EU Declaration of Conformity (DoC-17120701048-B)

This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration is in conformity with the relevant Union harmonization legislation:

2011/65/EU on RoHS-2 for Restriction of the use of Hazardous Substances
2012/19/EU WEEE Waste Electrical and Electronic Equipment
2013/35/EU on Occupational Exposure to Electromagnetic Fields
ECE Regulation No. 10 for Electrical/Electronic-Subassembly (Automotive Directive)
1999/5/EC on Radio Equipment and Telecommunications Terminal Equipment (Non-REU Countries)

Object of the Declaration: MOTOTRBO Subscriber DM4x01e mobile Radio series
403-470MHz, TX: 1-25W, 12.5/20/25kHz; BT, WiFi™, GNSS capable
DM4401e, Type Designator: MBAR504DE, numeric Display
DM4601e, Type Designator: MBAR504NE, alphanumeric Display
National Licensed Frequencies Only

Superseded Remarks: This DoC supersedes DOC-17120701048-A

Manufacturer: Motorola Solutions Germany GmbH, Am Borsigturm 130, 13507 Berlin, Germany

Conformity:

Radio Equipment, Article 3(2):
RED:
EN 300 086 V2.1.2, EN 300 113 V2.2.1, EN 300 219-2 V2.1.1, EN 300 328 V2.1.1,
EN 300 440 V2.1.1, EN 300 720 V2.1.1
RTTE:
EN 300 086-1 V1.4.1, EN 300 086-2 V1.3.1, EN 300 113-1 V1.7.1, EN 300 113-2 V1.5.1,
EN 300 219-1 V1.2.1, EN 300 219-2 V1.1.1, EN 300 328 V1.9.1,
EN 300 440-1 V1.6.1, EN 300 440-2 V1.4.1, EN 300 720 V1.3.2

EMC, Article 3(1)b:
EN 301 489-1 V1.9.2, EN 301 489-5 V1.3.1, EN 301 489-17 V2.2.1, EN60945:2002-10
For desktop applications: This is an EMC class A product according to EMC directive 2004/108/EC.
This product may cause interference if used in residential areas. Such use must be avoided unless
the user takes special measures to reduce magnetic emissions to prevent interference to the
reception of radio and television broadcast.

Safety, Article 3(1)a:
Compliant with the ICNIRP (1998) Occupational / Controlled Exposure Limits
EN 62311:2008

Others:
This product shows compliance with Automotive Regulation ECE10, marked with E24 10R-051847.
Phoenix Testlab, NB# 0700, performed the assessment with regards to Maritime standards EN 300
720 V2.1.1, according to Article 3.2 of RE-D and issued EU type examination certificate 18-112178

Year of first application of CE mark: 2015

The essential radio test suites, as defined in the quoted harmonized standards, have been performed.

BERLIN, 21-FEB-2018

Andreas Schuenemann
Managing Director Motorola Solutions Germany GmbH,
Am Borsigturm 130, D-13507 Berlin, Germany

Rüdiger Maurer
Director of Product Safety and Regulatory Compliance,
Motorola Solutions Germany GmbH

Document Keeper: Motorola Solutions Germany GmbH, Am Borsigturm 130, D-13507 Berlin, Germany
Rev. 1 Addendum to EU Declaration of Conformity (DoC-17120701048-B)

This declaration of conformity is an addendum to above referenced product DoC and is issued under the sole responsibility of the manufacturer.
The accessories described below are in conformity with the relevant Union harmonisation legislation. The listed accessories are certified and approved for use with the radios listed in the referenced DoC.

