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# **User Guide**

**ICOM Next Hardware Family** 

User	Guide		
ICOM	Next	Hardware	Family



# **Document history**

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# Contents

1.	. PURPOSE OF THIS USER GUIDE	5
2.	. GENERAL INFORMATION	
۷.		
	2.1 GENERAL INSTRUCTIONS	6
	2.2 GENERAL SAFETY INSTRUCTIONS	6
	2.3 SAFETY INSTRUCTIONS	6
	2.4 Notes on Handling, Storage and Transport	6
	2.5 INTENDED USE	
3.	. THE DIAGNOSTIC UNIT FAMILY	
	3.1 Overview	{
	3.2 ICOM NEXT A WITH OBD CONNECTING CABLE	
	3.2.1. OPERATING AND STORAGE CONDITIONS	
	3.2.2. FUNCTION	
	3.2.3. On-BOARD CONNECTION FOR THE ICOM NEXT A	
	3.2.4. WORKSHOP INTERFACES ON THE ICOM NEXT A	
	3.2.4.1 RJ45 NETWORK INTERFACE	
	3.2.4.2 WLAN	
	3.2.4.4 5-PIN JACK FOR CONNECTING AN EXTERNAL MEASURING DEVICE	
	3.2.4.5 RESET BUTTON	
	3.2.4.6 ILLUMINATED BUTTON	12
	3.2.5. LEDs	
	3.2.6. MANUAL NETWORK CONFIGURATION	
	3.2.7. SOFTWARE UPDATE	
	3.2.8. COLOURED CLIP HOLDER	
	3.3 ICOM NEXT B	
	3.3.1. OPERATING AND STORAGE CONDITIONS	
	3.3.2. FUNCTION	
	3.3.3. VEHICLE CONNECTIVITY	
	3.3.4. LEDs	
	3.4 ICOM NEXT C (LEGACY VEHICLE ADAPTER)	21
	3.4.1. OPERATING AND STORAGE CONDITIONS	21
	3.4.2. FUNCTION	
	3.4.3. VEHICLE CONNECTIVITY	22
	3.5 ICOM NEXT D (MOTORCYCLE ADAPTER)	23
	3.5.1. OPERATING AND STORAGE CONDITIONS	
	3.5.2. FUNCTION	
	3.5.3. VEHICLE CONNECTIVITY	





4.	COMPATIBILITY WITH ICOM SERIES ADAPTERS	. 26
5.	WEAR PARTS	. 27
	5.1 REPLACING THE OBD CONNECTING CABLE	. 27
6.	SCOPE OF DELIVERY	. 28
7.	IMPORTANT SAFETY INSTRUCTIONS	. 29
8.	ETL CERTIFICATE	. 30
9.	EU DECLARATIONS OF CONFORMITY IN THE RESPECTIVE LANGUAGES	. 31
10.	EXPLANATORY NOTES ON THE NATIONAL APPROVALS	. 33
11.	ABBREVIATIONS	. 35

User	Guide		
ICOM	Next	Hardware	



# 1. PURPOSE OF THIS USER GUIDE

This User Guide contains all the information that is required to use the ICOM and ICOM NEXT interfaces in the intended manner. It characterises the single components according to their technical properties and describes how they are used for vehicle diagnostics. It also provides information about usage and storage conditions, and gives an overview of the authorisations and certifications.

This User Guide is intended to be used by technical qualified personnel who dispose of the appropriate know-how in the field of vehicle diagnostics and who are familiar with the basic terminology used for OBD II signal designations and communication interfaces.





#### 2.1 GENERAL INSTRUCTIONS

These operating instructions contain the necessary information for using the ICOM NEXT diagnostic interface.

#### 2.2 GENERAL SAFETY INSTRUCTIONS



This symbol indicates useful information that facilitates your work with the ICOM NEXT system.



This symbol indicates important instructions which you should follow at all times in order to avoid malfunctions or damage.

#### 2.3 SAFETY INSTRUCTIONS



These operating instructions must always be kept in a legible and complete condition at the place where the system is being used.

These operating instructions must always be observed.

Commissioning may only be performed by personnel who are familiar with the installation instructions.



Do not open the unit or perform repairs in the event of damage.



