



PPC3[®]

BSR TUNING SYSTEM



ENGLISH, VERSION 1.4

© COPYRIGHT BSR SVENSKA AB

USB cable

OBDII cable



Connect to the computer.

Connect to the car.

VERY IMPORTANT!

PROGRAMMING OF THE CAR:

- Always connect a battery charger to the car.
- When the programming has begun it can't be cancelled!

MACHINE WARRANTY:

- If the purchase includes BSR machine warranty this needs to be activated to be valid. This is done via your PPC-page at the site (www.en.bsr.se/read-more/machine_warranty).

CONTENTS

<i>How to program your car</i>	<u>4</u>
<i>Product information</i>	<u>8</u>
<i>How to install PPC Sync 3</i>	<u>10</u>
<i>Synchronizing PPC</i>	<u>12</u>
<i>Read data from car</i>	<u>14</u>
<i>Support</i>	<u>15</u>

HOW TO PROGRAM YOUR CAR

The procedure of tuning the car, returning to original and reading data from the car is basically the same, and is described in this 8-step scheme.

Preparations

- Use fuel according to the product info on page 8.
- Check that the car is properly serviced. If warning lamps are lit take the car to a repair shop first.
- Drive the car so that the engine reaches normal temperature before the programming.
- Always connect a battery charger to the battery.
- Turn off cellphone if connected to the car.
- For automatic gearboxes, put gear selector in position "P" before the programming.

1

2

Connect PPC and the OBDII cable to the diagnostic connector

The connector is located under the steering wheel, often behind a cover, and sometimes under the ashtray. (More pictures at bsr.se/ppc)





Turn ignition on

Ignition is in **position 2**, when all control lamps are lit and before the starter motor gets activated. (See more info at bsr.se/ppc)
position 0 = OFF
position 1 = Radio
position 2 = Ignition
position 3 = Start engine

3



Turn off any equipment that consumes battery power

To avoid running down the car battery, turn off the radio, air conditioning, headlight, defroster, seat heating etc.

4



Identify car

Select "Identify car" in the menu and press enter. PPC identifies the car and the software of the car. PPC also recognizes whether the software has been updated at the car service.

5

continues on next page >>

Now it's time to program your car

Depending on the circumstances you can choose between some of the following alternatives:

- **Tune car**
- **Return to original**
- **Read data from car** (see page 14)

During programming, the engine cooling fan might start and warning lamps on the car's dashboard might indicate errors regarding ESP, transmission, brake, light etc. This is normal. These warning lamps will be turned off either after the programming or after you have driven the car.

VERY IMPORTANT!

- Always connect a battery charger to the car!
- Once the programming/reading has started it must not be interrupted!
- Do not turn ignition off before the programming/reading is finished!
- Do not unplug the PPC before the programming/reading is finished!
- Leave the car untouched during programming/reading. Do not open or close doors, do not turn steering wheel, do not turn on radio etc.
- If the car doesn't start after the programming, please perform the programming once again. If the problem remains contact BSR support.



Turn ignition off and remove the key from the ignition lock

Impossible to remove the key?

After programming some cars with magnetic ignition lock, removing the key is impossible. If this is the case, you just turn ignition off (without removing the key). Then press "Enter" on PPC and unplug PPC and the OBDII cable from the car. Start the car and drive for some minutes. After this you can remove the key as usual.

7



Unplug PPC and the OBDII cable from the car

The programming is now finished. Start the car and drive for some minutes.

(Since we want to offer you the quickest support, we kindly ask you to always synchronize your PPC via the Internet and the program PPC Sync 3 after you have finished the programming of the car.)

8

PRODUCT INFORMATION

FUEL

Petrol cars

BSR recommends you to use at least EU 98 octane (≈US 93 octane) no matter what tuning stage you have or if the car is tuned or not.

- Cars with BSR Stage 1 or 2 can be run on EU 95 (≈US 90), if approved by the car manufacturer, but the result is increased fuel consumption and less power than indicated.
- Cars with BSR Stage 3 or more *require* EU 98 (≈US 93) minimum.

Diesel cars

Only use high quality diesel.

Ethanol cars

Drive carefully the first 5 minutes after refuelling, when the system is adapting.



Enclosed stickers

For cars with BSR Stage 1 or 2.

