

## You won't believe your ears!

The Bonito SDR shortwave receiver RadioJet 1102S combines innovative design with the advantages of modern computer technology. The frequency range is from 0.04 to 32 MHz with a minimum detectable signal at 3 dB above noise at -134 dBm (MDS). It is linear over the 16 kHz signal width, which is displayed on a 24 kHz enlarged spectrum for assessing the quality of the filter.

Of course, there is no AGC, but two digital output channels with different signal levels. Each of these channels has -15 dB ATT and can amplify or attenuate the input from -16 to +45 dB continuously. Therefore this SDR receiver can process an extremely weak signal without another signal being attenuated in its neighborhood.

## A new experience in listening

The excellent audio quality of the Bonito RadioJet 1102S will convince professionals and shortwave listeners alike. It has a very high IP3 (+29 dBm), excellent dynamic range (96 / 136 dB), outstanding sensitivity of 0.03 µV on a very low noise floor MDS -134 dBm and 1 Hz tuning accuracy. With these key features and its versatile software, the RadioJet 1102S is probably the most innovative SDR Receiver on the market at an affordable price.

## Good software - Made for your needs

The center piece of this IF-receiver is the included software. The standard software is already very extensive and is geared to the casual listener as well as experienced DXers. Bonito is the only manufacturer to deliver a complete software package containing all the functions which the radio listener needs. Beginning with diverse spectrum displays, a huge frequency list (with free updates), a map of the world showing all stations, variable filters, IF & AF recorder, scanner, DRM-Decoder and further accessories including optional decoders for weather fax, CW, PSK, RTTY, Navtex etc. Everything is displayed on a single user interface. Not only all of this, but also functions of other Bonito products such as the AntennaJetASM 300 are already integrated and can be used directly via the software. Everything is hassle-free and quickly installed without complicated searches for drivers and updates.

## Integrated DRM reception

DRM (Digital Radio Mondiale) is already fully integrated into the RadioJet Software. Simply double click the desired station in the large frequency list and the decoder and all other parameters will start to work automatically.

## A different kind of frequency list

The software contains huge frequency lists which can be sorted and edited and can be linked to the integrated world map. Of course, the current position of the sun is also indicated, which makes grey line reception easier. The frequency lists are updated free of charge via the integrated online update function.



## MRSS-Spectrum

The Multi Range Spectrum Scan function gives you the ability to create a large spectrum up to 30 MHz to observe the band conditions. The sweep data & values like Date, Time, Frequency & S-Meter will be stored on your PC.

## Panoramic Display

For a quick overview of interesting stations, the RadioJet Software can control a broadband IQ-Receiver via ExtIO and show the signal as a panoramic display.

## Extremely easy setup!

An easy installation without external drivers is assured due to the built-in USB-Audio card. Simply Plug and Play.

**The receiver comes with the standard software and the following features:** Reception and recording of transmissions in USB, LSB, CW, AM, eSSB, AMSS, FM and DRM. DRM Decoder, MRSS. All filters are completely variable and can be manually adjusted. The S-Meter and spectroscope have an extremely accurate dBm-scale.

## Minimum Requirements

1.6 GHz INTEL Pentium M CPU with 1 GB RAM, USB 2.0 Port, Sound card, Graphics card with at least 1024X600 pixels and suitable display ; Hard disk with a minimum of 1GB free space; OS: Windows 8, 7, Vista & Windows XP.

Tech. Data IF-Receiver			
Size / Weight	115 x 90 x 32 mm / 175 g (4.5 x 3.5x 1.2 in / about 6.2 oz)		
Reception Method	Active Mixer 45.012 MHz + VFO <b>no AGC</b>		
Frequency Range	0.04 MHz – 32 MHz		
IF-Band width	24 kHz		
IF-Filter	16 kHz (-3 dB) 10 pin crystal filter		
Dynamic Range	~96.32 dB real = $(\sqrt{2})$ ~136.22 dB		
Image rejection	>90dB / 1.IF (LO + 45MHz) >70dB / 2.IF (In-Band -24KHz)		
Sensitivity	DX-Channel	High-IP active	
Noise floor (0.15 - 30 MHz / 2.3 kHz BW)	-137 dBm (0.03 µV)	-122 dBm (0.18 µV)	

All specifications are subject to change without notice.