Damaged units, connectors and cables are not approved for use. Only use OEM cables.

#### 2.4 NOTES ON HANDLING, STORAGE AND TRANSPORT

Detailed knowledge and the technically correct application of the safety instructions and functions described in this User Guide are essential for safe operation of the system.

- Proper transport, storage, installation and operation are prerequisites for the safety of the product.
- The system may only be put into operation by trained personnel who are familiar with this User Guide.
- The units may only be used with the vehicle for their approved purpose.

Observing the handling regulations and safety instructions will ensure that under normal



circumstances the product will not pose any danger to persons or property.

The following should be noted during use:

- National safety regulations
- National accident prevention regulations
- Generally recognised rules of technology
- Safety instructions in this User Guide
- Stipulated operating conditions for the units
- Additional information labels on the unit
- Only the application software provided by the manufacturer is to be used

#### 2.5 INTENDED USE

The ICOM NEXT system (ICOM NEXT A, ICOM NEXT B, ICOM NEXT C, ICOM NEXT D) may only be installed and used if it is in a technically flawless condition, for its intended purpose, and in a safety and risk-aware manner. Any other or diverging use shall be considered improper use. The manufacturer will accept no liability for damage caused as a result. Additions and alterations by third parties may only be performed in consultation with the manufacturer.

Intended use also includes reading all the operating manuals for the ICOM NEXT A as well as adherence to the instructions contained in them, in particular the safety instructions (see Chapter 7).

The warranty excludes, among other things, damage of any kind caused by the following:

- Wear that is attributable to negligent or intentional use not covered by the product specifications:
  - deformation
  - scratches
  - indentations
  - breakages
- Structural alterations (e.g. drill holes in the housing)
- Additionally attached labels which cannot be removed without leaving a residue
- Missing unit parts
- Deliberately removed lettering, labelling and/or broken protective seals
- Destroyed electronics as a result of the improper use of inappropriate power sources
- · Traces of fire and smoke which were caused by an external fire
- Fluid inside the unit

Visual reconditioning is likewise not covered by the warranty.





#### 3.1 OVERVIEW

The ICOM NEXT A is a multifunctional vehicle interface that is designed to be used in workshops worldwide. It has been specially developed for use by workshop and service personnel in support of service consulting, diagnosis and vehicle programming processes. The philosophy behind the ICOM Next A is to provide universal deployment capabilities irrespective of the vehicle type and communication interface. To this end, the interface unit is distributed over several components. Each individual module is designed to be used in different combinations for special tasks.

The ICOM NEXT system comprises the following components: diagnostic unit incl. OBD cable, MOST diagnosis adapter, legacy vehicle adapter and motorcycle adapter. An overview of all the devices is shown in the table below.

	ICOM NEXT A: Diagnostic unit
	OBD connecting cable for the diagnostic unit
MA SOUTH ME SOUTH	ICOM NEXT B: MOST diagnosis adapter
Temporary of the state of the s	ICOM NEXT C: Legacy vehicle adapter



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ICOM NEXT D:

Motorcycle adapter

Table 1: Overview of ICOM NEXT hardware family

#### 3.2 ICOM NEXT A WITH OBD CONNECTING CABLE

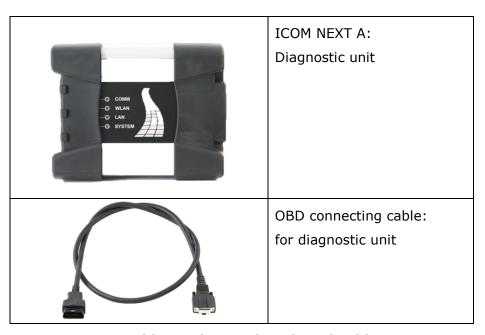


Table 2: Diagnostic unit and cable

#### 3.2.1. OPERATING AND STORAGE CONDITIONS

# Electric operation:

!

Supply voltage KL30: 8V to 18V

Max. power consumption: 1.5 A (incl. MOST diagnosis adapter)

Ambient conditions during operation:

!

