

Dräger Interlock[®] XT

de

Atemalkoholgesteuerte
Wegfahrsperre
Gebrauchsanweisung
📄 2

en

Breath Alcohol Controlled
Vehicle Immobilizer
Instructions for Use
📄 18



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For Your Safety

Observe the Instructions for Use

Any use of the device requires full understanding and strict observation of these instructions.

The device is to be used only for the purpose specified here.

Maintenance

We recommend that a service contract be obtained with Dräger Safety and that all repairs also be carried out by them.

Only authentic Dräger parts may be used for maintenance.



Note the chapter "Maintenance" on Seite 27.

Accessories

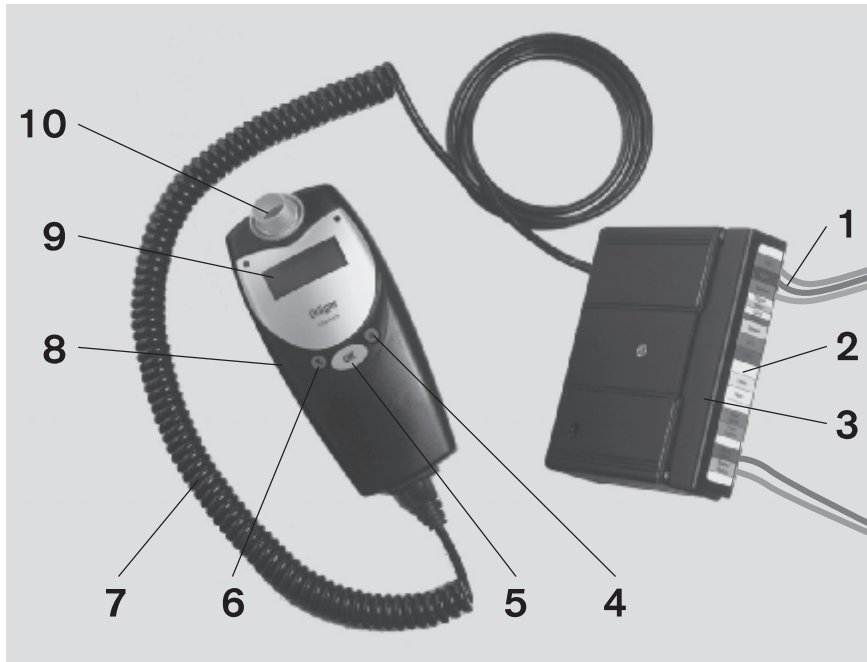
Do not use accessory parts other than those listed in the order list.

Safety symbols used in these Instructions for Use

These Instructions for Use use a number of warnings for risks and hazards, which might occur when using the device. These warnings contain signal words, which will alert you to the degree of hazard you may encounter. These signal words and corresponding hazards are as follows:

 WARNING
Death or severe bodily injuries may result in a situation of potential danger unless appropriate precautions have been taken.
 CAUTION
Indicates a potential hazardous situation which, if not avoided, could result in injury or damage to property. Can also be used to warn against any wanton actions.
NOTICE
Additional information for the use of the device.

What's What



- 1 Connecting cables car
- 2 Description of connecting cables
- 3 Control box
- 4 Button "Up"
- 5 Button "OK"
- 6 Button "Down / Menu"
- 7 Connecting cable handset
- 8 Handset
- 9 Display
- 10 Mouthpiece

Intended Use

The Dräger Interlock[®] XT is a breath-alcohol measuring instrument with a vehicle "immobilizer".

Before starting a vehicle equipped with the Dräger Interlock[®] XT, the driver has to provide a breath sample.

The Dräger Interlock[®] XT measures the breath-alcohol concentration and stores the measured value, the starting attempt and any indication of tampering and violations with the system in the data memory.

The vehicle can only be started when the measured breath-alcohol concentration lies below a pre-set limit value.

The instrument will also ask (optional) for retests while driving.

NOTICE

The instrument is not a safety device for automobiles and is not a substitute for a vehicle immobilizer for theft protection.

