

Make a worldwide QSO without a hotspot



Ailunce HD2 V3 version: Create firmware with built-in MMDVM serial commands, enabling easy access to DMR Global TG through a Windows PC using the third-party application BlueDV Windows developed by Mr. David Grootendorst (PA7LIM), connected via USB, without requiring a hotspot.

1. Update the Ailunce HD2 V3 version to V3.1.9, following the [firmware update guide](#).
2. New 12th Menu **【DV QSO】** : Hotspot Mode, Terminal Mode.

The DV QSO mode only works on a digital channel. The current working channel should be a digital channel.

Hotspot mode means the radio works as an external MMDVM hotspot device.

Terminal mode means the radio directly acts as a terminal device connected to your PC. You can access the DMR Global TG service directly without an additional hotspot device.

【Ailunce HD2 and PC Connection】

To connect the radio to a PC via the programming USB cable, you must first install the COM port driver on the PC.

Download the [USB Driver](#).

【BlueDV for Windows Settings】

1. Download the [BlueDV Windows](#).

Locate the ZIP file (if there are multiple, select the latest one by date), then download the file. Extract the downloaded ZIP file, and double-click the file inside the extracted folder to run the installer.

2. Double-click the “BlueDV” icon on the desktop to launch the program.

3. In “Menu” → “Setup,” the following settings window opens.

The screenshot shows the 'BlueDV for Windows' settings window. It is divided into several tabs: General, DMR, AMBE, and FUSION. The 'General' tab is active, showing fields for 'Your Call' (annotated with ① and 'Your own callsign'), 'Serial Port Rad' (annotated with ② and 'COM3'), 'Frequency' (annotated with ② and '434975000 working frequency'), 'Mode Timer' (5 seconds), 'Radio TX power', 'Latitude' (53.0570), 'Longitude' (005.0739), 'Always on top', 'Language' (English), 'DSTAR' settings, and 'NXDN' settings. The 'DMR' tab is also visible, showing 'DMR ID hotspot' (1234567), 'DMR ID simple' (1234567), 'QRG' (-100 to 0), 'Enable at start', 'DMR type' (EM), 'No inband data', 'Brandmeister' settings (DMR Master: 2322 AT, Master Password: *****), 'DMR+' settings, 'TGIF' settings, and 'FUSION' settings. The 'AMBE' tab shows 'Use AMBE' (unchecked), 'Model AMBE' (AMBE3000), 'Serial Port', 'DMR ID' (2043000), 'Baud rate' (230400), 'Use AMBEServer' (unchecked), 'Host/IP' (192.168.1.10), 'Port' (2460), 'Start/Stop Beep' (checked), 'Kill timer (min)' (5), and 'DSTAR/C4FM text' (BlueDV by PA7LIM). The 'FUSION' tab shows 'QTH Location' (J022MB), 'Enable at start', 'Default reflecto' (YSF/FCS), 'YSF' settings, and 'FCS' settings. At the bottom, there are 'Save' and 'Cancel' buttons, with 'Save' annotated with ⑤ and 'Save Setting'.

* The Master password is the same as the hotspot security password set under your Brandmeister

The screenshot shows the 'BrandMeister SelfCare Settings' window. It has a sidebar with navigation options: User Dashboard, Last Heard (DMR), Last Heard (TETRA), DMR Devices, DMR Terminals, TETRA Devices, Masters, SelfCare, Documentation, Information, My Devices, and Device Logs. The 'SelfCare' tab is active, showing 'General settings' with fields for 'Brand' (Choice Radio), 'APRS Interval' (60 sec), 'APRS Mode' (B), 'In Call GPS' (unchecked), 'Compact / CSBK data' (unchecked), 'Test Capture' (unchecked), 'AllSecurity / TOTP' (unchecked), 'Secure Local Pass' (unchecked), and 'Private Hotspot' (checked). The 'Hotspot Security' section has a field for 'Enter new Password' and a 'Save Password' button.

