MegaLoop & AntennaJet

MegaLoop ML200 Active Loop Antenna

The ML200 is another model of the MegaLoop series with similar data, but with an extended frequency range of 9 kHz - 200 MHz and a bit more sensitivity, with very high signal-to-noise ratios (SNR> 70dB). The supply voltage range is 5 - 15V DC (40mA max) and thus the antenna can also be operated for portable use. It is possible to operate the ML200 by two different kinds of power sources. It can be powered either by a conventional plug power supply or via USB. Powering via USB has the advantage that no external power supply is needed and that the antenna can be used autonomously and noise-free with a separate USB power bank. The amplification (low / high gain) can be selected internally with a jumper to adapt various lengths of the receiving loop element.

Additionally for outside use, we now offer a loop made of salt-water proof, PVC-coated stainless steel cable (V4A).

Frequency Range: 9 kHz - 200 MHz
Power Supply: 5 V - 15V (max. 60mA)
Upper Frequency Limit (-1dB): 200 MHz
Selectable gain difference: 10dB (high/low)
IP3: > +40 dBm Typ. IP2: > +85 dBm Typ.

MegaLoop ML200..Art.No.:00381

AntennaJet AAS300

3 Way Active Antenna Splitter for 9 kHz - 300 MHz

Bonito's active antenna signal splitter "AntennaJet AAS300" splits the signal from one antenna to three different receivers simultaneously. The AntennaJet has a wideband (>300 MHz) and ultra low noise amplifier and can share one antenna with up to 3 separate receivers which can be tuned to different frequencies. Due to the extraordinary high decoupling of the outputs (70dB), interference between the connected receivers is avoided. At the same time, the emission of interference to the antenna is effectively suppressed. With its ESD-protection circuit the antenna input is protected against short or pulsed voltage surges or short circuits*. *The ESD Protection does not replace lightning protection!

Technical Data

Input Frequency Range: 9 kHz - 300 MHz (-1dB); Impedance: BNC / 50 Ohms
ESD-protection: 30KV; max. pulse power 350W (8/20µs); Insertion loss: max. 1.5dB typ.
Isolation between the outputs: 70dB typ. <1MHz; 60dB typ. < 30MHz; 50dB typ. <100MHz; 40dB typ. <300MHz; Amplitude difference of the outputs: max. 0.5dB typ.; IP3 Intercept-Point 3rd Order: +35dBm typ. <10MHz

AntennaJet AAS300...Art.No.:00100

1 Antenna
3 Receivers

AntennaJet ASM300

USB controlled Antenna Switch and Mixer for 9 kHz - 300 MHz

The AntennaJet ASM 300 is USB-controlled and you can connect up to three separate receiving antennas from 9 kHz - 300 MHz **loss-free** to one output socket. Additionally, you can combine all three input channels according to your needs. Thus you can always find the best combination of antennas when receiving conditions are bad. The HF-inputs are BNC and are protected against short and pulse-shaped voltage surges with complex ESD protection circuits. Because the voltage supply is integrated via USB, you do not need an additional power supply. The necessary control software is included for Windows 8, 7, Vista and Windows XP.

Technical data

Input Frequency Range: 9 kHz - 300 MHz (-1dB); Input socket/Impedance: BNC/50 Ohm (DC-blocked max.50V) ESD; Insertion loss: 0dBm; Insulation between the inputs: 80dB typ. <0.3MHz; 70dB typ. <1MHz; 55dB typ. < 30MHz; 45dB typ.; Insulation between output and input: 110dB typ. <0.3MHz; 100dB typ. <1MHz; 80dB typ. <30MHz; 65dB typ.; 3rd order Intercept point: +40dBm typ<10MHz; +20dBm typ.>100MHz;

AntennaJet ASM300...Art.No.:00099

3 Antennas
1 Receiver

Accessories

Galvanic Isolator GI300

The GI300 suppresses noise reaching the ground connections of the receiver. It covers a wide-band range of 30 kHz - 300 MHz (typ. 1dB insertion loss). The unit can be used for many receiving applications, it will also work with frequencies up to 1 GHz but above 300 MHz insertion loss may increase by up to 3dB. The unit has integrated double over-voltage protection and input and output are blocked for DC voltage.

GI300...Art.No.: 00385

Over Voltage Protector OVP1000

Triple protection against excessive voltage on antenna cables to protect your receiver. High current pulses caused by nearby thunderstorms will be dissipated. A gas discharge tube with 60V firing voltage, max. pulse leakage current 1kA (8/20µs). On the RX side: An ultra-fast ESD diode (30KV; max. pulse power 350W (8/20µs). Additionally, DC voltages up to max. 100V are blocked at the input and output. 200Hz – 1GHz (typ. 1dB insertion loss). Coax connectors: BNC

OVP1000...Art.No.: 00204

TuningWheel USB

So far, the most common argument against an SDR (Software Defined Radio or Receiver) has been: "I need something with real buttons". The Bonito Tuning Wheel combines the advantages of an analog VFO knob with the various options of a software-based receiver such our RadioJet 1102S (also Kenwood TS-590S & TS-990S etc). You get a nice knob with push button function. All functions are programmable and thus provide direct access to important settings and give you the „analog" feeling that you have been missing.