Install Dräger Interlock[®] XT

⚠ WARNING

Alterations and additions to the Dräger Interlock[®] XT may cause dangers.

Such alterations and additions invalidate the certificate of installation contained in this instructions for use booklet.

The installation may only be carried out by an authorised Dräger Interlock Service Center or a professional auto repair shop according to the respective instructions for installation.

By choosing the place of installation, the existing regulations for the interior of vehicles have to be observed.

Starting the Vehicle

General Conditions

- Use a new mouthpiece for each person being tested.

NOTICE

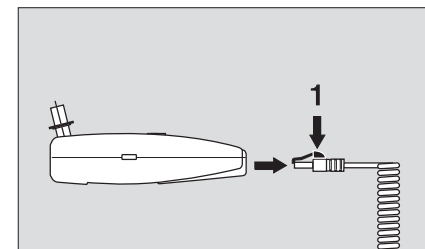
- No alcohol and solvent vapours (disinfectants, window cleaning fluids) in the ambient air.
- Do not allow a high alcohol concentration to reach the sensor. For instance, from drinking alcohol, eating alcohol containing foods or rinsing the mouth with alcoholic mouthwisher just before measurement.
- Keep away from the antenna of mobile phones or transmitters. Otherwise the measurement results may be falsified.

Detaching the Handset

- At temperatures below -20 °C (-4 °F) and above 80 °C (176 °F) in the interior of the vehicle, when provided, detach the handset from the connecting cable for quicker readiness of use.

- 1 Press this spot on the connecting plug and detach the plug.

- Store handset at a place with a moderate temperature.
- Before starting the vehicle, connect handset again.



Conditions for Tested Person

- There must be an interval of at least 15 minutes after alcohol has been taken into mouth. Actual residues of alcohol in the mouth may enhance the measured values. This may also occur by some foods, aromatic drinks (e.g. fruit juices), alcoholic mouthwashes or mouth sprays, medicines and drops, as well as by burping and vomiting. Rinsing out the mouth with water or non-alcoholic drinks do not substitute for the allotted time period.
- A measured concentration above the preset limit value will be stored in the data memory.
- Breath evenly and normally before the test.

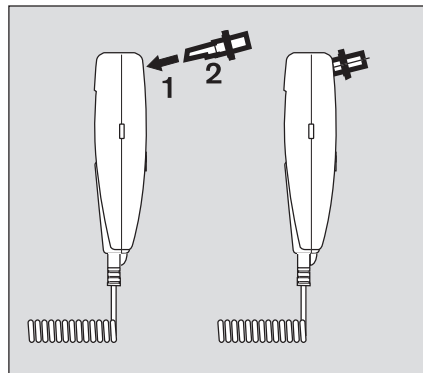
Making a Measurement

Activating Dräger Interlock® XT

- Insert key into ignition switch and turn to position "Ignition". A self-test is carried out and the warming-up phase starts.
- During warming up, the message » Warming Up PLEASE WAIT « is shown in the display.
- A signal tone, blinking of the yellow light and the message » Ready for Test PLEASE BLOW « show that the instrument is ready for measurement.

Providing a Breath Sample

- Remove handset from its holster.
- 1 Eventually insert a new mouthpiece into the respective opening.
- 2 Make sure the notch is positioned in the correct orientation.
- Blow evenly into the mouthpiece as long as a continuous tone sounds



or

- If the anti-circumvention mode is activated (Blow/Suck):
Blow evenly into the mouthpiece as long as a continuous signal tone sounds, followed immediately (the signal tone ceases and you may hear eventually a "click") without pause by a suck until a short signal tone sounds.
- If the breath sample is not delivered correctly with blowing and sucking, the message » Suck after Blow Repeat Test **OK** « is shown in the display.

- Acknowledge the message by pressing the button "OK".
- Afterwards the instrument requests a repeated breath sample.
- If the breath sample flow is too hard or too soft, a respective message is shown in the display.
- Acknowledge the message by pressing the button "OK".
- Afterwards the instrument requests a repeated breath sample.
- After a sufficient breath sample, the test result is shown with the message » Test Passed « or » Test Failed « or (optional) with the measured concentration.