ANTENNA
PMAN4010A GPS/GLONASS MAG MOUNT

AUDIO
HKN4191B POWER CABLE TO BATTERY, 3M (10 FT.), 20 AMP (1-25W)
HKN4192B POWER CABLE TO BATTERY, 6M (20 FT.), 20 AMP (1-45W)
HMN4098A TELEPHONE STYLE HANDSET
NNTN8143C REMOTE PTT BLUETOOTH POD (NON-SECURE)
NNTN8191B BLUETOOTH POD, NO CHARGER
NNTN8294A OPERATIONS CRITICAL 1-WIRE EARBUD 29CM CORD BLACK
NNTN8295A OPERATIONS CRITICAL 1-WIRE EARBUD 116CM CORD BLACK
NNTN8296A WIRELESS COVERT KIT
NTN7374AR 3060685A05 EURO LINE CORD
PMKN4033A CABLE, MOBILE MIC EXTENSION, 10 FEET
PMKN4034A CABLE, MOBILE MIC EXTENSION, 20 FEET
PMLN5718AS OPTION BOARD KIT
PMLN6953A OPERATIONS CRITICAL WIRELESS EARPIECE, 12
PMLN66463A BUSINESS WIRELESS ACCESSORY KIT
PMLN7052A OPERATIONS CRITICAL WIRELESS 1-WIRE SURVEILLANCE KIT WITH TRANSLUCENT TUBE
PMLN7181A FLEXIBLE-FIT SWIVEL EARPIECE W/ BOOM MIC
PMLN7203A FLEXIBLE-FIT SWIVEL EARPIECE W/ BOOM MIC, MULTIPACK
PMMN4095 WIRELESS R2.17A LONG RANGE REMOTE SPEAKER
PMMN4097 WIRELESS R2.17 MOBILE MICROPHONE GATEWAY
RLN4922A COMPLETELY DISCREET EARPIECE KIT
RLN4941A RECEIVER-ONLY EARPIECE WITH TRANSLUCENT TUBE AND RUBBER EARTIP FOR REMOTE SPEAKER MICROPHONE
RLN5926A PUSH BUTTON PTT
RLN6490A XBT HEADSET BTN, HEAVY DUTY HEADSET, BT
RLN6491A XBT HEADSET HB, HEAVY DUTY HEADSET, BT
Rev. 1 Addendum to EU Declaration of Conformity (DoC-17120701048-B)

This declaration of conformity is an addendum to above referenced product DoC and is issued under the sole responsibility of the manufacturer. The accessories described below are in conformity with the relevant Union harmonisation legislation. The listed accessories are certified and approved for use with the radios listed in the referenced DoC.

**AUDIO**
- RMN5052A COMPACT MICROPHONE
- RMN5053A HEAVY DUTY MICROPHONE WITH ENHANCED AUDIO
- RMN5054B VISOR MICROPHONE WITH ENHANCED AUDIO
- RSN4002A 13 WATT EXTERNAL SPEAKER
- RSN4003A 7.5 WATT EXTERNAL SPEAKER
- RSN4004A 5 WATT EXTERNAL SPEAKER
- RSN4005A DESKTOP TRAY WITH SPEAKER

**CHARGER**
- NNTN8190B BT ACCY KIT, SP, 9.5 CBL, NCHGR
- PMKN4010 MAP PROGRAMMING CABLE
- PMKN4016 MAP PROGRAMMING AND TEST CABLE
- PMKN4018 MOBILE AND REPEATER REAR ACCESSORY CONNECTOR UNIVERSAL CABLE

**CABLE**
- PMKN4143A MOTOTRBO REMOTE 3 METER CABLE KIT
- PMKN4144A MOTOTRBO REMOTE 5 METER CABLE KIT

**OTHERS**
- 3002695B05 POWER CABLE, UK PLUG (STRAIGHT)
- GKN6266 RADIO POWER CABLE FOR GPN6145
- PMKN4070 IMPRES MOBILE MAP NON PC ADAPTER
- PMLN5072 HARDWARE KIT FOR REAR ACCESSORY CONNECTOR
- PMLN6402 REMOTE MOUNT TRANSCEIVER INTERFACE
- PMLN6403 REMOTE MOUNT CONTROL HEAD INTERFACE

**SOFTWARE**
The installed radio software is under the full control of the manufacturer with no access by the user and is in compliance with the relevant directives.

