
# XTOOL Advancer A102 Smart OBD II Dongle User Manual



Contents



XTOOL

## XTOOL Advancer A102 Smart OBD II Dongle


### Specifications

- **Model:** $PDP
- **Power:** 4NBSU0#%%POHMF
- **Dimensions:** 4UBSUZPVSTNBSU0#%MJGF

## Product Information

The product is designed to provide efficient performance for various tasks.

## Product Usage Instructions

- **Setup:**
  Ensure all components are included in the package. Follow the assembly instructions provided in the manual.
- **Power On:**
  Connect the power source and switch on the device using the power button located on the control panel.
- **Operation:**
  Utilize the different modes and settings available to perform specific tasks. Refer to the user manual for detailed instructions on each function.
- **Maintenance:**
  Regularly clean and inspect the product for any damages. Follow the maintenance guidelines to ensure optimal performance.

## Product Description

Advancer Smart OBD II Dongle is a smart diagnosis terminal that communicates with your Android/iOS devices via Bluetooth. With the Advancer app, AD20 provides services like vehicle health checks, diagnosis, and driving habits analysis for car owners.

## Main Functions

1. OBD- II Code Check Advancer AD20 can read and categorize the fault codes (DTCs) that storage inside the vehicle ECU via standard OBD- II protocols. In-depth Check The In-depth check function allows you to thoroughly check on vehicle systems like engine, powertrain, brakes, steering, safety, infotainment, and so on, which helps owners to know the health condition of the car clearly and provide a safe and comfortable driving experience.
   **Note:**
   An in-depth check on all systems is only supported on AD20 Pro; AD20 supports an in-depth check on the engine only.
2. **Live Data**
   When the car is started, Advancer will provide and demonstrate detailed vehicle status like battery voltage, engine revolution speed, coolant temperature, engine load, fuel trimming, and so on. This will help you to get the real-time working conditions of the car.
3. **Maintenance Light Reset**
   Reset the maintenance counter and turn off the maintenance light after finishing maintenance. For your driving safety, make sure you have followed the manual when doing maintenance to
   **Note:**

A maintenance light is a reminder set by the car manufacturer, which reminds drivers to do maintenance when needed. When the reminder is on, the car will show info on the dashboard screen or simply show a light. Maintenance Light Reset is only supported on AD20 Pros.

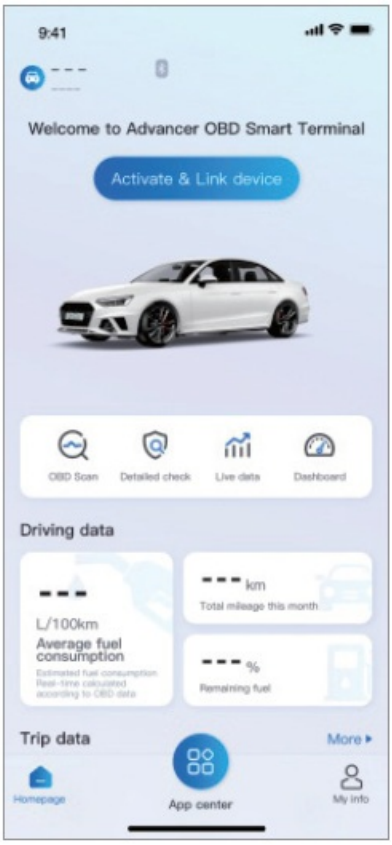
4. **Trip Recorder**
   When driving, Advancer will record the index like average speed, fuel consumption, mileage, max engine revolution speed, and max coolant temperature and show them on the app. This will help you to know vehicle status and fuel consumption info on the entire trip.
5. **Driving Habits Monitor**
   With the G-sensors inside Advancer, all the sharp turns, emergency brakes, and sudden accelerations will be recorded and shown on the app after analysis. This function will provide data support if you are willing to improve your driving skills.