TuningWheel..Art.No.: 00132

TRX-Cable Set for RadioCom

Ready-made TX cable set. No soldering needed any more! Available for nearly any radio. Length approx: 7" (1.80 meters). Other lengths available on request.

- Easy and clean installation
- Available for almost all radios
- Allows control of the transceiver and transmission

TRX-Cable Set..Art.No.: 00478

USB-Serial Adapter

Fully connected USB serial adapter. Converts a USB to a serial port (COM port). For the connection of the Bonito Switchbox, SSB Radios, Rotors, etc.
- Chipset FTDI
- USB serial adapter with full pin-out
- For Windows XP, Vista, 7 & 8 (even 64Bit!)

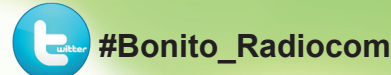**USB-Serial Adapter**..Art.No.: 00254

CE FC RoHS compliant

Bonito & NTI products are made in Germany!

Gerichtweg 3
29320 Hermannsburg (Germany)
E-Mail: office@bonito.net
Bonito USA HQ
207 S Whittemore ST
St. Johns, MI 48879, USA
E-Mail: radiojet@computer-int.com
http://www.bonito.net

Your local dealer:

/mybonito
/BonitoGermany
#Bonito_Radiocom

Webショップ ノイテック
Webshop Neu-Tek   Produced by TU Partners
お問い合わせ、ご注文は info@tupartners.com まで
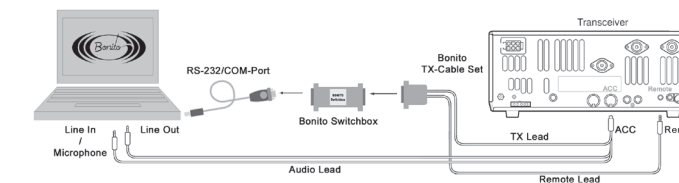For your inquiry, please contact us.
e–mail: info@tupartners.com

RadioCom 6 *the premium Hamradio Software*

RadioCom 6 is the premium software suite which enables a wide range of digital and analogue signals such as **PSK, RTTY, CW, SSTV, SYNOP, Weatherfax, Satfax** plus many more to be decoded by the user. It offers CAT-control for more than 130 radios with enhanced audio quality. RadioCom 6 requires no additional and costly soundcards or expensive interfaces in order to operate efficiently. Two radios can be connected simultaneously to 1 sound card. You can run and operate several decoders at the same time.

RadioControl The supplied Switchbox features RadioControl for more than 130 radios and receivers without the need of additional hardware because the switchbox already contains the level converters (CAT) and a PTT switch for all major manufacturers such as ICOM, Kenwood, Yaesu, Elecraft, etc. It just needs a simple cable set to control the radio and the PTT.

DSP-Equalizer RadioCom 6 uses your soundcard with special techniques. The quality is higher than anything you have come across before. This equalizer lets you arrange several notch filters within one band pass filter, or create a filter curve with custom wave pattern and variable slope at 2-Hz resolution. Simply draw your desired filter curve with your mouse.

SDR-Integration Software Defined Radios are very popular at the moment, but the available software is often not very useful. Bonito implements SDR in such a way that the owner really can use his SDR without additional costs.

The new USB-controlled radios by ICOM, Kenwood or Yaesu and SDRs are supported as well as interfaces from microHAM, RigExpert, etc. RadioCom will support these units, too.
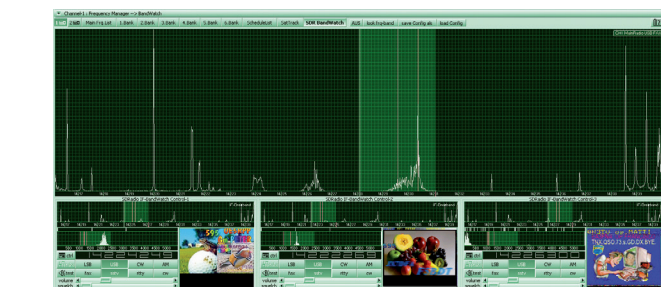
Multimode En-& Decoder

MultiDecoding RadioCom 6 decodes all common modes such as WeatherFax, SatFax, RTTY, CW, SSTV (all popular modes like Scottie, Robot, Martin, MMSSTV incl. the Bonito Modes and a Mode Creator) , PSK (PSK31, Q- and B-PSK) and Synopsis in superior quality. Now you can use several different decoders parallel! You may decode 6 PSK signals simultaneously while receiving Fax, SSTV or something else on the other channel. Since every decoder has its own window, everything is displayed in a very user-friendly way.

