The Sound-Unit



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The unique **Sound-Unit** can easily be removed for maintenance and, if necessary, all components can be exchanged individually. The mouthpiece is slim and, together with the block, slightly curved to provide for comfortable lip positioning and to offer an optimal angle for working with lip pressure.

The knurled head of the block adjustment thumbscrew (8), located below the block, allows the windway to be flexibly adjusted in small increments.

Care must be taken not to overtighten the screw.

- A narrow windway adds a certain rawness to the sound (i.e. the pitch drops slightly).
- · A wide windway makes the sound more flute-like (i.e. the pitch rises somewhat).
- The windway and block are cone-shaped to provide more flexibility in sound and intonation. The air stream becomes faster, giving a quicker response and a more immediate attack, aspects which improve both playing in the third octave and working with the Lip-Control mechanism (6).
- The three exchangeable windway-roof platelets (included) are held in position by

a removable rubber ring (7). The characteristics of these differ, depending on the material they are made of: The Palisander platelet (P) ensures a sonorous strong sound due to its smooth and very hard wood. The two Synpor platelets improve the response throughout the entire range, but particularly in the third octave, due to their moisture absorbing inorganic microporous structure. Their different voicings meet a multitude of musical demands: Platelet no. 1 ensures an easy response, platelet no. 2 adds more resonance.

General information about block settings

The stepless adjustment of the windway via the block adjustment screw gives the player the option to direct the tonal focus to the low register, or to the third register and above. In addition, narrower block positions give more focused, brilliant sounds, wider block positions emphasize the soft and airy sound elements. Because Synpor is absorbent, but does not swell, it is the ideal material for the platelet, and especially for the block. In the composite block (3) the Synpor core is embedded in a protective shell of high-quality plastic to prevent damage from teeth, or other mechanical wear. The stable

dimensions of both platelets and block maintain an air-tight fitting which is particularly beneficial when practising or rehearsing for many hours or playing in concerts.

The edges of the platelets have been designed perfectly for easy handling while removing or mounting, and ensure an air-tight fit.

The movable block allows the player to directly influence the sound. The soft rubber mount (4) beneath the block allows it to be tilted so as to completely close the windway as required. This gives the player the option to not only stop notes abruptly, but also to impart various shades, or even to let notes fade into nothing. A spring (9) connected to the Lip-Control mechanism (6) enables the latter to be employed in any block position, allowing greater flexibility for timbres and dynamics. The tension of the stainless steel spring (9) can be adjusted by means of a

Important: We recommend that the platelet, block and thumbscrew are carefully removed after playing for any length of time so that the Sound-Unit can thoroughly dry out.

small screwdriver to suit playing conditions of the

day and the musical material.

The Features

• The stainless steel tuning slide (10) allows the player to alter the instrument's pitch over a relatively wide range without detriment to the intonation, when playing, for example together with a piano (up to A = 444 Hz), with electronic studio instruments (at A=440 Hz), or even with older instruments (at around A=435 Hz).



 The wedge-shaped piano key/register key (11) can be opened or closed steplessly to allow playing with subtle, infinitely variable dynamics.



- The G sharp key (12) and the combined F/F sharp key (14) provide sonorous alternatives to standard forked fingerings and make some difficult fingering combinations and trill fingerings easier.
- The layout of the keys for C/C sharp/D sharp has been ergonomically designed to allow smooth fingering changes even when slurring.
- The connected key for the low B (13) makes it possible to play this extra note simply with the little finger of the left hand and also adds more options for alternative fingerings.



- The following features provide the best comfort while playing:
- The slightly tilted headjoint improves playing posture, particularly with respect to wrist position, by reducing the arm stretch.
- The innovative thumb rest (16) can be adjusted to suit individual players by extending the distance between the ball of the thumb (thenar) and the other fingers, thus minimising fatigue.
- The elastic neck strap reduces the weight of the instrument and relieves tension. Its carefully designed flexibilty supports a relaxed playing posture without being restrictive.





The Evolution of the Dynamic Recorder Based on the same principle as the modern harmonic recorders developed in the 1990s, and first developed by the Dutch recorder maker Maarten Helder, Mollenhauer has been making the so-called 'Helder Tenor' since 1996. Since that time, this comprehensivelyequipped instrument has been continuously improved, incorporating suggestions from Johannes Fischer and, more recently, in collaboration with the recorder player Susanne Fröhlich.

The underlying principles of the new harmonic instruments ensure that, through the use of a modern key mechanism, all the recorders' lowest notes can be overblown to clean and natural sounding harmonics. This characteristic gives the instruments more stability and volume, offering more favourable conditions for dynamic playing, improving the intonation and giving more natural access to the highest registers as well as an extended range.





Helder Evo Tenor recorder

Grifftabelle **Fingering Chart** Tableau de doigtés