

---

# **Wave Signal Booster™**

***Release 0.0.1***

**Author(s): Siôn H. Buckler, Wave**

**Jan 15, 2019**



# CONTENTS

<b>1</b>	<b>Release Notes and Notices</b>	<b>3</b>
1.1	Version 0.0.1 . . . . .	3
1.2	Known and Corrected Issues . . . . .	3
1.3	Recently Updated Topics . . . . .	4
<b>2</b>	<b>Guidelines &amp; Safety</b>	<b>5</b>
2.1	Regulatory Information . . . . .	6
2.2	<b>Safety Instruction</b> . . . . .	7
<b>3</b>	<b>Wave® Smart Home Intro</b>	<b>9</b>
3.1	Wave® Hardware Devices . . . . .	10
3.2	Wave® Operating System . . . . .	10
3.3	Wave® Enhancement Products . . . . .	10
3.4	Wave® Home Hub™ . . . . .	11
3.5	Wave® Dashboard™ . . . . .	12
3.6	Getting Started . . . . .	13
<b>4</b>	<b>About This Product</b>	<b>15</b>
4.1	Package Content . . . . .	15
4.2	Software Edition Features . . . . .	15
4.3	Settings & Preferences . . . . .	15
4.4	General Usage . . . . .	15
4.5	Troubleshooting . . . . .	15
<b>5</b>	<b>Service and Support</b>	<b>17</b>
5.1	Accessing Online Support . . . . .	17
5.2	Contacting Wave® Technical Support . . . . .	17
<b>6</b>	<b>Legal Compliance &amp; Warranty</b>	<b>19</b>
6.1	Regulatory Compliance . . . . .	19
6.2	CE Compliance For Europe . . . . .	19
6.3	GNU General Public Licence (“GPL”) . . . . .	20
6.4	Mozilla Public License version 2.0 . . . . .	20
6.5	Warranty Information . . . . .	24
<b>7</b>	<b>Document Author(s):</b>	<b>27</b>
7.1	Siôn H. Buckler . . . . .	27



*Wave® Wi-Fi Signal Booster™*





## RELEASE NOTES AND NOTICES

This section provides information about what is new or changed, including urgent issues, Software & documentation updates, maintenance and new releases.

- ‘Updates’ are the term used to describe significant changes to our public source code. These technical documents are now contained within our public source code.

### 1.1 Version 0.0.1

This is the first release/ draft of this technical document.

#### 1.1.1 Older Versions

There are no older versions of this document, however a table has been made so that enteries can be made. We’re also still exploring how exactly we will make links to the older versions possible. Perhaps a PDF snapshot will do, before the directory is overwritten with the next version. The sphinx methodology is new to our team, we’re still exploring this and other options for maintaining technical documents for this project:

Table 1: Table 1.0 - Older Versions of this Document

archive date	version	description	download link
no date	0.0.0	N/A	N/A

#### 1.1.2 Version 0.0.0

N/A

### 1.2 Known and Corrected Issues

**Below is a table of pending issues which have been reported to our team.** These issues will be cleared from this list as and when they are remedied.

Table 2: Table 1.1 - Known Issues

date	version	subject	description
01-11-2018	0.0.1	N/A	no doubt many issues to report - first draft only

**Comments** - none

## **1.3 Recently Updated Topics**

Nothing significant to report



## GUIDELINES & SAFETY

COPYRIGHT © 2018 Make it Wave Ltd.

### ALL RIGHTS RESERVED.

Any and all information, including, among others, wordings, pictures, graphs are the properties of Make it Wave Ltd. or its subsidiaries (hereinafter referred to be “Wave”). This user guide (hereinafter referred to be the “User Guide”) may not be reproduced, changed, translated, or distributed, partially or wholly, by any means, without the prior permission of Wave. Unless otherwise stipulated, Wave does not make any warranties, guarantees or representations, express or implied, regarding to the Manual

### About this User Guide

This User Guide is applicable to the WaveOS Range of Products V1. The User Guide includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the User Guide is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (<https://makeitwave.com>) Please use this User Guide under the guidance of professionals.

### Trademarks Acknowledgement

	Company Logo
---	--------------

The above logo and other Wave trademarks and logos are the properties of Wave in various jurisdictions. Other trademarks and logos mentioned below are the properties of their respective owners.

