2014
NEW V2 RANGE

bw broadcast

www.bwbroadcast.com



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Award winning FM Transmitters.

Thousands of our transmitters are operating trouble-free in the world's most familiar and demanding locations.



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A simple way to boost your coverage area.

Increase your power the easy way with a BW Broadcast power amplifier. Increasing your listenership has never been so simple.



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The World's best Re-broadcast Receiver

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RDS encoders designed to suit every budget.

If you just need your station name on the air or RT+ content tagging and automation system control we have an encoder for you.



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For FM, AM or digital radio broadcasting

Now any station can stand out on the dial, thanks to eight processors in three ranges. Our processors will give you the sound you need to be number one in your area.



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Taking stereo generation to another level.

Stereo generation with RDS, audio backup, SNMP and a whole lot more!



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Bullet-proof RF stereo audio links with DSP technology.

Get your audio to the top of the mountain with a minimum of fuss and with the best possible audio quality.

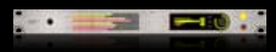


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Ariane Audio Leveller

Tame uncontrolled audio levels without a processed sound.

Perfect for recording, production & broadcast studios, nightclubs, PA systems, TV program audio and studio-transmitter links.



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All our products are designed around these 4 principles.

WELCOME TO BW BROADCAST

We've been supplying broadcasting equipment to radio stations worldwide for over 15 years. Our customers range from the major networks in New York to small community station in South Sudan. Whoever the customer, the needs are the same, high performing, reliable products that are easy to use and fairly priced. At BW Broadcast we create all our products with those principles in mind.

We constantly improve and update our products, thinking outside the box and employing new technologies to offer our customers products that exceed their expectations.

"With the DSPXmini you don't get what you pay for - you get a whole lot more! It's made it possible for us to give some of our smaller stations a major market sound at a VERY low cost."

Ian Perry, Pilgrim Radio Network

We listen to our customers and design products with features they need to solve real life problems.

"A high power transmitter at our site was interfering with our translator. I installed the RBRX1 and within minutes it was picking up the signal and we were loud & clean. I am overwhelmed with how good the translator sounds."

Bill Stevens, Engineer, USA

We pride ourselves on our Customer Service and 24/7 Technical Support, to give our customers 100% peace of mind.

"You guys are amazing! I deal with a lot of service issues with many vendors and your support is second to none!"

Ken Philpot, Engineer, USA

OUR MISSION

To design and manufacture reliable, innovative and affordable radio broadsting products, backed up by excellent customer service and support.

Award Winning FM Transmitters.



Using our years of experience and customer feedback we have designed our most advanced transmitters yet! New features that improved reliability, ease maintenance issues whilst giving you more control than ever before.

Sound amazing right out of the box.

Built-in multi-band DSP audio processing means there really is no need for a separate processor. There are also 15 factory presets, ensuring you'll find a sound you love and then there's the exciter – one of the industry's cleanest! These features go to make the V2 a high performing, great sounding transmitter that will give you the edge on your competition.

Trouble free operation even in the harshest environments.

