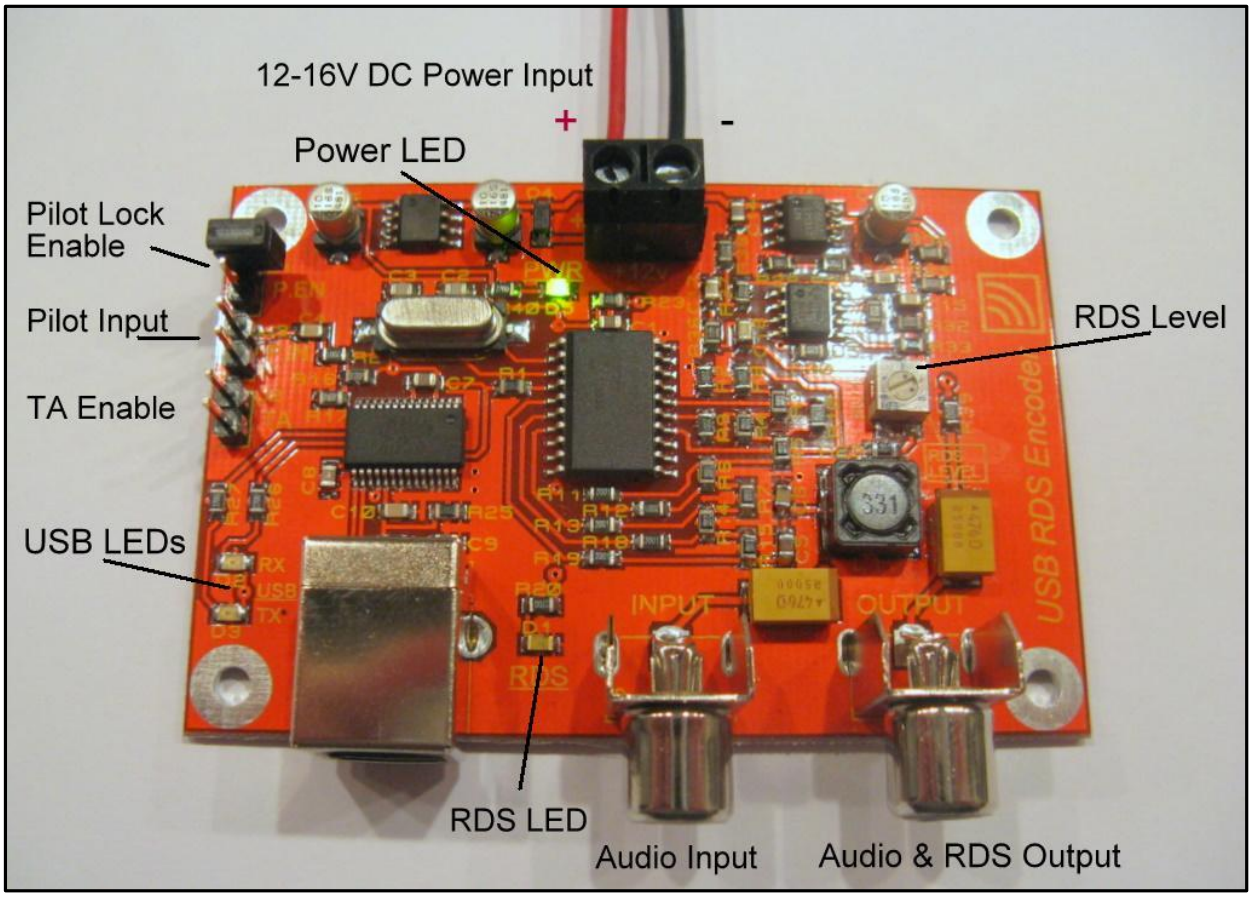
Enigma Broadcast USB RDS Encoder

QUICK START GUIDE

Please see the detail below for connection and adjustment information.



1. Ensure you have a compatible FM transmitter and RDS capable FM radio nearby and ready.

2. Connect the RDS module's output to your FM transmitter's audio input with a phono cable, then switch on the transmitter and tune the FM radio to the transmitter's output frequency.