### Legal Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, IS PROVIDED “AS IS”, WITH ALL FAULTS AND ERRORS, AND WAVE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THIRD PARTY. IN NO EVENT WILL WAVE, ITS DIRECTORS, OFFICERS, EMPLOYEES, OR AGENTS BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA OR DOCUMENTATION, IN CONNECTION WITH THE USE OF THIS PRODUCT, EVEN IF WAVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. REGARDING TO THE PRODUCT WITH INTERNET ACCESS, THE USE OF PRODUCT SHALL BE WHOLLY AT YOUR OWN RISKS. WAVE SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER ATTACK, HACKER ATTACK, VIRUS INSPECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, WAVE WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED. SURVEILLANCE LAWS VARY BY JURISDICTION. PLEASE CHECK ALL RELEVANT LAWS IN YOUR JURISDICTION BEFORE USING THIS PRODUCT IN ORDER TO ENSURE THAT YOUR USE CONFORMS THE APPLICABLE LAW. WAVE SHALL NOT BE LIABLE IN THE EVENT THAT

THIS PRODUCT IS USED WITH ILLEGITIMATE PURPOSES. IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

## 2.1 Regulatory Information

### FCC Information

**FCC compliance:** This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**FCC Conditions** This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1. This device may not cause harmful interference. 2. This device must accept any interference received, including interference that may cause undesired operation.


### EU Conformity Statement

	<b>European Standard</b>
---	--------------------------

This product and if applicable, the supplied accessories too are marked with “CE” and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU

	<b>WEEE Directive</b>
---	-----------------------

2012/19/EU (WEEE directive) Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

	<b>Battery Directive</b>
---	--------------------------

2006/66/EC (Battery Directive) This product may contain a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product specific section of this document for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg).

For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

### Industry Canada ICES-003 Compliance

This device meets the CAN ICES-3 (A)/NMB-3(A) standards requirements.

## 2.2 Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. The precaution measure is divided into “Warnings” and “Cautions”

	<b>Warnings</b>
---	-----------------

**Warnings:** Safeguards to prevent serious injury or death. Serious injury or death may occur if any of the warnings are neglected. Follow these safeguards to prevent serious injury or death.

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 24 VAC or 12 VDC according to the IEC60950-1 standard.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Please make sure that the plug is firmly connected to the power socket. When the product is mounted on wall or ceiling, the device shall be firmly fixed.
- If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

	<b>Cautions</b>
---	-----------------

**Cautions:** Injury or equipment damage may occur if any of the cautions are neglected. Follow these precautions to prevent potential injury or material damage.

- Make sure the power supply voltage is correct before using the product.
- Do not drop the product or subject it to physical shock.
- If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the product will not be used for an extended period, please repack it to protect the sensor from dirt.

- Do not place the product in extremely hot, cold (the operating temperature shall be -30°C ~ +60°C, or -40°C ~ +60°C if the product model has an “H” in its suffix), dusty or damp locations, and do not expose it to high electromagnetic radiation.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the product away from liquid while in use.
- While in delivery, the product shall be packed in its original packing, or packing of the same texture.
- Improper use or replacement of the battery, if required, may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
- If the product does not work properly, please contact your dealer or the nearest service center. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

## WAVE® SMART HOME INTRO

The Wave® Smart Home™ is made up of a wide range of Wave® products and services. Each product and service has its own separate Operation Manual/ User Guide. As you will see below, each of these documents first introduces the Wave® Smart Home™ solution as a whole. Information relative to the specific product/ service named in this documents title is listed afterwards - in the 'About this Product' section.

Image 1.0 - Wave® Smart Home™



Wave® is a Highly Affordable, All-in-One, **Complete Smart Home Solution**. It's modular, plug & play and works right out of the box - making it today's easiest and fastest way to transform any house into a fully-intergrated digital smart home. The Wave® Smart Home™ solution is also the worlds first technology to reduces households internet and energy bills each month, completely autonomously, while users enjoy the products **state of the art** smart home features. which include;

