

estelon

from Alfred & Partners



*Designed
by Alfred Vassilkov*

Model YB Mk II

Serial Number _____

Your ESTELON loudspeakers have passed our quality control:

- Technical test passed.

Engineer, Estelon

- Listening test passed.

Alfred Vassilkov
Head of Research & Development, Estelon

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1. INTRODUCTION

1.1. Alfred & Partners OÜ

Alfred & Partners, the Tallinn-based design studio, think-tank, and owner of Estelon, is not simply a business but a passionate dedication to a single, heartfelt idea: the development and manufacturing of instruments capable of unveiling the rich, emotional tapestry of music in a personally involving and captivating way.

For more than 35 years Electro-acoustics Engineer and company founder, Alfred Vassilkov, has been relentlessly designing loudspeakers. His designs have been awarded numerous patents while also achieving much success in Europe. In 2010 a decision was made: to establish his own brand based on his extensive experience, knowledge, and relentless passion.



Alfred Vassilkov, the Designer and Founder of Estelon

Such dedication carries the implicit responsibility of a wholly uncompromising approach to audio design. Pride of craftsmanship shares equal footing with sonic innovation. Alfred Vassilkov's visionary achievements along with his tireless drive and quest for musical truth, created an innovative brand of loudspeakers whose products offer unrivalled musicality and incomparable beauty: Estelon. More importantly, Estelon offers a distinctive key that assists listeners in unlocking the vast structure of emotion through music.

For the Estelon brand, the visionary development started in 2006 when Alfred started analyzing materials and technologies for producing cabinets with streamlined shapes that could not only reproduce the best sound but also assimilate into home interiors with an elegant, sculptured look. Years of research and development led him to a proprietary, crushed marble-based composite. The material, having excellent stiffness and anti-resonant attributes, as well as various technical advantages, allows the creation of molded cabinets with a purposeful design that enhances the sound quality of the entire audio system. Estelon's unique Y-shaped cabinet creates the ideal conditions for sound reproduction. Its smooth form eliminates corner reflections. A sculpted narrowing of the area where high frequency emanates helps achieve 0 degrees phase at the listening position, while the cabinet's larger radiuses create controlled directivity of the propagating soundwaves. The cabinet then becomes wider and deeper at its base for both stability and to allow effective low-frequency reproduction.

Every loudspeaker produced must pass Alfred & Partners' extreme level of quality control. Each pair of loudspeakers is completely hand-built, painted, assembled, tuned, tested, and then listened to individually. All Estelon products are meticulously handmade in Estonia, to the company's exacting standards.

1.2. Estelon YB Mk II

The distinctive style of YB Mk II is a masterpiece of sleek design. With an emphasis on lines and surfaces the resulting Y shape, from which the YB name derives, is obtained by the system's asymmetric driver positioning. The Estelon YB Mk II suits perfectly in contemporary interiors providing luxury, elegance, and performance.

Paramount among the physical design elements is the use of the unique Y shape cabinet form. Its design and construction allow it to easily couple with non-acoustically treated listening areas (i.e. normal living spaces). Premium quality components in separate chambers, state-of-the-art carbon-fiber resonant control, and applied isolation technology along with top-quality dampening materials, are all contributing factors to an exhilarating audio experience.

Many years have passed since the genesis of the Estelon, and much has been learned while embodying all achievements. The roots and choices have evolved into the Estelon sound. With the YB Mk II, the most beloved element of Estelon products has been reaffirmed again: simplicity. Featuring “minimalistic” second-order crossovers and the refined combination of the selected drivers and the acoustical attributes of the enclosure, has allowed Estelon to achieve their signature sound along with enhanced performance qualities.

The YB Mk II is a speaker designed for smaller listening rooms [suggested room size 16-45 m² (170-480 ft²)]. It provides exceptionally wide imaging, deep sound stage, and thrilling life-like dynamics. It is far more than speaker drivers in a cabinet. It is a genuine musical instrument in its own right, and when carefully integrated into a system and listening space, it is capable of connecting the listener to the music in a most profound and transcending way. Everything is expressed naturally, balanced, and emotionally engaging. The YB Mk II

possesses an eminently musical temperament that is immediately evident upon your first audition and every subsequent listening experience.