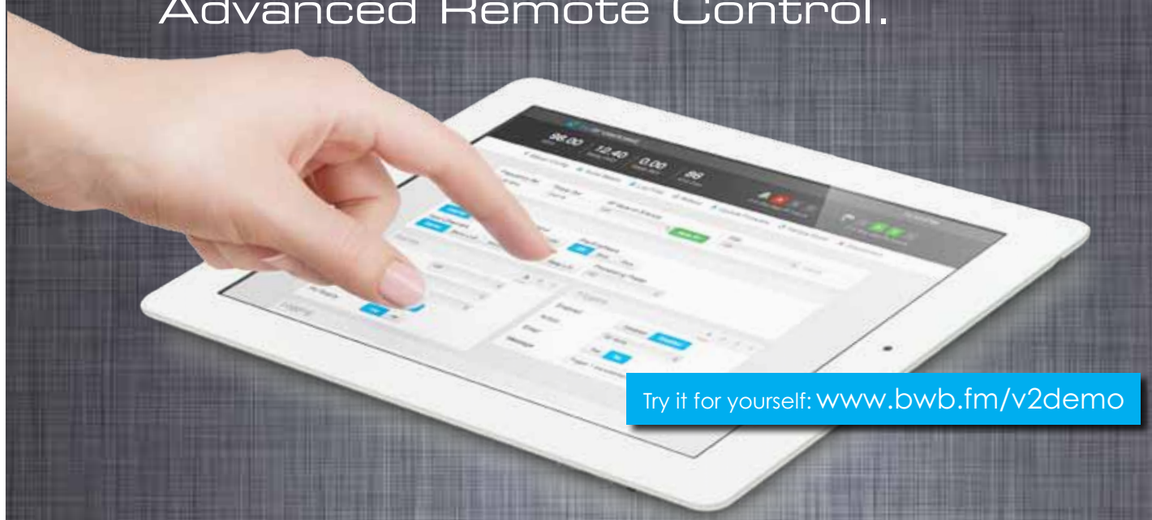
We've made great strides in improving reliability and easing maintenance issues. The innovative cooling design and the upgraded 120°F 10 year life fans reduce operating temperatures which prolong service life. Gold clamp technology and slide-in power supplies make changing parts a breeze. Transistors can be changed in minutes using just a screwdriver , while power supplies simply slide-in – taking seconds to replace!

Everything comes as standard.

We provide competitively priced products with ALL features as standard (no pricey optional extras!). We offer FREE software upgrades, so our customers can benefit from new features as we develop them. We pride ourselves on great Customer Service and Technical Support, which is available 24/7 - we're always there if you need us. In addition, all our products come with a 2 year international warranty, giving complete peace of mind.



Advanced Remote Control.



Try it for yourself: www.bwb.fm/v2demo

Monitor and control your transmitter anywhere, anytime, on any device!

The new Advanced remote control app means you can access your transmitter from anywhere, at anytime and now from any device! There's no software to install and you can connect remotely from any web connected device such as a smartphone or tablet. It also has Intelligent email alarms, SNMP, UDP and local SD card logging that really keep you informed. The high resolution front panel display now has a handy help tips menu, for those of us that don't like reading manuals! So wether you have 1 or 100 transmitters they will never have been this easy to manage.

Amazing sound built-in!
No need for a separate processor!

Sound great, right out of the box. One of the industry's cleanest exciters and ultra-low distortion modulator combine with 4-band audio processing and 15 presets to choose from.



Change parts in minutes
and be back on the air!

If a lightning strike or power surge takes out your transmitter's power supply, you no longer need to remove it from the rack and spend hours disassembling it. You can simply slide in a replacement power supply in seconds.



V2 FM Transmitters

TX5 V2 & TX50 V2



TX300 V2



TX600 V2



TX1000 V2 & TX1500



The TX5 V2 FM transmitters are perfectly suited for micro power radio stations, cable TV FM modulators, real estate advertising, lab testing and other applications that demand BW Broadcast quality.

The TX50 V2 gives you 50w of power in a 1U case with built in 4-band DSPX audio processing, Ethernet control and FSK IDer. Eliminating the need for any additional equipment. It offers multiple solutions in one box. Whether it is a standalone FM transmitter or used to drive high power FM amplifiers, such as the PA1500, the TX50 V2 delivers highly efficient reliable RF power.

The most popular 300W FM transmitter in the world, ideal for LPFM stations, community stations, emergency broadcast kits, military applications and as a truly reliable back-up transmitter or exciter for national broadcasters. It benefits from slide-in power supplies and hotswap facility. This allows power supplies to be swapped over without having to power down the transmitter. Whatever the application, the TX300 V2 will take it in its stride.

TX600 V2 come with gold clamp technology, slide-in power supplies and hotswap - making maintence a dream! No wonder there are thousands of these unit operating trouble free around the world - even in the harshest environments.

TX1000 V2 and TX1500 V2, the most compact transmitters on the market for their power! high performance and superb value for those who can't afford to buy anything but the best.

Compare V2 with the best of the rest!

