DVMEGA AMBE3000
Installation manual Dongle / radio hotspot

Download Ircddbgateway and D-Star repeater package

Software packages are available for Windows PC and as SD card image for Raspberry PI.

Windows PC
You can download the software for Windows PC from the dedicated Yahoo group. The author, Jonathan (G4KLX), will publish new releases when available here. Both groups are closed so permission is required.

ircDDBGateway : https://groups.yahoo.com/neo/groups/ircDDBGateway/files
D-Star repeater : https://groups.yahoo.com/neo/groups/pcrepeatercontroller/files

Raspberry PI image
3Star (Dutch) : http://wiki.nlreflector.nl/index.php?title=Kzu-distributie
Western D-Star : http://www.westerndstar.co.uk/html/downloads.html
VK4TUX : dvrptr.net/vk4tux/od_vk4tux_images/RPI2/tux_RPI2_KDE_FC21_ultix.img.zip
Maryland : http://maryland-dstar.org/html/raspiberry.html

Use always the latest version and check documentation of particular image for how to update to latest version.
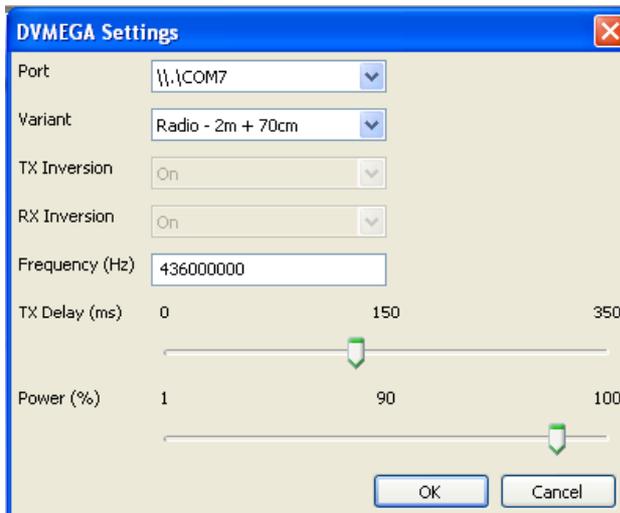
Configuration D-Star repeater software..

For proper operation, at least the Callsign and Modem Tab has to be set. The other settings can be done as desired.
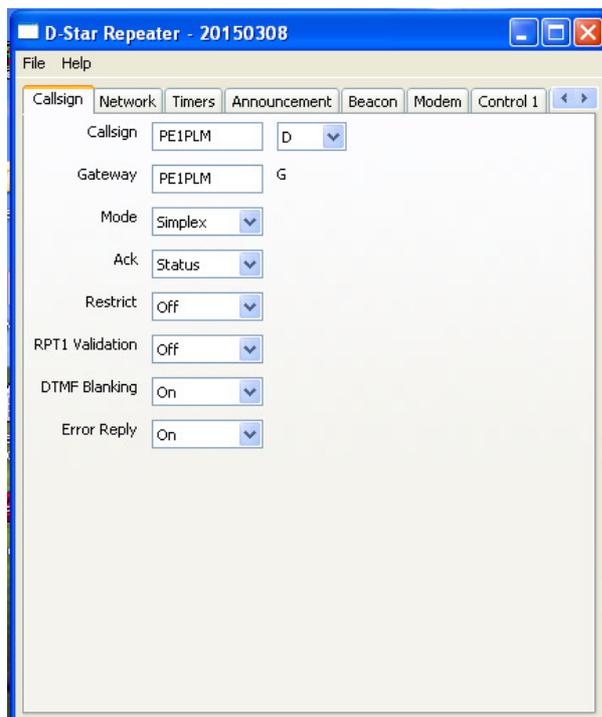
- Callsign and module (D) must be identical in D-Star repeater and ircDDBGateway.