» Test Passed «

- The measured breath-alcohol concentration is below the set limit value. The display shows » Test Passed «. The start of the vehicle is cleared showing in the display » Free start time: « and a timer showing how long the vehicle may be started.
- After starting the vehicle, the Dräger Interlock® XT is in stand-by mode. This is shown by the display » Drive Safely ! «.
- Attach handset to the holster again.

» Test Failed «

- The measured breath-alcohol concentration is above the set limit value. The display shows » Test Failed « followed by » Temporary Lockout « with a counter which shows the remaining disabled hours, minutes and seconds. The red lamp is lit.
- After a subsequent intermediate phase indicated by » Warming Up PLEASE WAIT «, the display shows » Ready for Test PLEASE BLOW « requesting a further breath sample.

Interruption of Ride – Switching-off the Vehicle

- As long as the ignition of the vehicle is switched on after a successful breath test, the instrument is in the stand-by mode. This is shown by the display » Drive Safely ! «.
- When the ignition of the vehicle has been switched off or when the vehicle has not been started after a successful breath test, a restart period (see page 31) starts. During this time the vehicle can be started without a new breath alcohol test being required. The display shows » Free start timer: « and a timer of the remaining time for starting the vehicle.
- When this time of the restart period has ended, the instrument is switched off. The Dräger Interlock® XT remains switched off until it is activated again by turning on the ignition.

NOTICE

Before starting again a breath test has to be carried out.

Retests

CAUTION

In heavy traffic or in dangerous situations wait with the retest until the breath test can be delivered safely.

CAUTION

For safety reasons and certain road laws, the vehicle should be parked off the road, away from traffic in safe position before presenting the retest.

To make sure the driver stays sober while driving, the instrument requires to present additional breath tests while driving (optional).

- When the instrument prompts a retest, it makes a beeping sound, the yellow lamp flashes and the display shows » Retest required PLEASE BLOW «.
- Perform the breath test exactly as when starting the vehicle.
- The motor shall be running while the retest is taken. Otherwise a respective entry ("violation") is registered.
- When the display shows » Test Passed «, put the instrument back on the holster and continue driving.
- The message » Drive Safely ! « returns to the display.

NOTICE

There are (depending on instrument settings) several minutes to deliver the retest.

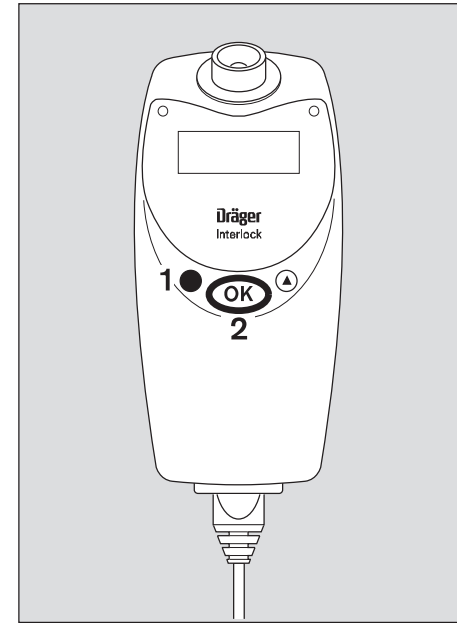
Menu Options

The Dräger Interlock® XT offers (depending on the set configuration) the possibility to show the following options:

- » Back «
- » Free start «
- » New Breath Test«
- » Service « with submenu:
 - » Back «
 - » Next Service «
 - » Provider Info «
 - » Handset Info «
 - » Controlbox Info «
 - » Access Code « with submenu:
 - » Back «
 - » Enter Code «
 - » Free start PIN « with submenu:
 - » Back «
 - » Enter PIN «
- » Date and Time «
- » Non locked times «
- » Unlock Device «

Before selection the ignition of the vehicle is switched on.