Feature as standard:*	BW Broadcast TX1000 V2	Nautel VS1	Ecreso/Crown Helios FM 1000W	Nicom NA 1005	Elenos Indium ETG 1000.10
Multi-band Audio Processing	✓	✗	✗	✗	✗
Gold Clamp Transistors	✓	✗	✗	✗	✗
Slide-in Power Supply	✓	✗	✗	✗	✗
Ethernet Control	✓	✓	✗	✗	✗
Telemetry /GPIO	✓	✓	✓	✓	✓
Size	2RU	3RU	3RU	3RU	2RU

*Correct at time o f press.

NEW
178 POINT
TEST PROCEDURE

Tested to the max, so your patience isn't!

It's so frustrating when you go to install a brand new product and it doesn't work properly. Our new test procedures make V2 transmitters the most rigorously tested on the market.

V2 FM POWER AMPLIFIERS

A simple and efficient way of boosting your coverage area.



PA300 V2 an effective way of increasing your audience.
A compact 2U design that weighs less than 5kg. Control and monitoring is done via the front panel. It has RS232 remote control, alarms and external RF muting. The power amplifier typically runs at 80% efficiency for ultra-cool long term reliability.

PA600 V2 with gold clamp technology.
Offers all the features of the PA300 V2, like active and passive VSWR protection, simple modular PSU interface allowing for easy maintenance and a high quality dual fan cooling system. In addition the PA600 V2 includes a unique 'gold clamp' transistor clamping design for ease of servicing of vulnerable components.

PA1000 V2 & PA1500 V2 with slide-in power supplies.
A compact 2U design, still only weighing 15kg. The PA1000 V2 & PA1500 V2 share the features and facilities of its younger brother the PA600 V2, including gold clamp transistor clamping but with the addition of a slide in power supply for ultimate maintenance peace of mind.



Increase your listenership right now!

The World's Best FM Re-broadcast Receiver.

"We are shocked with the difference in performance and in reception with the RBRX1 compared to our previous receiver. I don't know what little magic is going on in there to make the reception so much better, but I'm a fan."



RBRX1

DSP FM RECEIVERS

Setting new heights for FM reception.



This award winning FM DSP Receiver range has quickly become the industry standard professional receiver and re-broadcast receiver around the world. Created to make a difference, the RBRX1 and RX1 will change your perspective on what can be achieved.

Combining our vast knowledge of RF and audio DSP with SONY's patented noise reduction technology has allowed us to create a remarkable product. The RX1 and RBRX1 achieve unprecedented RF and audio performance, giving access to previously hidden RF and audio settings. The listening experience is greatly optimized, whether used for monitoring radio stations to adjust processing, evaluating the competition, re-broadcasting or pure pleasure.

Adjustments are provided for over 50 parameters, including audio and IF bandwidths, de-emphasis and blending for stereo, HF and ultrasonic noise. Control of blending levels and attack & release times is also possible. All adjustments, plus factory presets and user stored settings, can be accessed from the front panel or via Ethernet and serial connections.

For re-transmission applications, the RBRX1 adds a DSP enhanced MPX output that reconstructs a clean peak-level and bandwidth limited waveform, eliminating worries about studio-transmitter link overshoots.

RDS PI code checking prevents translators and repeaters from being hijacked or jammed, keeping your frequency safe from unwanted visitors. The receiver will also send automatic email alerts to notify you of any problems.

Plan-B silence detection technology automatically switches to either of the analogue and AES/EBU digital inputs, or to the built-in flash memory to keep broadcasting in the event of reception being lost, eradicating dead air.

	Full Control of RF & audio filtering / blending	RDS / RBDS decoding	Network (browser) and serial remote control	Factory and user presets, with back panel switching	Front panel control interface	MPX regeneration (with peak control)	PI code checking (for jamming prevention)	Audio switching (for signal loss)	RDS / RBDS encoding and re-encoding	Real time clock day/time switching of modes and presets	SNMP remote control enabled	24 bit XLR balanced analogue outputs	24 bit SRC controlled XLR AES/EBU output	24 bit XLR balanced analogue inputs (for signal failure switching)	24 bit SRC controlled XLR AES/EBU inputs (for signal failure switching)	24 bit BNC unbalanced MPX outputs (x 2)	1/4 inch front panel Headphone socket	Configurable email alerts
RBRX1	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
RX1	●	●	●	●	●	-	-	-	-	●	●	●	●	-	-	-	●	●



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RDS ENCODERS

Static and dynamic Radio Data System encoders designed to suit every budget.



