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USERS GUIDE AND REGULATORY STATEMENT

FOR

NEXT WSCU/NEXT WSCU Cradle

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1 INTRODUCTION

1.1 Purpose

The Wireless Seat control Unit(WSCU) and the cradle are components of the NEXT series In-Flight Entertainment (IFE) system is designed to provide wireless remote control to passengers in premium class seats.

1.2 Reference Document

Wireless Seat control Unit(WSCU) and the cradle Component Maintenance Manual

1.3 Acronyms and Abbreviations

DoC	Declaration of Conformity
FCC	Federal Communications Commission
IFE	In-Flight Entertainment
IFES	In-Flight Entertainment System
MPEG	Moving Picture Experts Group
RF	Radio Frequency
R&TTE	Radio and Telecommunications Terminal Equipment
SAR	Specific Absorption Rate
TRA	Telecommunications Regulatory Authority
TX/RX	Transmitter/Receiver
UAE	United Arab Emirates
WSCU	Wireless Seat Control Unit

2 EQUIPMENT/SYSTEM DESCRIPTION

2.1 IFE System architecture and function

The NEXT System is an electronic control data and audio/video distribution system providing digital video and audio on demand to the passenger seat. The system architecture is modular in design, allowing for additional components to be integrated without aircraft-side wiring changes.

NEXT System employs MPEG encoding techniques for audio/video data compression providing high-resolution digital video and quality audio to the seats without using excessive system bandwidth.

NEXT System also provides broadband Ethernet network connectivity between the passenger-computing device at the seat and the head-end network equipment. The system is used for internet data application and streaming digital audio/video content distribution.

2.2 WSCU Wireless Seat control Unit and Cradle

The Wireless Seat Control Unit (WSCU) and the cradle are components of the NEXT series In-Flight Entertainment (IFE) system designed to provide wireless remote control to passengers in premium class seats. It supplies the passenger with a display for video and interactive entertainment, including a front-facing camera. The WSCU and cradle are shown in Figures 1 and 2.