- Multi-Room Media (DLNA - Music, Movies & IPTV Streaming)
- Wireless Home Control (IoT, Smart Plug Sockets, Lights etc)
- IP Camera Monitoring (+25 IP Cameras, DVR & Motion Detect)
- Energy Monitoring (Self-Labeling, simple interface & Deep Energy Consumption Analysis)
- Vehicle Tracking (USSD/ Non-Subscription & Carrier Free, & battery level status)
- Multi-User Support (access the Wave® Dashboard™ from multiple devices, simultaneously, through any web-browser)
- Access the Wave® Dashboard™ from Anywhere in the world using the Free Wave® Remote (Remote Access) Mobile App

## 3.1 Wave® Hardware Devices

### 3.1.1 Hardware Features

### 3.1.2 Powering Up

### 3.1.3 Factory Reset

### 3.1.4 Power/Activity LED

### 3.1.5 Handling Precaution

Safe Power Down & Disconnect

General Maintenance & Care

## 3.2 Wave® Operating System

For simplicity each product in the Wave® Smart Home™ uses the exact same hardware device and operating system. The hardware devices are known as Single Board Computers (SBC's). The software is known as the Wave® Operating System (WaveOS™) and runs all of the devices in the Wave® Smart Home™.

WaveOS™ is Free, Open-Source and is held on a Micro SD Card inside of every Wave® Smart Home™ product. WaveOS™ will boot the device up, establish an internet connection and generate a Wi-Fi Hotspot autonomously. The operator can then connect their device to the Wi-Fi Hotspot and complete initial set-up via their web-browser.

To complete initial set-up the operator must simply select which Edition of WaveOS™ they'd like installed to the device. The Edition of WaveOS™ installed will determine which product the device will become (or which function the device will serve within the Smart Home™). For example, if the operator selects the Home Hub™ Edition of WaveOS™, it will transform the device a Wave® Home Hub™. The initial installation is done via a web browser menu (no programming skills requires), it's one-click, fully autonomous and takes only a few minutes.

## 3.3 Wave® Enhancement Products

With the exclusion of the Wave® Home Hub™ and Neo Dome™, all products from Wave® are considered **Enhancement Products** since they are designed to enhance the experience and performance of the Home Hub™ and Neo

Dome™. The quantity and configuration of these enhancement products will depend on the size of the users home, occupants and their personal preferences. Below is a list of the full range of Wave® Enhancement Products:

Table 1: Table 1.0 - Wave's 'Enhancement' Products

Name	Description
Wave® Energy Monitor™	Deep Analysis of Energy Consumption
Wave® Vehicle Tracker™	Real-Time Location of Vehicle (USSD - FREE Cellular Channel)
Wave® Multi-Room™ Link	Wirelessly sends the Home Hub™ Dashboard to any TV Display. HDMI Connection
Wave® Signal Booster™	Extends Wi-Fi Signal Strength - Re-broadcasts Home Hub™ SSID
Wave® Storage Device™	4TB of Raid 10 NAS Storage - for use with the Home Hub™

#### NOTES:

- The products above are to enhance the Wave® Home Hub™, and the Wave® Neo Dome™,. They **DO NOT** function independantly of the Home Hub™ and/or Neo Dome™. Please ensure you have one of the Wave® core products in place, before expecting full enjoyment and use of the above Enhancement Products.

## 3.4 Wave® Home Hub™

A Wave® Smart Home describes, at the very least, a Wave® Home Hub™ with at least one Wave® Enhancement Product connected to it. The Home Hub™ is effectively Wi-Fi Hotspot with a built in server, which hosts a number of smart home applications. Any device connected to the hotspot (locally and remotely) may access these applications via any modern web browser. For convenience and ease of use, all of the applications hosted on the Home Hub™ are embedded into one interface called The Dashboard™.

