SEKHMET Digital Gauge

Owner's Manual

SEKHMET
Airgun Accessories

This is the gold standard for air gun gauges. They are going to give you a reading many times more accurate than any analog gauge. And this is also like a multi-functional mini-computer, let's get into it.

1. First time use

For first time use after unpacking, charge the gauge using USB cable for at least 20 minutes.

* The USB cable is at the bottom of packaging.

It takes one hour to fully charge this device from zero battery, and if the screen keeps on, the battery last for 10 hours. In most cases, the gauge works with a black screen or just sleeps. So basically, you can recharge it once a month or two months, depends on the using frequency. The extreme battery life will be at least 300 days without using in one charge cycle.

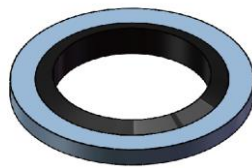Line these pins up until the charging icon shows up. Remember to take

off the protector before charging your devices.

To display the current battery, tap the Middle Key to wake up the gauge,

it shows 0 bar, then touch & hold the Middle Key.
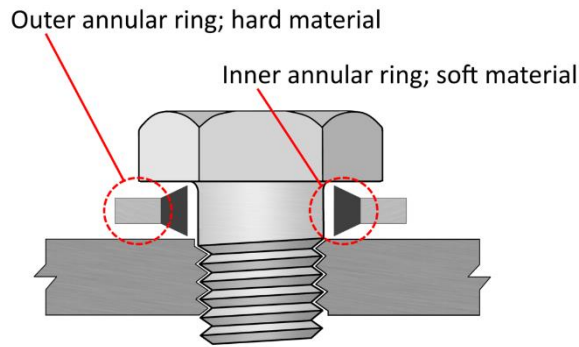
[Click here for the introduction video.](#)

2. Install

2.1 Before install the gauge on your air gun, choose the seal component

properly.

Bonded Seal

2.2 Complimentary Bonded Seal is recommended. Using Pom/ Teflon/Rubber gaskets could possibly block the air inlet due to over-tightening, which may cause the gauge to read ZERO. Please make sure the air inlet is clear.

Put it on the thread, then install the gauge on your rifle. This gasket works between the gap of the gauge and rifle like this:
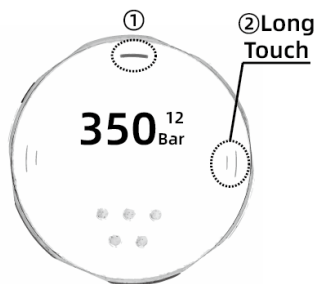
Outer annular ring; hard material
Inner annular ring; soft material

2.3 If a POM seal is already used on your rifle, the washer should not be installed.

3. Display & Modes

Enter the menu.

①After waking up the gauge by touching the middle key.

②Long touch the right/left touch key in the main interface to

① ②Long Touch

350 $^{12}_{Bar}$

3.1 **Simple Mode**: the main interface shows current pressure and the number of shots at the upper right corner.

3.1.1   The gauge counts the number of shots by identifying pressure drops. If you place the gauge on regulator, it would only be able to display reg pressure it wouldn't be able to do shot count. For shot count it need to be on the bottle/main chamber gauge.

3.1.2   Temperature drop after filling will add the number of shots.

If recording too many datas or error counting, the screen will flash with gibberish like pictures below. The little 15 under 139 which means you recorded 1015 times of data already, please try to clear data and the problem should be saved.

3.1.3   Two methods to clear the number of shots:

①Combination key: Touch and hold the Middle key and then touch the Right key in pressure display. This only works in pressure display.

Pressure Display

②Filling：Pressure rises over 30bars in one time.

3.1.4   Due to above reasons, the regulator gauge can only read the pressure without counting the number of shots.

3.2 **Pro Mode**: Switch off Simple mode in the menu. In this mode you will get three more displays: Shot Left / Last Shot Pressure Drop / Average Pressure Drop.

3.2.1   LEFT SHOT: Remaining shots.

3.2.2   <<: Last air consumption.

3.2.3   AVG: Average air consumption

3.3 **Regulator Mode**: If you place the gauge on the regulator, the Regulator mode is recommended. The shot count function/Clear data by pressure rising part is disabled in this mode. It displays the same information as a simple mode, and there is no other option to cycle through different screens, only the current pressure screen. The main difference between the regulator and simple modes is the Filter Function. In contrast, the pressure in the regulator chamber changes rapidly; it requires a unique software data filter for a stable display. A regulator gauge with a simple mode may get stuck in some extreme cases.