- 1 Press menu button "M".
- Select menu item by pressing the buttons "▼" and "▲".
- 2 Acknowledge choice with button "OK".
- Eventually select submenu item by pressing the buttons "▼" and "▲" and acknowledge with button "OK".



Option "Free start":

Offers the possibility after entering a PIN number to start the vehicle without delivering a breath sample, for example for parents or supervisors. The PIN code has to be entered again before each motor start without breath test.

The basic setting of the free start PIN is » 1234 « (change of the free start PIN, see page 26).

- Select option » Enter PIN: « with the buttons "▼" and "▲" and acknowledge with button "OK".
- The display shows » Enter PIN: 0000 «.
- Select the desired first figure with the buttons "▼" and "▲".
- Acknowledge with button "OK".
- Afterwards set the next figure.
- Repeat the procedure for all figures.
- Acknowledge complete PIN number again with button "OK" or return to the enter state with the button "▲".

Option "New Breath Test":

Offers the possibility to request a new breath test.

- Select option » Start test « with the buttons "▼" and "▲" and acknowledge with button "OK".
- The output relay is opened. A new motor start is only possible after a successful breath test.
- Deliver breath test.

Option "Next Service":

Shows date and reason for next service.

- After display: acknowledge with button "OK".

Option "Provider Info":

Shows phone number of service center and eventual program number of instrument user.

- After display: acknowledge with button "OK".

Option "Handset Info":

Shows serial number and software version of handset.

- After display: acknowledge with button "OK".

Option "Controlbox Info":

Shows serial number and software version of control box.

- After display: acknowledge with button "OK".

Option "Access Code":

Offers for a limited time period the possibility after entering a code number to start the vehicle without delivering a breath sample for example in a garage.

- For obtaining the code number call the phone number of the service provider (for example see option "Provider Info", page 25) and have the following information:
 - serial number of the handset (see option "Handset Info"),
 - date and time at which the code number has to be entered.
- The access is (depending on setting) possible for a maximum of 48 hours after entering the code number.
- Select option » Enter Code: « with the buttons "▼" and "▲" and acknowledge with button "OK".
- The display shows » Enter Code: 0000 «.
- Select the desired first figure with the buttons "▼" and "▲".
- Acknowledge with button "OK".
- Afterwards set the next figure.
- Repeat the procedure for all figures.
- Acknowledge complete code number again with button "OK" or return to the enter state with button "▲".
- The validity of the access code can be finished by entering the code number "0000" or by requesting a new breath test (see option "New Breath Test", page 25).

Option "Free start PIN":

Offers the possibility to change the free start PIN.

- Select option » Free start PIN: « with the buttons "▼" and "▲" and acknowledge with button "OK".
- The display shows » Enter curr. PIN: 0000 «.
- Select the first figure of the current PIN with the buttons "▼" and "▲".
- Acknowledge with button "OK".
- Afterwards set the next figure.
- Repeat the procedure for all figures.
- Acknowledge complete PIN number again with button "OK" or return to the enter state with the button "▲".
- The display shows » Enter new PIN: 0000 «.
- Enter new PIN number as described above.

Option "Date and time":

Shows actual day of the week, date and time of the Dräger Interlock® XT.

- After display: acknowledge with button "OK".

Option "Non locked times":

Shows the set non locked time periods.

- After display: acknowledge with button "OK".

Option "Unlock Device":

Offers in case of a device lockout (for example because of expiry of the service period due to legal requirements) the possibility after entering a code number to start the vehicle with delivering a breath sample.

- For obtaining the code number call the phone number of the service provider (for example see option "Provider Info", page 25) and have the following information:
 - serial number of the handset (see option "Handset Info"),
 - date and time at which the code number has to be entered.
- Select option » Unlock Device: « with the buttons "▼" and "▲" and acknowledge with button "OK".
- The display shows » Enter Code: 0000 «.
- Select the desired first figure with the buttons "▼" and "▲".
- Acknowledge with button "OK".
- Afterwards set the next figure.
- Repeat the procedure for all figures.
- Acknowledge complete code number again with button "OK" or return to the enter state with button "▲".
- The instrument requests a breath test.