The **TX pages** were designed to be clearly arranged and simple to use. SSTV Images, for example, can be brought into the TX window simply by drag and drop, and be sent off immediately. You can queue up several images and text. RadioCom will send them out one by one. All images can be viewed and edited.

The **Frequency-Manager** is comprised of one main and 6 user databases. They can store all settings of a radio broadcast station and bring them up again when needed. These databases also include all decoder data, Keplerian elements as well as other decoder data.

The **Frq-/Channel-Scanner-Functions** display signal strength, audio events or graphs in 3D. Event logging makes it possible to subsequently analyze events with frequency and time.

System requirements

SSB-Receiver or Transceiver (remote controlled if possible) RadioCom 6 can be combined with almost all brands of radios, such as those made by Bonito, Yaesu, ICOM, Kenwood, JRC, AOR, WiNRADiO, Elecraft, etc.

Computer:
Intel Pentium M processor with at least 1,6 GHz, 512 MB RAM, a bi-directional sound card with a LINE-IN port, a spare COM port, and either Windows XP / Vista / 7 / 8 or higher installed, as well as a graphics card with 1280x1024 resolution. When using a SDR, the requirements are higher depending on the minimum requirement of the SDR.

RadioCom6 Fullversion............................Art.No.:00303
RadioCom 6 RX Fullversion......................Art.No.:00304
TRX Cable set for dif. Radios....................Art.No.:00478

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 no AGC
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 = (√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*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.

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.

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

Active Antennas

Boni-Whip Wideband Active Antenna

Despite its size (only approx. 17 cm / 6 ¾ inch long), it renders excellent reception results on long wave, medium wave and shortwave and additionally for VHF up to 300 MHz. Even on very low frequencies, the Boni-Whip produces very good reception results. It can be used starting at 20 kHz and is a good choice for listeners who are interested in the low bands. We also had the radio listeners in mind, who are interested in high frequencies and extended the range to 300 MHz. With only a little effort, you can achieve fantastic reception results; and because of its small size, the antenna can be erected inconspicuously. The active antenna circuitry is cased in a weather resistant box. The voltage supply is delivered by the antenna cable and the included junction box.
Because of its interchangeable radiating elements (Whips) the Boni-Whip can be used with different elements for experiments. The antenna can thus be adjusted to the surrounding environment or a special reception area.

Frequency Range: 20 kHz -300 MHz
Voltage supply: 12V-15V
Gain: 3dB
Upper Frequency Limit: (-1dB): 300 MHz
IP3: > +30 dBm Typ. IP2: > +50 dBm Typ.

Boni-Whip..Art.No.:00125

GigActiv GA3005 Extreme Wideband Active Antenna

Where space is at a premium or you live in an area where an antenna is considered an undesirable element in neighborhood, the new GigActiv GA3005 is the ideal solution for the avid listener with a wide band receiver. The low noise GigActiv 3005 Extreme Wideband Active Antenna by NTi covers the whole frequency range from 9 kHz – 3 GHz. The antenna radiator measures only 10 cm (approx 4 inches) and so the unit can be mounted unobtrusively. The antenna requires a supply voltage of 5 –15V DC (max. 120mA) fed through the coax cable via the standard supplied DC interface CPI3000DP. It can also be powered via USB with slightly reduced performance. This is perfect for portable use in combination with a PC, which powers the antenna or the antenna can be powered autonomously and noise-free with a separate USB power bank. For shortwave and above 200MHz an IP3 of typically > +30dBm is achieved.

Frequency Range : 9 kHz - 3 GHz
Power Supply: 5V - 15V
Gain: + 3dB
Upper Frequency Limit (-1dB): 3000 MHz
IP3: > +30 dBm Typ. IP2: > +50 dBm Typ.

GigActiv GA3005..Art.No.:00382

MegaLoop ML060 Active Loop Antenna

The MegaLoop ML060 is an active loop amplifier for the range from 9 kHz – 60 MHz. With a slightly reduced performance, it can also be used for FM. Active loop antennas make predominantly use of the magnetic field component. As a result they are very useful when reception is difficult because of electric interferences nearby or when using them as an indoor antenna. The standard version is an amplifier with a 5 m loop made of flexible wire. Other than rigid pipe constructions, this antenna can easily be transported which makes its portable use very convenient. The mounting of the loop is done by two stainless steel nuts with M5 thread. This allows for the fastening of other loop forms as well. There is also the possibility of switching the amplification (Low/High Gain), so it can be adjusted to the size of the loop. On shortwave around 7 MHz the antenna has an excellent IP 3 of typically +43dBm and an IP2 of >+70dBm with a voltage of 11-15V.

Frequency Range: 9 kHz - 60 MHz
Power Supply: 11V - 15V (max. 60mA)
Upper Frequency Limit (-1dB): 60 MHz
Gain: + 0dB / 6dB
IP3: > +45 dBm Typ. IP2: > +70 dBm Typ.

Megaloop ML060..Art.No.:00380