- RPT1 Validation must be Off for Dongle function.
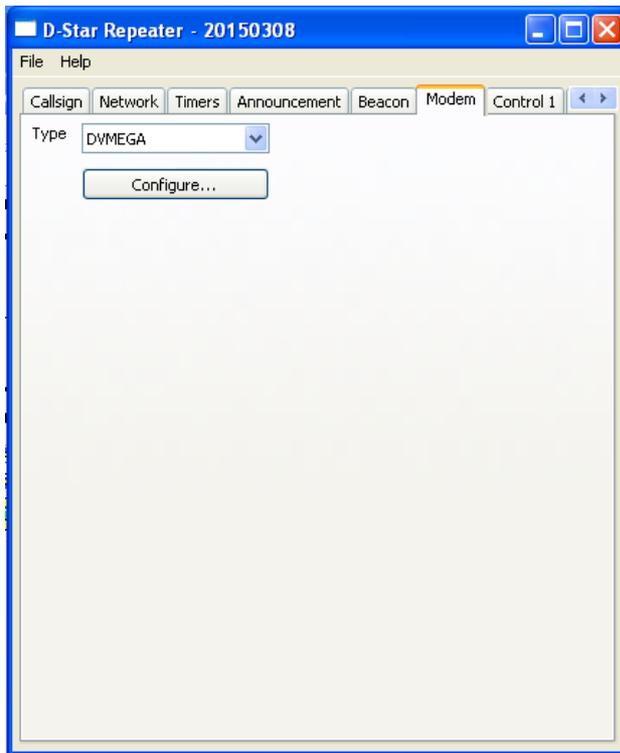
- Select DVMEGA as modem.
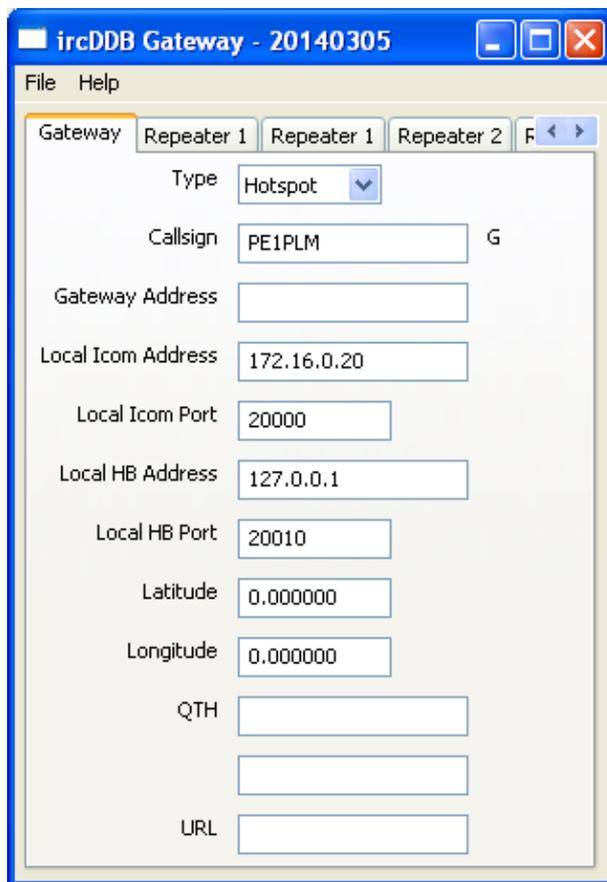
- Click the Configure button.

- Select comport of PC that is assigned to the Arduino. When Arduino is connected to a Raspberry select ACM0.

- Set Variant to Radio - 2m + 70cm.

- Frequency has to be set when AMBE works in conjunction with Dualband Radio shield.

- Set TX delay to approx. 150 ms.

- Make sure that you save the changes before you close the configurationwindow.
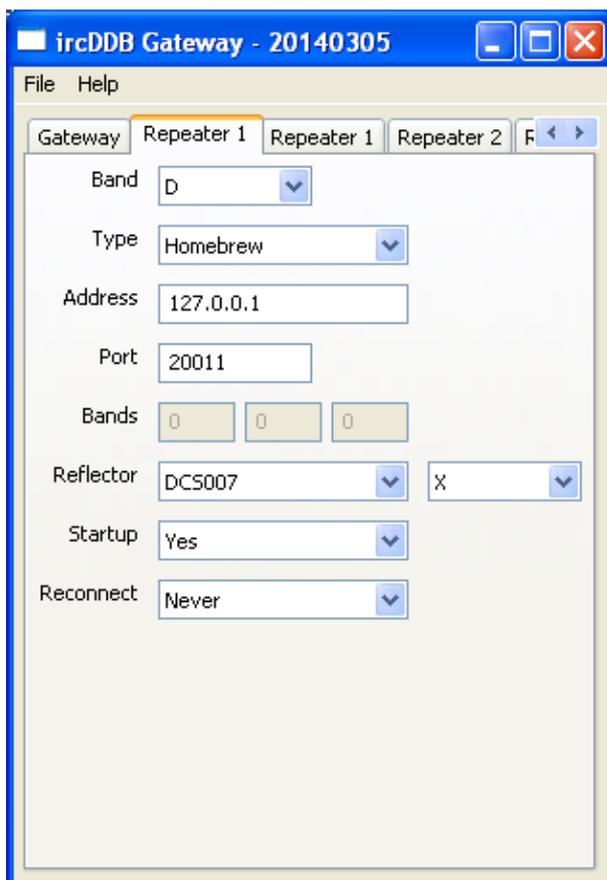 FILE -> SAVE -> click OK.