The YB Mk II will surprise the listener with the extremely defined and unexpectedly deep bass, clear and articulate mid-range, and musically detailed and dynamic high frequencies. The YB Mk II is capable of reproducing the finest nuances of music.

1.2.1. Cabinet Design

Chief among the physical design elements of the YB Mk II is the use of the Y-shaped cabinet form that has been developed and honed over many years of research and testing in order to find the right material that would allow the highest quality of cabinet and construction for the loudspeaker's acoustically engineered shape.

The cabinet is extremely rigid, highly dense, resonant-free, and with exceptional internal dampening and acoustical control. This is the result of time-honoured construction techniques, a special casting process, the use of a proprietary marble-based composite along with the extensive use of sub-structural stiffening spars that break up resonance nodes and create an internal acoustic chamber of non-parallel sidewalls that is all but immune to unwanted standing waves that can cause a coloured sound. This is why the Estelon speakers reproduce a very natural and balanced sound. During the final hand-assembly process each speaker is individually tuned to maintain uniformity from unit to unit. Unusual in its defined form, the results of this cabinet construction allows it to be easily paired even in an acoustically-untreated room, allowing the bass to roll effortlessly into the listening space.

1.2.2. Transducers

The high-quality drivers from Scan-Speak and SEAS employed, are a statement of transducer design. A 220 mm (8") SEAS woofer with an extremely lightweight and stiff aluminium cone provides tremendous bass precision. The cone and the low-loss rubber surround show no sign of the familiar cone edge resonance and distortion associated with soft cones. The mid-woofer is a Scan-Speak "Revelator" 148 mm (5.8") sliced paper cone. The slices are filled with damping glue, which reduces drastically the break-up modes in the diaphragm. This leads to less overall distortion in the mid-range frequencies, and the sound is clear and accurate. The tweeter is a 25 mm (1") beryllium "Illuminator" driver from Scan-Speak. Beryllium is a material characterized by great stiffness, lightweight and high damping. It has very low distortion and a distinct clarity that brings out the best of any musical genre.

In our loudspeakers, through the properly designed crossover, the drivers simply disappear, and only the music remains. It is like being present at a live concert where one can hear the instruments but not the speakers reproducing the sound. The Estelon loudspeakers offer a new way of relaxed listening, and you get to sense all the details that you have never heard before on your old records and digital music. You will be immersed in acoustical spaces with a "live" 3D presence that was never there before.

Each drive unit is "broken-in" by running an audio signal through them for several hours before selecting matching drivers for each pair of speakers. When the drivers are in matching pairs, another "break-in" with an audio signal is conducted. Finally, drivers are fitted into the finished cabinet for individual tuning.

1.2.3. Crossovers

The crossovers are mounted in a special isolated chamber to reduce the microphonic effect and vibration influence. Each crossover construction process involves careful attention from our engineers and designers, where every process is carefully measured, and each component is tested to make sure that the final outcome is perfect. In addition to technical measurements, there is also a final listening and evaluation process done by our highly experienced engineers. The Estelon YB Mk II has a finely tuned crossover. It is second-order, allowing it to be incredibly fast and with perfect phase transition. The crossover point of the tweeter and mid-woofer is at 2 kHz and between the mid-woofer and woofer at 80Hz.

We use transformer-core coils, OFC (oxygen-free copper) coils and Mundorf Silver-Gold-Oil capacitors, and all of which are measured to extremely tight tolerances before using in the crossover production. To maintain the smallest of details in the audio signal, direct mounting techniques are used with hand-soldered connections with short cable runs to each respective driver and binding posts. All internal cabling is of the highest quality and from the renowned cable manufacturer Kubala-Sosna. The connectors are strong and stable and are provided by Furutech.