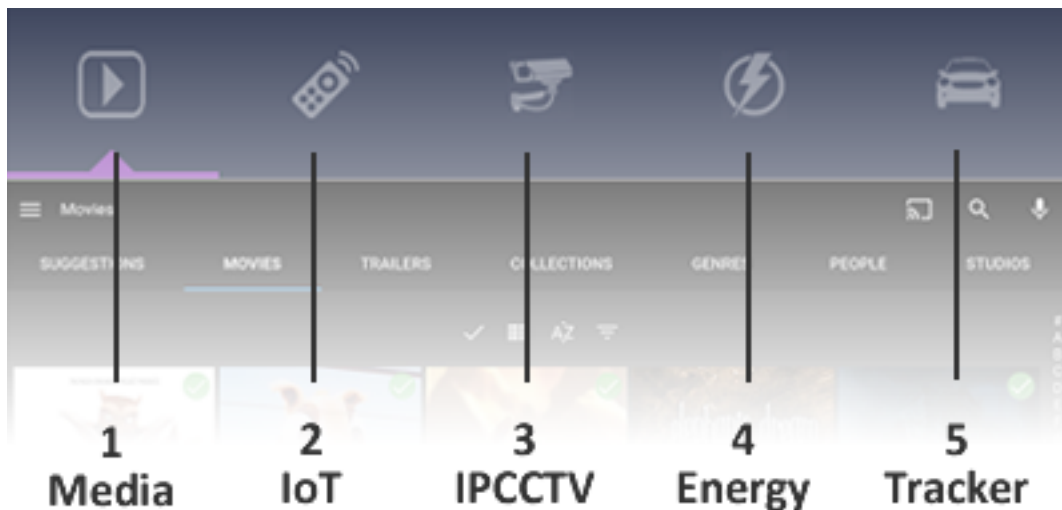
Image 1.1 - Wave® Home Hub™



## 3.5 Wave® Dashboard™

- Tab 1 - Media Library: Featuring Movies, Music, IPTV, Latest Trailers, TV Shows
- Tab 2 - IoT Home Control: Scan your Wi-Fi for Things to Control, Add buttons to control your Things
- Tab 3 - IP Camera DVR: Scan your Wi-Fi for IP Camera Monitor to monitor. Includes Motion Detect and loopback recording.
- Tab 4 - Energy Monitor: Receives info from the Wave® Energy Monitor and displays connected items, their energy consumption and on/off status.
- Tab 5 - USSD/GPS Tracking: Receives info from the Wave® USSD/GPS Tracker and displays location and battery status.

Image 1.1 - Wave® Home Hub™ - Dashboard™



### 3.5.1 Tab 1 - Media Library

Featuring Movies, Music, IPTV, Latest Trailers, TV Shows

### 3.5.2 Tab 2 - Home Control

Scan your Wi-Fi for Things to Control, Add buttons to control your Things

### 3.5.3 Tab 3 - IP Camera DVR

Scan your Wi-Fi for IP Camera Monitor to monitor. Includes Motion Detect and loopback recording.

### 3.5.4 Tab 4 - Energy Monitor

Receives info from the Wave® Energy Monitor and displays connected items, their energy consumption and on/off status.



### 3.5.5 Tab 5 - USSD/GPS Tracking

Receives info from the Wave® USSD/GPS Tracker and displays location and battery status.

**Key Facts about the Wave® Home Hub™:**

- Primarily a Wi-Fi Hotspot with built in Media Center (with IPTV), IP Camera Monitor & DVR and IoT Smart Device Controls
- Connects to existing Internet Router (ethernet port & cable)
- Works independantly or with enhancement products and/or accessories
- Functions most effectively when all wireless devices connect exclusively to the Wave® Wi-Fi Hotspot
- Not designed to replace or function as a replacement internet modem/ router hotspot.

## 3.6 Getting Started

### 3.6.1 Accessing the devices menu

### 3.6.2 Selecting Edition/ Completing Initial Installation



## **ABOUT THIS PRODUCT**

This section provides information about this specific product.

### **4.1 Package Content**

### **4.2 Software Edition Features**

### **4.3 Settings & Preferences**

### **4.4 General Usage**

### **4.5 Troubleshooting**



## **SERVICE AND SUPPORT**

This section provides information about what is new or changed, including urgent issues, Software & documentation updates, maintenance and new releases.

### **5.1 Accessing Online Support**

### **5.2 Contacting Wave® Technical Support**



## LEGAL COMPLIANCE & WARRANTY

This appendix includes the following topics:

- Regulatory Compliance
- Warranty Information

### 6.1 Regulatory Compliance

#### 6.1.1 FCC Class B Information

Operation of this device is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Wave® could void your authority to operate this device.

#### 6.1.2 Safety Compliance

Approved for Global Usage (Ref: Pending). Safety of Information Technology Equipment.