- Detailed information related to the other settings can be found at :
  https://groups.yahoo.com/neo/groups/pcrepeatercontroller/files/Documentation/

Configuration ircDDBGateway software..

For proper operation, at least next tabs has to be set. The other settings can be done as desired.

ircDDB Gateway - 20140305	
File Help	
Gateway Repeater 1 Repeater 1 Repeater 2	
Type	Hotspot
Callsign	PE1PLM G
Gateway Address	
Local Icom Address	172.16.0.20
Local Icom Port	20000
Local HB Address	127.0.0.1
Local HB Port	20010
Latitude	0.000000
Longitude	0.000000
QTH	
URL	

- At least type and callsign has to be set.

ircDDB Gateway - 20140305	
File Help	
Gateway **Repeater 1** Repeater 1 Repeater 2	
Band	D
Type	Homebrew
Address	127.0.0.1
Port	20011
Bands	0 0 0
Reflector	DCS007 X
Startup	Yes
Reconnect	Never

- Band must be set to the same modules as set in the D-Star repeater software.
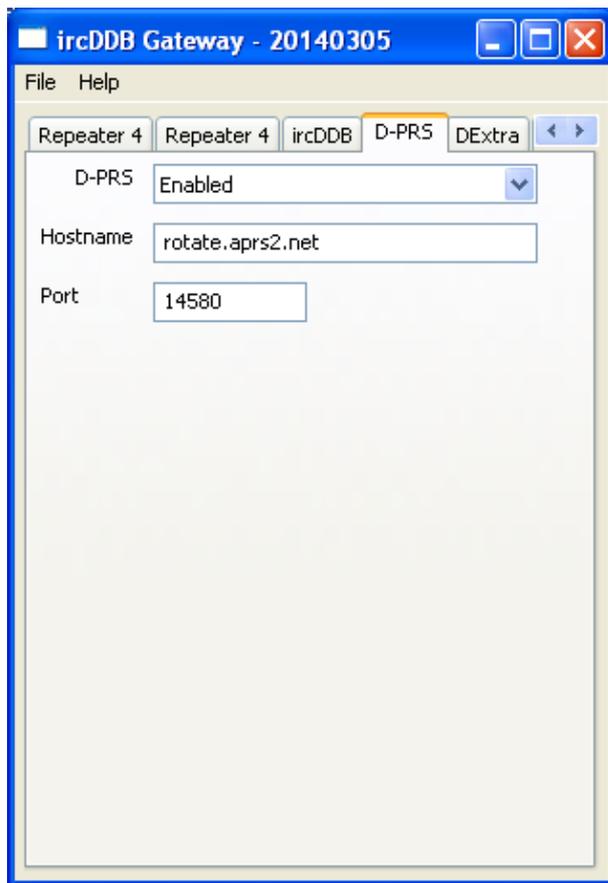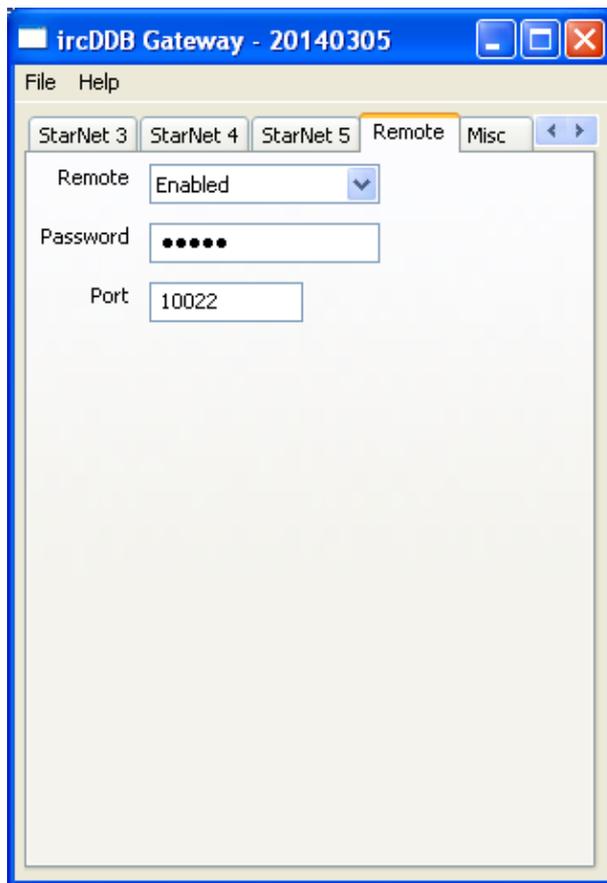
- Enable D-PRS when you like to pass GPS data to www.aprs.fi
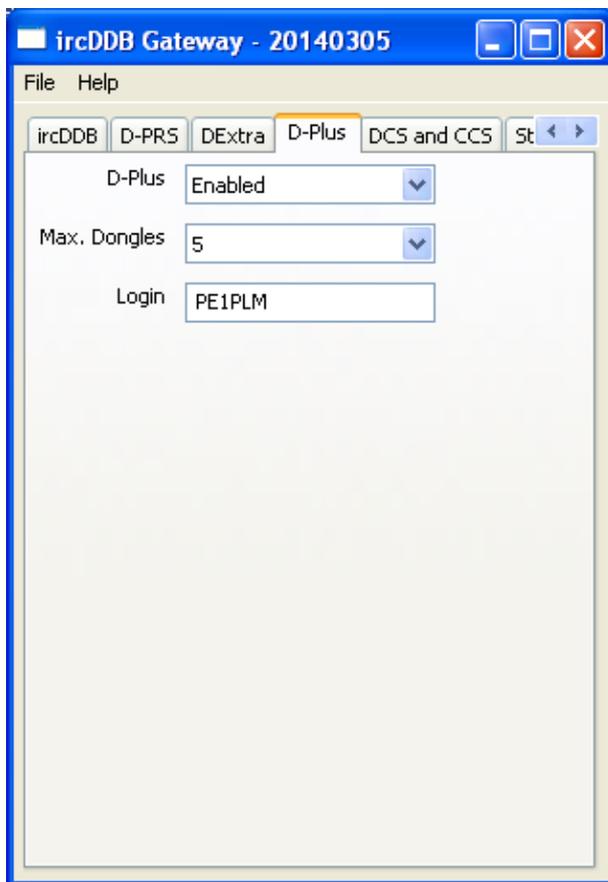
- Enable D-Plus when you make use of REFXXX reflectors.

