

# **EQUIPMENT DISPOSAL AND RECYCLING**

EHS-042: ISSUE 2

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### 1. Introduction

#### Scope of documentation

This document makes reference the range of products manufactured by Kelvin Hughes Ltd, trading as Hensoldt UK. Depending on the age of a product, this may not extend to legacy or obsolete equipment manufactured by the company.

#### Equipment disposal/ recycling

Hensoldt UK is committed to conserving the environment and treating natural resources with care and respect. This applies as much to our products as to our processes. It is our aim to take appropriate measures to prevent environmental pollution or to reduce it to an absolute minimum.

It has been globally recognised that the incorrect disposal of some materials including plastics can have a harmful and negative impact on the environment. Hensoldt UK request that waste material and equipment that has reached the end of its serviceable life is not discarded as general waste or by a method that could lead to material being disposed of in a landfill site.

For end of life disposal of equipment, please contact Hensoldt UK using the contact details in paragraph 1.5.

#### 1.1 Design

Complying with the applicable legal requirements and with other requirements to which the organisation subscribes relating to its environmental aspects, Hensoldt UK will endeavour to apply design standards that will promote the use of environmentally friendly processes and materials and encourage the development of products that can be reused, recycled, or disposed of safely.

#### 1.2 Material Sourcing

The company will promote responsible sourcing of materials and goods from suppliers that encourage the safe production, reuse, recycling, and use of recycled materials wherever possible.

#### 1.3 Disposal of Installation Material

Unless specifically required for repacking, storage, transport or return, all equipment packaging and any waste material generated during equipment installation should be disposed of in accordance with current local waste disposal regulations. Safe disposal should include all adhesives, sealants and materials supplied as part of fitting kits.

#### 1.4 Disposal of In-Life Consumables

During the life cycle of a product, some spare parts may be required to replace consumable items such as batteries, magnetrons, line replacement units. For end of life disposal of consumables, please contact Hensoldt UK using the contact details in paragraph 1.5.

### 1.5 End of Life Disposal

Hensoldt UK will take back equipment and consumables that have reached end of life for disposal providing the consignment is in accordance with our Returns Procedure and has a valid Returns Reference.

Hensoldt UK can offer a repair / refurbishment service for faulty equipment considered to be within its serviceable lifecycle. If after survey, the equipment is considered to be beyond economic repair (BER), Hensoldt UK can arrange disposal. Disposal of BER equipment is free of charge but surveys are chargeable.

To obtain a returns reference or if you require further assistance, please email the contacts below:-

Equipment Type	Email Address
Commercial Marine Radar or Nav/Com	<a href="mailto:Khhg.rma@hensoldt.net">Khhg.rma@hensoldt.net</a>
Naval Radar System	<a href="mailto:surveillance.support@hensoldt.net">surveillance.support@hensoldt.net</a>
Land Based VTS System	<a href="mailto:surveillance.support@hensoldt.net">surveillance.support@hensoldt.net</a>
Security or Counter UAV Radar	<a href="mailto:Security.tech@hensoldt.net">Security.tech@hensoldt.net</a>

### 1.6 SharpEye™ Specific End of Life Disposal Notice

SharpEye™ transceivers are factory-sealed units that contains no field serviceable parts or lifed components.

Components within some early models of the processor may contain traces of Beryllium and Trivalent Chromium. For end of life disposal of a SharpEye™ processor, please contact Hensoldt UK quoting the part number and MOD (Modification) state of the processor. We will provide you return instructions in accordance with our returns procedure. For contact details, please see paragraph 1.5 – End of Life Disposal.