Ambient temperature range: 0 °C to +45 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

Ambient conditions for storage:



Ambient temperature range: -20 °C to +60 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h



3.2.2. Function

The ICOM NEXT A is the base component. Physically, it provides the interfaces for linking up to the vehicle's OBD diagnostic interface together with the interfaces for adaptive integration in the workshop's network. With its powerful computer kernel, it serves as a protocol converter and takes over the exchange of data between the tester and the vehicle's control devices, as well as processing the signals to the connection for the measuring device. The ICOM NEXT A is supplied with power from the vehicle's on-board electrical circuit (terminal 30) via the OBD connection.



In electric operation, the ICOM NEXT A is specified for a minimum voltage of 8V. The unit will only function reliably if the supply voltage <u>does not</u> fall below this minimum level.

#### 3.2.3. ON-BOARD CONNECTION FOR THE ICOM NEXT A

The ICOM NEXT A features a sub D socket with 15 pins for plugging in the OBD connecting cable to the vehicle. The rubber cover of the ICOM NEXT A and the connecting cable have guide slots which facilitate plugging the unit in correctly and exclude an incorrect installation. The cable is mechanically fixed onto the unit by means of slot-head screws. To perform the vehicle diagnosis, the connecting cable has to be plugged into the OBD socket in the vehicle.



Fig. 1: Sub D socket on the ICOM NEXT A with guide slots for securing the connecting cable (right side: illuminated button for workshop interaction)

#### 3.2.4. Workshop interfaces on the ICOM NEXT A

The requisite interfaces are defined and an appropriate port is implemented to give the workshop user access to the ICOM NEXT A. These interfaces and their functions are described below.





Fig. 2: Interfaces on the ICOM NEXT A, from left to right: RJ45, reset button, USB 3.0 port, jack

#### 3.2.4.1 RJ45 NETWORK INTERFACE

The RJ45 network interface offers a wired connection to the workshop network. This is a gigabit network connection, which also supports backward compatibility for 100 Mbit/s connections.

#### 3.2.4.2 WLAN

As an alternative to wired operation, the ICOM NEXT A can also be used wirelessly in workshop networks. The WLAN interface must be configured accordingly for this purpose.

#### 3.2.4.3 USB 3.0 PORT

The MOST diagnosis adapter is connected to the USB port, which feeds the MOST interface. The user can plug a USB mass storage device (USB stick or similar) into the USB port for downloading log files for support purposes. A reset of the ICOM Next A can also be performed with a special dataset on the USB stick.

#### 3.2.4.4 5-PIN JACK FOR CONNECTING AN EXTERNAL MEASURING DEVICE

The ICOM NEXT A emits special vehicle signals via the 5-pin jack for connecting an external measuring system box.



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#### 3.2.4.5 RESET BUTTON

The ICOM NEXT A can be reset using a thin metal pin (e.g. a paper clip).



Fig. 3: Reset button next to the USB socket

#### 3.2.4.6 ILLUMINATED BUTTON

When a USB mass storage device is detected at the USB port, the switch lights up to indicate the interaction capability. When the button is pressed (if it is lit up and a USB mass storage device is connected to the ICOM NEXT A), the log files are saved to the USB device, which is then disconnected from the system so that it can be unplugged.



Fig. 4: Illuminated button



3.2.5. LEDs

The unit has four two-coloured (red and green) light emitting diodes (LEDs) for visualising various device and communication states. A separate group of possible states and events is defined for each LED. The LEDs are labelled according to their purpose. All the LEDs are combined to create coded light patterns for special cases.



Fig. 5: LEDs on the ICOM NEXT A

#### General assignment:

LED SYSTEM: Indicates the general unit status

green ready for operationflashing green unit is starting up

o red error

o off unit is not being supplied with power

• LED LAN: Status of the wired tester / Ethernet communication

o green Ethernet connection is active (flashes to indicate data

traffic)

o off Ethernet connection is inactive

• LED WLAN: Status of wireless tester / Ethernet communication

o green infrastructure (flashes to indicate data traffic)

o yellow\*1 ad-hoc (flashes to indicate data traffic)

o off no WLAN communication

• LED COMM: Status of K-Line and D-CAN communication



#### Special cases:

• Light chain: all LEDs are switched on and off in sequence

o red software update **or** downloading log files **or** interaction with user.settings on USB stick **or** self-test is being run with USB stick

 $\circ$  green factory reset has been completed or download of log files has finished or interaction with

user.settings on USB stick has stopped

• Flashing: all the LEDs flash at the same time

o all red factory reset is starting **or** self-test with USB

stick has failed

o red and green factory reset progress indicator (LEDs

begin flashing red and change to green one after the other; SYSTEM first, COMM last)

o all green self-test with USB flash drive was successful

#### 3.2.6. MANUAL NETWORK CONFIGURATION

The LAN configuration can be manually modified for diagnostic purposes or for purposes that involve intentionally modifying the factory settings to integrate the ICOM NEXT A in the workshop network.



