

Pin-pointing system

protrac®

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Table of contents

1	About this manual	4
1.1	Using this manual	4
1.2	Applicable documents.....	4
1.3	Information on the screenshots used.....	4
2	Updating the device software.....	5
2.1	Updating the device software of the CU control unit	5
2.2	Updating the device software of the AGP acoustic ground probe	6
2.2.1	Required equipment.....	6
2.2.2	Connecting the laptop/PC to the AGP	6
2.2.3	Determining the COM port number of the AGP	7
2.2.4	Updating the AGP device software	8
3	Maintenance and care	11
3.1	Charging the batteries.....	11
3.2	Replacing the batteries	11
3.3	Replacing the BIOS battery	12
3.4	Cleaning the devices.....	12
4	Warranty and After Sales	12

1 ABOUT THIS MANUAL

1.1 Using this manual

This update and maintenance manual contains all information needed for updating the device software of the CU control unit and the AGP acoustic ground probe and for the maintenance, cleaning and care of the protrac® pin-pointing system.

- ▶ The update and maintenance manual should be considered part of the product and stored in an easily accessible location.
- ▶ If this update and maintenance manual is lost, please contact BAUR GmbH or your nearest BAUR representative (<http://www.baur.eu/baur-worldwide>).

1.2 Applicable documents

This update and maintenance manual applies in conjunction with the user manual for the protrac® pin-pointing system and other applicable documents.

1.3 Information on the screenshots used

The screenshots used are intended to illustrate the procedure and may differ slightly from the actual state.

2 UPDATING THE DEVICE SOFTWARE

2.1 Updating the device software of the CU control unit

The update process including automatic restart of the CU control unit takes approximately 5 minutes.

- ▶ Ensure that the batteries are fully charged, and stay with the device throughout the entire update process.

Required equipment

- Empty USB drive (*FAT32* file system)
- Current device software as ZIP file
You can download the ZIP file from the BAUR website: <http://www.baur.eu>
The zip file contains all the files you need to update the CU and AGP device software, and the update and maintenance manual.
- protrac® screwdriver (included in standard delivery)
- USB adapter cable

Procedure

1. Unzip the ZIP file to the USB drive.
Important: The CU device software can only be updated using the USB drive.
2. Open the battery compartment of the CU carefully. Ensure that the batteries do not fall out.
3. Connect the USB adapter cable to the mini USB port in the battery compartment.
4. Switch on the CU and wait until the home screen is displayed.
5. Connect the USB drive to the USB adapter cable.
The update process starts automatically, after which the CU is automatically restarted. This process can take 2–3 minutes.
6. Remove the USB drive and the USB adapter cable and close the battery compartment.

2.2 Updating the device software of the AGP acoustic ground probe

The update process involves the following steps:

- Connect the laptop/PC to the AGP (establish Bluetooth® connection)
- Determine the COM port number of the acoustic ground probe
- Update the AGP device software

Note: Administrator rights are **not** required to perform the update.

2.2.1 Required equipment

- Laptop/PC with Bluetooth® function activated
- Empty USB drive (*FAT32* file system)
If you have ever updated the CU device software in the past you can use the same USB drive.
- Up-to-date device software and AGP update software as ZIP file
You can download the ZIP file from the BAUR website: <http://www.baur.eu>
The zip file contains all the files you need to update the CU and AGP device software, and the update and maintenance manual.

2.2.2 Connecting the laptop/PC to the AGP

Procedure for Windows 7

1. Switch on the AGP.
2. On the laptop/PC, open the dialog **Devices and Printers**: Control Panel > **Hardware and Sound** > **Devices and Printers**
3. Click on **Add a Device**.
The AGP is displayed as a multimedia device.
Note: It can take a while before the AGP appears in the list of devices.
4. Select the AGP and click **Next**.
If several acoustic ground probes are displayed, select the AGP with the desired serial number and click **Next**.
The AGP is configured and shown as having been successfully added.
5. Click on **Close**.
6. Continue by determining the AGP COM port number.
Further information: Chapter *Determining the COM port number of the AGP* (on page 7)

Procedure for Windows 10

1. Switch on the AGP.
2. On the laptop/PC, open the dialog **Manage Bluetooth devices**: To do this, double-click the  symbol in the taskbar, for example.