## Specifications

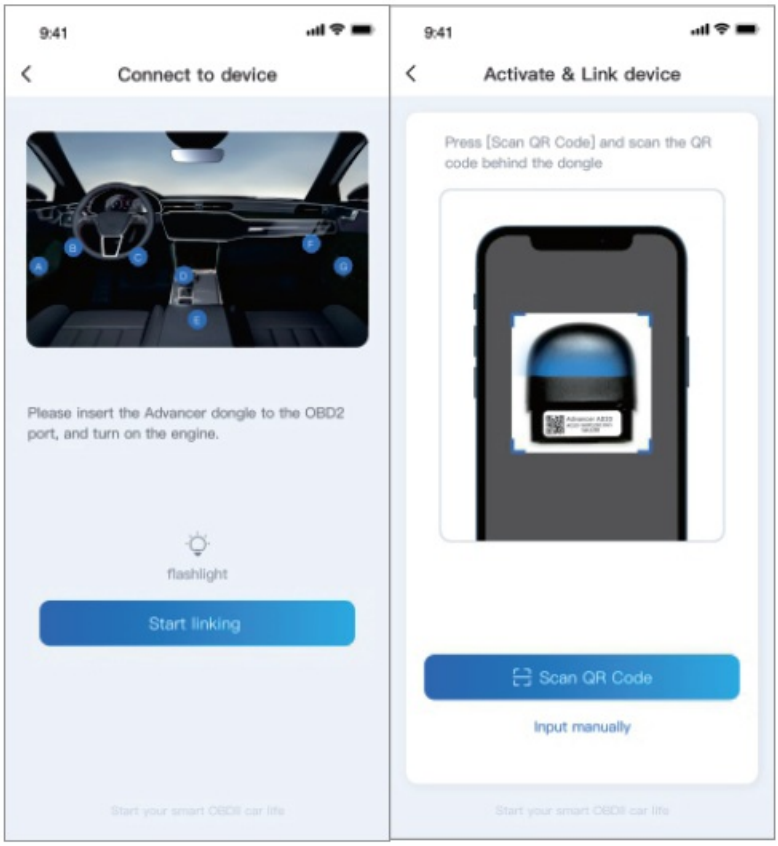
| Items | Specifications |
|---|---|
| Processor | ARM Cortex-M4 |
| Supported Protocols | ISO15765-4 CAN (11bit ID, 500Kbaud)<br>ISO15765-4 CAN (29bit ID, 500Kbaud)<br>ISO15765-4 CAN (11bit ID, 250Kbaud)<br>ISO15765-4 CAN (29bit ID, 250Kbaud)<br>ISO9141-2 (5 baud init, 10.4Kbaud)<br>ISO14230-4 KWP (5 baud init, 10.4Kbaud<br>ISO14230-4 KWP (fast init, 10.4Kbaud)<br>SAE J1850 PWM (41.6Kbaud)<br>SAE J1850 VPW (10.4Kbaud) |
| Working Voltage | DC 9-36V |
| Working Current | 100mA@12V |
| Sleeping Current | 10mA@12V |
| Working Temperature | -20~60°C/-4~140°F |

## How to Use

1. Turn on Bluetooth, click the “Advancer” app, sign up (or login to your account), and click “Activate &




2. Scan the QR Code on the device, follow the steps on the app and insert your AD20 into the OBD-II port, then turn on the engine.




3. The Advancer will automatically collect the basic info of the vehicle. Please make sure the info is correct and click “0K” to finish activation.


**Note:**
Sometimes when detecting vehicles, the info may not be correct, or the info could be missing. If this happens, please correct it manually.

**Scan this QR Cod**

- Scan this QR Code or search “Advancer” on Play Store/App Store:

Download APP

- Shenzhen Xtooltech Intelligent Co., Ltd.
- Add: 17&18/F, A2 Building, Creative City, Liuxian
- Avenue, Nanshan District, Shenzhen, China
- Website: **www.xtooltech.com**
- Custotner Support: **supporting@xtooltech.com**

## COMPLIANCE INFORMATION

**FCC COMPLIANCE**
FCC ID: 2AW31A102
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

2. This device must accept any interference received, including interference that may cause undesired operation.

**Warning**
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
**Note**
This equipment has been tested and found to comply with the limits for a Class B digital device, under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment can generate, use and radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications- However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna-
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- **RF Exposure Warning Statements:**
  This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment- This equipment shall be installed and operated with a minimum distance of 20cm between the radiator & body.
- **Responsible Party**
  - Company name: TianHeng Consulting, LLC
  - Address: 392 Andover Street, Wilmington, MA 01887, United States
  - E-mail: **tianhengconsulting@gmail.com**
- **ISED STATEMENT**
  - 29441-A102
  - PMN: A102, AD20, AD20 Pro
  - HVIN: A102