Actions of this kind scale down the predefined factory settings and are only to be taken by trained personnel. The execution of these actions requires precise knowledge of the network landscape, and general theoretical knowledge of the technology, topology and protocols used for local computer networks.



A portable USB mass storage device (USB stick) that is at least compliant with USB 2.0 and is formatted with the <u>FAT32 file system</u> is required as additional hardware.

#### Procedure:

1. Create a text file *user.settings* with the following content:

ConnectionMode=xxxxxx \*1 (default \*2: DHCP)

Ip=xxx.xxx.xxx (default: 0.0.0.0)

Netmask= xxx.xxx.xxx (default: 0.0.0.0)

Gateway=xxx.xxx.xxx (default: 0.0.0.0)

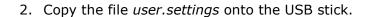
Pay attention to the upper and lower case letters!

\*1 Possible parameters for ConnectionMode: STATIC\_IP, DHCP, APIPA

\*2 default = factory settings

<sup>\*1</sup> yellow = relevant LED lights up red and green at the same time





3. If the ICOM NEXT A is ready for operation (SYSTEM LED permanently lights up green), the USB stick is to be connected to the unit (a connected MOST diagnosis adapter is to be unplugged). The red light chain starts after approx. 10 seconds (see 4.2.7.). The saved settings are persistently overwritten. The green light chain starts once all the data has been updated. In this state, the unit can be addressed at the new IP (even without a restart).

If the red light chain does not start, the *user.settings* file on the USB stick could not be read.

If the green light stays off, an error has occurred while the LAN configuration was being written. For analysis purposes, the ICOM NEXT A saves the file user.settings.log with the error description to the USB stick.



The LAN settings are persistently overwritten and remain available even after a reboot. To restore the original configuration, repeat the steps described above with the default values entered in user.settings.

#### 3.2.7. SOFTWARE UPDATE

How to update the software is described in the relevant documentation provided by ISPI Next.

#### 3.2.8. COLOURED CLIP HOLDER

The ICOM NEXT A can be marked with a maximum of two coloured clips for differentiating between multiple units at the workshop. This is done by attaching the clips above and below the LEDs to the aluminium frame with the aid of clip holders. The coloured clip is placed underneath the holder, which is then lightly pressed onto the unit's frame. The clip holder can be removed by carefully placing two fingers on the recesses and then pulling the clip holder forwards and off the frame.



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Fig. 6: Coloured clip holder on the ICOM NEXT A

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#### 3.2.9. TEMPERATURE IN THE WORKING ENVIRONMENT

High temperatures in the operational environment of the ICOM NEXT A can have a negative effect on the hardware while it is operating and increase the heat build-up in the unit. The housing of the ICOM NEXT A is able to perfectly dissipate the waste heat.

# Note the following:



The maximum permissible ambient temperature is +45 °C. Exceeding this limit can cause damage to the ICOM NEXT A.



#### 3.3 ICOM NEXT B



Fig. 7: ICOM NEXT B (MOST diagnosis adapter)

#### 3.3.1. OPERATING AND STORAGE CONDITIONS

### Electric operation:

!

Power supply via USB 2.0 interface: 5V

Max. power consumption: 250mA

# Ambient conditions during operation:



Ambient temperature range: 0 °C to +45 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

#### Ambient conditions for storage:



Ambient temperature range: -20 °C to +60 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

#### 3.3.2. Function

The ICOM NEXT B is the MOST (Media Oriented Systems Transport) external interface of the ICOM NEXT A. It is connected to the ICOM NEXT A using a standard type A-B USB cable (included in delivery). The supply voltage is fed in from the ICOM NEXT A via the USB port.