### 6.2 CE Compliance For Europe

Marking by the CE symbol indicates compliance of this system to the applicable Council Directives of the European Union, including the EMC Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC). A “Declaration of

Conformity” in accordance with the applicable directives has been made and is on file at Make it Wave Ltd, United Kingdom.

## 6.3 GNU General Public Licence (“GPL”)

Firmware incorporated into this product may include third party copyrighted software licensed under the GPL or Lesser General Public License (“LGPL”) (collectively, “GPL Software”) and not Wave’s End User License Agreement. In accordance with the GPL, if applicable:

1. the source code for the GPL Software may be downloaded at no charge from <https://makeitwave.com/download.html> or by contacting Customer Support within three years of the date of purchase;
2. you may re-use, re-distribute, and modify the GPL Software;
3. with respect solely to the GPL Software, no warranty is provided, to the extent permitted by applicable law; and
4. a copy of the GPL is included herewith, may be obtained at <http://www.gnu.org>

Modification of or tampering with the Software, including but not limited to any Open Source Software, is solely at your own risk. Wave® is not responsible for any such modification or tampering. Wave® will not support any product in which you have or have attempted to modify the Software supplied by Make it Wave Ltd.

## 6.4 Mozilla Public License version 2.0

### 6.4.1 1. Definitions

- 1.1. **“Contributor”** means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.
- 1.2. **“Contributor version”** means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor’s Contribution.
- 1.3. **“Contribution”** means Covered Software of a particular Contributor.
- 1.4. **“Covered Software”** means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.
- 1.5. **“Incompatible With Secondary Licenses”** means
  1. that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or
  2. that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.
- 1.6. **“Executable Form”** means any form of the work other than Source Code Form.
- 1.7. **“Larger Work”** means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.
- 1.8. **“License”** means this document.
- 1.9. **“Licensable”** means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.
- 1.10. **“Modifications”** means any of the following:
  1. any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or



2. any new file in Source Code Form that contains any Covered Software.

**1.11. “Patent Claims” of a Contributor** means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor version.

**1.12. “Secondary License”** means either the GNU General Public License, version 2.0, the GNU Lesser General Public License, version 2.1, the GNU Affero General Public License, version 3.0, or any later versions of those licenses.

**1.13. “Source Code Form”** means the form of the work preferred for making modifications.

**1.14. “You” (or “Your”)** means an individual or a legal entity exercising rights under this License. For legal entities, “You” includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, “control” means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

## 6.4.2 2. License Grants and Conditions

### 2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

1. under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and
2. under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor version.

### 2.2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

### 2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

1. for any code that a Contributor has removed from Covered Software; or
2. for infringements caused by: (i) Your and any other third party’s modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor version); or
3. under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

### 2.4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

### 2.5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

## 2.6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

## 2.7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

# 6.4.3 3. Responsibilities

## 3.1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients' rights in the Source Code Form.

## 3.2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

1. such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and
2. You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients' rights in the Source Code Form under this License.

## 3.3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

## 3.4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

## 3.5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

# 6.4.4 4. Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed

in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

## **6.4.5 5. Termination**

5.1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

5.2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

5.3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.

## **6.4.6 6. Disclaimer of Warranty**

Covered Software is provided under this License on an “as is” basis, without warranty of any kind, either expressed, implied, or statutory, including, without limitation, warranties that the Covered Software is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the Covered Software is with You. Should any Covered Software prove defective in any respect, You (not any Contributor) assume the cost of any necessary servicing, repair, or correction. This disclaimer of warranty constitutes an essential part of this License. No use of any Covered Software is authorized under this License except under this disclaimer.

## **6.4.7 7. Limitation of Liability**

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, indirect, special, incidental, or consequential damages of any character including, without limitation, damages for lost profits, loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party’s negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to You.

## **6.4.8 8. Litigation**

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party’s ability to bring cross-claims or counter-claims.

## 6.4.9 9. Miscellaneous

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

## 6.4.10 10. versions of the License

### 10.1. New versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

### 10.2. Effect of New versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

### 10.3. Modified versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

### 10.4. Distributing Source Code Form that is Incompatible With Secondary Licenses

If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

## 6.4.11 Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at <http://mozilla.org/MPL/2.0/>.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

## 6.4.12 Exhibit B - “Incompatible With Secondary Licenses” Notice

This Source Code Form is “Incompatible With Secondary Licenses”, as defined by the Mozilla Public License, v. 2.0.