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

  - This device may not cause interference.
  - This device must accept any interference, including interference that may cause undesired operation of the device-
- **CAN ICES (B) / NMB (B).**
  - This device meets the exemption from the routine evaluation limits in section 6.6 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
  - This equipment complies with IC exposure limits set forth for an uncontrolled environment- This equipment shall be installed and operated with a minim-distance off 20cm between the radiator & body-

**CE**

- **Declaration of conformity**
  Hereby, Shenzhen XTOOLtech Intelligent Co., Ltd declares that this Smart OBD II Dongle complies with the

essential requirements and other relevant provisions of Directive 2014/53/EIJ- By Article 10(2) and Article 10(10), this product is allowed to be used in all EIJ member states.

- **U KCA**
  - Hereby, Shenzhen XTOOLtech Intelligent Co., Ltd declares that this Smart OBD II Dongle satisfies all the technical regulations applicable to the product within the scope of UK Radio Equipment Regulations (SI 2017/1206); UK.
  - Electrical Equipment (Safety) Regulations (SI 2016/1101); and 1.1K Electromagnetic Compatibility Regulations (SI 2016/1091) and declare that the same application has not been lodged with any other I-JK Approved Body.

## FAQs

C an AD20 placed inside the vehicle all the time ?

Yes, in daily driving conditions, Advancer AD20 wm' t cause battery drain out or damage. Advancer AD20 supports low-power Bluetooth which automatically sleeps after the car is turned off for 3 minutes. It will be turned on again when the car is turned on.

Why there are fault lights on my car, but the Advancer cannot find any DTC codes ?

Please make sure that the Advancer supports checking current fault codes: AD20: OBDII Standard fault codes & Engine in-depth check AD20 Pro: OBDII Standard fault codes & All system in-depth check e.g.: The ABS light turned on in the dashboard. AD20 cannot show the specific fault code but AD20 Pro can.

Why the fault light turned on when doing diagnosis ?

performing diagnosis, some ECUs will get into diagnosis mode and the corresponding fault light will turn on. The light will turn off automatically when the process is over and it is normal, please don't worry.

How can I do when the device cannot sign up or log in?

Please check the network on your phone and the account info is correct. If both those are checked but the problem still happens, please contact customer support.

**Why can’t I connect to my AD20?**

1. Click “the Advanced’ app will let the phone automatically connect to the device so you don’ t need to find it

again in phone settings.

2. Please make sure “Advancer” is allowed to turn on Bluetooff, get location info, and get access to device storage.
3. Make sure €1at the AD20 is attached firmly to the OBD-II port.
4. Make sure €1at you are using the app from reliable sources and has already been in the latest version.

**Why can’t I communicate with the vehicle?**

1. Make sure the engine has been turned on and is idle;
2. Please check the brand and model that registered inside the Advancer app is correct.

**Why the fault codes couldn’t be cleared, or just appear again after being cleared?**

1. When clearing codes, please refer to the actual situations of the fault Usually there are sporadic codes and actual codes:
2. Sporadic codes: Normally this happens when the component works abnormally in time points, probably because of electromagnetic interference, vibration, poor contact with the wiring, and so on. Those codes could be cleared directly.
3. Actual codes: This happens when there are components that are failed. Before clearing those codes, make sure that you have fixed the issue. If the fault lights are on again after clearing codes, that means the faults are not fully fixed – further inspections are needed in those cases.

**Why there are no lights shown on my dashboard but AD20 scanned that there are DTC codes present?**

1. Not all the DTC codes will trigger the fault lights on the dashboard – the manufacturer will decide which fault will trigger the light and which won’t
2. The ECU may still not fully decide if this is a fault yet. Maybe there is electromagnetic interference or vibration that misleads the ECU. Normally in those cases, the ECU will decide if this is an actual fault after running for several cycles.

## Documents / Resources

| | |
|---|---|
|  | XTOOL Advancer A102 Smart OBD II Dongle [pdf] User Manual<br>2AW3IA102, 2AW3IA102 a102, Advancer A102 Smart OBD II Dongle, Advancer A102, Smart OBD II Dongle, OBD II Dongle, II Dongle, Dongle |

## References

- User Manual