

AKKO
tune

Tuning Table

Accessory

AKKO
flip

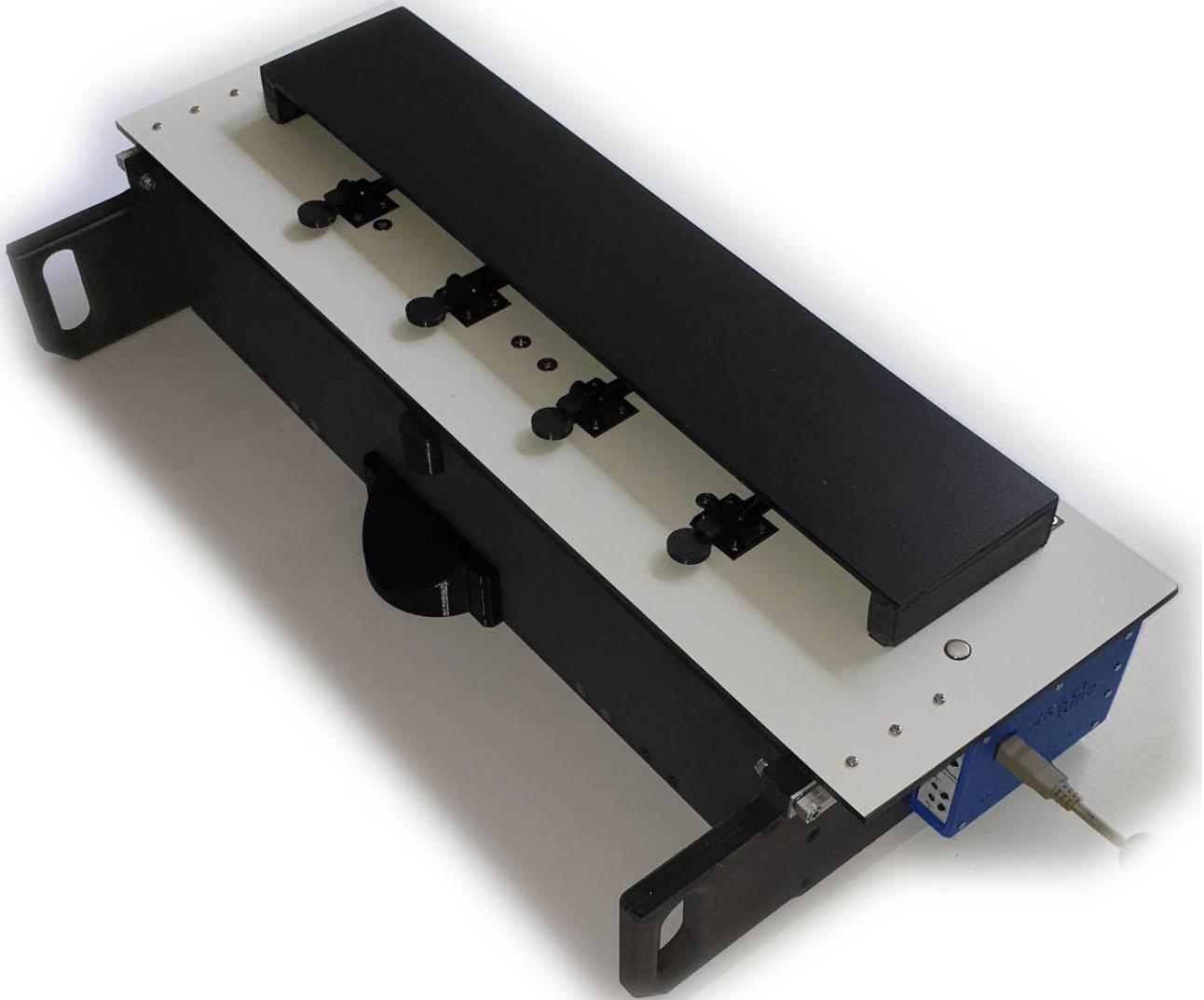
In-Body-Tuning-Aid

Tuning like a pro - inside the instrument

User Guide

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AKKO
Thielmann **fixxx**
Akkordeon - Service



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The Sense of it All

Some accordion tuners make the final touches to the reeds with the reed blocks mounted in the instrument.

In fact, this results in pitch that is a few cents different than if the reed block was measured outside the instrument.

The difficulty here is to work on the reeds reasonably with the reed blocks installed. Changing from reed plate manipulation inside the instrument to measurement inside the instrument means that each time the (halved) instrument must be rotated and then placed back in the measurement position. Since the instrument always has some weight, this is very strenuous and requires some practice.

But, of course, it brings better tuning by including the resonating body of the instrument - and a better sound.

AKKOflip was developed to facilitate this work.

