



MC551 MODULE INSTALLATION AND
COLLOCATION GUIDELINES FOR
HOST DEVICES Rev.3

FCC ID: PKRNVWMC551S

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Document Revision History

Rev.	Date	Brief Description of Change	Originator	Approved by
1.0	August 8, 2011	Initial Draft	Roman Olmos	
2.0	October 20, 2011	Administrative Changes per result of TCB Review.	Roman Olmos	
3.0	December 15, 2011	Administrative Changes per FCC Response 12-05-11	Roman Olmos	

1.0 Introduction

This document provides OEM installation requirements for the MC551 device (FCC ID: PKRNVWMC551S). As the grantee, Novatel Wireless is responsible for all integrations and must be consulted on all regulatory matters involving the MC551.

The document outlines what RF Exposure considerations are required for OEM installation using the MC551. If the installation of the MC551 is outside of the provided guidelines, contact Novatel Wireless for further instructions.

When integrating the MC551 into host devices as described in this document please contact Novatel Wireless at <http://www.nvtl.com/support/index.html>. Novatel Wireless must be notified to ensure that the regulatory guidelines provided in this document are fully understood and complied to.

2.0 Module Installation Guidelines

This document addresses the following installation host configurations and conditions:

- i) The MC551 must be installed by OEM as a standalone transmitter in final products where greater than a 2.4cm (24mm) separation distance is provided between the MC551 transmitting antenna and the end user. Refer to **Section 3.0 on OEM Installation Guidelines**.
- ii) Collocated transmitters that can operate simultaneously with the MC551 module are only allowed if the requirements defined in the **Section 4.0 Collocated Installation Guidelines** are satisfied.
- iii) If the MC551 is in an enclosure, the FCC and Industry Canada IDs must be permanently affixed on the exterior of the final product..
- iv) A label must be applied to the outside of the device with the following wording:
This device contains FCC ID: PKRNVWMC551S.
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.
- v) **These installation guidelines are not applicable to installations where the separation distance between the modem and users cannot be guaranteed to be greater than 2.4cm (24mm).**

3.0 Module Installation Guidelines

The MC551 must be installed for use internal to final products where the separation distance between the user and the modem is greater than 2.4cm (24mm). Refer to **Section 5.0 OEM Integration Requirements** section for measurement guidelines for separation between the transmitting antenna and the user. The modem must not be collocated with other antennas or transmitters unless the guidelines within this document are followed. See **Section 4.0 Collocated Installation Guidelines** for collocated information.

4.0 Collocated Installation Guidelines

This section applies to all combinations of transmitters and antennas installed in the final product. The addition or use of the MC551 with other radio transmitters must be evaluated to ensure that RF Exposure conditions do not violate any FCC rules. It is not recommended that other transmitters be used with the MC551 however should the installation utilize other transmitting devices care must be taken and these steps need to be followed. Please contact Novatel Wireless to oversee the setup of the modem with multi radio configurations.

Collocated transmitters can be operated simultaneously with the MC551, provided the conditions listed below are met:

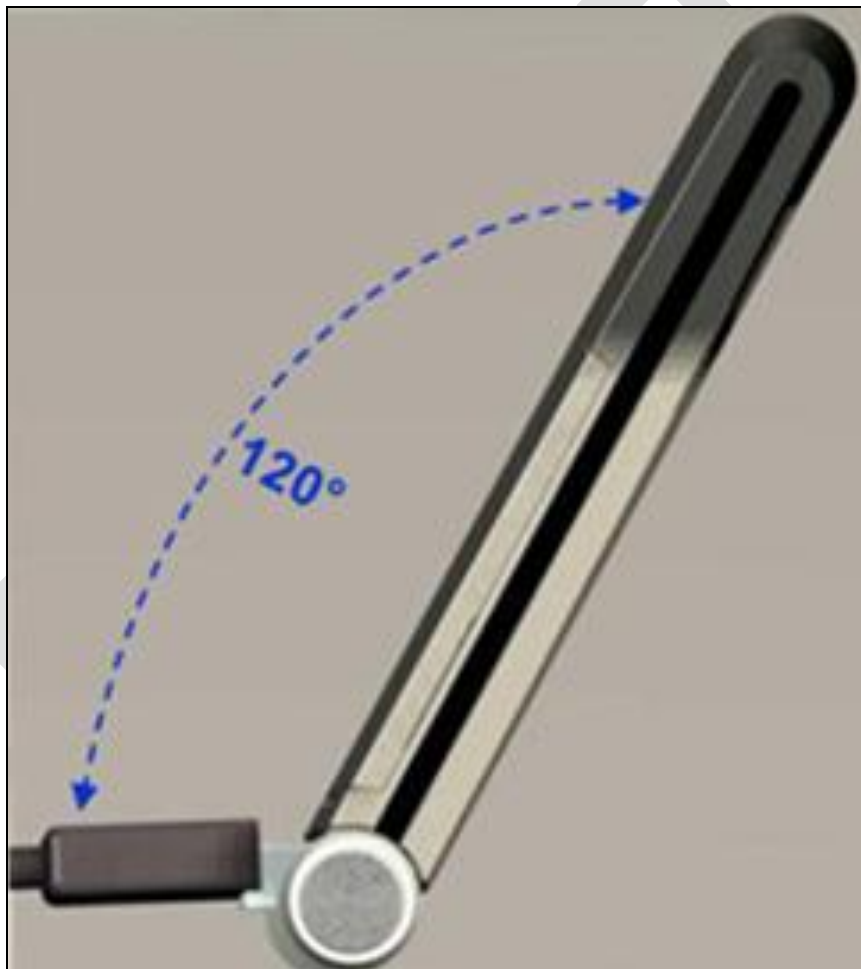
- i) A list of the FCC IDs must be presented to Novatel Wireless.
- ii) A distance of at least 5cm (50mm) must be maintained from other transmitting devices (such as other USB devices).
- iii) Any combination of transmitting antennas must maintain a separation distance of at least 5cm (50mm) from each other.
- iv) Authorization from Novatel Wireless is required before operating two or more wireless transmitters with the MC551.

The application of the Novatel Wireless FCC ID as stated in section 1) iv) is conditional based on the guidelines above. All integrations that involve multiple transmitters must be reviewed and approved by Novatel Wireless. Authorization to apply the Novatel Wireless FCC ID on the exterior of the host device must be provided prior to installing and turning these devices on.

5.0 OEM Integration Requirements

For operation of this device by OEM integration into final products, this transmitter must be installed in the final product with a minimum separation distance from the user of greater than 2.4cm (24mm). This distance must be maintained to satisfy FCC equipment certification and RF exposure requirements.

Ensure that the modem hinge is able to maintain the normal operation position 120°degrees when installed inside the final product. If the hinge is positioned in an orientation other than that shown the transmitter may shut off.



6.0 Regulatory Statements - Federal Communications Commission Notice (FCC—United States)

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.
- Contact your service provider for help.

Notice to Consumers: Changes or modifications made to this equipment not expressly approved by Novatel Wireless may void the FCC authorization to operate this equipment.

This device complies with Part 15 of the FCC Rules and with Industry Canada ICES-003.

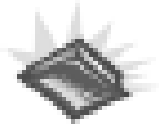
Operation is subject to the following two conditions:

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

The E362 is compliant to the relevant sections of the FCC rules:

- FCC CFR47 Part 2 (General Rules and Regulations, RF Exposure Evaluation)
- FCC CFR47 Part 15 (All Radio Frequency Devices)
- FCC CFR47 Part 24 (Narrow and wideband PCS modules)
- FCC CFR47 Part 22 (Cellular Service)
- FCCCFR47 Part 27 (Wireless Communications Services)

7.0 Technical Support Contacts



WWW: <http://www.nvtl.com/support/index.html>

Email: support@novatelwireless.com

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