In electric mode, the ICOM NEXT B is only operational when the ICOM NEXT A is being supplied with a minimum voltage of 8V.



If a cable other than the one supplied with the unit is to be used for the data connection to the ICOM NEXT A, it must be ensured that it complies with the USB 2.0 High Speed specification and that it is in a flawless mechanical condition.



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#### 3.3.3. VEHICLE CONNECTIVITY

The ICOM NEXT B is connected to the vehicle using the standardised MOST interface.



Fig. 8: MOST interface on the ICOM NEXT B

# 3.3.4. LEDs

The unit has two two-coloured (red and green) light emitting diodes for visualising specific device and communication states. A separate group of possible states and events is assigned to each LED for display purposes. Next to the LEDs on the top of the housing are short, function-oriented names, similar to the ICOM NEXT A.







Fig. 9: LEDs on the ICOM NEXT B housing

The following light and flash codes are defined:

• LED SYSTEM: Indicates the general unit status:

o off unit is not being supplied with power
 o yellow \*1 unit is being initialised
 o red start / initialisation problems
 o green unit is operational

o flashing green communication

• LED MOST: Status of the MOST communication:

o off no light at the MOST interface
 o red unlockable light
 o green stable LOCK
 o yellow \*1 unstable LOCK

<sup>\*1</sup> yellow = relevant LED lights up red and green at the same time



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# 3.4 **ICOM NEXT C** (LEGACY VEHICLE ADAPTER)



Fig. 10: ICOM NEXT C

3.4.1. OPERATING AND STORAGE CONDITIONS

#### Electric operation:



Supply voltage KL30: 8V to 18V

Max. power consumption: 1.5 A (incl. MOST diagnosis adapter)

Ambient conditions during operation:



Ambient temperature range: 0 °C to +45 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

Ambient conditions for storage:



Ambient temperature range: -20°C to +60°C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

3.4.2. Function

The ICOM NEXT C is a smart interface converter with an OBD connector and a vendor-specific round plug. It is used as an extended extra module to connect the ICOM NEXT A to vehicles without an OBD interface. Voltage is supplied via the round plug from the vehicle battery's continuous positive terminal (30).





In electric operation, the ICOM NEXT C is specified for a minimum voltage of 8V. The voltage at terminal 30 is fed within the unit to the OBD interface to make it available to the ICOM NEXT A. A stable interaction between both devices can only be assured if the vehicle battery voltage is above the minimum limit.

3.4.3.

#### VEHICLE CONNECTIVITY

The ICOM NEXT C is connected to the vehicle using the round plug.



Fig. 11: ICOM NEXT C round plug



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# 3.5 ICOM NEXT D (MOTORCYCLE ADAPTER)



Fig. 12: ICOM NEXT D

3.5.1. OPERATING AND STORAGE CONDITIONS

#### Electric operation:

1

Supply voltage KL30: 8V to 16V

Max. power consumption: 1.5A (incl. ICOM NEXT A)

#### Ambient conditions during operation:



Ambient temperature range: 0 °C to +45 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

#### Ambient conditions for storage:



Ambient temperature range: -20 °C to +60 °C

Relative humidity at max. 25 °C: 10% to 80%, non-condensing

Temperature gradient: 5 °C/h

#### 3.5.2. FUNCTION

The ICOM NEXT D is a cable extension for the ICOM NEXT A featuring a smart interface converter. with an OBD connector and a 10-pin diagnosis connector specific to BMW. Voltage is supplied from the vehicle battery's continuous positive terminal (30). Direct access to the vehicle's signal lines for probes is provided by external measuring sockets. The respective pin indices corresponding to the assignment of the 10-pin diagnosis connector are clearly labelled on the sockets.





In electric operation, the ICOM NEXT D is specified for a minimum voltage of 8V. The voltage at terminal 30 is fed within the unit to the OBD interface to make it available to the ICOM NEXT A. A stable interaction between both devices can only be assured if the vehicle battery voltage is above the minimum limit.



Fig. 13: Measuring sockets with clearly labelled pin indices

3.5.3. VEHICLE CONNECTIVITY

The ICOM NEXT D is connected to the vehicle using the vendor-specific round plug.