RDS2+. All the features you need at a fantastic price.

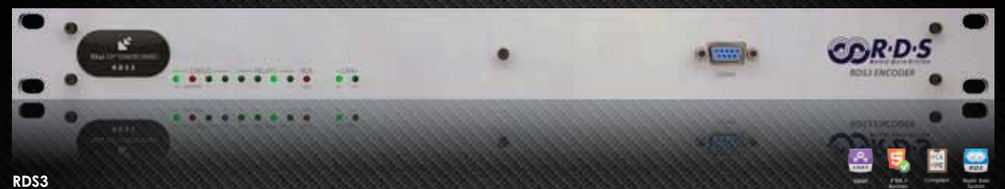
Supporting the majority of RDS protocols. It has a real-time clock and memory to support 8000 characters of text. Programming is simple with the supplied windows application which can be used directly or remotely. After initial programming no PC is required.

RDS3. A dynamic RDS encoder with powerful interfacing features.

It supports all RDS protocols, including ODAs such as RT+ (which is used for interactive radio applications and content tagging). It effortlessly connects to your radio automation software, to display track information. Configure remotely using it's embedded web server and a standard web browser. It also allows you to broadcast scrolling text, which can be customized through the integrated web server. It can also display messages based on time and date by utilizing the embedded scheduler. The RDS3 can either be used in loop through mode in your broadcast chain or can operate as a standalone unit.







RDS3

Our processors give you the upper hand.

"Our DSPXtra is excellent. We really like the way the preset maintains the dramatic affect and musicality of the program material while maintaining a competitively loud sound. Frankly I am not sure other processors are capable of keeping this sense of dynamics at the same loudness level. It is impressive!"

Ian Perry, Pilgrim Radio Network



DSPXtra-FM

Audio processors for FM AM & DAB.

We are as passionate, as you are, about making your station stand out on the dial. Our processors will exceed your sound aspirations without blowing the budget. Used by radio stations worldwide to 'crush the competition'.



DSPmpx



DSPXmini



DSPXmini-ST



DSPX



DSPmpX is a final clipper and high specification stereo generator. It features an oversampled audio clipper, 15kHz filtering as well as a pilot and RDS/SCA protected composite clipper. Perfect for satelite to FM distribution.

DSPXmini supports FM, HD and AM processing versions, it's one of the most cost effective audio processors on the planet. You will not believe how much sound you get for your money!

DSPXmini-ST, with only 4ms of delay it's perfect for monitoring on-air and studio use. Digital FM processing with ultra low latency - say good ridence to echoes in your headphones.

DSPX supports FM, HD and AM processing. It's the UK's most popular audio processor. Packed with features and 1GHz of processing power - you know you are going to sound great!

DSPXtra supports FM and HD processing, it gives a cleaner, louder sound. The award winning Ariane leveller and full 6 bands of limiting will leave your listeners hooked.

Compare ours with the best of the rest!

Feature:	DSPX	DSPXtra	David IV	Ominia ONE	Orban6300
No. of processing bands	4	6	5	4	5
Integrated Ariane RMS Leveller	✗	✓	✗	✗	✗
Multiband look ahead limiting	✓	✓	✓	✗	✗
Dual Processing paths enabled for HD and Digital Radio	✓	✓	✗	✗	✓
Remote access over IP	✓	✓	✓	✓	✓
Silence detect auto changeover	✓	✓	✗	✗	✓

AUDIO PROCESSORS

FM Broadcasting.
You want your radio station to sound great...right? So do we! With 5 FM supported models in our range, you'll exceed your aspirations of sounding great without blowing your budget. Used around the world by radio stations to 'crush the competition'.

