V25F-TWS(305B)V1.0

I. Product introduction

1, support a variety of audio formats: MP3, WMA(double decoding), WAV
2, Support BT, USB, AUX function is optional
3. IR infrared function
4. Bluetooth BDR+EDR
5, support U disk fast upgrade program
6, signal to noise ratio SNR can reach 99DB
7. Bluetooth can be used in a single machine, and any two machines can also realize the TWS function against the box
8, support DACL mixed output and DACL DACR stereo output
9, Support button function, through different resistors under the ground can be connected to a maximum of 5 keys

II. Product schematic diagram

1、**Front**(尺寸 30*21mm)

地址：浙江省嘉兴市城南路 1369 号科创园 11 栋 206 室
电话：0573-82651105 传真：0573-82651107

2.2List of applicable FCC rules：FCC Part15 Subpart C, Section 15.247.

2.3

1, support a variety of audio formats: MP3, WMA(double decoding), WAV

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2.4Because the module has shielding cover,it is a unrestricted module.

2.5 Not applicable. The module has its own antenna, and doesn't need a trace antenna etc.

2.6RF exposure considerations This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.The device can be used in portable exposure condition without restriction.

This transmitter must not be co-located or operating inconjunctionwith any other antenna or transmitter.

2.7Antenna Type:PCB Antenna

Antenna Gain(Peak): 1.7dbi

2.8The final end product must be labeled in a visible area with the following: "Contains FCC ID: 2BARL-V25F ". Information that must be placed in the end user manual:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.

2.9Operation Frequency: 2402~2480MHz

Number of Channel: 79 Channels

Modulation: GFSK, π/4-DQPSK

Host manufacturer must perfom test of radiated & conducted emission and spurious emission,etc according to the actual test modes for a stand-alone modular transmitter in a host.Only when all the test results of test modes comply with FCC requirements, then the end product can be sold legally.

2.10Additional testing Part15SubpartB disclaimer

The grantee should include a statement that the modular transmitter is only FCC authorized forthe specific rule parts (i.e.，FCC transmitter rules)listedonthegrant， and that the host productmanufacturer is responsible

for compliance to any other FCC rules that apply to the host notcovered by the modular transmitter grant of certification .If the grantee markets their product asbeing Part 15SubpartBcompliant(when it also contains unintentional - radiator digital circuit y)， then the grantee shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed .

Federal Communication Commission Statement (FCC, U.S.)
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 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 device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
This device may not cause harmful interference, and
this device must accept any interference received, including interference that may cause undesired operation.

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.

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

2.2 List of applicable FCC rules
This module comply with the FCC Part15.247 for Modular Approval.

2.3 Specific operational use conditions
1, support a variety of audio formats: MP3, WMA(double decoding), WAV
2, Support BT, USB, AUX function is optional
3. IR infrared function
4. Bluetooth BDR+EDR
5, support U disk fast upgrade program
6, signal to noise ratio SNR can reach 99DB
7. Bluetooth can be used in a single machine, and any two machines can also realize the TWS function against the box
8, support DACL mixed output and DACL DACR stereo output
9, Support button function, through different resistors under the ground can be connected to a maximum of 5 keys

2.4 Limited module procedures
Not applicable. This module is a single module

2.5 Trace antenna designs
Not applicable. There is no trace antenna on the module.

2.6 RF exposure considerations
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.The device can be used in portable exposure condition without restriction.

2.7 Antennas
The EUT has a 1.7dBi PCB Antenna.

2.8 Label and compliance information
FCC ID: 2BARL-V25F

The final end product must be labeled in a visible area with the following: “Contains FCC ID: 2BARL-V25F”. Information that must be placed in the end user manual:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as shown in this manual.

The module is not applicable for Limited module procedures. The module is a Single module and complies with the requirement of FCC Part 15.247

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

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.

2.9 Information on test modes and additional testing requirements

To investigate the maximum EMI emission characteristics generates from EUT, the test system was prescanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively. RADIATED EMISSION TEST (BELOW 1GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).

For the test results, only the worst case was shown in test report.

RADIATED EMISSION TEST (ABOVE 1GHz):
Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports (if EUT with antenna diversity architecture).

2.10 Additional testing, Part 15 Subpart B disclaimer

The grantee should include a statement that the modular transmitter is **only** FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. If the grantee markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuity), then the grantee shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

Compliance of this device in all final host configurations is the responsibility of the Grantee. OEM integrators and end-users must be provided with specific operating instructions for satisfying RF exposure compliance. OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device.