EU Declaration of Conformity (DoC-15120100204-G)

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-RED Countries)

Object of the Declaration: MOTOTRBO Subscriber DM4x00e mobile Radio series  
403-470MHz, TX:1-25W, 12.5/20/25kHz  
DM4400e, Type Designator: MBAR504D, numeric Display  
DM4600e, Type Designator: MBAR504N, alphanumeric Display  
National Licensed Frequencies Only

Superseded Remarks: This DoC supersedes DOC-15120100204-F

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 300 720 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 300 720 V1.3.2

EMC, Article 3(1)b:
EN 301 489-1 V1.9.2, EN 301 489-5 V1.3.1, EN 60945:2002-10
For desktop applications: This is a 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 18-110237

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 Schewenmann  
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-15120100204-G)**

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.

<table>
<thead>
<tr>
<th>ANTENNA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMAN4010A</td>
<td>GPS/GLONASS MAG MOUNT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AUDIO</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HKN4191B</td>
<td>POWER CABLE TO BATTERY, 3M (10 FT.), 20 AMP (1-25W)</td>
</tr>
<tr>
<td>HKN4192B</td>
<td>POWER CABLE TO BATTERY, 6M (20 FT.), 20 AMP (1-45W)</td>
</tr>
<tr>
<td>HMN4098A</td>
<td>TELEPHONE STYLE HANDSET</td>
</tr>
<tr>
<td>NNTN8143C</td>
<td>REMOTE PTT BLUETOOTH POD (NON-SECURE)</td>
</tr>
<tr>
<td>NNTN8191B</td>
<td>BLUETOOTH POD, NO CHARGER</td>
</tr>
<tr>
<td>NNTN8294A</td>
<td>OPERATIONS CRITICAL 1-WIRE EARBUD 29CM CORD BLACK</td>
</tr>
<tr>
<td>NNTN8295A</td>
<td>OPERATIONS CRITICAL 1-WIRE EARBUD 116CM CORD BLACK</td>
</tr>
<tr>
<td>NNTN8296A</td>
<td>WIRELESS COVERT KIT</td>
</tr>
<tr>
<td>NTN7374AR</td>
<td>3060685A05 EURO LINE CORD</td>
</tr>
<tr>
<td>PMKN4033A</td>
<td>CABLE, MOBILE MIC EXTENSION, 10 FEET</td>
</tr>
<tr>
<td>PMKN4034A</td>
<td>CABLE, MOBILE MIC EXTENSION, 20 FEET</td>
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<tr>
<td>PMLN5718AS</td>
<td>OPTION BOARD KIT</td>
</tr>
<tr>
<td>PMLN6053A</td>
<td>OPERATIONS CRITICAL WIRELESS EARPIECE, 12</td>
</tr>
<tr>
<td>PMLN6463A</td>
<td>BUSINESS WIRELESS ACCESSORY KIT</td>
</tr>
<tr>
<td>PMLN7052A</td>
<td>OPERATIONS CRITICAL WIRELESS 1-WIRE SURVEILLANCE KIT WITH TRANSLUCENT TUBE</td>
</tr>
<tr>
<td>PMLN7181A</td>
<td>FLEXIBLE-FIT SWIVEL EARPIECE W/ BOOM MIC</td>
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<tr>
<td>PMLN7203A</td>
<td>FLEXIBLE-FIT SWIVEL EARPIECE W/ BOOM MIC, MULTIPACK</td>
</tr>
<tr>
<td>PMMN4095</td>
<td>WIRELESS R2.17A LONG RANGE REMOTE SPEAKER</td>
</tr>
<tr>
<td>PMMN4097</td>
<td>WIRELESS R2.17 MOBILE MICROPHONE GATEWAY</td>
</tr>
<tr>
<td>RLN4922A</td>
<td>COMPLETELY DISCREET EARPIECE KIT</td>
</tr>
<tr>
<td>RLN4941A</td>
<td>RECEIVER-ONLY EARPIECE WITH TRANSLUCENT TUBE AND RUBBER EARTIP FOR REMOTE SPEAKER MICROPHONE</td>
</tr>
<tr>
<td>RLN5926A</td>
<td>PUSH BUTTON PTT</td>
</tr>
<tr>
<td>RLN6490A</td>
<td>XBT HEADSET BTN, HEAVY DUTY HEADSET, BT</td>
</tr>
<tr>
<td>RLN6491A</td>
<td>XBT HEADSET HB, HEAVY DUTY HEADSET, BT</td>
</tr>
</tbody>
</table>
**Rev. 1 Addendum to EU Declaration of Conformity** (DoC-15120100204-G)

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 kitings - 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+ResourceLibrary](http://www.motorolasolutions.com/Business/XU-EN/BMS+ResourceLibrary)
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>MDM28GNC9RA2AN MBAR5604DE</td>
<td>DM4401e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, numeric display, BT/GNSS/Wi-Fi</td>
<td></td>
</tr>
<tr>
<td>MDM28GNC9VA2AN MBAR5604D</td>
<td>DM4400e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, numeric display</td>
<td></td>
</tr>
<tr>
<td>MDM28GN9RA2AN MBAR5604NE</td>
<td>DM4601e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, alphanumeric display, BT/GNSS/Wi-Fi</td>
<td></td>
</tr>
<tr>
<td>MDM28GN9VA2AN MBAR5604N</td>
<td>DM4600e, UHF1 403-470 MHz, 1-25W, 12.5/20/25kHz, alphanumeric display</td>
<td></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,

DiNong Nguk Ing

Tiong Nguk  on behalf of Pei Looi 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 (0 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

BNetzA-6S-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. 18-110237
Manufacturer Motorola Solutions
Address Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D 11900 Bayan Lepas, Penang, Malaysia
Product Description Mobile, mobile PMR (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 Grieß
Notified Body

PHOENIX TESTLAB GmbH
Königsweinkel 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)

Transmit Power  UHF: max. 2 W

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

Software Version     ---

Firmware Version     C02.17.55; Codeplug version 09.00.04

Model Name(s)  Type Designator  Design

DM4400e   MBAR504D  numeric Display

DM4600e   MBAR504N  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

Block Diagram, Circuit
Diagram, PCB Layout,
Operational Description,
Parts Placement, Parts List
                  see Detailed Service Manual

EU Declaration of Conformity
                  Declaration of Conformity, 4 pages, 2017-06-19

Explanation of compliance
Article 10(2) and Article 10(10)
                  provided in User Guide

Further Documents
                  Risk assessment of DM4000e Series UHF1 Mobiles,
                  (on-board version)
                  Manufacturers Declaration, 2 pages, 2016-04-20
                  Detailed Service Manual MN002208A01-AB
                  based on Type Examination Certificate 17-112178
Applied Standards and Test Reports

<table>
<thead>
<tr>
<th>Specification</th>
<th>Laboratory</th>
<th>Test Report Number / Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN 300 086-1 V1.4.1</td>
<td>Motorola Solutions Malaysia</td>
<td>02017-RF-00009</td>
</tr>
<tr>
<td>EN 300 086-2 V1.3.1</td>
<td>Motorola Solutions Malaysia</td>
<td>02017-RF-00010</td>
</tr>
<tr>
<td>EN 300 113-1 V1.7.1</td>
<td>DM4601e</td>
<td>08852-RF-00009 Rev.B part 1 of 2</td>
</tr>
<tr>
<td>EN 300 113-2 V1.5.1</td>
<td>DM4601e</td>
<td>08852-RF-00009 Rev.B part 2 of 2</td>
</tr>
<tr>
<td>EN 300 328 V2.1.1</td>
<td>GCTCS</td>
<td>11196</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.