Press **ON** twice. Press and hold the **LEFT** button. **GREEN** LEDs light sequentially = capo mode is active.

4. Press **ENTER** and strum to tune your guitar. TronicalTune briefly indicates capo detection; the number of lit **YELLOW** LEDs indicates the capo's location. Example: Two lit **YELLOW** LEDs = capo is at second fret. Then tuning proceeds as usual.

NOTE: Whenever you tune in capo mode TronicalTune first indicates capo location by the number of lit **YELLOW** LEDs.

5. If any string LEDs aren't **GREEN**, pluck those strings. TronicalTune turns off automatically once tuning is complete.

EXIT CAPO MODE: TWO OPTIONS

• Remove the capo. Next time you tune, as soon as you strum TronicalTune will detect that there is no capo, **RED** LEDs will flash sequentially to turn off Capo Mode, and TronicalTune will confirm that there is no capo by flashing shortly all **BLUE** LEDs. Continue with tuning.

• If you don't want to re-tune after removing the capo, make sure TronicalTune is off and follow steps 3 and 4 above. **RED** LEDs will light sequentially instead of **GREEN** ones to indicate that Capo Mode is no longer active. Press and hold **ON** to turn off TronicalTune. Remove the capo.

Legal Information

GUIDELINES FOR SAFETY AND EFFICIENT USE

Read this information before using TronicalTune.

PRODUCT CARE:

DO NOT expose your product to liquid or moisture or to humidity.

DO NOT expose your product to extreme high or low temperatures.

DO NOT expose your product to lit candles, cigarettes, or cigars, or to open flames etc.

DO NOT drop, throw or try to bend the product as rough treatment could damage it.

DO NOT attempt to disassemble your product. The product does not contain consumer serviceable or replaceable components. Only Tronical GmbH should perform service.

If you will not be using the product for a while, store it in a place that is dry, free from damp, dust and extreme temperatures.

DISPOSAL OF OLD ELECTRICAL & ELECTRONIC EQUIPMENT:

This symbol on the product indicates that the product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Recycling will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

POWER SUPPLY

Connect the AC power adapter only to designated power sources as marked on the product. To reduce risk of damage to electric cord remove it from the outlet by holding onto the AC adapter rather than the cord.

To reduce risk of electric shock unplug the unit from any power source before attempting to clean it.

The AC power adapter must not be used outdoors or in damp areas. DANGER - Never alter the AC cord or plug. If the plug will not fit into the outlet or has a proper outlet installed by a qualified electrician contact your reseller. Improper connection can result in risk of electric shock.

CHILDREN:

DO NOT allow children to play with Tronical Tune since it contains small parts that could be detached by improper handling and create a choking hazard.

BATTERY INFORMATION:

A rechargeable battery has long service life if treated properly. A new battery or one that has not been used for a long period of time could have reduced capacity the first few times it is used. Do not expose the battery to extreme temperatures, never above +55° C (+131° F). For maximum battery capacity use the battery in room temperature. If the battery is used in low temperatures, the battery capacity will be reduced. The battery can only be charged in temperatures between +10°C (+50° F) and +45° C (+113° F).

RECYCLING THE BATTERY:

The battery in your Tronical Tune must be disposed of properly and should never be placed in municipal waste.

BATTERY CAUTION:

1. **DO NOT CONNECT IMPROPERLY.**
2. **DO NOT DISPOSE OF IN FIRE OR EXPOSE TO HEAT.**
3. **DO NOT CRUSH, PUNCTURE, INCINERATE OR SHORT CIRCUIT EXTERNAL CONTACTS.**

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