The above accessories are shown with their global part numbers. In practice the accessory will have a regional prefix. Prefixes are purely done for regional kittings - primarily the manual (languages) and packaging. Prefixes are MD for European countries, AA of United States and AZ for Asia/Pacific region.

Note: A copy of the above referenced signed and dated Declaration of Conformity can be obtained either via your local Motorola help desk, via your dealer from where you purchased this radio or alternatively you can send an email request to manufacturerdeclaration.eu@motorolasolutions.com, or via http://www.motorolasolutions.com/Business/XU-EN/BMS+Resource+Library
Electromagnetic Energy (EME) Test Laboratory

Conformity of models listed with applicable RF energy exposure limits

This declaration confirms compliance of Motorola Solutions mobile radio(s) with certified accessories

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Type Designator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM2ONC9RA2AN</td>
<td>MBR504DE</td>
<td>DM4401e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, numeric display, BT/GNSS/Wi-Fi</td>
</tr>
<tr>
<td>MDM2ONC9VA2AN</td>
<td>MBR504D</td>
<td>DM4400e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, numeric display</td>
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<tr>
<td>MDM2ONN9RA2AN</td>
<td>MBR504NE</td>
<td>DM4601e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, alphanumeric display, BT/GNSS/Wi-Fi</td>
</tr>
<tr>
<td>MDM2ONN9VA2AN</td>
<td>MBR504N</td>
<td>DM4600e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, alphanumeric display</td>
</tr>
</tbody>
</table>

with the ICNIRP\(^1\) limits for radio frequency (RF) energy exposure. The ICNIRP guidelines were developed by an independent scientific organization after thorough evaluations of relevant research studies, and have been endorsed by the World Health Organization (WHO). The ICNIRP guidelines are also referenced in the European Directive 2013/35/EU,\(^2\) forming the basis of the applicable radio-frequency exposure framework for workers.

For these radio models, RF exposure evaluations were carried out in accordance with harmonised\(^3\) standard EN 62311:2008,\(^4\) following best practices defined in IEEE Std C95.3,\(^5\) with the corresponding results scaled to the applicable highest certified power levels in all tested frequency bands.

RF exposure evaluations were performed at the Motorola Solutions Electromagnetic Energy (EME) laboratory, which has been certified to ISO/IEC Guide 17025 by an independent accrediting agency, the American Association for Laboratory Accreditation (A2LA), in accordance with the applicable ISO/IEC accreditation guidelines.

As certified in the Motorola Solutions EME lab, these radio models, at the highest applicable certified power levels, are compliant with the applicable exposure limits defined by ICNIRP.

Sincerely,

Tiong Nguk Ing

Tiong Nguk In on behalf of Pei Loo Tey
Penang EME Laboratory Manager
DATE : 01-JUN-2017

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4 EN 62311:2008 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (5 Hz - 300 GHz). Although the standard is defined for the general public, it provides guidance for occupational exposures in Annex B.
5 IEEE Std C95.3-2010 IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields: 0 Hz to 100 kHz.
EU-TYPE EXAMINATION (MODULE B) CERTIFICATE

Radio Equipment Directive (RED) 2014/53/EU

PHOENIX TESTLAB
Notified Body Number 0700

Recognised by
BNkA-6/S-02/51-55

This is to certify that:
PHOENIX TESTLAB did undertake the relevant type examination procedures for the radio equipment identified below which was found to be in compliance with the essential requirements of Radio Equipment Directive (RED) 2014/53/EU subject to any conditions in the annex attached hereto.

Certificate No. 17-112178
Manufacturer Motorola Solutions
Address Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D 11900 Bayan Lepas, Penang, Malaysia
Product Description Mobile, mobile PMR with WiFi, Bluetooth and GPS (on-board vessels communication)
Brand Name / Model Name Motorola Solutions / See annex of this Certificate

The radio equipment meets the following essential requirements
Article 3.1 a): Health and Safety Not assessed
Article 3.1 b): Electromagnetic Compatibility Not assessed
Article 3.2: Effective and Efficient Use of Radio Spectrum Conform
Additional Essential Requirements:
Article 3.3 a) Accessories, common chargers not applicable
Article 3.3 g) Access to emergency services

Date of issue 2018-02-20 Expiry date: 2023-02-19

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached annex are complied with. The conditions for the validity of this certificate are listed in the Annex.