1.2.4. Finish

Just as in the making of a great musical instrument, the finish has also an influence on the outcome. Because of the highly sophisticated cabinet shape, all the processes in the finishing stage are hand-made with extreme care by highly experienced specialists using the best technology and procedures. After casting the proprietary marble-based composite, it is allowed to age. Then the preparation of the surface of the cabinet commences by hand sanding and by sealing layer upon layer through an elaborate and time-consuming procedure. Finally, the multiple coats of the lacquer finish are applied along with the final polishing to a mirror-like finish. The Estelon YB Mk II is offered in a choice of liquid gloss, matte, or the optional premium finishes.

2. SPECIFICATIONS

TYPE:	3-way passive speaker, sealed box
DRIVERS:	
Woofer:	220 mm (8") SEAS, aluminium cone
Mid-woofer:	148 mm (5.8") Scan-Speak, sliced paper cone "Revelator"
Tweeter:	25 mm (1") Scan-Speak, beryllium dome "Illuminator"
INTERNAL WIRING:	Kubala-Sosna
FREQUENCY RESPONSE:	30-40 000 Hz
POWER RATING:	150 Watts
NOMINAL IMPEDANCE:	6 Ω (min 3 Ω at 52 Hz)
SENSITIVITY:	86 dB / 2.83 V
MINIMAL AMPLIFIER POWER:	30 Watts
DIMENSIONS:	Height: 1260 mm (49.5") Width: 332 mm (13") Depth: 394 mm (15.5")
NET WEIGHT:	45 kg (99 lbs.) per piece
SHIPPING WEIGHT:	126 kg (278 lbs.) pair

3. UNPACKING INSTRUCTIONS

Your Estelon Model YB loudspeakers come packaged in 2 separate carton boxes. For shipping, both boxes are packed in one plywood crate. The crate is collapsible for easier storage. We recommend keeping the original packaging for possible future transportation. Due to the substantial weight and slippery surface of the loudspeakers, we suggest that **two able-bodied individuals assist in the unpacking and positioning process**

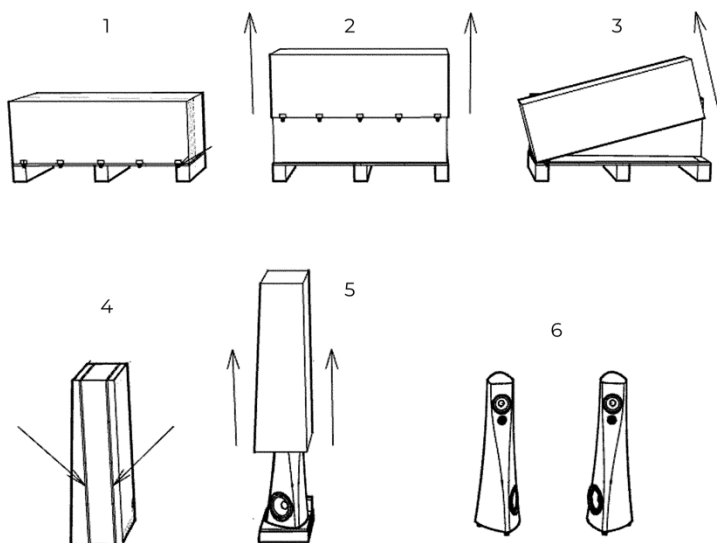
Content of the crate:

- 2 loudspeakers - 2 boxes: Left unit - 1 box / Right unit - 1 box
- 2 sets of spikes (8 pieces)
- 2 sets of locking rings (8 pieces)
- 2 sets of floor plates (8 pieces)
- 2 pairs of gloves
- 1 polishing cloth
- 1 user's manual
- 1 special fabric wrapped cover/grille (Woofer)
- 1 special fabric wrapped cover/grille (Mid-woofer)
- 1 special fabric wrapped cover/grille (Tweeter)

For unpacking, please follow the instructions described below and as shown in the drawings.