For cars with BSR Stage 3 or higher.

For cars with BSR ethanol conversion Stage 1 or 2.

For cars with BSR ethanol conversion Stage 3 or higher.

Replace the original sticker with the one corresponding to your tuning stage. Place it on the inside of the tank cover.

STORAGE

PPC must not be exposed to water, moisture or condensation. Store it in a place free from dust and vibrations. Do not store it near strong magnetic fields.

PPC TERMS OF AGREEMENT

1. It is not allowed to open the unit, or in any form try to make a copy of the software or hardware related to the PPC itself or the PPC 3 BSR Tuning System, including the PPC Sync program.
2. It is not allowed to disassemble or reverse the PPC unit functions or PPC Sync functions.
3. It is not allowed to use BSR software or coming software updates for reversed engineering of an ECU.
4. It is not allowed to use the PPC, or its software that is acquired from BSR, in any other way than as described by BSR and/or the BSR staff.
5. It is not allowed to read out the information in a tuned ECU, or the PPC, and by this try to modify, copy, distribute or reproduce the BSR tuning software.
6. If the ECU software is overwritten with any other tool than PPC, BSR cannot guarantee the function with PPC later on.

If PPC has been exposed to anything set out above, BSR claims the right to expel the PPC and its owner from all support, updates and access to BSR servers; The warranty will be void and any refund will be denied. BSR can and will take legal actions against anyone who does not follow this agreement. The PPC must be used as instructed by BSR.

ENCLOSED BSR BADGES



Large badge
Place the large badge on the back of the car, approx. 20mm under the engine designation.



Small badges
Place the two small badges on the front fenders of the car.



Tip: Use the black foam as a template to get the distance right if it will be mounted close to any other badge.

CHANGING OR ADDING HARDWARE TO YOUR VEHICLE

Today, many tuning and styling products are found on the market with promises of huge power and performance increase. The products in your specific tuning kit can be found at the BSR site (www.en.bsr.se/tuning-kits and the choose your car). Using other hardware will result in BSR not being able to anticipate the results of the tuning procedure.

Changing air filter

When changing air filter, make sure that the filter has a filtration level and flow rate suited for the power of the engine. All BSR air filters are qualified accordingly.

Changing exhaust system

Changing the exhaust system (cat-back) will improve performance if the back pressure levels are lower than for stock system. Most modern cat-back systems branded as “sport exhaust” will provide this. As a consequence, feel free to fit a cat-back system in combination with the BSR PPC.

Changing downpipe

Changing the downpipe to a larger diameter version generally gives a lower back pressure and as such it should always be combined with proper software. BSR Stage 3 tuning kits are calibrated using BSR 3” downpipes and as a result of this, BSR’s downpipe is recommended for best performance.

Changing BOV (blow off valve)

Stock valves in modern cars are of high quality and function, thus there is no need to change them. Many of the aftermarket BOVs actually offers less performance in comparison. “Open air” BOVs are not to be used in cars with air mass meters, i.e. all cars younger than 10 years. BSR PPC software is calibrated for stock valves only.

Changing catalyst

The term “race catalyst” is sometimes used to describe a catalyst with high flow rates and low back pressure. The majority of these catalysts achieve this by having inadequate catalyst function which affects our environment in a negative way. Furthermore, it also might cause problems with the cars internal diagnostic features. As a consequence, BSR will advice you not to use such a catalyst.

Changing sparkplugs

We recommend you to use stock spark plugs, in particular for Saab engines as they use the plugs for misfire detection. Driving under hard conditions (track days, high speed highway driving), we recommend you to change the plugs at a more frequent rate than what is described in the owner’s manual.

Changing intercooler (IC)

In BSR tuning kits where the stock intercooler has been found inadequate, an upgraded version is offered. This also requires a re-calibration of the software and is therefore not recommended for other cars than the ones having an intercooler in the tuning kit.

HOW TO INSTALL PPC SYNC 3

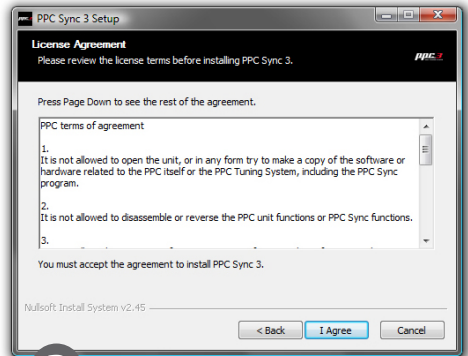
- 1 It is necessary to install the PPC Sync 3 program to be able to download new software from BSR's server to your PPC.