4. Functions in the Menu

4.1 Fill wake up: This function allows the gauge to identify the pressure rise and automatically turns on the screen when the device is powered. After power off, this function doesn't work to extend battery life. Also filling a tank with a hand pump or small pump which fills your gun too

slow could not trigger this feature too

4.2 Power Off: Set Auto Shutdown time, any operation will refresh the countdown.

4.3 Screen Off: Set Auto Display Turn Off time, any operation will refresh the countdown.

4.4 Data Clear: Clear the shot counts.

4.5 P-minimum: Manually give this gauge a regulator pressure you have set to calculate the left shots with the main reservoir pressure, it only works for the main reservoir gauge.

4.6 Rotate Screen: To adjust different installing angle, this function could rotate the display 180 degrees.

4.7 Wake by Shot: This function allows the gauge to identify the pressure drop and automatically turns on the screen when the device is powered. After power off, this function doesn't work to extend battery life. It is possible to trigger this function by slowly leaking.

4.8 Device Info: Allow you to check the software version.

4.9 Temperature: Turn on the temperature display.

4.10   Temp Unit: Allow you to switch units between ℉ and ℃.

4.11   Cal Temp: Enter the current temperature to calibrate the sensor temperature. If the pressure gauge has just been used, it may not be calibrated due to the temperature of the gas.

5. Software Update

Please access the Info option in the menu to check the current version of the software before upgrading. The software designed for 28mm pressure gauge is divided into two versions, namely series A and series B. Different versions of the same series can be upgraded to each other, but the software of different series cannot be burned.

Series A and B represent different control chips, but their functions are identical.
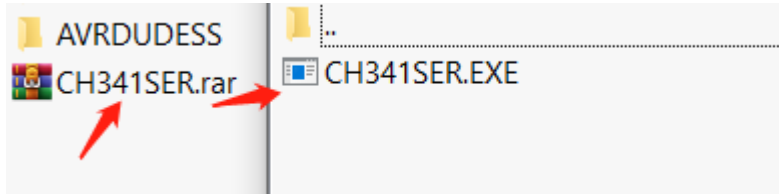
Make sure your gauge is at least Version 4.36 already!

Preparations required for an upgrade are as follows:

1) SEKHMET Digital Gauge (at least V4.36)

2) USB Update Tool

3) PC with Windows OS

4) SEKHMET Upgrade Program

5) New software

You can download them from this page:

https://www.sekhmetonline.com/products/28mm-digital-gauge-usb-firmware-updater
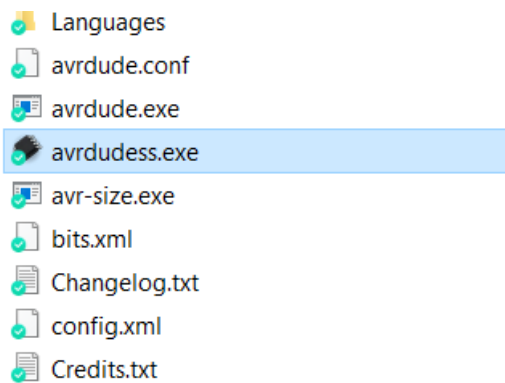
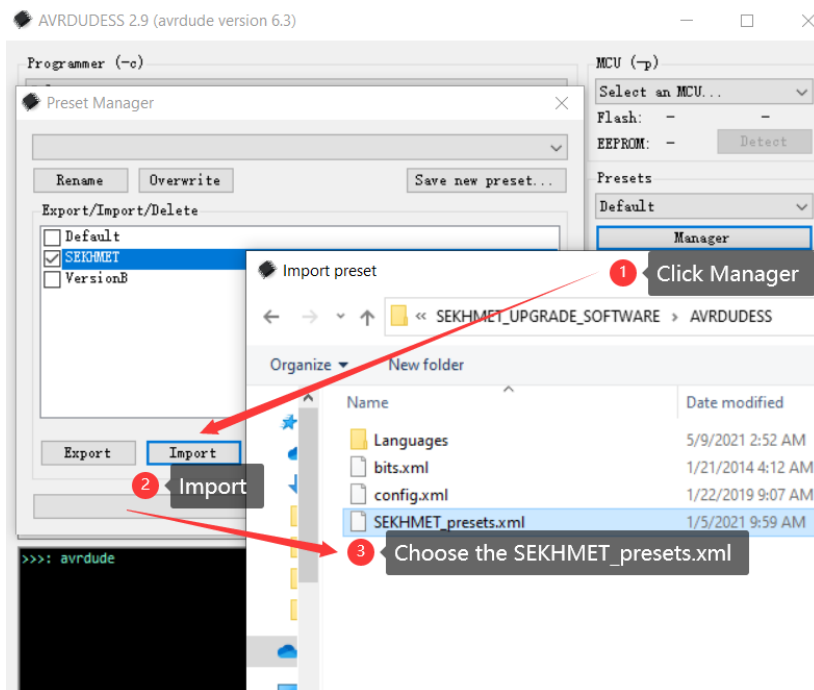First, unpack the software after downloading and install CH341 driver.

