User Instruction Manual and Regulatary notices

Infotainment System

Model\Product: MGU22

Version: 1.0 English Version

Date: 2021-10-25

1 Technical Information

1.1 Materials

MGU22 Infotainment System – Conformity with RoHS, RED, ISO, etc .

The MGU22 is an infotainment head unit for vehicles. It does not include a display. It contains GNSS, Bluetooth, BLE, and Wifi 802.11a/b/g/n/ac/ax (2.4GHz and 5GHz) MIMO capability. The external connections are:

- BT/WLAN – antenna connection
- USB1/2/3 – for USB 2.0 connections
- Main – power and CAN
- CID – APIX2 and APIX3 display link (HDCP2.3)
- AR-CAM – camera
- 100BASE-T1 (OABR) – ethernet
- 1GBASE-T1 – 1GBit Ethernet

Installation Instructions:
The MGU22 is installed in the vehicle by the vehicle manufacturer during the vehicle assembly process and is not a user serviceable component.

Operating Instructions:
The MGU22 is operated via the user interface located in the vehicle. The user interface is designed and installed by the vehicle manufacturer. See the vehicle's user manual for instructions.

1.2 Declaration of Conformity to RED regulation 2014/53/EU

Declaration of Conformity (DoC)

English:
We declare that the radio equipment type **MGU22** is in compliance with XXX.
EU declaration of conformity is available at XXX

Spanish:

Portuguese:

1.3 Used Frequency spectrum

Bluetooth:	2400 – 2483.5 MHz
WLAN:	2400 – 2483.5 MHz
WLAN:	5170-5250 MHz (US & Canada), 5735 – 5815 MHz (Canada), 5735 – 5835 MHz (US)

1.4 Maximum radio-frequency power transmitted

2400 – 2483.5 MHz: 15 dBm
5170-5250 MHz: 14 dBm, 5735 – 5835 GHz: 15 dBm

1.5 Manufacturer & Factory Units

Manufacturer:
Garmin Wurzburg GmbH
Beethovenstrasse 1A

97080 Wurzburg, Germany

1.6 FCC/ISED statements

Model: MGU22
FCC ID: IPH-03910
IC: **1792A-03910**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

This radio transmitter has been approved by the FCC/ISED to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Interface and frequency range	**Type**	**Max Gain**
Bluetooth & Wifi @ 2.4GHz	¼ wave coax	-2.5 dBi
Wifi @ 5GHz	¼ wave coax	-2.8 dBi

This device complies with the FCC/ ISED RF exposure limits and has been evaluated in compliance with portable exposure condition.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR.

This device has been shown to be capable of compliance for localized SAR for uncontrolled environment/general population exposure limits specified in ANSI/IEEE Std. C95.1-1992 and has been tested in accordance with the measurement procedures specified in ISED RSS-102 and IEEE Std. 1528-2013.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations.

To comply with the measured SAR value/SAR testing exclusion, the equipment must be installed and operated with a minimum distance of 50 mm of the human body.

FCC Class B device notice

Note: This equipment 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 equipment 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 communications. 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, the user is 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 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/TV technician for help.

CAN ICES-003 (B)

This Class B digital apparatus complies with Canadian ICES-003.

1.7 Mexico declaration:

Modelo: MGU22
Marca: TBC

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada”

1.8 Brazil declaration:

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.
Para maiores informações, consulte o site da ANATEL – www.anatel.gov.br