1. Bring the crate for unpacking as close as possible to the speakers positioning point.
2. Remove screws to open all locks from the bottom of the crate. This should be done with the crate in a horizontal position. (drawing 1)
3. Carefully lift and remove the cover from the crate as shown in drawing 2. Please put on the gloves that you will find in the crate.

4. Lift the box with the speaker to a vertical position as shown in drawing 3. Lift the box gently while the other person supports the box from the other side. Elevate the box with the speaker to a vertical position. Pay attention to the Speaker Top signs.
5. Remove the belts (drawing 4) and then remove the carton. (drawing 5)
6. Move the speaker carefully to the desired position in your room. Please make sure the right speaker is placed on the right side and the left speaker on the left side as shown in drawing 6.
7. Carefully remove the cloth bag.
8. Place the special fabric wrapped covers/grilles on the drivers to protect from dust and damage. They can be placed magnetically on the driver rims.



NB: Please retain all original packaging materials and accessories. They are essential for any future transportation or for shipping the speakers in the event of a warranty service. Discarding these materials may result in damage during transit.

NB: When reusing the supplied protective cloth bags to cover the speakers, ensure that the stitching is facing outward. This prevents the seams from coming into contact with the surface of the speakers and helps avoid any potential damage to the finish.

4. SET-UP

4.1. Initial positioning in the room

Model YB Mk II – Suggested room size 16-45 m² (170-480 ft²).

When positioning the speakers in your room, it is advised to allow enough "free" space around the speakers to minimize sound reflections from walls, furniture, etc. This will contribute to achieving correct tonality, realistic imaging, focus, and dynamics. The recommended minimum distance between the speaker and the front wall is 0.5 m (1.6 ft). The distance of the tweeter to the front and side walls should not be the same.

Listening point: the distance between the floor and your ears should be approx. 1 m (3 ft), while the distance between the listener and the speakers should be similar to the distance between the two speakers.

The positioning of the speakers in the room must be symmetrical for achieving a balanced sound stage. This is particularly important in a narrow space. The distance between the speakers should be approx. 2.2 – 3.5 m (7.2 – 11.4 ft) depending on the size of the

room and its reverberation characteristics. The recommended speaker's direction is approx. 7°, off-axis, towards the listening position (depending on the room acoustics).

The bass driver is positioned in an angle, facing the other loudspeaker. In smaller rooms, the loudspeakers are often located near the sidewalls and part of the midrange frequencies reflect on the walls and add colouration to the sound. The stereo image can also be impaired. The angled woofer position assists in reducing the reflections so that the audio signal remains pure within a realistic sound stage. For this reason, the left and right speakers are in a mirror-like position.

In smaller rooms or when the speakers have to be positioned close to the sidewalls, less than 0.6 m (2 ft), we suggest placing the speakers in opposite positions (L <-> R) so that the woofers are facing the sidewalls. The speakers' set up in this fashion will utilize the direct acoustical loading mechanism; whereas the low frequencies with a long wavelength will couple acoustically with the sidewalls (and the room) and will be direct without significant phase and timing distortion. The boundary interference with the sidewalls will be minimized for the low frequencies, and the effect will be elevated bass quantity, reduction of unevenness in standing waves, and better integration from lows to midrange. However, imaging and depth perception of the soundstage can be somewhat negatively affected as this setup is a slight compromise.

When there is sufficient space around the speakers, the ideal placement is always with the woofers facing inwards towards the middle of the room.

Please contact your dealer for consultation on how to improve your room acoustics.

4.2. Installing the bases

Depending on the type of floor in the listening room, there are 2 options for the stabilization of the speaker. The Estelon YB Mk II speakers are shipped with the isolation feet preinstalled on the base of the speakers.