here is the drive for win10:

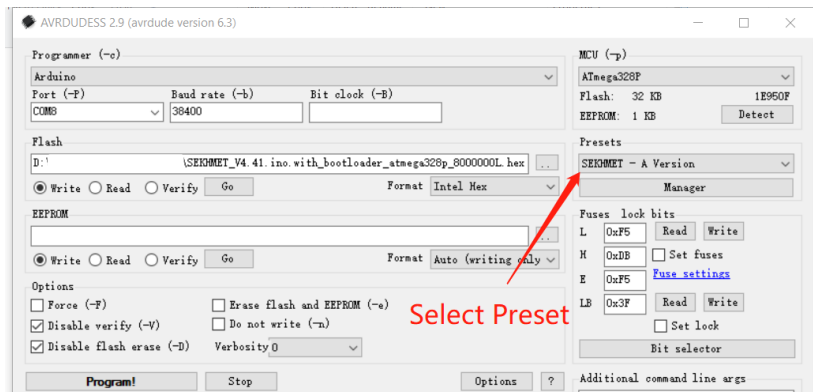https://cdn.shopify.com/s/files/1/0278/3749/7476/files/SEKHMET_Driver.rar?v=16457 97764
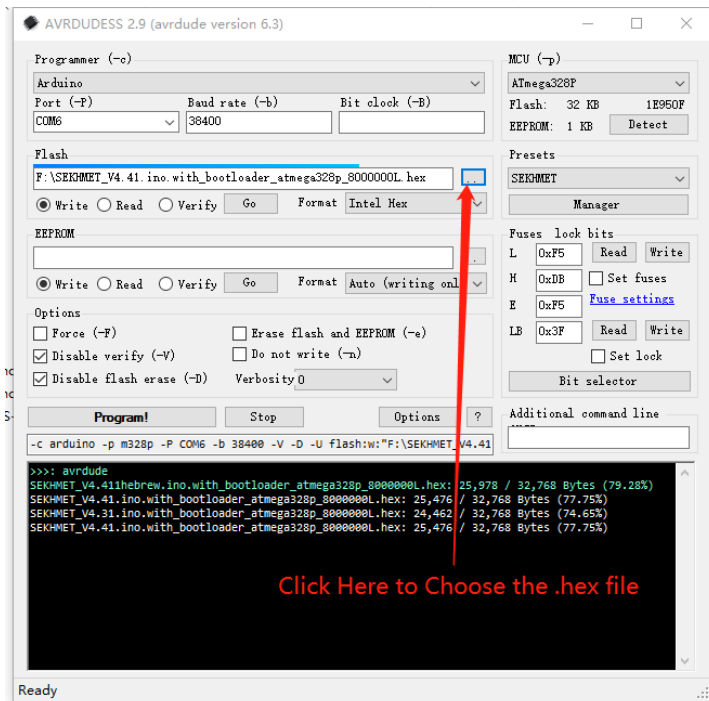
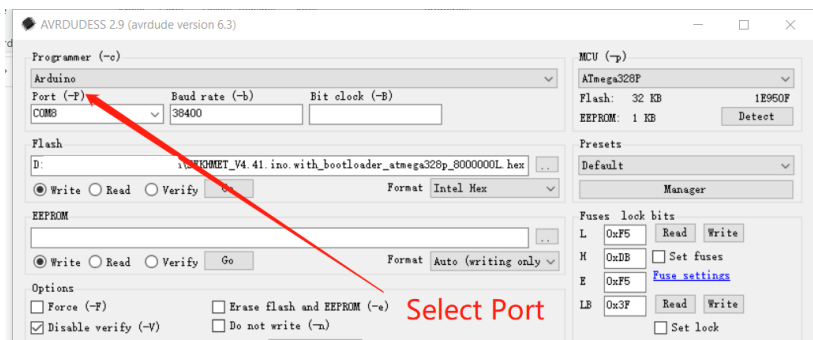Then open AVRDUDESS:

