

# Auri RM1 Radio Module Integration Instructions

## Introduction

The Auri RM1 radio module has been granted modular approval for Bluetooth Low Energy transmitter applications. OEM integrators for host products may use the module in their final products without additional FCC / IC (industry Canada) certification if they meet the following conditions. Otherwise, additional FCC / IC approvals must be obtained.

## Support

Email: [support@ampetronic.com](mailto:support@ampetronic.com)

## FCC WARNING

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

15.105 Information to the user.

(b) For a Class B digital device or peripheral, the instructions furnished to the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 5 cm between the radiator and your body.

### Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination.

The firmware setting is not accessible by the end user.

The final end product must be labelled in a visible area with the following:

“Contains FCC ID 2BHN3TX2N”

## Requirement per KDB996369 D03

### 2.2 List of applicable FCC rules

This module meets the requirements of FCC part 15, subpart C (15.247), specifically the 6dB Bandwidth, Peak Output Power, Radiated Spurious Emission, Power Spectral Density, Restricted Band of Operation and Band Edge (Out of Band Emissions).

### 2.3 Specific operational use conditions

The module contains a permanently attached chip antenna, the antenna gain is 1.69dBi.

### 2.4 Limited module procedures

N/A, the modular transmitter is not approved as a “limited module”.

### 2.5 Trace antenna designs

N/A, the modular transmitter utilises a permanently attached chip antenna.

### 2.6 RF exposure considerations

This module complies with FCC RF radiation exposure limits set forth for a portable device. This equipment has been shown to be below the SAR exclusion threshold at 50mm, and can be installed and operated with a minimum distance of <20 centimeters between the radiator and the body.

### 2.7 Antennas

The module contains a permanently attached chip antenna, The antenna gain is 1.69dBi

### 2.8 Label and compliance information

The host system using this module should have a label in a visible area indicated the following texts: "Contains FCC ID 2BHN3TX2N"

### 2.9 Information on test modes and additional testing requirements<sup>5</sup>

Ampetronic Ltd. can increase the utility of our modular transmitters by providing Direct Test Mode (DTM) firmware that simulates or characterizes a connection by enabling the transmitter. This can help to determine that the host complies with FCC requirements when using the installed module. Detailed instructions are available on request.

### 2.10 Additional testing, Part 15 Subpart B disclaimer

The module contains only intentional-radiator digital circuitry and is evaluated according to FCC Part 15 Subpart C , and therefore does not require an evaluation by FCC Part 15 Subpart B. The host device should be evaluated according to FCC Part 15 Subpart B.

## Canada IC / ISED

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- (1) Cet appareil ne doit pas causer d'interférences
- (2) Cet appareil doit accepter toute interférence, y compris les interférences pouvant provoquer un fonctionnement indésirable de l'appareil

This device has been tested for RF exposure compliance at a separation distance of 50 mm therefore this is considered the minimum distance between the radiator and the body.

This module has been granted modular approval for Bluetooth Low Energy applications. OEM integrators for host products may use the module in their final products without additional certification if they meet the following conditions, otherwise, additional IC approvals must be obtained.

- The host product with the module installed must be evaluated for simultaneous transmission requirements if applicable.
- The host user manual should contain the following text in both English and French:  
“This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.”

“Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- (1) Cet appareil ne doit pas causer d'interférences
- (2) Cet appareil doit accepter toute interférence, y compris les interférences pouvant provoquer un fonctionnement indésirable de l'appareil”

In addition, the RF exposure compliance separation distance shall be clearly stated in a prominent location in the user manual.

- A label must be affixed to the outside of the host product with the following statement:

“Contains IC ID 32898-TX2N”