Since the instrument's resonating body plays a crucial role, the AKKOflip's resonating box emulates it. The exact volume of an instrument is difficult to achieve in this process, especially since it changes constantly during playing with the opening and closing of the bellows. The reed block must now be played in this recreated resonant volume.

To do this, it is fixed under a plate, which is equal to the reed block mounting plate of the instrument. The fixation is done by a quick mounting system, which also allows the sideways shifting.

This whole plate can be flipped over 180° to the front to present the reed block in front of the tuner.

The AKKOflip Frame

The frame with a height of 100 mm, a width of 510 mm, and a depth of 176 mm forms a volume of approx. 8 liters (reed block, quick fix, etc. deducted) when the lid (reed block plate) is closed.

The upper edge of the frame is provided with a sealing strip made of PU foam. The soundpost plate rests on it and is pressed on magnetically.



This creates sufficient airtightness to concentrate the full force of the blower on the reed block.

The frame has two forward extending cantilevers, which on the one hand contain the handles of the frame, and on the other hand serve as a support for the forward flipped reed block plate.

Two cross strips are built into the frame, through which the associated star grip screws are inserted to fix the frame firmly to the worktable and ensure airtightness to the bottom.

The holes in the strips correspond to the threaded

inserts in the AKKOflip DESK working plate.

AKKOflip USB

The AKKOflip USB version has two microphones installed for sound recording. One microphone is inserted on the right side of the interior.



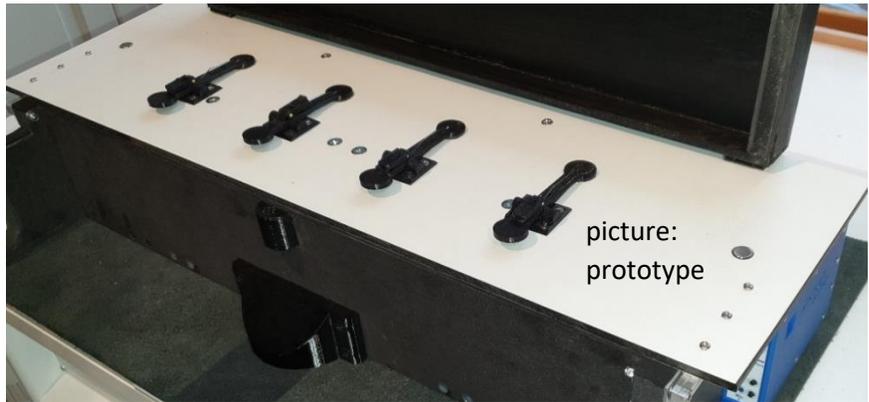
A second is centered on the front edge of the reed block plate. On the right outside of the frame, the MicSelection box lets you choose which microphone signal is sent to the USB output: Mic1 internal, Mic2 external, or both mixed. The signal strength must be adjusted in the Windows menu for the microphone input.



The AKKOflip Reed Block Plate

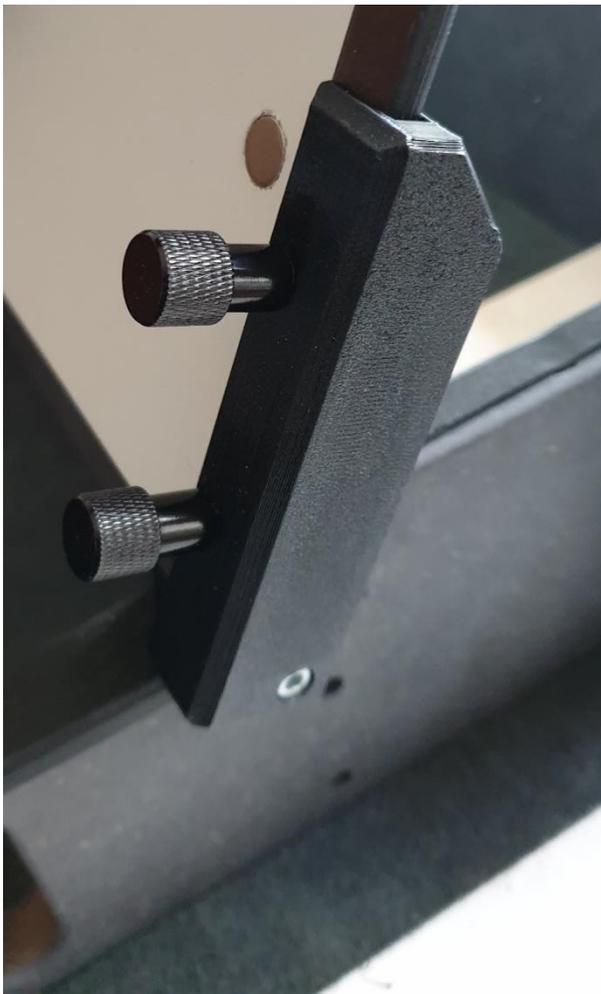
The reed block plate is made of a very stiff material with a thickness of 6 mm. A total of 6 magnets are embedded on the edge, which pull the plate firmly onto the frame in conjunction with the corresponding magnets in the frame.