Enter the website www.bsr.se/ppc and log in with your PPC number and password that were sent to your e-mail. Click on the PPC Sync 3 link to start the installation.

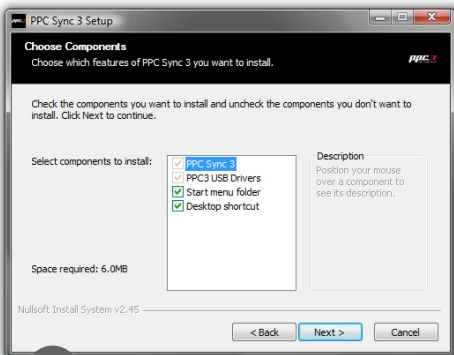
This is how the installation looks when using Windows Vista. The installation might differ slightly on other operation systems.



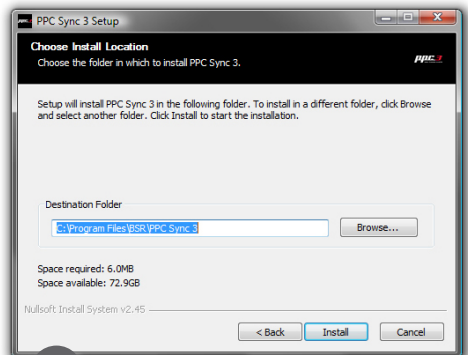
- 2 Click Next.



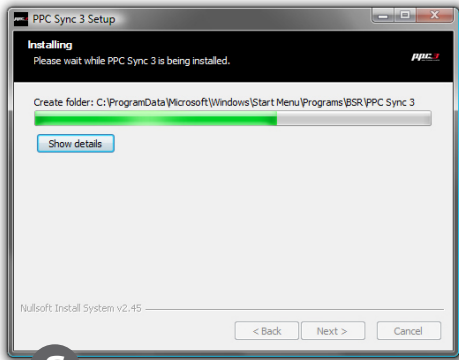
- 3 If you agree, click I Agree.



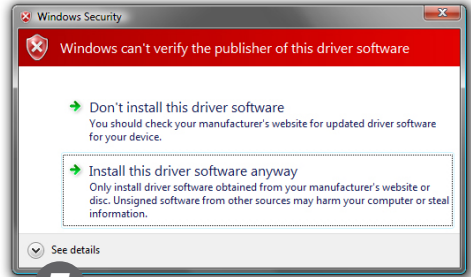
- 4 Click Next.



- 5 Click Install.



6



7

Click Install this driver software anyway.



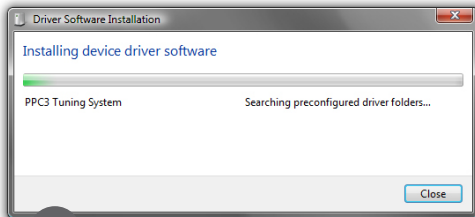
8

Click Finish.

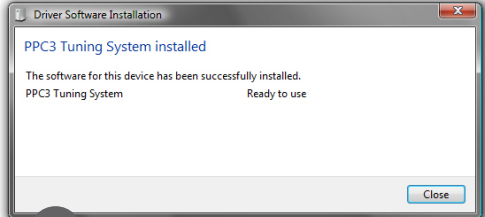


9

Now connect PPC to your computer with the USB cable.