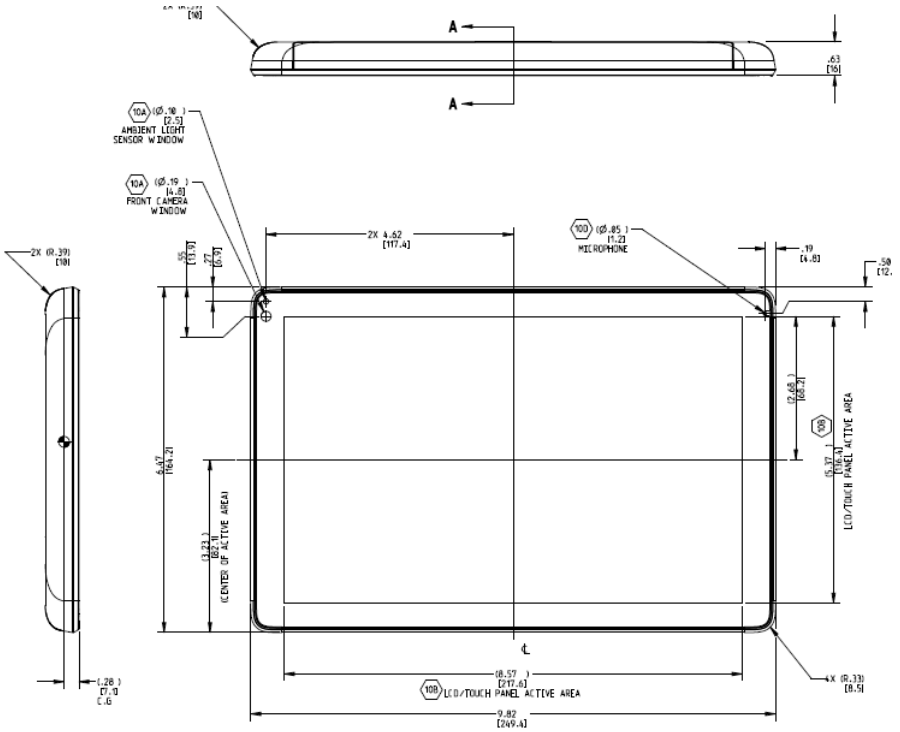

Figure 1: WSCU Outline Drawing

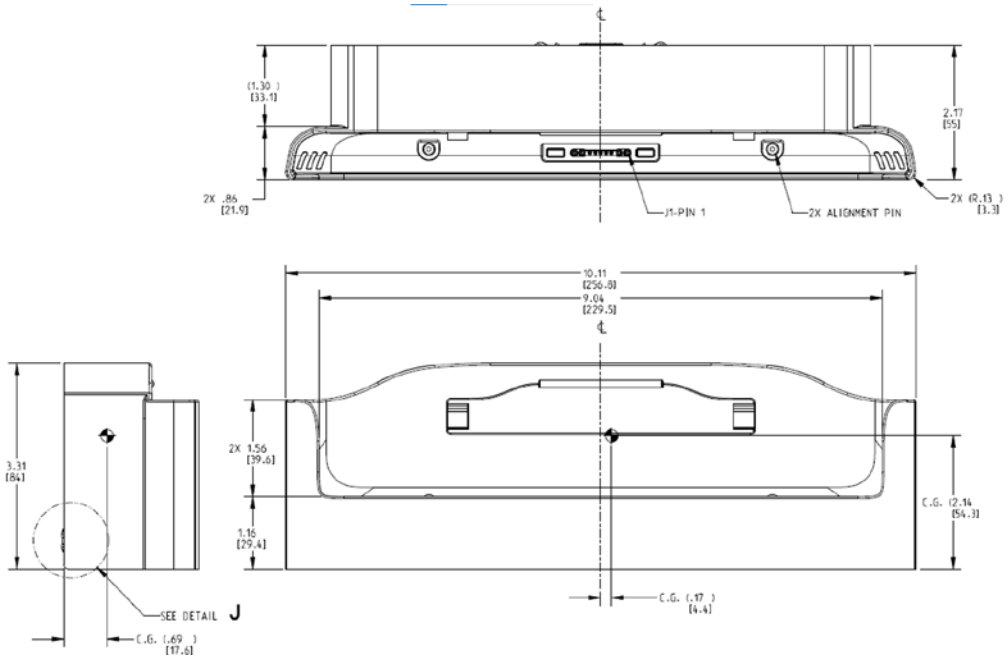

Figure 2: WSCU Cradle Outline Drawing

3 REGULATORY INFORMATION

The WSCU and the cradle have been tested and complies with the specifications for a digital device pursuant to the below specification.

3.1 Regulatory Information: United States

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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution

Any changes or modifications not expressly approved could void the user's authority to operate the equipment.

Radio Frequency Exposure

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines.

This device must not be co-located or operated in conjunction with any other antenna or transmitter.

Contains:

WSCU

FCC ID: U6YRDNA130201
IC: 216P-RDNA130201

Cradle

FCC ID: U6YRDNA135201
IC: 216P-RDNA135201

The FCC ID is present on the product packaging.

3.2 Regulatory Information: Canada

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) L'appareil ne doit pas produire de brouillage;

(2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Notice

The Innovation, Science and Economic Development Canada regulation provides that changes or modifications not expressly approved by Panasonic Avionics Corporation could void your authority to operate this equipment.

Le règlement d'Innovation, Sciences et Développement économique Canada prévoit que les changements ou modifications non expressément approuvés par Panasonic Avionics Corporation pourraient annuler votre droit d'utiliser cet équipement.

Radio Frequency Exposure
This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules.

Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE.

3.3 SAR Compliance Statement

The WSCU and the cradle are compliant with the SAR limits specified for General Population/Uncontrolled exposure required by FCC/ISED.

WSCU

RF Exposure Information (SAR)

The SAR limit is 1.6 W/kg averaged over one gram of tissue. The highest body SAR value reported during product certification is 1.1230 W/kg. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Cradle

RF Exposure Information (SAR)

The SAR limit is 1.6 W/kg averaged over one gram of tissue. The highest body SAR value reported during product certification is 0.2319 W/kg. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements and should be avoided.

3.4 Radio Specification

WSCU

- WiFi standard: 802.11 a/n/ac
- Frequency operation: WLAN_5G
- Modulation DSSS: CCK, DQPSK, DBPSK,
- Modulation OFDM: 256QAM, 64QAM, 16QAM, QPSK, BPSK
- Antenna type: 2 x 2 MIMO
- Antenna gain(Antenna only): 2.73 dBi

Cradle

- WiFi standard: 802.11 a/n/ac
- Frequency operation: WLAN_5G
- Modulation DSSS: CCK, DQPSK, DBPSK
- Modulation OFDM: 256QAM, 64QAM, 16QAM, QPSK, BPSK
- Antenna type: 2 x 2 MIMO
- Antenna gain(Antenna only): 2.2 dBi

3.5 Electronic Label

Customers can access the regulatory electronic label information within 3 steps from the “CABIN MAINTENANCE” dropdown menu at the Crew Terminal’s crew maintenance home screen:

Step 1 – Expand the “Seat Functions” group
Step 2 – Select the "Seat Settings” Option
Step 3 – Toggle the “Seat Info" button, “on” or “off”

No special access codes or permissions are required to go through the above steps. However, standard permission may be required for airline safety reason.

A screenshot of the Electronic Label is shown below.