The foam gasket provides sufficient air seal.



Hinges

The panel is inserted and fixed with its lateral front edges into the two hinges of the frame. To swing it forward, its trailing edge is lifted against the holding force of the magnets. Then it is swung (flipped) forward by 180° and placed on the outriggers. If the frame is fixed on the working plate, the reed block plate can be subjected to a load.



Blow Holes

The standard plate has 4 blowholes at a distance of 100 mm. If a reed block has, for example, 16 tone chambers along its length, it is possible, by shifting the reed block sideways (even if the tone chambers are irregularly spaced), to always use a blowhole/key that lies above a tone chamber.

Thus, all reed blocks can be tested, even if the distances or the position of the tone chambers are different.

On the underside of the plate, the area of the blowholes is covered with a layer of leather in order to achieve a sufficient air seal when the reed blocks are attached.

This is necessary so that

1. enough air can flow into the chamber and
2. no neighboring chambers receive the air flow..

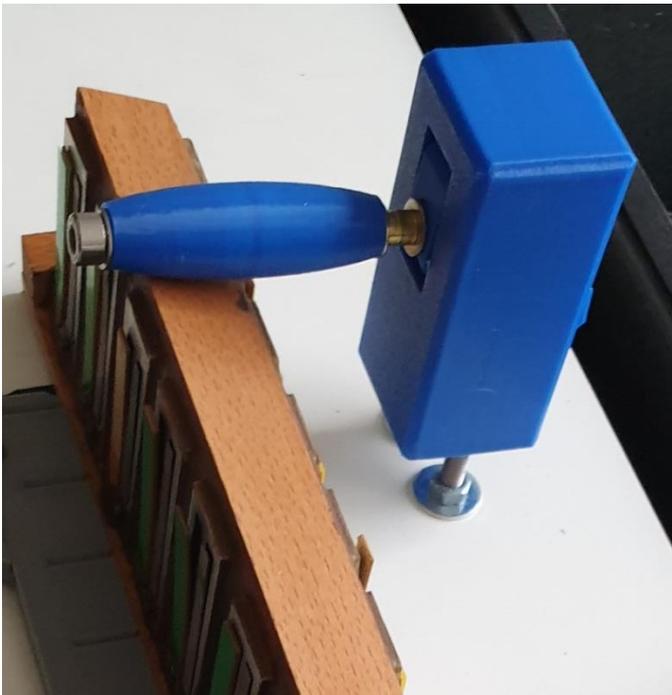
Guide Rail

To facilitate the positioning of the reed blocks, there is a guide rail that can be adjusted in distance to the blowholes. The guide rail has markings that indicate the position of the blowholes. When the reed block is in place, the blowholes are no longer visible, and the reed plates can be aligned with the markings.



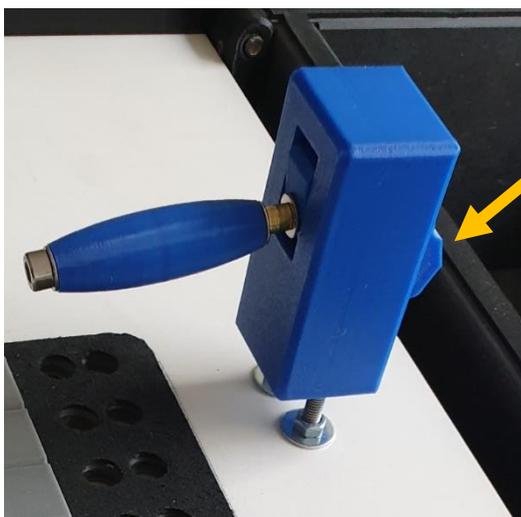
Reed Block Quick Fix

In order for a reed block to sit airtight on the blowholes, it is necessary to press it on. When the reed block is aligned with the guide rail, the two or three hold-downs are placed on the upright threaded bolts and slowly pressed down. The spring-loaded rollers are tensioned as soon as they touch down on the reed block. Now you can move the reed block sideways and adjust it to the position of the blowholes.



Press the hold-downs down only until the spring-loaded rollers are approximately horizontal. Then the reed block is sufficiently depressed and this is also the case when the reed block plate is swiveled back again to close..

The hold downs fix their height automatically.



To release the hold-downs, press the button opposite the roller, which is swung up as a result, and pull the hold-down upwards.

