Roost User Manual RSW200A Transmitter Module

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1) Compatibility

2.4GHz Band ONLY

2) FCC Notice to OEM

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.

CAUTION:
Changes or modifications to this unit not expressly approved by Roost, Inc. could void the user's authority to operate this 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:

1. Reorient the Roost Smart Monitor
2. Consult getroost.com/support for help

Radiation Exposure Statement: This equipment complies with the FCC radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between radiator and your body.

OEM Warning: The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number – FCC ID: 2AE5A-RSW200A. If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AE5A-RSW200A." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

3) ISEDC Notice

This device complies with Innovation, Science, and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation of the device.

Cet appareil est conforme à Industrie Canada une licence standard RSS exonérés (s). Son fonctionnement est soumis aux deux conditions suivantes:

- Cet appareil ne doit pas provoquer d'interférences
- Cet appareil doit accepter toute interference recue, y compris les interferences pouvant provoquer un functionnement indésirable de l'appareil..

Radiation Exposure Statement: This equipment complies with the IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Enonće d'exposition aux ravonnements: Cet équipment est conforme aux limites d'exposition aux rayonnements ioniques RSS-102 Pour un environnement incontrôlé. Cet équipement doit être installé et utilisé avec un Distance minimale de 20 cm entre le radiateur votre corps.

OEM Warning: The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its ISEDC identification number – IC: 20891-RSW200A. If the ISEDC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module IC: 20891-RSW200A." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

4) Safety Information

WARNING: Do not expose this Roost RSW200A transmitter module to excessive heat, direct sunlight, or fire. Do not expose to excessive humidity, rain, moisture or other liquids. Store at room temperature between 40 and 80 degrees F for best results.

WARNING: Keep out of reach of children. Ingestion hazard. Harmful if swallowed.

5) Disposal Information

The Roost RSW200A Transmitter Module Must be Recycled or Disposed of Properly.

When the Roost RSW200A Transmitter module is no longer functional, please dispose of it properly, following the guidelines in accordance with applicable regulations for your country. In most countries, electronic printed circuit boards must be recycled.

6) No Lifesaving Uses of the Services

The Roost RSW200A Transmitter module, Monitor app (including mobile and web applications), the Smart Monitor device, and the Smart Monitor software may be collectively referred to as the "Services". The Roost Smart Monitor APP is not an alarm. The apps and device software are intended to be accessed and used for non-critical information and control of the smart Monitor hardware. You will not rely on the Services for any health, lifesaving, or emergency

purposes. Under no circumstances should you enter into a life- threatening environment. The Services (on their own or in combination with third-party products or services) are not a third-party monitored emergency notification system and are not certified for emergency response. Roost will not dispatch emergency authorities to your home in the event of an emergency

7) Electrical Specifications of the Roost RSW200A Transmitter Module

- Input Operating Voltage Range: 3V minimum, 3.6V Maximum, 3.3V nominal
- Input Operating Voltage during Sleep State: 2.5V Minimum
- Absolute Maximum Input Voltage: 5V
- Input Current consumption (with no load on Control Interface Logic Signals), 1uA nom Sleep, 400mA max during Transmit
- Digital Interface Logic Levels: CMOS
    - high level minimum of Input Operating Voltage – 0.6V
    - low level maximum of 0.45V
- Digital Interface Output Drive Level: 8mA maximum
- RF Transceiver operation: 2.4GHz Band 802.11 B,G,N
- Absolute Maximum Transmit power: +20.5dBm
- RF Test Signal Connector Type: Murata MM8030-2610
- Normal Operating Temperature Range: -0C to +60C
- Operable Temperature Range: -30C to +70C
- Maximum Humidity limit: 60C with 100% relative humidity for 24 hours operating
- Mechanical Vibration limit: Single axis sinusoidal for 4 hours,10-30-10Hz sweeps at 2 cycles/min with 0.55mm displacement
- Mechanical Shock limit: half sine, 109G@8.0mSec. Two shocks in all three axes for a total of 12 shocks

8) HW Integration of the Roost RSW200A Transmitter Module into OEM product

The RSW200A Transmitter Module is meant for Internet of Things applications.

- The module is provided as a PCBA
- As good practice with all radio PCBs, it is expected the mother board integrating the RSW200A Transmitter Module will have, at a minimum, a continuous ground plane in the area adjacent to the RSW200A Transmitter. This ground plane can be on the top, bottom, or internal layers and should be connected to the RSW200A Ground pin (connector H6) in a continuous fashion
- The RSW200A Interface Connector control signals are TTL, Open Drain, or Analog as specified in the Limited Modular Circuit Description.
- The RSW200A Transmitter Module is a Limited Modular Certification so further Spurious Emissions scanning is required to maintain proper certification authorization.