Fig. 14: ICOM NEXT D round plug



# 3.5.4. ATTACHMENT AID FOR MOTORCYCLE APPLICATIONS

To facilitate the use of diagnostic applications for motorcycles in field environments where a functionally correct handling of the unit cannot be assured due to limited storage and attachment possibilities, a strap is supplied with the motorcycle adapter as an optional attachment aid for the ICOM NEXT A. This strap can be fixed in a suitable position (e.g. to the handlebar).

The cord is attached by running it through the mounting on the ICOM NEXT A, and the entire strap is then pushed through the resulting loop formed by the cord and tightened. The illustration below shows the correctly installed strap.

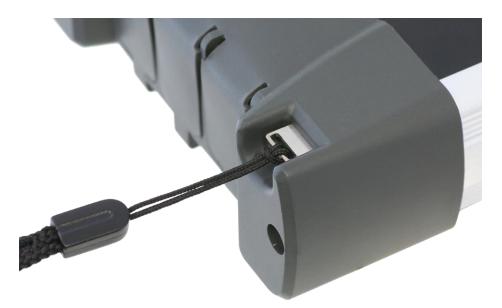


Fig. 15: Strap on the ICOM NEXT A



#### 4. Compatibility with ICOM series adapters



The adapters for the ICOM NEXT family are 100% functionally compatible with adapters for the legacy ICOM family. It is possible to use both ICOM NEXT adapters (ICOM NEXT B, ICOM NEXT C, ICOM NEXT D) with the ICOM A/ICOM A2 as well as legacy adapters (ICOM B, ICOM C, ICOM D, ICOM E) with the ICOM NEXT A.

Legacy units can be distinguished from new units by referring to the part number printed on the back of the unit. The table below gives an overview of the legacy and new part numbers:

Designation	Part number	Designation	Part number
Legacy part	Legacy part	New part	New part
ICOM A/A2	IME4201201	ICOM NEXT A	AR10008059
ICOM B	IME4201202	ICOM NEXT B	AR10008060
ICOM C	IME4201203	ICOM NEXT C	AR10008061
ICOM D	IME4201204	ICOM NEXT D	AR10008062
ICOM E	IME4201205	ICOM E	AR10008200

Further information about the legacy units (ICOM A to ICOM E) can be found in the respective user guides.



#### 5. WEAR PARTS

#### 5.1 REPLACING THE OBD CONNECTING CABLE

The two metal screws on the sub D connector are removed from the housing using a suitable slot-head screwdriver. The OBD connecting cable can then be pulled off the housing and a new cable can be plugged in. The two metal screws are screwed back in again and tightened to hold the cable in place.



These two screws prevent the connecting cable from being detached unintentionally!



#### 6. SCOPE OF DELIVERY

The scopes of delivery of the single units are as follows:

#### ICOM NEXT A set:

- ICOM NEXT A unit
- OBD connecting cable
- 10m Ethernet cable
- 2 coloured clip holders
- 1 colour marking set

# ICOM NEXT B set (MOST diagnosis adapter):

- ICOM NEXT B unit
- USB 2.0 High Speed cable

# ICOM NEXT C set (legacy vehicle adapter):

• ICOM NEXT C unit

# ICOM NEXT D (motorcycle adapter):

- ICOM NEXT D unit
- Strap



#### 7. IMPORTANT SAFETY INSTRUCTIONS

# Read all the safety instructions

- This unit is for professional use only.
  - Only use the unit in accordance with this User Guide. In particular, only the cables referred to in this User Guide may be used with this product.
- Only operate the unit with an 8-18V DC power supply, maximum 1A.
- Only connect the device to a fused battery circuit, max. 25A.
- ❖ The unit may not be operated in the vicinity of open fuel containers as this poses an explosion or fire hazard.
- ❖ Ensure there is sufficient ventilation when working on a vehicle with the engine running due to the risk of toxic poisoning.
- ❖ Do not run the Ethernet cable and vehicle connecting cables over tables, benches or cabinets.
  - Do not place cables in the vicinity of hot surfaces or moving parts.
- ❖ Only operate the unit at an ambient temperature of between 0 °C and +45 °C.
- Do not expose the unit to direct sunlight, such as through a window.
- Avoid exposure to sprayed liquids (water, acids, solvents, etc.).
- Do not drop the unit.
- Use a cloth slightly moistened with a mild detergent to clean the outside of the unit.