The attached Annex forms part of this certificate. This certificate consists of 3 pages.

Phone +49(0)5235-9500-24
Fax +49(0)5235-9500-28
notifiedbody@phoenix-testlab.de

Signed by Dieter Grießner
Notified Body

PHOENIX TESTLAB GmbH
Königswinkel 10
D-32825 Blomberg, Germany
www.phoenix-testlab.de
Annex

Technical description

Frequency Range
UHF 403-470 MHz (Channel Spacing 12.5/20/25 kHz)
Bluetooth 2402-2480 MHz (40 and 79 channels)
WiFi 2412-2472 MHz (9 and 13 channels)
GPS 1575.45 MHz (receiver only)

Transmit Power
UHF: max. 2 W
Bluetooth: 9.0 dBm EIRP
WiFi: 19.3 dBm EIRP

Hardware Version
Tanapa Number: PMUE4125B;
Serial number: 511TRMA966 / 511TRMA967

Software Version
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Firmware Version
C02.17.55; Codeplug version 09.00.04

Model Name(s)  Type Designator  Design
DM4401e  MBAR504DE  numeric Display
DM4601e  MBAR504NE  alphanumeric Display

Optional Components
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Approval documentation

External / Internal Photos  provided
Operator's Manual
User Guide DM4400/DM4400e, DM4401/DM4401e
User Guide DM4600/DM4600e, DM4601/DM4601e
see Detailed Service Manual

EU Declaration of Conformity
Declaration of Conformity, 4 pages, 2017-06-19
provided in User Guide

Explanation of compliance
Article 10(2) and Article 10(10)

Further Documents
Risk assessment of DM4000e Series UHF1 Mobiles,
(on-board version)
Manufacturers Declaration, 2 pages, 2016-04-20
Detailed Service Manual MN002208A01-AB
Applied Standards and Test Reports

<table>
<thead>
<tr>
<th>Specification</th>
<th>Laboratory</th>
<th>Test Report Number / Version</th>
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<tbody>
<tr>
<td>EN 300 086-1 V1.4.1</td>
<td>Motorola Solutions Malaysia</td>
<td>02017-RF-00009</td>
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<td>EN 300 086-2 V1.3.1</td>
<td>Motorola Solutions Malaysia</td>
<td>02017-RF-00010</td>
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<td>08852-RF-00009 Rev.B part 1 of 2</td>
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<td>08852-RF-00009 Rev.B part 2 of 2</td>
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<td>EN 300 328 V2.1.1</td>
<td>Motorola Solutions Malaysia</td>
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<tr>
<td>EN 300 720-1 V1.3.2</td>
<td>GCTCS</td>
<td>11196</td>
</tr>
<tr>
<td>EN 300 720-2 V1.2.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Limitations / Restrictions

- Restrictions for use shall be stated by the manufacturer, completed in the instructions accompanying the radio equipment. This could relate to frequency spectrum use and licence requirements.
- This device also contains frequency bands that are implemented by hardware, but not supported by software. Only the frequency bands stated in this Expertise are operable and have been assessed.
- The manufacturer shall provide information to the user concerning Health restriction.

Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/them being placed on the market.
3. The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured radio equipment with the approved type described in the EU-type examination certificate and with the requirements of Directive 2014/53/EU that apply to it.
4. The manufacturer shall affix the CE marking to each item of radio equipment that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of the Directive.
5. The manufacturer shall draw up a written EU declaration of conformity for each radio equipment type and keep it at the disposal of the national authorities for 10 years after the radio equipment has been placed on the market. The EU declaration of conformity shall identify the radio equipment type for which it has been drawn up. A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.