- Portforewarding of some ports i needed for propper functionality. You can find detailed info on : http://www.k6jm.com/portforwarding.htm

- Remote control has to be enabled in order to switch from reflector.

- Remember Password and Port, these values have to be set in Remote Control later.

- Make sure that you save the changes before you close the configurationwindow.
  FILE -> SAVE -> click OK.

- Detailed information related to the other settings can be found at :
  https://groups.yahoo.com/neo/groups/ircDDBGateway/files

Configuration Remote Control software..

The Remote control software let you change from reflector when running the gateway.
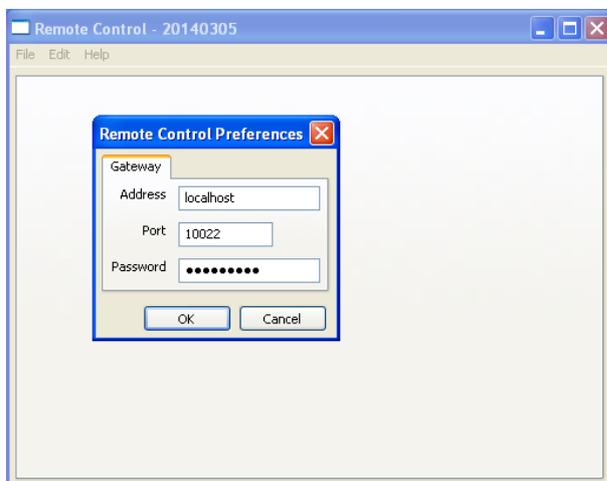
- Click Edit -> Preferences.

- Set Adres to localhost, Port and Pasword values must be the same as in ircDDBGateway.

- To Remote Control the reflectors you can also use the Android / iOS app made by PD7L. Search on ircDDBremote in your App store, the Author is David Grootendorst.