

**TV/Radio reception**

The device is not foreseen for TV or radio DVB-T reception and as such there is no software provided by us for this purpose.

**Other notes**

ADS-B reception is strictly line-of-sight. Trees, buildings, mountains etc. will block the reception. Not all aircraft transmit ADS-B data. Place your antenna accordingly. If you want to improve your reception consider buying a dedicated ADS-B antenna from the jetvision.de 1090MHz-Shop at <https://www.jetvision.de>.

**General notice**

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**Manufacturer**

Diamond Crown Technology Co., Ltd.

**Distribution**

Günter Köllner Embedded Development GmbH  
85256 Vierkirchen, Germany

# Quick Start Guide

## Diamond Crown Technology

### R820T2 ADS-B USB Dongle

Art. 53199

Art. 53200

Art. 53505



**jetvision**



## Description

Using the Diamond R820T2 ADS-B-Dongle you can receive ADS-B signals on your PC or notebook. The receiver can be used as a general SDR or FLARM receiver, too.

## Specification

ADS-B reception on 1090 MHz

SDR reception (approx. 24- 1.700 MHz, no guaranteed frequency coverage)

R820T2 tuner

RTL2832U Decoder and USB interface

MCX female connector

USB 2.0, max. sample rate 3.2 MBit/s

Internal power supply

The device is not foreseen for reception and decoding of TV or radio signals.

The frequency accuracy is specified

for art. no 53199/ 53200 as  $\pm 100$  ppm (standard accuracy)

for art. no 53505 as  $\pm 2$  ppm (enhanced accuracy)

Please note that due to the characteristics of the ADS-B signal the enhanced accuracy is not required for its reception, but it may be useful for SDR functionality.

## System requirements

Windows 7/ 7-64/8-32/8-64/10-32/10-64

PC or Notebook with a free USB 2.0 Port

Antenna placement with free outside view

## Package contents

USB 2.0 Dongle with standard (art. no. 53199)  
or enhanced (art. no 53505) frequency accuracy  
Small Indoor Antenna (art. no. 53200 only)

## Installation

Follow the general instructions below for installation of the receiver. If necessary, read the manual of your computer, or ask a specialist for help.

## Download of driver software

Download the software RTL1090 - IMU

(Installer and Maintenance Utility) from

<http://shop.jetvision.de/Service-Downloads>

## Driver Installation

1. Switch on your computer.
2. Connect the antenna to the ADS-B receiver. Place the antenna with a free sky view to potentially ADS-B transmitting aircraft.
3. Connect the ADS-B receiver to a free USB port of your computer.
4. Afterwards, Windows will display the hardware wizard.
5. Now: click on „Cancel“.

Start the RTL1090 - IMU application as downloaded before and follow the instructions to install the drivers and application RTL1090.

## Software installation

Download and install any other software to display and share ADS-B data e.g.

<http://www.planeplotter.com>

<http://www.fr24.com>