Keys

Each blowhole is covered by a tone flap that can be operated with a key. The keys are equipped with a releasable latch that can hold the key open.



closed



open, latched

Cassotto

A cassotto is an additional volume in front of the tone flap. It influences the sound of the tone to an audible extent. To test the effect of a cassotto on a built-in reed block, the reed block plate is equipped with a hinged cassotto. When the cassotto is open, the tone is slightly "harder", and closing the cassotto makes the tone audibly "softer".



Cassotto open



Cassotto
closed

AKKOflip Reed Block Plate according to customer specification

The standard reed block plate offers flexibility and can be used for all reed blocks with a flat sole.

In the production of always identical reed blocks with a regular hole pattern, it is possible to produce exactly matching reed block plates. It is also possible to provide as many blowholes and the corresponding keys as the reed block has tone chamber holes.

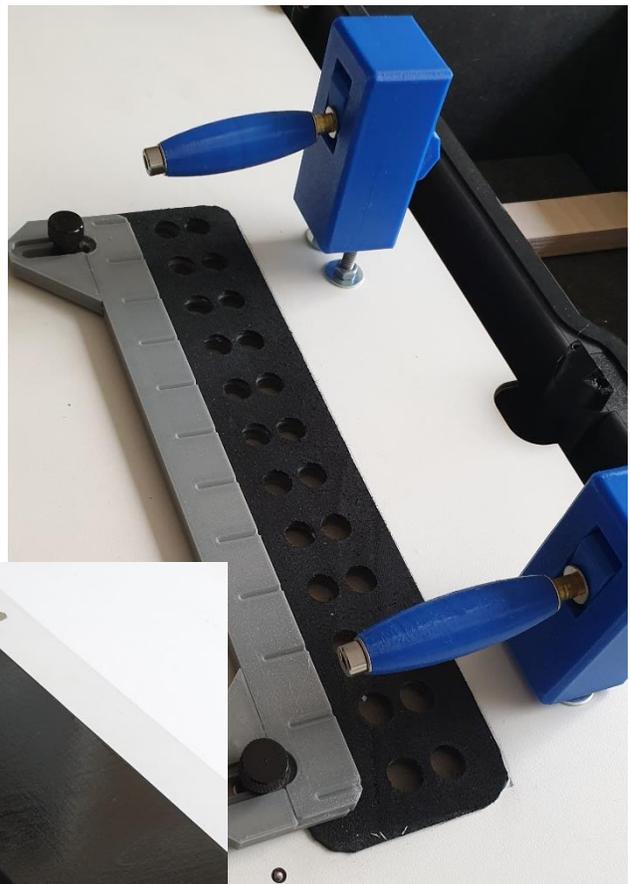
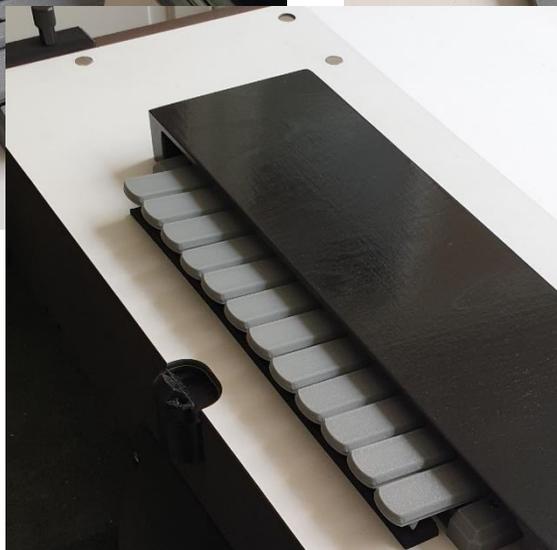
For this purpose a precise agreement between the customer and AKKOfixx is necessary.

Example 1

for a 2-voices reed block



reed block for a
diatonic
harmonica



Example 2

for a 3-voices reed block



for a diatonic harmonica



The customer tapes individual tone chambers to test the others.

Specifications

Dimensions (w/o reed block plate):	width	550 mm
	depth	300 mm
	height	100 mm
reed block plate:	width	570 mm
	depth	210 mm
	height, approx., over plate	35 mm
Weight	approx.	5 kg

For version with USB:

The MicSelection Box is activated by connecting it to a computer. The internal microphone is activated by the Mic 1 pushbutton, the external microphone by the Mic 2 pushbutton. The Mic 1+2 pushbutton activates both microphones, whose signal is mixed and routed to the USB output.. Pressing Mic 1 or Mic 2 activates the individual microphones again.

Scope of Delivery

AKKOflip Frame

Standard Reed Block Plate (can be omitted when ordering a customer-specific plate)

2 Star grip screws M6 for fixing the frame on the worktop.

Version AKKOflip USB USB cable for connecting to a PC

Options

2 microphones with output via USB port

Special reed block plate, according to customer specification.



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