Import Presets:

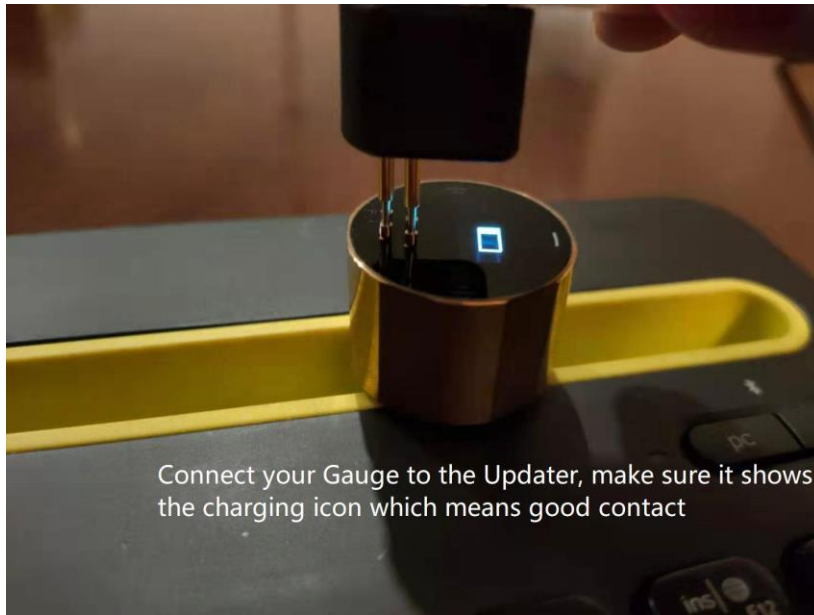Choose Preset according to software series after importing.

Select the latest version of the pressure gauge program in the format of

hex and then the following dialog box will prompt the loading of the file:

Insert the USB Update Tool into your computer and then select the
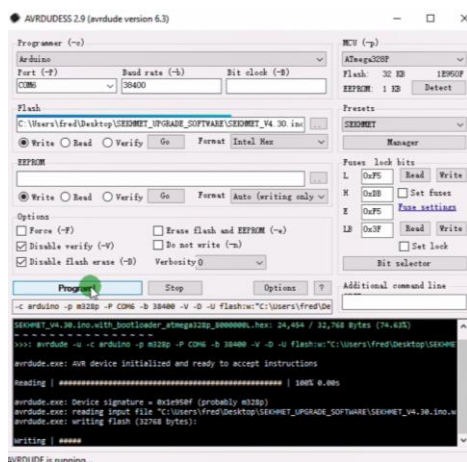
corresponding Port in AVRDUDESS:

Fix the gauge and align the USB Update Tool with the tip on the gauge, and then hold them together until the charging icon appears:

Connect your Gauge to the Updater, make sure it shows the charging icon which means good contact

Click Program in the AVRDUDESS software!

If the progress bar appears, it proves that you have done all the previous steps correctly, wait patiently for another ten seconds, and the burning is successful after the progress bar is finished.
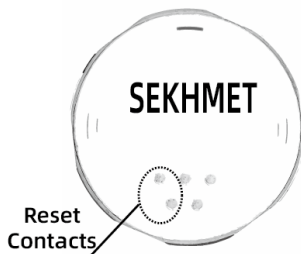

Watch this instruction video before updating your gauge:

youtube.com/watch?v=n2bHGe7Japc

6. Notices

6.1 If the system is stuck/blank screen, charge or use a conductor to short-circuit the Reset Contacts.

6.2 The gauge is water resistant but do not use under water.

6.3 Max working pressure is 350 bar and this gauge could show 400 bar at most.

6.4 If the Carbon Fiber Cover is loose, you can put a little tape on the pressure gauge and increase the outer diameter of the pressure gauge.

6.5 There is a buffer in the air inlet hole; it protects the sensor from the shock of high-pressure air, don't take this screw out. If the POM seal is used while uninstalling the gauge, the screw may get stuck in the plastic, screw it back is recommended.

6.6 Contents: Gauge x1, Carbon Fiber Cover x1, USB cable x1, Bonded

Seal x1, Clean wipe x4, Screen protector x3