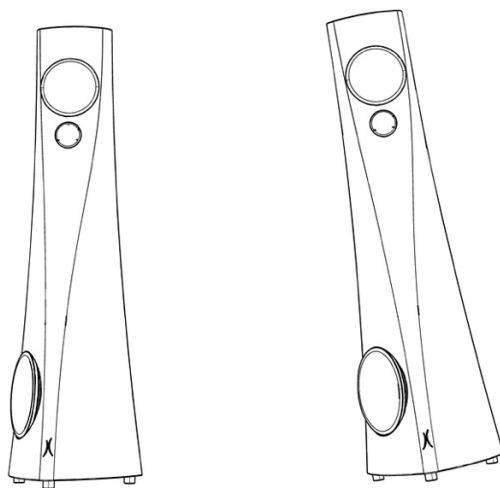
For carpeted floors please use the **spikes** (8 pcs), after assembling them **with the locking rings** as shown in drawing 7.



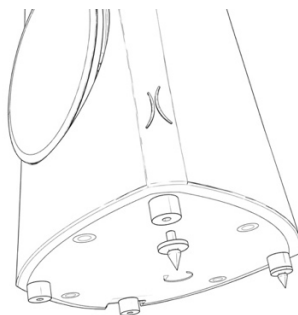
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Once you have assembled the bases and the final position of the speakers has been located, it is time to insert the spikes into the isolation feet. Please **insert the spikes on one side of each loudspeaker at a time**.

One person should carefully tilt the speaker against himself/herself and hold it in this position (drawing 8), while the other person screws the spikes into the two isolation feet as shown in drawing 9. Please **make sure the edge of the speaker's bottom does not touch the floor** during this process.



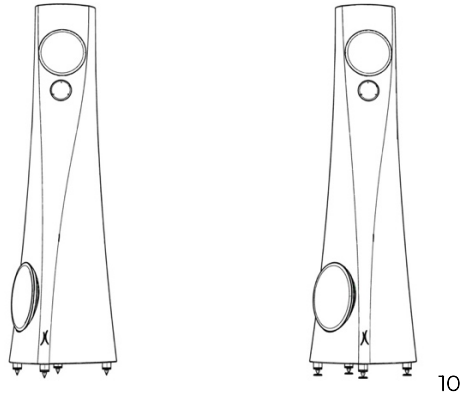
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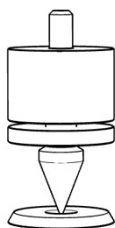
In case of hard flooring, please place the **floor plates** onto the floor before lowering the speaker on the side that the spikes were inserted. The floor plates are for use only on hard flooring in order to protect the floor from any damage from the spikes. For carpeted floors, use the **spikes** in order to pierce through the carpet to the hard flooring underneath.

Repeat the process for inserting the rest of the spikes on that loudspeaker, and then repeat this process for the other loudspeaker until both loudspeakers are standing on their spikes and/or the floor plates (drawing 10).

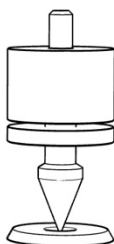


In case of an uneven floor please follow the steps described below, and as shown in the drawings, in order to achieve good stability and a properly levelled loudspeaker. Please locate the spikes that do not touch the floor/floor plates and then:

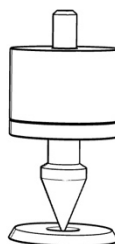
- i) Firmly hold the isolation foot to stay in place and unscrew the locking ring.
- ii) Keep holding the isolation foot and unscrew the spike till it reaches the right length and touches the floor/floor plate.
- iii) While firmly holding the spike in the adjusted height position, tighten the locking ring until the spike is firmly and securely seated.



i)



ii)



iii)

Proper use of the isolation feet and spikes/floor plates will achieve accurate audio reproduction with fast and deep bass, focused imaging, and avoiding colouration in the midrange frequencies.

NB: The speaker's floor plates are designed exclusively for stationary use. Once the speakers are positioned on spikes or floor plates, they should not be moved or repositioned, as this may cause damage to the floor or the speaker base.

4.3. Wiring

When connecting the speaker to the amplifier please make sure that the amplifier is in the off position. Connect the speaker cable to the pole terminal on the back of the speaker: speaker terminal „+“ with the amplifier terminal „+“ and „-“ with „-“. For signal flow, please follow the direction marked on the cable or in the cable manufacturer's instruction. Typically, the signal flow is in the same direction as the labelling/writing on the cable.

4.4. Break-in period

Although all Estelon speakers have an initial “break-in” at the factory, due to shipping conditions and pressure/temperature changes that may have incurred, the speakers will need to go through an additional “break-in” process before their final set-up. All the mechanical and electrical connections will stabilize naturally after playing a continuous music signal for approx. 24 hours – e.g. use a digital source on repeat mode. After the initial “break-in” period, you can start setting-up the sound according to Alfred Vassilkov's recommendations. Please note that the speakers should reach their optimum level of performance after about 300-400 hours of use.

4.5. Set-up recommendations by Alfred Vassilkov

The set-up of the sound consists of the balance between different parameters such as tonality, bass accuracy, focus, stage imaging, depth, etc. The time required for this process depends on the listener's experience and skills. Proper set-up will maximize the speakers' performance. During the final set-up, small adjustments may be made to the initial chosen position, e.g., moving the speakers 10 cm towards the front wall, etc. Please evaluate the sound carefully every time you make a small change in the positioning. Continue making small changes in the positioning and evaluate again until the proper position with a balanced, natural sound is found. We suggest that you test and listen to various musical pieces from different genres to avoid specific sonic accents.

Please keep in mind when changing the position of your speakers:

- Close proximity to the front wall and corners will reinforce, enhance, the bass performance.
- A shorter distance between the two speakers will create better focus and deeper imaging but will reduce the width of the stereo image.
- Pointing the speakers inwards minimizes reflections from the side walls but has an impact on the stereo image.

Before critical listening, please allow 60-90 minutes of playback for system-stabilization and remove the drivers' protective grilles. When listening at an excessive volume you risk damaging the drivers.

5. TAKING CARE OF YOUR ESTELON SPEAKERS

The multi-coated finish applied to Estelon speakers is considered the most advanced automotive finish available. It is extremely strong and durable. In order to maintain the speakers' immaculate appearance, special cleaning cloths are provided with your Estelon loudspeakers. Please note that only dry cleaning is allowed. Do not wash the speakers. In case of a smudge/spot, please use a damp, soft, lint-free cloth to clean the smudges before the final finishing with the special cloths that accompany the speakers. For the Liquid Gloss finish, please use only the polishing cloth included in the flight case. Please do not apply polishing to the speaker drivers. The use of other materials can damage, scratch, or destroy the finish.

Additional information regarding the polishing cloths and other products:

For all finishes:

- Use with the provided microfiber cloth: Würth Active Glass Cleaner (Item # 089025) Silicone-free
- 3M Perfect-It III High Performance Polishing Cloth (Item # 50486) or any 3M Microfiber cloths

For Liquid Gloss finish only:

- Window Cleaner (with alcohol)
- Polish cloth impregnated with Krytox® (DO NOT USE FOR MATTE FINISH)

No additional wax or polish is required.

For additional information and guidance regarding cleaning/polishing materials, please contact your dealer or distributor.

6. ESTELON / ALFRED & PARTNERS OÜ – Technical Services

Alfred & Partners OÜ Five Year Limited Warranty

Terms and Conditions

1. **Limited Warranty** – All ESTELON products purchased from authorized ESTELON dealers are covered by a limited 5-year non-transferrable warranty granted by Alfred & Partners OÜ. This warranty includes all parts and labour charges as well as return shipping charges (product owner is responsible for all shipping and insurance charges

one-way to the ESTELON repair facility or ESTELON factory approved repair facility).

Alfred & Partners OÜ warrants the purchased product to be free from manufacturing, materials, and workmanship defects for **five years** from the date of original purchase, subject to the following conditions.

Customers should consult with their original ESTELON dealer or distributor for possible alternate repair instructions prior to contacting the ESTELON factory. Other ESTELON dealers or distributors may refuse from assisting the Customer under the limited warranty. BUT under any and all circumstances customers are welcome to contact our sales department, listed on our website www.estelon.com, for service assistance.

This limited warranty is valid only in the country where the product was originally purchased. If the repair request that is covered under this warranty comes from another country, then Alfred & Partners OÜ may request the Customer to compensate Alfred & Partners OÜ additional costs arising from providing this limited warranty in another country than the country of original purchase.

This limited warranty shall not affect the statutory rights of the Customer.

2. Limited to Original Purchaser – This warranty is for the sole benefit of the original purchaser of the covered product and may not be transferred to a subsequent purchaser of the product.

3. Conditions and Limitations – This warranty is subject to certain conditions and limitations, as follows. This warranty is void and inapplicable if the product has not been used in accordance with the instructions found elsewhere in the owner's manual, or if it has been misused or abused, damaged by accident or neglect, or in transport

once in possession of the purchaser. The warranty is also deemed void if the product has been repaired, modified, or tampered with by anyone other than Alfred & Partners OÜ or its specifically authorized agents. Please Note – if the fasteners to the cover of the crossover area, those covered with multi-coloured specialty epoxy seal, have been tampered with / the epoxy removed – the warranty will be considered to be void.

This warranty does not cover defects due to accidents or similar causes arising after the risk for the product has passed to the Customer, or normal deterioration, wear and tear.

4. **Remedy** – If this product contains a material, manufacturing, or workmanship defect that cannot be repaired at the dealership where the product was purchased, it must be packed in original packaging and returned to Alfred & Partners OÜ via insured freight, at the owner's expense. If replacement packaging materials are required, they may be purchased from the factory at a charge. **Returned products must be accompanied by a written description of the defect.**

Upon receipt of a defective product, Alfred & Partners OÜ agrees to repair the product without charge for parts or labour. The product will then be returned via prepaid, insured freight, with the carrier at the sole determination of Alfred & Partners OÜ. This constitutes the purchaser's sole remedy.

Alfred & Partners OÜ undertakes during the warranty period to the exclusion of any other remedy to repair or replace the part of the product, which the examination by Alfred & Partners OÜ shows to have been defective. The warranty period for repaired or replaced parts shall not exceed the original warranty period and shall terminate along with the original warranty. The term of the original warranty shall not be extended by the duration of any warranty repairs.

5. **Design Changes** – ESTELON reserves the right to modify its products or change specifications at any time without obligation or liability to previous purchasers.

6. **Miscellaneous** – This warranty does not extend to any incidental or consequential costs or damages to the purchaser. This warranty gives you specific legal rights. You may also have other rights which vary from country to country.

Instructions for Repair Service

1. Crate and/or package the product in its **ORIGINAL FLIGHT CASE CONTAINERS ONLY**. The owner is responsible for paying the shipping and insurance charges (Alfred & Partners OÜ will cover return shipping and insurance charges on warranty repairs).

2. In the case of **non-warranty repairs**, Alfred & Partners OÜ will physically inspect the product and contact the customer for repair approval. Upon approval and completion of the repair, the product owner will be informed of the final charges (including return shipping). Payment may be made by bank/wire transfer prior to the final shipment). Payments not received within 30 days of initial contact may incur storage fees.

We strongly recommend that all product repairs should be conducted through the ESTELON factory or an authorized ESTELON repair facility. ESTELON products are designed and manufactured to the highest tolerances with numerous hand-picked components; for this reason, we **HIGHLY RECOMMEND** that components not be serviced by non-authorized repair facilities. Alfred & Partners OÜ values its loyal customers and will make every attempt to return repaired products to their original factory specifications. Customers should

consult with their original ESTELON dealer or distributor for possible alternate repair instructions prior to contacting the ESTELON factory. BUT under any and all circumstances customers are welcome to contact our sales department, as listed on our website www.estelon.com, for service assistance. All non-warranty repairs are warranted for one year from the date of the return shipment.

*Have we answered all your questions?
If not, please send us an email with your questions at
sales@estelon.com*

www.estelon.com

ESTELON is a trademark of Alfred & Partners OÜ

Alfred & Partners OÜ

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Notes