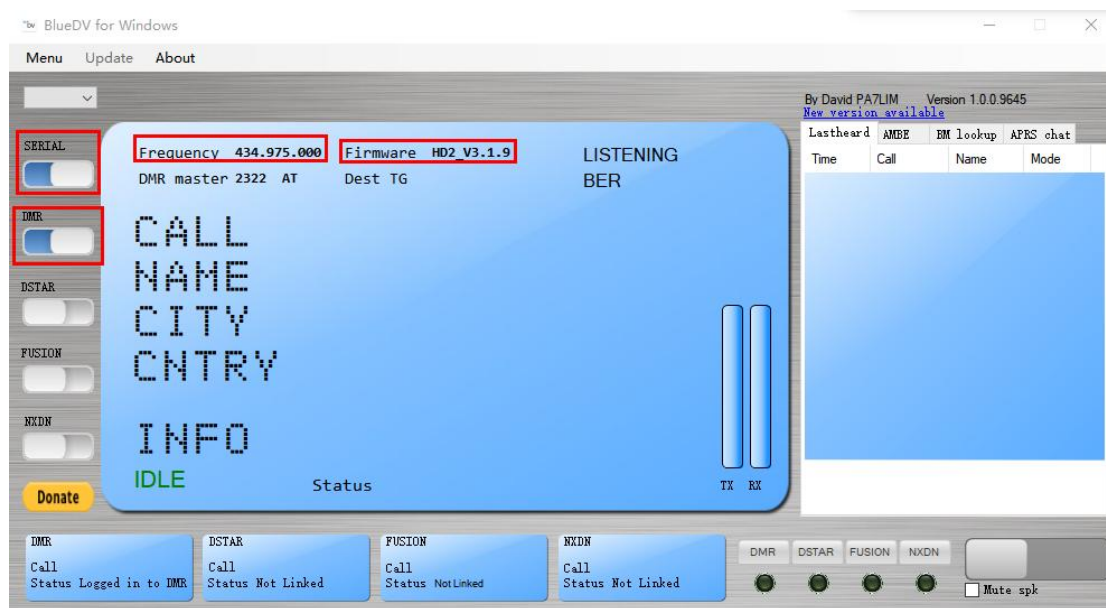
account.

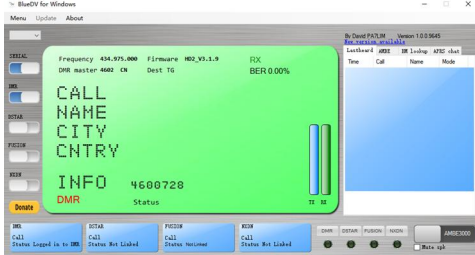
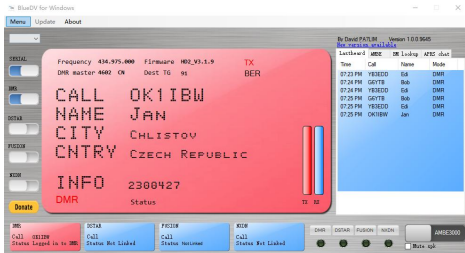
【Settings on the radio】

1. Short press EXIT to switch to VFO, and create a frequency that matches the BlueDV frequency.
2. In the 6th menu, create new contacts by entering the contact name and ID, and select the group or private type. Turn the channel knob to move to the next contact.
3. Set your own Radio ID in the 8th menu.
4. Create a digital channel: Menu > Band A/B, set the color code in the 19th menu, set DMR Mode to Simplex in the 22nd menu, and select a contact (group contact or private contact) from the list in the 28th menu.

【Connect radio to the PC】

1. Connect the radio to the PC.
1. Find the 12th menu 【DV QSO】 on the radio and select the working mode you wish to use.
2. Go back to the BlueDV window and enable Serial. The radio frequency and firmware version will be displayed at the same time. Then enable DMR; the message "status logged in to DMR" indicates that all settings are correct and you are ready to wait for a QSO on the air.



	Hotspot Mode	Terminal Mode
		
	Under current mode, this radio works as a hotspot. Other radios should be set to the same frequency, time slot, and color code. Only group call works on this mode. Keep on this mode, otherwise this function is invalid.	Under this mode, the radio can directly work like a hotspot; simply press PTT to QSO. Group call or private call both works on this mode. Keep on this mode, otherwise this function is invalid.
BlueDV RX Status		
Radio TX Status		
Radio RX Status		
BlueDV TX Status		

If you change the working mode from hotspot to terminal, or from terminal to hotspot, disable DMR and enable it again to reconnect.