A list of available Bluetooth® devices is displayed.

Note: It can take a while before the AGP appears in the list of devices. Wait until the AGP is displayed and its status is **Ready to pair**.

3. Select the AGP and click on **Pair**.
If several acoustic ground probes are displayed, select the AGP with the desired serial number and click on **Pair**.
The Bluetooth® connection between the laptop/PC and the AGP is established. The AGP is displayed as **Paired**.
4. Continue by determining the AGP COM port number.
Further information: Chapter *Determining the COM port number of the AGP* (on page 7)

2.2.3 Determining the COM port number of the AGP

1. On the laptop/PC, open the dialog **Devices and Printers**: Control Panel > **Hardware and Sound** > **Devices and Printers**
A list of available devices is displayed. The AGP is displayed as a multimedia device.
2. Right-click the AGP and select the context menu item **Properties**.
3. Select the **Services** tab and note or write down the COM port number.



4. Continue with the device software update.
Further information: Chapter *Updating the AGP device software* (on page 8)

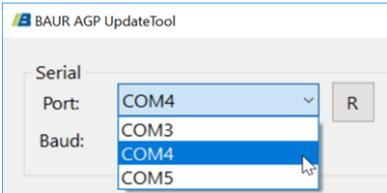
2.2.4 Updating the AGP device software

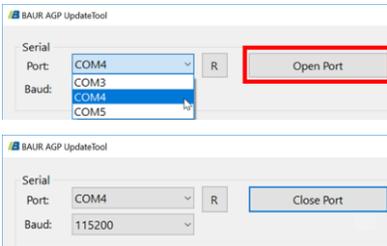
Note: Administrator rights are **not** required to perform the update.

1. If you have not yet unzipped the file: Unzip the ZIP file to the USB drive.
 The files that you will need during the update process are in the root directory of the USB drive:
 - *BAUR_AGP_UpdateTool_vxxx.exe*
 - *BAUR_AGP_Vxxx.ldr*

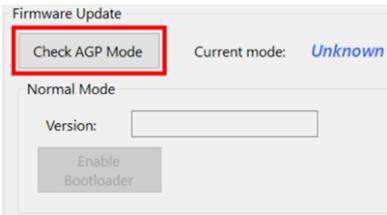
2. Switch on the AGP.

3.  Start the AGP update software: To do this, double-click on the *BAUR_AGP_UpdateTool_vxxx.exe* file.
 The AGP update software starts.

4.  In the **Port** selection list, select the COM port number that has been determined.
 If the COM port number is not displayed in the selection list, click on the **R** button.
 The list is refreshed and the COM port number of your AGP is displayed.

5.  Click the **Open Port** button.
 The text on the button changes to **Close Port**.
Note: If the text does not change, the Bluetooth® connection may have been interrupted. Reconnect the laptop/PC to the AGP.
 Further information: Chapter *Connecting the laptop/PC to the AGP* (on page 6)

6.



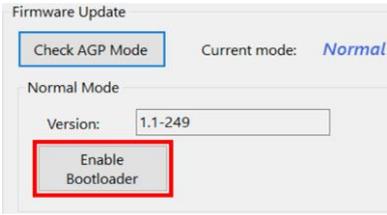
In the **Firmware Update** section, click on the **Check AGP Mode** button.

The current operating state of the AGP is detected. At this point in the update process the AGP is in the *Normal* operating state.

The current version of the AGP device software is displayed in the **Normal Mode** section. The **Enable Bootloader** button is active.

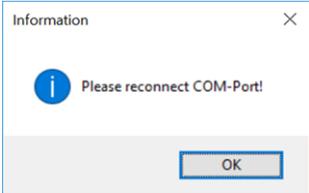
Notes:

 - If the current version of the AGP device software is not displayed, restart the laptop/PC and start the update process again.
 - When the AGP is in the *Bootloader* operating state (next step), the AGP remains in this operating state until the device software update is complete.
7.



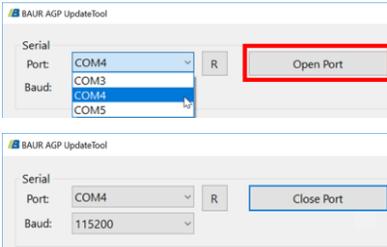
Click the **Enable Bootloader** button.