## 6.5 Warranty Information

### 6.5.1 Obtaining Services

Wave® values your business and always attempts to provide you the very best of service. If this Product requires maintenance, either contact the dealer from whom you originally purchased the Product or visit our product support website at <https://makeitwave.com> for information on how to obtain service or a Return Material Authorization (RMA). If it is determined that the Product may be defective, you will be given an RMA number and instructions for Product return.

An unauthorized return (i.e., one for which an RMA number has not been issued) will be returned to you at your expense. Authorized returns must be shipped in an approved shipping container, prepaid and insured, to the address provided on your return paperwork. Your original box and packaging materials should be kept for storing or shipping your Wave® product. Wave® shall have no liability for lost data regardless of the cause, recovery of lost data, or data contained in any Product placed in its possession.

## **6.5.2 Limited Warranty**





Wave® warrants that the Product, in the course of its normal use, will for the term defined below, be free from defects in material and workmanship and will conform to Wave's specification therefor. The term of your limited warranty depends on the country in which your Product was purchased. The term of your limited warranty is for 3 years in the North, South and Central America region, 3 years in the Europe, the Middle East and Africa region, and 3 years in the Asia Pacific region, unless otherwise required by law. The term of your limited warranty period shall commence on the purchase date appearing on your purchase receipt. Wave® shall have no liability for any Product returned if Wave® determines that the Product was stolen from Wave® or that the asserted defect a) is not present, or b) is attributable to misuse, improper installation, alteration (including removing or obliterating labels and opening or removing external enclosures, unless the product is on the list of limited user-serviceable products and the specific alteration is within the scope of the applicable instructions, as found at <https://makeitwave.com>), accident or mishandling while in the possession of someone other than Wave, Wave's licenced distributors and/or Wave's End-User. Subject to the limitations specified above, your sole and exclusive warranty shall be, during the period of warranty specified above and at Wave's option, the repair or replacement of the Product.

The foregoing limited warranty is Wave's sole warranty and is applicable only to products sold as new. The remedies provided herein are in lieu of a) any and all other remedies and warranties, whether expressed, implied or statutory, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and b) any and all obligations and liabilities of Wave® for damages including, but not limited to accidental, consequential, or special damages, or any financial loss, lost profits or expenses, or lost data arising out of or in connection with the purchase, use, or performance of the Product, even if Wave® has been advised of the possibility of such damages. In the United States for example, some states do not allow exclusion or limitations of incidental or consequential damages, so the limitations above may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.



DOCUMENT AUTHOR(S):

## 7.1 Siôn H. Buckler

Organisation	Role	Details
	Founder & CEO	Make it Wave Ltd, British Corporation (England & Wales), Company Director ID 11363386
	Head of Defence	Caribbean Communications Unit (CCU), Royal Corps of Signals, Life Member ID 55983
	Council President	Utilities as Rights (UaR) Society, British Crown Public Servant, Gov/Oath ID 25148537
	Military Theorist	Scottish Bay, Dominican Republic

**About Siôn Buckler** - Science & Computer Science (Bachelors), Electronic Engineering, Industrial Electronics and Electronics & Computing (Advanced Diplomas), Cisco Certified Network Associate (CCNA), Microsoft Certified Solutions Expert (MCSE), Certified Project Management (Prince2 Practitioner), Institute of Electronic Engineering (IEEE), Siemens Certified Engineer, Certified Telecommunications Service Provider (NVQ3), Satellites & Full Spectrum Radio, Fixed Telecommunications Systems with Enhanced Capabilities (Nortel Passport, RAD-IP Mux, Probot Fiber Optics, APC Power Supplies), SKP01 Electrical Safety, NVQ2 IT, Defence Specialist LAN, TCP/IP, Subnetting, DHCP, Addressing, Routing & Browsing, Communications Equipment Room Design & Maintenance, Health & Fire

Safety Officer, Military Command & Leader (Level 2 CMI), Cyber Security (Pen Testing/ JOCS), Electronic Warfare, SIP/ VOIP, Google Advertising Professional, SEO, PPC, HTML5, CSS3, Java, Perl, Ajax, JQuery, MySQL, Unix, Python, Linux.