

INTEGRATION INSTRUCTIONS

Modular Integration into Host Device

Hunter Douglas Remote Module into Remote Assemblies

M/N: 2021000193

FCC: UXURC4U6

IC: 7316A-RC4U6

General Guidance:

Definitions:

Modular Transmitter = remote board (PCBA) with a transmitting radio

Host (Host Product) = complete remote assembly without a modular transmitter

Composite System (Composite System End-Product) = A composite system is a device or product that incorporates one or multiple different transmitters and/or RF devices each operating under different FCC rules. Also referred to as simply "System".

- General

- Hunter Douglas is responsible to ensure that when their product operates as intended it does not have any emissions present that are out of compliance that were not present when the transmitter was tested individually. (7)
- *It is important to note that Hunter Douglas should not assume that because the modular transmitter is certified that they do not have any responsibility for final product compliance.* (10)
- Hunter Douglas is responsible to follow the integration guidance and to perform a limited set of testing, to ensure the end product is in compliance with the FCC rules. (2)
- Hunter Douglas needs to maintain documentation on how the host product with the certified modular transmitter complies with the FCC rules. (1)
- If Hunter Douglas finds that the composite system exceeds the spurious emissions or output power limit, it is the responsibility of Hunter Douglas not to market the products in the U.S. (17)

- **RF Exposure**

This module complies with the rf exposure requirements for hand-held and hand-operate portable devices, such as the remote controls for which this device is intended.

- **Additional assessment to support a permissive change is only necessary if this modeule is installed into a device that may transmit when body-worn.**

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FCC KDB references

- (1) 996369 D04 Module Integration Guide v02, Section 2.0, a
- (2) 996369 D04 Module Integration Guide v02, Section 1.0
- (3) 996369 D04 Module Integration Guide v02, Section 2.0, c, i
- (4) 996369 D04 Module Integration Guide v02, Section 2.0, d
- (5) 996369 D04 Module Integration Guide v02, Section 2.0, e
- (6) 996369 D04 Module Integration Guide v02, Section 2.0, f
- (7) 996369 D04 Module Integration Guide v02, Section 3.1
- (8) (removed)
- (9) 996369 D04 Module Integration Guide v02, Section 3.1, a
- (10) 996369 D04 Module Integration Guide v02, Section 3.1, b
- (11) 996369 D04 Module Integration Guide v02, Section 3.2
- (12) 996369 D04 Module Integration Guide v02, Section 3.4, a
- (13) 996369 D04 Module Integration Guide v02, Section 3.4, b
- (14) 996369 D04 Module Integration Guide v02, Section 3.4, c
- (15) 996369 D04 Module Integration Guide v02, Section 3.5, a
- (16) 996369 D04 Module Integration Guide v02, Section 3.5, b
- (17) 996369 D04 Module Integration Guide v02, Section 3.7, c
- (18) 178919 D01 Permissive Change Policy v06

TEST PLAN

Integrating a Certified Modular Transmitter into Host

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This test plan is permitted to allow for test reduction based on a “worst-case scenario.” Hunter Douglas can use sound engineering judgment and justification to identify a “worst-case” data rate and bandwidth setting for test reduction. (18)

The C2 Permissive Change procedure is required for every different specific host using the module (for every composite system end product). This test plan details the tests required to perform, document and submit to FCC for the C2 Permissive Change. A particular host is the same series or similar models having the same form factor, physical size, and component layout and construction. (18)

NOTICE: this modular transmitter is intended to be used in hosts with the same form factor, physical size, and component layout and construction as is in the image below:



Size: 6.75 in x 2.5 in x 1 in

Component Layout: screen on top, buttons in middle, batteries on bottom

Construction: polymers only (resin and elastomer), no metal, no wires

Device under Test (DUT) = composite system

DUT Mode = normal-mode

- **Output Power (conducted)**
 - o Verify output power prior to testing to ensure test sample is operating correctly.
 - o Conducted power should be in the range 0 - 5dBm
 - o Expected field strength of the intentional signal should be in the range 95- 100 dBuV/m
- **Radiated Emissions Testing**

Ensure compliance with the radiated emissions limits of 15.247 / 15.209. These tests are all performed with the device operating in the 2MB/s mode as this mode has been shown to be the worst-case of the two data rates supported (1MB/s and 2MB/s)

 - o Perform spurious emissions testing with the device operating on low, mid and high channels for the frequency range 30MHz - 26 GHz.
 - 15.209 limits for emissions in the restricted bands detailed in 15.205
 - All other emissions to be at least 20dB below the in-band signal level or compliant with 15.209
 - o Perform radiated emissions band edge testing
 - With the device operating on the low channel (2402 MHz) in 2MB/s mode verify that emissions at and below 2390 MHz meet the 15.209 peak and average limits.
 - With the device operating on the high channel (2480 MHz) in 2MB/s mode verify that emissions at and above 2483.5 MHz meet the 15.209 peak and average limits.
- **RF Exposure**

This module complies with the rf exposure requirements for hand-held and hand-operate portable devices, such as the remote controls for which this device is intended. It also complies with rf exposure requirements for body worn devices. No additional host-specific assessments for rf exposure are required unless the host has additional transmitters.
- **Installation into hosts electrically equivalent to those already approved for use with the module:**

When installing the module into a host of a type already covered by the original application or a subsequent C2PC a permissive change filing is not required. However, the tests detailed above shall be used to verify compliance of host and module with the FCC's rules.
- **HOST Specific Testing and requirements**
 - o Obtain the required equipment authorization for the applicable unintentional radiator functions (FCC 15B) of the host product, and if required any additional testing and certification for any other included transmitters or devices not authorized as a certified modular transmitter.
 - o Label the product appropriately with *contains FCC ID: UXURC4U6* , see KDB Publication 784748.
 - o Include information to the user as described on the following pages in the product documentation

§ 15.21 Information to user.

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

The Code of Federal Regulations (CFR) is the official legal print publication containing the codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government. The Electronic Code of Federal Regulations (eCFR) is a continuously updated online version of the CFR. It is not an official legal edition of the CFR. Learn more about the eCFR, its status, and the editorial process.

§ 15.105 Information to the user.

(a) For a Class A digital device or peripheral, the instructions furnished 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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

(b) For a Class B digital device or peripheral, the instructions furnished 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.

(c) The provisions of paragraphs (a) and (b) of this section do not apply to digital devices exempted from the technical standards under the provisions of § 15.103.

(d) For systems incorporating several digital devices, the statement shown in paragraph (a) or (b) of this section needs to be contained only in the instruction manual for the main control unit.

(e) In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.