Maintenance

Calibration / Adjustment

- Only by an authorised Dräger Interlock Service Center.
- Check calibration at least every 12 months.
- After expiration of the service interval or after shortening of the service interval due to violations – depending on the actual parameter setting and the legal regulations – the display shows the message » Service required in X days «.
- If the instrument is not serviced, the vehicle cannot be started after a grace period of several days – depending on the legal regulations.

- Attempts to disable the Dräger Interlock® XT will shorten the specified service interval.

Cleaning

- Do not submerge in liquid – liquid must not enter the sockets!
- To clean, wipe with a disposable tissue.

Disposal of the Instrument

Disposal of electrical and electronic equipment



EU-wide regulations for the disposal of electrical and electronic equipment which have been defined in the EU Directive 2002/96/EC and in national laws are effective from August 2005 and apply to this device.

Common household appliances can be disposed of using special collecting and recycling facilities. However, as this device has not been registered for household usage, it must not be disposed of through these means. The device can be returned to your national Dräger Safety Sales Organization for disposal. Please do not hesitate to contact the above if you have any further questions on this issue.

Faults, Cause and Remedy

Display	Cause	Remedy
Flow detected during Warm-Up	Breath sample has been blown too early.	Deliver breath sample when requested by the instrument.
Blow stronger ! / Repeat Test	Breath sample has been blown too soft.	Repeat test blowing stronger.
Blow softer ! / Repeat Test	Breath sample has been blown too strong.	Repeat test blowing softer.
Blow longer ! / Repeat Test	Breath sample has been blown too short.	Repeat test blowing longer.
Suck after Blow / Repeat Test	Breath sample is not delivered correctly by blowing and sucking.	Repeat test with blowing and immediately afterwards sucking.
Suck longer ! / Repeat Test	Breath sample has been sucked too short	Repeat test sucking longer.
Check mouthpiece / Repeat Test	Mouthpiece is not correctly inserted into handset.	Insert mouthpiece correctly.
Please retry / Repeat Test	During delivery of the breath sample a fault has been detected.	Deliver breath sample again when requested by the instrument.
Test Failed	The measured breath-alcohol concentration is above the set limit value.	Repeat test after at least 15 minutes. If message reappears, the breath alcohol concentration is above the limit value.
Low Temperature / Warm Up Handset	Temperature of the handset too low.	Detach handset and take it at a place with moderate temperature. Connect measuring instrument again and make measurement.
High Temperature / Cool down Handset	Temperature of handset too high.	Detach handset and take it at a place with moderate temperature. Connect measuring instrument again and make measurement.
Service required in x days	Service interval will expire in x days.	Call an authorized Dräger Interlock Service Center in due time.
Service lockout	Service interval expired.	Call an authorized Dräger Interlock Service Center.

Display	Cause	Remedy
Violation Reset	Too many violations have been detected.	Call an authorized Dräger Interlock Service Center in due time.
Handset error / Contact Service !	Fault of handset.	Switch ignition off/on and repeat the test. If message reappears: call an authorized Dräger Interlock Service Center.
Controlbox error / Contact Service !	Fault of control box.	Switch ignition off/on and repeat the test. If message reappears: call an authorized Dräger Interlock Service Center.
Check cable and reconnect !	No connection between handset and control box.	Check plugs of the connecting cable and connect again with handset and control box. If message reappears: call an authorized Dräger Interlock Service Center.
Controlbox mismatch SW-version "OK"	Controlbox and handset have different software versions.	After acknowledging with button "OK" the software version may be seen (e.g. Rev. 1.9). Call an authorized Dräger Interlock Service Center.
(No display textes on handset, but signal lamps functioning)	Temperature of the handset too low.	Perform test as usual guided by the signal lamps.
		Detach handset and take it at a place with moderate temperature. Connect handset again and make measurement.
(No display messages on handset)	No connection between handset and control box.	Check plugs of the connecting cable, disconnect plug from handset and reconnect again. If again no messages are shown: call an authorized Dräger Interlock Service Center.