HD Broadcasting.
Our range includes 3 HD audio processors. Used on more DAB services in the UK than any other. They optimise your audio for digital radio transmission whether for an internet stream or HD-IBOC-DRM-DAB broadcast.

AM Broadcasting.
The best sounding AM stations in the world use a BW Broadcast variable bandwidth AM audio processor. Parallel processing paths also enable you to feed a 20KHz bandwidth signal to a web stream or a HD service.

Compare our processors range.

	FM BROADCASTING DSPmpX	DSPX mini-FM	DSPX-FM	DSPXtra-FM	**HD BROADCASTING** DSPX mini-HD	DSPX-HD	DSPXtra-HD	**AM BROADCASTING** DSPX mini-AM	DSPX-AM	**STUDIO PROCESSOR** DSPX mini-ST
APPLICATION										
FM Broadcasting	●	●	●	●	-	-	-	-	-	●
AM Broadcasting	-	-	-	-	-	-	-	●	●	-
FM+HD Broadcasting	-	-	●	●	-	-	-	-	-	-
AM+HD Broadcasting	-	-	-	-	-	-	-	-	●	-
DAB / DRM / HD Broadcasting	-	-	-	-	●	●	●	-	-	
Web streaming / Podcasting	-	-	-	-	●	●	●	-	-	
PROCESSING FEATURES										
Relative loudness (dB)	-	-1	0	1	-1	0	1	-1	0	-
Parametric bass enhancement	-	●	●	●	●	●	●	●	●	-
Shelf bass enhancement	-	-	●	●	-	●	●	-	●	●
AGC	-	4 band	Advanced 4 band	WB + Ariane	4 band	Advanced 4 band	WB + Ariane	4 band	Advanced 4 band	4 band
AGC window gating	-	-	●	●	-	●	●	-	●	●
Multiband limiter	-	4 band	4 band	6 band	4 band	4 band	6 band	4 band	4 band	4 band
Bass clip modes	●	●	●	●	●	●	●	●	●	●
Multi-band clipper	-	-	●	●	-	●	●	-	●	-
Distortion cancelled clipper	●	●	●	●	-	-	-	●	●	●
Composite clipper / Pilot protection	●	●	●	●	-	-	-	-	-	-
Asymmetrical clipping & Tilt EQ	-	-	-	-	-	-	-	●	●	-
AM low pass filtering (4-10kHz)	-	-	-	-	-	-	-	●	●	-

STEREO ENCODERS

SE1, taking stereo generation to another level.



The DSPmpX is renowned for bringing lab quality stereo generation to the masses whilst adding bells and whistles to match. The SE1 takes this experience to a new level by adding RDS, audio backup, SNMP and lots more.

DSPmpX - digital signal processing for enhanced audio.

Now you won't have to worry about the integrity or cleanliness of your audio. Pristine bandwidth and peak limiting keep you rock solid and clean, even when overdriving the built in audio limiter. The DSPmpX also offers built in silence detection and can automatically switch from analog to AES/EBU and vice versa on program fail.

SE1 - quality stereo generation with a whole lot more!

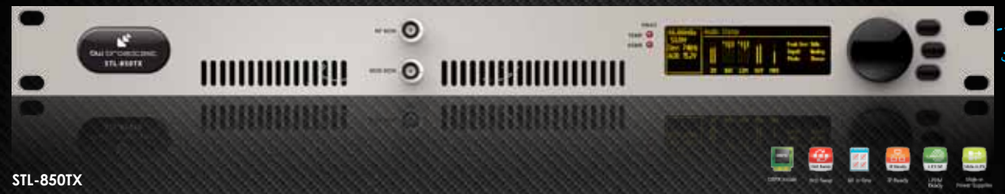
Combing BW Broadcast's audio peak control and stereo generation technology - the latest interface, remote control and fault monitoring features make this an essential item at any transmission site. The built in RDS encoding and audio backup from the built in flash memory complete the package.

The capacitive touch front panel and OLED display make for quick and easy set up and the Ethernet and HTML5 web remote will mean that you will only have to visit the site once. Fully accessible and remote upgradeable, the SE1 offers control above and beyond anything else available on the market.



