

ALO BT Mini-Module – User’s Manual DRAFT

FCC ID: 2AS58-BT01

IC: 24976-BT01

### **FCC Part 15 Compliance Statement**

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.

### **Changes to the Device**

Changes or modifications not expressly approved by the manufacturer could void the user’s authority to operate the equipment.

### **Device Antenna**

Module shall be used with supplied +3dB quarter-wave whip antenna, attachment of any higher-gain antenna or other-patterned antenna is not permitted. Increases in the shielded length of the antenna which do not increase its gain or change its emission pattern are permitted. Modification of the module to install an antenna not approved for use voids the user’s authority to operate the equipment.

### **Co-Location**

This device and its antenna must not be co-located or operated in conjunction with another transmitter or antenna.

### **Digital Device Integration**

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.

HOWEVER – Integration of this product into an end-device with various host modules will require re-testing for Digital Device emissions compliance, as data lines from the module are connectable to host devices. Compliance should be feasible and any failures in compliance will require adjustments to the *host* device to resolve. Even when the host device does not have any oscillators or logic on board which would independently trigger Digital Device requirements, digital device testing for the *product* will be necessary due to those parts on the module.

### **Integration Instructions - Availability to Host Manufacturers**

This module is intended for use in products designed in whole or in part by ALO Audio, and is not approved for use in third party hosts. As such, ALO retains responsibility for ensuring compliance with intentional and unintentional radiator requirements.

Host product design shall comply with best design practices, especially with respect to grounding and routing of digital lines, to minimize unintentional emissions.

### **Antenna Placement Instructions**

Antenna shall be separated from the user by a minimum distance of 5 mm (five millimeters), such that the operation separation distance shall exceed the test separation distance of less or equal to 5mm. Any additional spacing serves to minimize the user's exposure to RF emissions, and will increase the Bluetooth link quality between the source and sink devices when the device is paired. Consider providing a typical separation of at least 3cm for the purposes of Bluetooth reception and maximize this separation where feasible.

### **End Product Labeling**

The end product (Host + Module) must be labeled with the following:

Contains FCC ID: 2AS58-BT01

The Part 15 statement printed within this manual should also be included in the Product's manual, after the device passes Part 15B unintentional radiator testing as discussed previously.

### **IC Notes**

Note that the product is too small to affix a label indicating the HVIN, therefore it is provided here in the manual. Additionally, the module is not available for sale to third parties as indicated above.

HVIN Hardware Version Identification Number / Model Number: 1.0

FVIN Firmware Version Identification Number: 1.0

ISED Certification Number IC: 24976-BT01

PMN Product Marketing Name: Product is not for resale, known internally as the BT Mini-Module

### **IC Statements / Déclarations IC**

This device complies with Industry Canada's license-exempt RSS standards. Operation is subject to the following conditions:

- 1) This device may not cause interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme aux normes CNR d'Industrie Canada exemptes de licence. Le fonctionnement est soumis aux conditions suivantes:

- 1) Cet appareil ne doit pas causer d'interférences, et
- 2) Cet appareil doit accepter toutes les interférences reçues, y compris celles pouvant entraîner un fonctionnement indésirable.

RF Exposure Warning: This equipment complies with RF exposure limits for an uncontrolled environment. The antenna used for this transmitter must not be co-located with or operated in conjunction with another antenna or transmitter.

Avertissement d'exposition aux RF: Cet équipement est conforme aux limites d'exposition aux RF pour un environnement non contrôlé. L'antenne utilisée pour cet émetteur ne doit pas être co-localisée ou utilisée avec une autre antenne ou un autre émetteur.

The end product must be labeled clearly with the following:

Contains IC: 24976-BT01

The IC license-exempt statement provided above should be included in the end-product manual in both English and French.

The installer of this radio equipment must ensure that the antenna is located or pointed such that it does not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website [www.hc-sc.gc.ca/rpb](http://www.hc-sc.gc.ca/rpb).