10



11

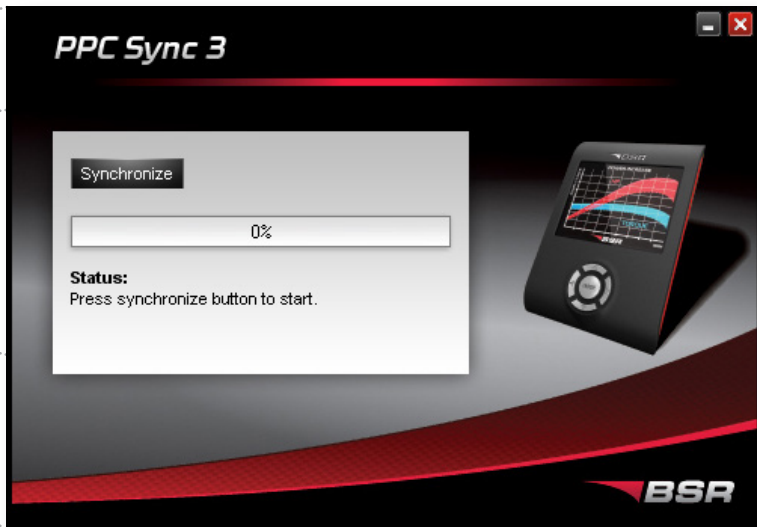
12

The installation is complete! You can now use the PPC Sync 3 program.

SYNCHRONIZING PPC



- 1. Connect PPC to your computer with the USB cable. The computer must be connected to the Internet.*
- 2. Start the program PPC Sync 3.*
- 3. Fill in the PPC number and password that were sent to your e-mail. (Only necessary to do once.)*
- 4. Click Synchronize.*



Click Synchronize to either:

a) Download new software to PPC

If there is a new tuning software for your car, it will be downloaded. Also, the menus in your PPC may be updated and new functions may be added.

b) Send your car's original data to BSR

If you have read your car's original data it will be sent to BSR. On the basis of this BSR makes a new tuning software for your car.

SPECIFICATIONS FOR PPC SYNC 3

Compatible with: Windows 7/Vista/XP/2000/ME/98/NT

Internet protocol: TCP/IP port 143

We recommend you to turn off any firewalls before using PPC Sync 3.

READ DATA FROM CAR

When is it necessary to read data from the car?

PPC has an advanced safety system that guarantees that your car always gets the right software installed. If the tuning software and the car's original software are not compatible, you will be told to read data from the car. Nothing is wrong with your PPC when this happens. Reading data means that PPC stores your car's original software. Then you'll be able to send it to BSR via the Internet and the PPC Sync 3 program. On the basis of this data, BSR makes a new tuning software for you to download.

How to do:

1. Read data from the car

Connect PPC to your car and follow the instructions in the section "How to program your car" in this manual. Connect an battery charger to the car. To avoid running down the car battery turn off current consumers such as radio, AC, headlight, defroster, seat heating etc (reading can take up to 1½ hour). Reading must not be interrupted! Do not turn ignition off or disconnect PPC from the car before the reading is finished!

2. Send this data to BSR

Connect PPC to your computer. Start the program PPC Sync 3 and click "Synchronize" to send your car's information to BSR. You don't have to inform BSR about this!

3. BSR makes a new tuning software for you

When BSR's technicians has received the information of your car, they will make a new tuning software for your car. This normally takes 1-5 working days. You'll get an e-mail when the new tuning software is ready, then you can download it.

4. Download the new tuning software

Connect PPC to your computer. Start the program PPC Sync 3 and click "Synchronize" to download the new tuning software to your PPC.

5. Tune your car

Connect PPC to your car and follow the instructions in the section "How to program your car" in this manual.

SUPPORT

Need some help?

If you need some help with your PPC, please contact your BSR dealer in the first place. You can also contact BSR via the website **www.bsr.se/support**. Your question is top priority and will be answered as soon as possible. As a BSR customer you shall feel that you are in safe hands. That's why we offer you the best service and support you can think of. This is what we call a "support agreement".

More about the support agreement

When you buy a PPC, the support agreement is included in the price and free of charge for two years from the time of buying. After that we offer you to renew the support agreement one year at a time. The support agreement contains this:

- Free updates/improvements in the tuning files done by BSR
- New tuning files, e.g. when the workshop has updated the car's ECU at the service*
- Free technical support via **www.bsr.se/support**

** Not offered if the car manufacturer introduces restrictions that complicate or make tuning impossible.*

Your PPC number and password

Your PPC number and password were sent to your e-mail. You can also see the PPC number on the backside of the PPC. Use them to log in at the PPC website **www.bsr.se/ppc** and to start the PPC Sync 3 program the first time.

My PPC number:

My password:



BSR Svenska AB

Deltavägen 9, 352 45 Växjö, Sweden

+46 470 - 70 96 70 | info@bsr.se | www.bsr.se

Support: www.bsr.se/support