Technical Data

Measuring principle	Electrochemical DrägerSensor	Waiting time to ready for measurement	
Ambient conditions for operation	-45 °C to 85 °C (-49 °F to 185 °F) 20 % to 98 % r.h. 600 to 1100 hPa No influence of changes in altitude on the measurement result	≥20 °C (68 °F) -40 °C (-40 °F)	< 10 seconds < 3 minutes
Sensitivity drift	typically 1 % of measured value / month	Approvals	Radio interference (Directive 2006/28/EC)
Display	Graphic display		Breath-alcohol-controlled vehicle immobilizer as separate technical unit (general German operating permission)
Calibration interval	typically 12 months		
Dimensions (H x W x D)			
Handset	approx. 150 mm x 70 mm x 40 mm		
Control box	approx. 115 mm x 105 mm x 40 mm		
Weight			
Handset	approx. 175 g		
Control box	approx. 320 g		
Voltage supply	12 V to 35 V		
Current consumption			
maximum	<2 A		
stand-by	<20 mA		
Relais for the lead starter relais	<16 A, continuous <40 A, peak <48 V		
Lead ignition	5 V to 48 V		

Adjustable Parameters

Several parameters of the Dräger Interlock[®] XT may be set differently by a Dräger Interlock Service Center because of legal regulations in different countries or individually during installation.

The descriptions of these instructions for use are related to the basic version.

Table of essential adjustable parameters:

Parameter	Basic version
Controls	
Display of test result	Test Passed / Test Failed
Minimum sample volume	1.0 liter
Limit value (initial test)	0.30 ‰
Anti-circumvention (mode of blow / suck)	No
Restart period	15 minutes
Service	
Service interval	365 days
Device lockout (after service period and grace period have expired)	No
Retests	
Retests (whilst the vehicle is in use)	No

Parameter	Basic version
Lockouts	
High concentration lockout period for motor starter	5 minutes
Non locked times	
Non locked times (allows starting the vehicle only during certain times of the day and days of the week)	No
Override possibilities	
Free start (for repeatedly overriding the instrument via a PIN number)	No
Access code (for overriding the instrument via a code number for a limited time period)	Yes
Access code period	9 hours

Order List

Name and Description	Part no.
<p>Dräger Interlock® XT Breath-alcohol controlled vehicle immobilizer (hand-set and control box) for installation in motor vehicles, 12 V to 24 V, mouthpieces (5 pieces) and mounting accessories</p>	<p>83 19 600</p>
<p>Accessories</p> <p>Mouthpieces (5 pieces with non-return valve), separately packed</p> <p>Mouthpieces (300 pieces with non-return valve), separately packed</p> <p>Mouthpieces (50 pieces without non-return valve), separately packed</p> <p>Mouthpieces (300 pieces without non-return valve), separately packed</p> <p>Mouthpiece cap (1000 pieces), per 20 pieces in bag</p> <p>Set of cables for connecting horn and high-beams</p> <p>Set of cables for connecting horn</p> <p>External indicator light</p> <p>Mounting plate</p> <p>Curly cord, length 5,5 m</p>	<p>68 10 478</p> <p>68 11 325</p> <p>68 12 288</p> <p>68 11 815</p> <p>68 11 483</p> <p>83 16 229</p> <p>83 17 452</p> <p>on request</p> <p>83 17 139</p> <p>83 20 248</p>

Installation Certificate

I, the undersigned:

certify that the installation of the breath-alcohol-controlled vehicle immobilizer described below has been carried out by myself pursuant to the fitting instructions supplied by the manufacturer of the system.

Description of the vehicle:

Make:

Type:

Serial Number:

Registration Number:

Description of the breath alcohol controlled vehicle immobilizer:

Make:

Type:

Approval number:

Done at:

on:

Installer's full address (and stamp, if appropriate):

Signature:

Position:

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