3. Using a small flat screwdriver, connect a 12-16V DC regulated power supply to the RDS coder using the terminal block at the top. Pay attention to the polarity!

Caution: An input voltage exceeding 16V may damage the RDS encoder.

4. The green POWER LED on the module should light, and the green RDS LED on the module should start blinking about once per second. Now check the screen of the FM radio; if the module is connected correctly you may see 'ENIGMA Broadcast scrolling USB RDS encoder test OK!' scroll across the screen.

   If you do not see this message, adjust the RDS level control on the unit counter-clockwise until this RDS message appears.

Your RDS encoder is now connected correctly and ready for installation on the PC and programming.

5. For easiest installation, its best to connect the module to a PC with an internet connection first time. Plug the module into a spare USB port on the PC with the USB cable provided. Follow the Windows on-screen instructions to install the USB drivers automatically from the internet. Once the drivers have correctly installed you will receive a message saying 'Your new hardware is installed and ready to use'.

   If the USB drivers are not installed automatically, please download the USB drivers in the 'Support' file, which can be found at the product web page at www.enigma-shop.com.

Please note: This module does not receive power from the USB cable; it must be connected to a 12V source to communicate with the PC.

6. Once the USB drivers are correctly installed unplug the USB coder from the USB port. Now download and install the 'Enigma RDS Software' from the product web page at www.enigma-shop.com.

7. Run the software (called Tiny RDS) and click on the 'Hardware' tab near the top right. Plug the module back in to the PC with the USB cable. Click the button called 'Micro RDS (MRDS1322)' near the left in the hardware tab. Also click the 'Bidirectional' button near the right-hand side in the hardware tab.

Now click 'List' near the bottom in the hardware tab, and the Windows Hardware Device Manager window should open up in a separate window. Look down the hardware list and find an entry called 'Ports (COM and LPT) . Click the + sign and you should see an entry called 'USB to Serial converter', with a COM port number allocated to it, to the right. Make a note of the COM port number and then close the window.

8. In the 'Hardware' tab of the RDS software, choose this COM port number from the list and highlight it. Now click the 'Update' button, near the bottom in the 'Connection' section. You should see the message 'COM port opened' in the 'Status' window. Your RDS coder is now ready for programming.

9. Click the 'Program' tab in the RDS software. Look in the area called 'Default PS' on the left which should be blank. Now press the 'Receive' button on the right-hand side; 'ENIGMA' should appear. This means the RDS software has received the already-programmed RDS data from the encoder successfully.

'Default PS' is the station name, and can be up to 8 characters. Change this to your station name, then press the 'Send' and 'Store' buttons. Note the station name has changed on your FM receiver.

In the 'Dynamic PS' tab you may change the scrolling RDS information. From the options provided, choose the scrolling mode you like then press 'Send' and 'Store'. Ensure the 'Enabled' box is ticked for the scrolling function to work.

Experiment with the tabs in the RDS software and see how these change the RDS information on the FM tuner.

The 'Send' button simply sends new RDS data to the unit, but it will not be saved when the unit is powered down.

The 'Store' button will save the RDS data after it is sent to the module, and it will be saved in memory and not lost when it is powered down.

The 'Receive' button retrieves current RDS data from the module.

10. Adjust the RDS level on the module so that the RDS information just appears i.e. do not set the level too loud. Turn down the level until a scrolling RDS message fails, then turn back up again till it just appears. If you are using in a professional application, adjust the RDS carrier to 3.75KHz deviation using a modulation meter.

11. When you are happy with the RDS programming, connect an audio input to the RDS module, this can be normal mono audio or a stereo multiplex. The RDS module can be disconnected from the PC and used in standalone mode alongside your FM transmitter.

For advanced operation, such as setting the TA flag and stereo pilot-tone phase locking, please see the main user manual for the RDS coder.

Thank you for buying the Enigma USB coder, and we sincerely hope you enjoy using our product.

For more information and technical enquiries, please email;

info@enigma-shop.com