DO NOT USE SOLVENTS!

# THESE SAFETY INSTRUCTIONS MUST BE KEPT IN A SAFE PLACE!

User	Guide		
ICOM	Next	Hardware	



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# 8. ETL CERTIFICATE



Certified to CAN/CSA Std. C22.2 No. 60950-1

Conforms to ANSI/UL Std. 201 and ANSI/UL Std. 60950-1



# 9. EU DECLARATIONS OF CONFORMITY IN THE RESPECTIVE LANGUAGES

Česky [Czech]	ACTIA I+ME GmbH tímto prohlašuje, že tento "AR10008059" je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede ACTIA I+ME GmbH erklærer herved, at følgende udstyr "AR10008059" overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt ACTIA I+ME GmbH, dass sich das Gerät "AR10008059" in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab <i>ACTIA I+ME GmbH</i> seadme " <i>AR10008059</i> " vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	ACTIA I+ME GmbH hereby declares that this "AR10008059" complies with the general requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente <i>ACTIA I+ME GmbH</i> declara que el " <i>AR10008059</i> " cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ <i>ΑCTIA I+ΜΕ GmbH</i> ΔΗΛΩΝΕΙ ΟΤΙ " <i>AR10008059"</i> ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
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Italiano [Italian]	Con la presente ACTIA I+ME GmbH dichiara che questo "AR10008059" è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo <i>ACTIA I+ME GmbH</i> deklarē, ka <i>"AR10008059"</i> atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo <i>ACTIA I+ME GmbH</i> deklaruoja, kad šis " <i>AR10008059</i> " atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart <i>ACTIA I+ME GmbH</i> dat het toestel " <i>AR10008059"</i> in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.



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Malti [Maltese]	Hawnhekk, <i>ACTIA I+ME GmbH</i> , jiddikjara li dan " <i>AR10008059"</i> jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, <i>ACTIA I+ME GmbH</i> nyilatkozom, hogy a " <i>AR10008059</i> " megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym <i>ACTIA I+ME GmbH</i> oświadcza, że " <i>AR10008059</i> " jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	ACTIA I+ME GmbH declara que este "AR10008059" está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	ACTIA I+ME GmbH izjavlja, da je ta "AR10008059" v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	ACTIA I+ME GmbH týmto vyhlasuje, že "AR10008059" spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	ACTIA I+ME GmbH vakuuttaa täten että "AR10008059" tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar <i>ACTIA I+ME GmbH</i> att denna " <i>AR10008059</i> " står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir <i>ACTIA I+ME GmbH</i> yfir því að " <i>AR10008059</i> " er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	ACTIA I+ME GmbH erklærer herved at utstyret "AR10008059" er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.



ACTIAI+ME GmbH

# 10. EXPLANATORY NOTES ON THE NATIONAL APPROVALS

<b>ANATEL</b> 4102-15-8436
7898926774081
Contains IC: 6158A-WPEA-121N CAN ICES-3 (B)/NMB-3(B)
CEO
TBD
CIDF1 5000527
Contiene módulo inalámbrico IFT: RCPSPWP11-0615
NOM TYCE
OMAN TRA R/2870/15 D080134



ACTIAI+ME GmbH

Philippines	Type Approved No.: ESD-1511817C
Russia	EAC
Singapore	Complies with IDA Standards  DA101586
United Arab Emirates	TRA  REGISTERED No: ER42420/15  DEALER No: DA0099689/12
United States of America	Contains FCC ID: RYK-WPEA121N  "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."  "Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment."

WLAN

Wireless Local Area Network





# 11. ABBREVIATIONS

CAN Controller Area Network FAQ Frequently Asked Questions FCC Federal Communications Commission Integriertes Verbindungs-Management (Integrated Connectivity Management) IVM KL15 Klemme 15 (Terminal 15) KL30 Klemme 30 (Terminal 30) LAN Local Area Network LED Light Emitting Diode **MOST** Media Oriented Systems Transport OBD **ON-Board Diagnosis** UL **Underwriter Laboratories** USB Universal Serial Bus