### 2. Navigation Equipment Material Composition

Hensoldt UK manufactured navigation equipment may contain a combination of the following materials:

	<p><b>ANTENNA</b></p> <p>Plastics, Polystyrene, Metal, Adhesive</p>
	<p><b>GEARBOX / UPMAS TRANSCEIVER</b></p> <p>Metal, Carbon Fibre, Cables, Plastics, Various electronics and electronic components, Adhesives, Sealant, Lubricant, SharpEye Processor, Magnetron.</p>
	<p><b>DOWNMAST TRANSCEIVER</b></p> <p>Metal, Cables, Plastics, Various electronics and electronic components, Adhesives, Sealant and Air Filters, Batteries, Magnetron.</p>
	<p><b>ANCILLARY UNITS</b></p> <p>Metal, Cables, Plastics, Various electronics and electronic components, Adhesives, Sealant and Air Filters, Batteries.</p>
	<p><b>DISPLAY</b></p> <p>Metal, Cables, Plastics, Glass, electronics and electronic components, Adhesives, Batteries, Various RoHS compliant electronics/ electrical components.</p>
	<p><b>CABLES</b></p> <p>Cables &amp; Interconnections, Waveguide, Flexwell, Cables (copper &amp; fibre optic).</p>

#### KELVIN HUGHES | NAVIGATION EQUIPMENT MATERIAL BREAK DOWN


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#### HISTORY DRAWN BY: VM

REQ.	WILL WALLIS	03/12/18
Iss 1	VIGAN MALAZOGU	03/12/18
Iss 2	VIGAN MALAZOGU	07/02/19
Iss 3	VIGAN MALAZOGU	26/09/19
MOD.	*	**jjsj**

### 3. Voyage Data Recorder Material Composition

Hensoldt UK manufactured and supplied Voyage Data Recorders (VDR) and Simplified Voyage Data Recorders (S-VDR) may contain a combination of the following materials:



**DATA ACQUISITION UNIT**

Metal, Cables, Plastics, Various electronics and electronic components, Adhesives, Sealant and Air Filters, Batteries, Magnetron.




**FIXED CRASH SURVIVAL MODULE (CSM)**

Metal, Electronics, Lithium Batteries.




**FLOAT FREE CRASH SURVIVAL MODULE**

Metal, Electronics, Lithium Batteries.



**BATTERY UNITS**

Batteries.



**DATA COLLECTION UNIT**

Metal, Cables, Plastics, Electronics and electronic components.

**KELVIN HUGHES | VOYAGE DATA RECORDER (VDR)  
EQUIPMENT MATERIAL BREAK DOWN**

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REQ.	WILL WALLIS	03/12/18
Iss 1	VIGAN MALAZOGU	03/12/18
Iss 2	VIGAN MALAZOGU	28/01/19
Iss 3	VIGAN MALAZOGU	24/09/19
MOD.	*	**/**/**

## 4. Product specific notices

### 4.1 Batteries

Some equipment may contain sealed lead acid batteries, Lithium or Manganese Dioxide Lithium batteries.

Hensoldt UK will take back batteries at end of life for disposal providing they are returned in accordance with the Hensoldt UK Returns procedure (see paragraph 1.5 – End of Life Disposal)

### 4.2 Magnetrons

Magnetrons contain high-powered magnets that must be kept away from all magnetically sensitive material and equipment.

Hensoldt UK will accept the return of used magnetrons providing they are returned in accordance with the Hensoldt UK Returns procedure (see paragraph 1.5 – End of Life Disposal)

### 5. Materials and Environmental Impacts

MATERIAL	ENVIRONMENTAL IMPACTS
<b>PLASTICS</b>	Plastics are not biodegradable and can be harmful to marine life. Chlorinated plastics in landfill may result in ground water and soil pollution.
<b>CARBON FIBRE</b>	Carbon fibre is not biodegradable.
<b>ADHESIVES AND SEALANTS</b>	Some adhesives and sealants are not biodegradable. Adhesives and sealants in landfill may result in ground water and soil pollution.
<b>METALS</b>	Raw material extraction and processing may result in soil degradation, ground water pollution, damage to the ecosystem and global warming exacerbation.
<b>BATTERIES</b>	Batteries are manufactured from a variety of chemicals. Some of these chemicals, such as nickel and cadmium, are extremely toxic, and can cause damage to humans and the environment. In particular, they can cause soil and water pollution and endanger wildlife.
<b>GLASS</b>	Glass is a fully recyclable material that can be repeatedly recycled. Thanks to glass recycling, significant amounts of raw materials are saved, and natural resources are preserved. Glass recycling also helps in saving energy as cullets (crushed glass) melt at a lower temperature than raw materials.