SE1 Stereo Encoder





STL-850TX

Seamlessly Linking Studio to TX



STL-850RX

STUDIO TO TRANSMITTER LINKS



Bullet-proof RF links with built-in DSP technology.

Building upon the award winning technology in the RX1 and RBRX1 DSP FM receivers and BW Broadcast's renowned low distortion transmitters, this range of studio to transmitter link systems offer second to none performance and features.

DSP enhanced transmission solutions. Nothing else comes close!

Our Studio to Transmitter Links offer you ultimate flexibility by offering composite, analogue and digital inputs, at both ends of the link transmission chain. They also have configurable alarms and remote control, allowing you to monitor and control the system effortlessly.

Our STL receivers offer a unique feature over our competitors, by employing digital signal processing they constantly adapt to the incoming signal and dynamically adjust the RF and audio settings, in order to provide a received signal. Built in stereo and audio bandwidth and peak regeneration protect the re-broadcast transmission from RF path induced overshoots and interference. A multitude of protection systems, such as RDS PI code checking ensure that only your audio is broadcast, not interference, or worse still another station's broadcast. When the quality of your broadcast is important to you, there is nothing else on the market that comes close to a BW Broadcast DSP enhanced link transmission solution.

BW Broadcast studio to transmitter links don't just offer great audio, the added value feature list goes on and on. The transmitter has built in multi-band DSP audio processing, AES inputs and more. The receivers include audio backup capability from the in-built flash memory or analogue or digital inputs, RDS and stereo regeneration, VRP, SNMP and HTML5 web based remote control.

PICK HIT Radio

AUDIO LEVELLER

Tame uncontrolled audio levels.

Use the Araine for pre-processing Radio or TV Program Audio to get a more controlled but open On-Air signal or in production and dubbing to create audio consistency. It works wonderfully as a leveler for webcasting, streaming and IBOC to create a more even and listenable sound.



- User determined 'Instantaneous Dynamic Range' (IDR) control allows more natural dynamics. User-selectable modes include Stereo Matrix processing, conventional Stereo & Independent Dual Mono modes. Savable user presets with automatic daypart clock.
- Matrix sum & difference processing maximizes FM transmission medium with sum-referenced control on the difference signal for more consistent stereo and better loudness density.
- Removal of low frequency components from the difference (L-R) signal reduce intermodulation products and improve multipath performance.
- Adjustable multiband crossover points place equal energy in all bands to help prevent spectral skewing during large gain changes.
- RMS detection for control mimics the audio power sensitivities of human hearing.
- Wide acceptance range utilizes feed-forward topology for over 40db of input range.



ARIANE 3 Audio Leveller



"In the past we have tried just about everything to tame wildly inconsistent audio sources to achieve a cohesive, loud, yet pleasing sound. Fortunately we found the Ariane and it is up to the challenge!"

Perfect for recording, production & broadcast studios, nightclub, PA systems, TV program audio & studio-transmitter lnks.

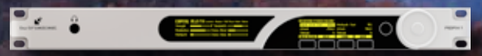
The Perfect Translator System

The Most Reliable FM Transmitter.



V2 FM TRANSMITTER RANGE
Radio 'Pick Hit' winning V2 FM Transmitters are packed with features to improve sound quality & reliability. Built in 4-band DSPX audio processing, Ethernet control and FSK IDer in every transmitter eliminates the need for any additional equipment.

The World's Best Re-broadcast Receiver.



RBRX1 FM RE-BROADCAST RECEIVER
Sensitivity and selectivity like never before gives superior reception even at the toughest translator sites. Radio World's 'Cool Stuff' winner, the RBRX1 has set new standards for FM reception around the world. This box is the industry standard and for good reason.

"Our RBRX1's are fantastic. We have some very difficult sites and these are the only receivers that pull in the signal and give a clean re-broadcast."

Juan Turner, Energy FM



100% peace of mind...



...with our 24/7 Tecnical Support and 2 year international warranty.

"You guys are amazing! I deal with a lot of service issues with many vendors and your support is second to none!"

Ken Philpot, Engineer, USA

24 SEVEN

DEALER STAMP

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