The AGP changes to the *Bootloader* operating state. The operating state indicator LED flashes blue/green. This indicates that the AGP is in the *Bootloader* operating state. The AGP remains in this operating state until the device software update is complete.
8.



The message **Please reconnect COM-Port!** appears.

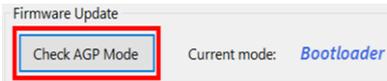
Confirm the message by clicking on the **OK** button.
9.



In the **Serial** section, click on the **Open Port** button.

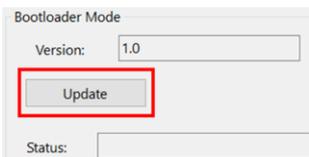
The text on the button changes to **Close Port**.

Note: If the text does not change, the Bluetooth® connection may have been interrupted. Reconnect the laptop/PC to the AGP.
10.



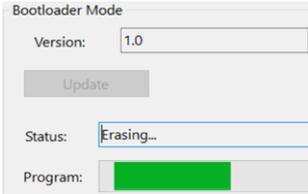
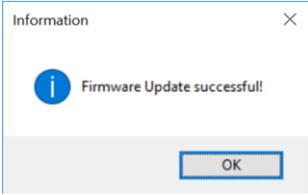
In the **Firmware Update** section, click on the **Check AGP Mode** button.

The current operating state of the AGP is detected. At this point in the update process the AGP is in the *Bootloader* operating state.
11.



In the **Bootloader Mode** section, click on the **Update** button.
12.

In the **Open** dialog, select the file *BAUR_AGP_Vxxx.ldr*.

-
13.  The device software is automatically updated. The text in the progress bar changes from **Erasing...** to **Programming...** and finally to **Verifying...**
-
14.  When the update process is complete, a message appears stating that the update was successful.
Click the **OK** button.
The operating state indicator LED flashes green.
The updated AGP device software is immediately active, the AGP does not need to be restarted.
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Notes:

- If there are any other Bluetooth® devices nearby, these may interfere with the update process. If an error message appears during the update, take any other Bluetooth® devices out of range and restart the update process.
- If the error message **Erase fail** appears, restart the laptop/PC and start the update process again.

3 MAINTENANCE AND CARE

3.1 Charging the batteries

	 CAUTION
	<p>Danger of explosion or fire due to charging non-rechargeable batteries</p> <p>Risk of injury, damage to device.</p> <ul style="list-style-type: none">▶ Never charge non-rechargeable batteries.

1. Switch off the device.
2. Ensure that rechargeable batteries are inserted in the device.
3. Connect a suitable charger to the charger socket.

3.2 Replacing the batteries

Required equipment

- 8 x each for CU or 6 x for AGP:
 - NiMH Mignon 1.2 V IEC LR6 or
 - Alkaline batteries 1.5 V IEC LR6
- protrac® screwdriver (included in standard delivery)

Procedure

1. Switch off the device.
2. Open the battery compartment and replace the batteries.
NOTICE! Wrong polarity of rechargeable or non-rechargeable batteries can destroy the electronics.
3. While inserting batteries, pay attention to the polarity of the rechargeable or non-rechargeable batteries.
4. Close the battery compartment.

3.3 Replacing the BIOS battery

Required equipment

- CR 2032 coin cell, 3 V
- protrac® screwdriver (included in standard delivery)

Procedure

1. Switch off the CU.
2. Open the battery compartment and replace the coin cell.
3. Close the battery compartment.
4. Switch on the CU and set the date and time.

3.4 Cleaning the devices

NOTICE

Device damage due to wrong cleaning agents

- ▶ Do not use any abrasive, corrosive cleaning agents or strong solvents.
- ▶ Never clean electrical devices with water.

1. If required, clean the device surfaces with mild detergent and a lint-free cloth.
NOTICE! Device damage due to leaking fluids.
2. Do not allow liquids to leak into the devices.

4 WARRANTY AND AFTER SALES

Warranty

For warranty claims, please contact BAUR GmbH or your local BAUR representative (<http://www.baur.eu/baur-worldwide>). Warranty is cancelled in case of misuse. Wear parts are excluded from the warranty.

After Sales

For questions contact BAUR GmbH or your BAUR representative (<http://www.baur.eu/baur-worldwide>).



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