RadioJet 1102S.....	Art.No.:00083
Mounting bracket MB1.....	Art.No.:00294
RX-Decoder option.....	Art.No.:00085
RadioCom 6 Bundle.....	Art.No.:00143

## A Hybrid Receiver of the next Generation

The popular RadioJet IF-receiver has been dramatically improved and expanded by an additional IQ-receiver that gives you a large panoramic display. The frequency range has also been extended giving coverage way beyond the shortwave bands (10 kHz - 1.6 GHz). We call this combination of various receivers and special control systems 'Hybrid Receiver'. Now it is possible to make use of multiple demodulation systems. You can select different frequency bands and antennas making monitoring of the bands a lot easier. As a further option you can add another SDR of your choice.

The main receiver is similar to our successful RadioJet with its 24 kHz-wide panorama. For the RTL-2832 IQ-receiver, two converters have been added to its mixer. This required a major extension of the software which not only simply receives the frequency, e.g. the 2 m / 70 cm ham radio bands, but also decodes it to make the reception of Sat-/FAX-pictures in the 136-138 MHz range possible. You can also listen to FM-stations with the multiplex baseband and the RDS-text being displayed. Additional hardware was necessary for the frequency-controlled antenna switching. So we have included an internal USB-Hub to reduce connections to the PC.

## Wide Frequency Range and large Panorama Display!

The frequency range has been extended far beyond 1600 MHz, the spectrums for the RadioJet 1305P are scalable with a panoramic display of up to 3.2 MHz per IQ-receiver. All in all, a maximum of four receivers can be operated independently on different frequencies. It should be mentioned that because of the high-quality front end the IQ-receivers RTL 2832U have a noticeably higher sensitivity and stability due to the excellent shortwave capabilities of the RadioJet.

## Multi Band Receiving and Recording

The possibility of operating up to four receivers simultaneously makes multi-band recording possible, a feature, which currently many listeners enjoy. The RadioJet 1305P can receive and record the 20m-, 40m- and 80m band independently and at the same time. The complete storable width is determined by the number of the IQ-receivers and their sample rate, namely two internal IQ-receivers plus external receivers, e.g.,  $2 \times 3.2 = 6.4$  + 2MHz Excalibur, Perseus etc = more than 8 MHz.

*The Radio Jet 1305P combines hardware and software technology to bring you the best all in one Receiver / Decoder package.*

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## Unique Features

**Synchronous:** Each of the IQ-receivers can display its own spectrum and you can listen to a radio station. If you change the frequency, you will hear nothing, of course.

**Asynchronous:** You can still listen to a Station on 177KHz for example and at the same time scroll through the complete shortwave range. Only when you double-click on a peak in the spectrum display, a new station will be selected and becomes audible.

**Independent:** The receiver can record a station on 183 KHz, for example, while you are listening to a signal in the 20m-band. Or you are listening to a FM-station and your neighbors are mightily impressed by the oscillating spikes of the multiplex base band spectrum. In the meantime, the FM-antenna was selected automatically without disturbing the recording.

All these possibilities require a considerable amount of hard- and software and that is why we call the RJ 1305+ not only a 'receiver', but 'Hybrid-Receiver'.

The receiver comes with the standard software and the following features: Reception and recording of transmissions in USB, LSB, CW, AM, eSSB, AMSS, FM, WFM and DRM. DRM Decoder, MRSS. All filters are completely variable and can be manually adjusted. The S-Meter and spectroscope have an extremely accurate dBm-scale.

## What's in the Box

- Bonito RadioJet 1305PLUS including 1x IQ Receiver
- Bonito RadioJet Software 1.5
- Quick Instructions
- Online Manual (on Program CD-ROM)

## Minimum requirements (temporarily)

2.0 GHz INTEL Core2Duo CPU and 1 GB RAM, USB 2.0 Port, Sound card, Graphics card with at least 1024X600 pixels and suitable display ; Hard disk with a minimum of 1GB free space; OS: 7, Vista & Windows XP. Windows 8 / 8.1 only after deactivation of the driver signature.

RadioJet 1305P.....	Art.No.:00092
Mounting bracket MB1.....	Art.No.:00294
RX-Decoder option.....	Art.No.:00085
RadioCom 6 Bundle.....	Art.No.:00092