



Warranty Claims Checklist

Introduction

This document is part of the “Claims Process for Warranty Handling.

This document provides a checklist for 1st line support and/or customers to verify if a suspected faulty Witra product should be returned for warranty claim or DOA. The purpose of the verification is to minimize the risk of claiming units with no faults.

Fault Localization

Providing a service using Witra Solution incorporates not only the Witra product (product), but also applications and Internet connectivity. It is of utmost important that all parts in such a solution are working satisfactory.

To summarize, a problem may be caused by:

- **Faulty installation**
The Witra Solution may not work properly if the installation of the Hardware has not been done according to the guidelines in Installation Guide.
- **Poor internet connection for the Gateway**
The Witra Solution may not work properly if required ports are blocked in the network for internet connection or if the network has limited capacity.
- **Poor network coverage of the Mesh Network**
The Witra Solution may not work properly if the coverage provided by the mesh network is not sufficient. To secure a good coverage use the Installation and deployment guidelines (docs.witra.se) as well as the Deployment tool in the Witra Portal.
- **Misuse of the Witra products**
The Witra Solution may not work properly if the user is misusing the equipment, connecting faulty power sources, Gateway backhaul network or data delay.
- **Wrong user handling**
The Witra Solution may not work properly if the user has been e.g. altering the configuration parameters outside the recommended values.
- **Weather and other environmental conditions**
The Witra solution may not work properly if it has been used in areas and conditions outside the recommended values and IP codes.

Check Received Items

Check the items received as described below:

- What Witra product is this; Product number (Serial number if available).
- Note the serial number of the unit; xxxxxx
- Which SW version is loaded on the unit?
- Read trouble report, if any.
- Document received items; are all parts included?
- Store in database for repair administration.
- Use the checklist in chapter 5 for a complete health check of the unit.

Test Equipment

The following equipment is needed when performing the health check described in next chapter:

- Witra Gateway with internet access
- Access to the Witra Portal (portal.witra.se)
- Product documentation (doc.witra.se)
- docs.witra.se/#/troubleshooting

As a reference, the “Witra product documentation” can be used which includes a “Troubleshooting” chapter providing detailed descriptions and tips and tricks when troubleshooting a unit.

Checklist Gateway

The following actions should be performed before a unit is returned for DOA or warranty claim.

| No | Action | Links to docs.wittra.se | Check |
|----|--|-------------------------|-------|
| 1 | Overview condition and abuse <ul style="list-style-type: none"> • Check if the unit has any physical damage and/or broken parts on plastic cover, antenna, cables, labels etc • If broken case, the warranty is void. | Link | |
| 2 | Start-up the unit <ul style="list-style-type: none"> • Connect the power cable to the Gateway. • Check Led lights according to instructions. • Check if the Gateway reports into your project in the portal (portal.wittra.se) • Check frequency of reports see instructions in docs.wittra.se | Link | |
| 3 | If the unit appears dead, do a reset to restart the unit. <ul style="list-style-type: none"> • Reset the Gateway with the white reset button on the motherboard according to instructions. Note: A reset will restart the unit. | Link | |
| 4 | LAN connections <ul style="list-style-type: none"> • Check the Ethernet port and the connected cable • Check the built-in LED on the connector if a connection is established. | Link | |
| 5 | Final step Add missing items labels, cables, leaflets, etc. | Link | |

Checklist Mesh-Router and Sensor Tag

The following actions should be performed before a unit is returned for DOA or warranty claim.

| No | Action | Links to docs.wittra.se | Check |
|-----|---|---|-------|
| 1 | Overview condition and abuse <ul style="list-style-type: none"> Check if the unit has any physical damage and/or broken parts on plastic cover, connectors, labels etc. If broken case, the warranty is void. | | |
| 2 | Start-up the unit <ul style="list-style-type: none"> Connect the micro-USB power cable Wait for approximately one minute for the unit to start-up Check the Led light according to instructions | Mesh-Router Link Sensor Tag Link | |
| 3 | If the unit appears dead, do a reset restart the unit <ul style="list-style-type: none"> Reset the unit by connecting a OTG adapter Note: A reset will restart the unit. | Link | |
| 4 | <u>Check Sensors:</u> <ul style="list-style-type: none"> To verify the sensor functionality please make a check of the following values | Link Link | |
| 4.1 | Accelerometer (flat on one side) <ul style="list-style-type: none"> The axis parallel to the earths gravitational acceleration should report a value of ~1g pointing "away" from earth (the force of the ground keeping it from falling) | Link | |
| 4.2 | Magnetometer (place devices in multiple orientations far from any metal objects and note the reported sensor value) <ul style="list-style-type: none"> The magnitude of the magnetometer vector should have a value between ~0.35 and ~0.65 Gauss | Link | |
| 4.3 | Usage (Leave all tags stationary for one data report interval) <ul style="list-style-type: none"> All tags should report 0 on the moving data Usage (Move some tags and count how many seconds they are in motion) <ul style="list-style-type: none"> The counted motion should be reflected in the moving data (+/- 5 seconds) | Link | |
| 5 | Final step <ul style="list-style-type: none"> Add missing items labels, cables, leaflets, etc. | | |

Conclusions

If the health check failed at any point, and the unit is not older than one year, the unit can be sent for DOA or warranty claim as described in the document "Claims Process for Warranty Handling, Dead on Arrival (DOA)".

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Wittra AB

SE-111 64 Stockholm