# BROADCAST TOOL

# Model DB6000-STC

## ADVANCED STEREO AND RDS GENERATOR - BS412 COMPLIANT

DEVA's line of broadcast tools can now boast a groundbreaking new device that provides a multitude of unparalleled features to meet the strictest requirements. It is fully BS412-compliant, making sure that you can achieve the loudness of sound that you need while retaining perfect sound clarity. It is compatible with all types of transmitters and provides the same consistent level of high-quality sound, fulfilling even the strictest customer requirements. The foundation of this exceptional tool is the 32bits DSP-based Stereo Generator combined with a built-in RDS/RBDS encoder. It allows you to use both analog and digital AES/EBU audio sources and supports SNMP, RS232, UDP and TCP/IP communication protocols.

The RBS/RBDS encoder can parse scrolling text, automatically separating phrases into word groups. Programming access with the USB, TCP/IP and UDP/IP interfaces is also a matter of course. This allows for full integration with the station's other networked functions including message streams for digital radio and Webcasting. It also offers an ASCII protocol for broadcasting song/artist information.

What makes this tool especially valuable is its ability to provide against the dead air problem. It detects audio loss and switches automatically to the alternative MP3 player whose backup audio files and playlists can be uploaded form your PC through any FTP client. Its storage capacity is 8GB.

The DB6000-STC is undoubtedly the cream of the crop - easy to use, versatile, dependable and innovative, supplying even the most demanding clients with the best solution that leaves no room for improvement.



## FEATURES

- Excellent Audio Performances
- Adjustable Pilot, L-R, RDS phases
- Fully Digital 32 bits DSP Stereo Encoder
- Digital Volume Control of all Audio Inputs
- Selectable pre-emphasis 0, 50µs, 75µs
- Digitally adjustable Pilot & RDS injection levels
- Intelligent Silence Detector and Backup Audio Player
- Configuration and Monitoring via SNMP Ver.2C & WEB
- Alert Notifications via E-mail, SNMP in case of Audio Loss
- Professional 19 inches, 1U Professional rack mount chassis
- Lots of Storage for over 24 hours of non-repeating audio playback

- Always Fresh Backup Audio Tracks with Embedded FTP server
- Professional Balanced Stereo Analog Input on XLR connectors
- Professional Digital AES/EBU Audio input on XLR connectors
- Headphones Jack for local monitoring of the Audio Signal
- Remote Firmware Upgrade for future-proof operation
- Built-in MP3 Player with built in 2GB SD Card
- UPnP for easy discovery in Local Networks
- Fully Digital Synthesis of the RDS Signal
- Protected access to the device settings
- Easy installation and operation
- 2 Years Warranty

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## SPECIFICATIONS

| Analog Audio Input | |
|---|---|
| Connectors | Main - 2 XLR [1] [2];  Auxiliary - DB9 [1] [2] |
| Configuration | Stereo |
| Input level (0 dBFS) | [4]  -8 dBu to +24 dBu peak |
| Impedance | Jumper selectable 600Ω / >10kΩ |
| A/D Conversion | 24 bit; 48 kHz sample rate; Differential inputs |

| Analog Audio Output | |
|---|---|
| Connectors | 2 XLR [1] [2] |
| Configuration | Stereo. [4] flat, pre- or de-emphasized |
| Out Level (0 dBFS) | [4] -12 to +24 dBu peak into ≥ 600Ω load |
| Source Impedance | 20Ω |
| Load Impedance | >= 600Ω, balanced/unbalanced |
| Signal-to-Noise | >= 110 dB unweighted [5] |
| Distortion | <= 0.01 THDN [5] |
| D/A Conversion | 24 bit; 192 kHz rate; Differential outputs |

| Remote Access Interface | |
|---|---|
| Configuration | TCP/IP via USB or Ethernet interface |
| USB Connector | USB type B connector |
| Ethernet Connector | Female RJ45,10/100 Mbps CAT5 |

| Remote Control Interface (GPI) | |
|---|---|
| Connector | DB-9 male |
| Configuration | 8 LED optocoupler, current limited cathode inputs. Anodes are connected to VCC int. |
| Control | Selects corresponding user preset if connected to GND |

| Operating conditions | |
|---|---|
| Temperature | -15°C to 55°C |
| Humidity | < 95%, non-condensing |
| Altitude | 0 to 5000m above sea level |

| Power | |
|---|---|
| Voltage | 100-240 VAC, 50-60 Hz, 30VA |
| Connector | IEC, Fused and EMI-suppressed. |

| Digital Audio Input | |
|---|---|
| Connectors | Main - XLR [1] [3]; Auxiliary - DB9 [1] [3] |
| Configuration | Stereo AES3 standard, up to 24 bit resolution |
| Sampling Rate | 22 kHz to 192 kHz |
| Input Gain | -20 dB to 20 dB, referenced to 0 dBFS, [4] |

| Digital Audio Output | |
|---|---|
| Connector | XLR [1] [3] |
| Configuration | Stereo AES3 standard, 24 bit resolution. Software selectable flat, pre- or de-emphasized |
| Sample Rate | