

estelon

from Alfred & Partners



AURA

*Designed
by Alfred Vassilkov*

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. Estelon's unique shaped cabinet creates the ideal conditions for sound reproduction. Its smooth form eliminates corner reflections.

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 AURA

The AURA is a masterpiece of sleek design. It suits perfectly in contemporary interiors providing luxury, elegance, and performance.

Paramount among the physical design elements is the use of the unique 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, 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 AURA, the most beloved element of Estelon products has been reaffirmed again: simplicity. Featuring “minimalistic” 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 AURA is a speaker designed for various sized listening rooms [suggested room size 15-60 m² (161-645 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 AURA possesses an eminently musical temperament that is immediately evident upon your first audition and every subsequent listening experience.

The AURA 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 AURA is capable of reproducing the finest nuances of music.

1.2.1. Cabinet Design

Chief among the physical design elements of the AURA is the use of the unique shape 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 thermoforming development process, the use of a proprietary mineral-filled 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 26mm (1") Scan-Speak 'Illuminator' Textile Dome tweeter has a symmetrical drive motor for outstanding sound quality and linearity, regardless if the music is reproduced at high or low volume levels. The tweeter excels at speed and high resolution. The soft curves of the cabinet, along with the tweeter waveguide, eliminate the negative reflective impacts from the driver output, thus the directivity of the speaker is homogenous and wide. The tweeter waveguide has a complex elliptical shape, and it is fine-tuned to match the specific tweeter by Scan-Speak. The sound dispersion is more uniform, and when paired with the mid-woofer drivers the sound is pure and uninfluenced.

The 130mm (5") mid-woofer by Satori is using a proprietary Egyptian Papyrus Cone for achieving transparency and effortless delivery of the sound. The vented aerodynamic cast aluminium chassis provides optimum strength and low compression. The driver features a soft, low-dampening rubber surround for optimum transient response, and its neodymium motor system is optimized for low distortion. The silver lead wires are attached 180° apart for improved stability.

AURA's innovative design allows the incorporation of a powerful 10" woofer in the base of the loudspeaker (down-firing), for a rich and smooth bass reproduction. The 250mm (10") Faital woofer provides articulate, deep-bass. It has a semi-pressed paper cone that provides clean and tight low frequencies. The woofer has an accurate, effortless bass sound. The curved base plate enables the bottom firing woofer to acoustically couple with the floor. The isolation feet/ spikes are positioned in its corners with appropriate distance that provides the necessary stability for the loudspeaker. Lastly, the base-plate's design and driver elevation from the floor allows the bass to propagate properly through the provided opening, even when the speaker is placed on thick carpeting.

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 AURA crossovers are mounted in the woofer chamber. In order to reduce the microphonic effects and vibration influence we are using dampening materials in contact with the filter plate. The woofer has a second-order low-pass network. The mid-woofer has a high-pass network that is a blend of second and third order. The mid-woofer low-pass network is third order, and the tweeter high-pass network is second order.

We use custom OFC (oxygen-free copper) air-core coils, supercapacitor type capacitors and wire-wound resistors of the finest quality. Every component is measured to yield perfect pairs. In order to achieve the highest degree of micro-detail fidelity, the filter components are connected directly, via point-to-point techniques, all hand-soldered with high-quality solder, and with the shortest possible cable runs between drivers, crossover and binding posts. All internal cabling is from the renowned cable manufacturer Kubala-Sosna. The connectors are strong and stable and are provided by Cardas.

Each crossover construction process involves careful attention from our engineers and designers, where every process is carefully thought out and each component tested to make sure that the final result is perfect. After passing technical measurement tests, the finished speaker is put through extensive critical listening tests.

2. SPECIFICATIONS

TYPE:	3-way passive speaker, sealed box
DRIVERS:	
Woofer:	250 mm (10") Faital, Semi-pressed paper cone
2 x Mid-woofer:	130 mm (5") Satori, Egyptian papyrus cone
Tweeter:	26 mm (1") Scan-Speak, Textile dome "Illuminator"
INTERNAL WIRING:	Kubala-Sosna
FREQUENCY RESPONSE:	35 - 25 000 Hz
POWER RATING:	200 Watts
NOMINAL IMPEDANCE:	4 Ω (min 2 Ω at 58 Hz)
SENSITIVITY:	90 dB / 2.83 V
MINIMAL AMPLIFIER POWER:	30 Watts
DIMENSIONS:	Height: 1366 mm (53.7") Width: 384 mm (15.1") Depth: 367 mm (14.4")
NET WEIGHT:	34 kg (75 lbs.) per piece
SHIPPING WEIGHT:	109 kg (240 lbs.) pair

3. UNPACKING INSTRUCTIONS

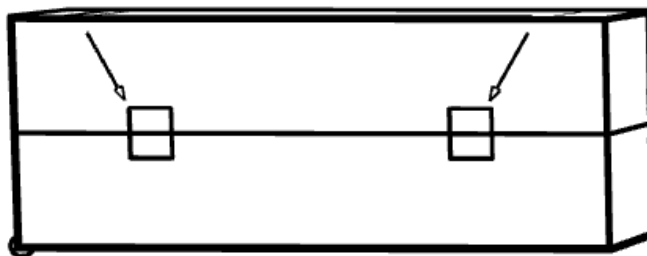
Your Estelon AURA loudspeakers come packaged in 2 separate carton boxes. For shipping, both boxes are wrapped on a pallet. We recommend keeping the original packaging for possible future transportation. Due to the substantial weight and slippery surface of the loudspeakers, we suggest that **two or three able-bodied individuals** assist in the unpacking and positioning process.

Contents of the two flight cases:

- 2 loudspeakers
- 1 Accessories box (always located in the flight case with the indication OWNERS MANUAL IS LOCATED INSIDE THIS BOX):
 - 2 sets of isolation feet (8 pieces)
 - 2 sets of spikes with locking rings (8 pieces)
 - 2 sets of floor plates (8 pieces)
 - 1 user's manual
 - 2 pairs of gloves
 - 1 polishing cloth

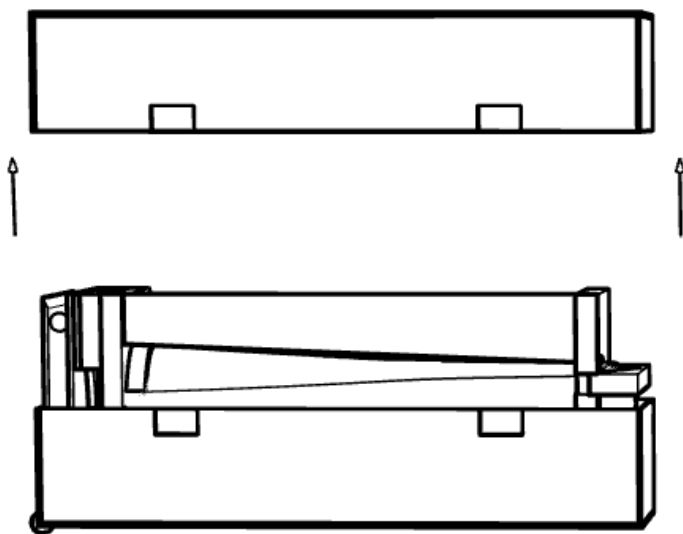
For unpacking, please follow the instructions described below and as shown in the drawings:

1. Unlock/open all four locks of the flight case cover while the flight case is in a horizontal position (drawing 1).



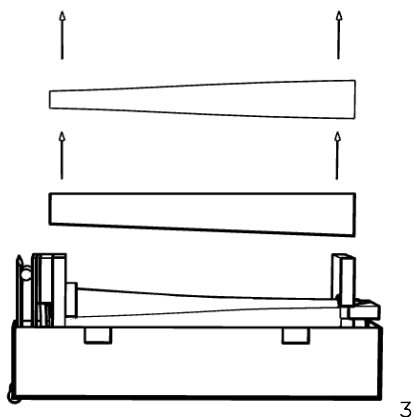
1

2. Carefully lift and remove the cover from the flight case (drawing 2).

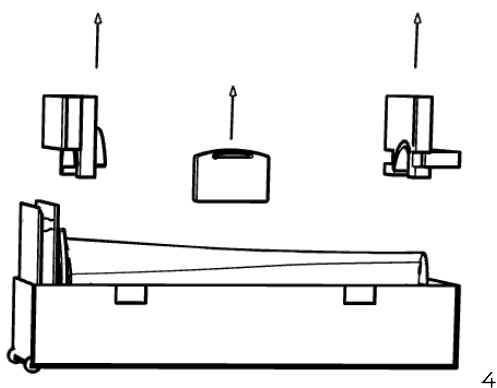


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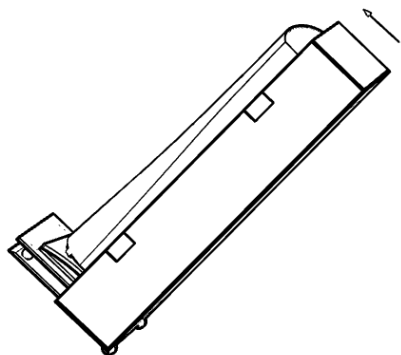
3. Remove the thin cardboard box from the side of the case, and then carefully remove the drivers' grille cover from the thin cardboard box as shown in drawing 3.



4. Remove the 2 pieces of protective foam from the top and bottom part of the speaker, as well as the accessories box as shown in drawing 4. In the accessories box you will find 2 pairs of gloves and a cleaning cloth. Please use the gloves for the following steps.

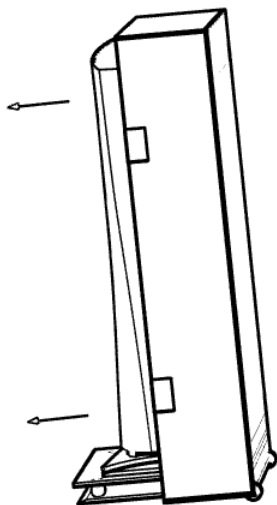


5. Lift gently the flight case as shown in drawing 5 while the other person supports the speaker from the other side. Be very careful to not touch the drivers of the speakers.



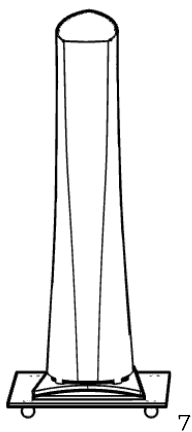
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6. Now in an upright position, please support the speaker, and slowly roll it out of the case (drawing 6).

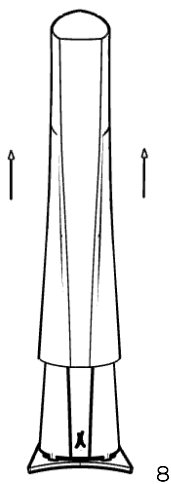


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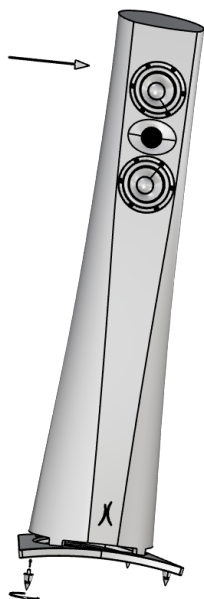
7. Carefully place the speaker on the floor from the wheeled base (drawing 7).



8. Remove the cloth bag from the speaker (drawing 8).



9. Repeat the above steps for the other speaker.
10. In order to put the spikes with the locking rings, one person should carefully tilt the speaker against himself/herself and hold it tight in this position (drawing 9), while the other person screws the spikes into the isolation feet.
Repeat the process for the other side until all 4 spikes are screwed into place.



9

11. 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 (drawing 10).

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.



10

12. Place the special fabric wrapped covers/grille, that was unboxed during step 3, on the front panel of the speaker to protect the drivers from dust and damage. They can be placed magnetically (drawing 11).



13. Repeat the steps for the other speaker.

4. SET-UP

4.1. Initial positioning in the room

Model AURA – Suggested room size 15-60 m² (53-645 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 at the base of the speakers, facing the floor. 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 woofer position assists in reducing these reflections so that the audio signal remains purer with more uniform bass propagation.

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

4.2. Wiring

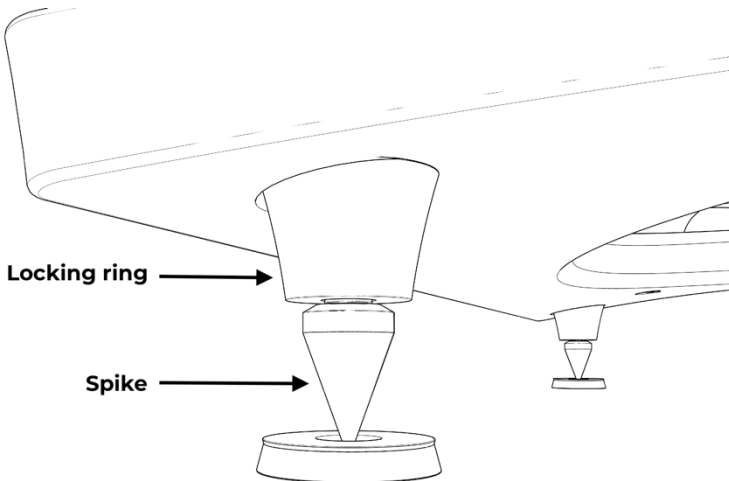
When connecting the speaker to the amplifier please make sure that the amplifier is in the off position. Connect the speaker cable to the pole terminal on the back of the speaker: speaker terminal „+“ with the amplifier terminal „+“ and „-“ with „-“. For signal flow, please follow the direction marked 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.

4.3. Setting up the spikes for uneven floors

In case of an uneven floor please follow the steps described below 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) Loosen the locking ring slightly.
- ii) Adjust the spike until it makes contact with the floor.
- iii) While firmly holding the spike in the adjusted height position, tighten the locking ring until the spike is securely in place.



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

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. 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:

- 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

No additional wax or polish is required.

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

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, and a return authorization number (available from the factory via phone or email).

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 Obtaining Repair Service

1. Complete the Return Authorization Request Form – available online at estelon.com/support.
2. Upon clicking the 'Submit' button on the Return Authorization Form, the ESTELON factory will review it for

completeness and return an e-mail to you with an RA number when required (please allow 2-5 days for a return e-mail).

3. Crate and/or package the product in its **ORIGINAL FLIGHT CASE CONTAINERS ONLY**, according to the instructions included in the return e-mail, and ship the product to the shipping address included in the e-mail. The owner is responsible for paying the shipping and insurance charges (Alfred & Partners OÜ will cover return shipping and insurance charges on warranty repairs).

4. **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

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Alfred & Partners OÜ

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Notes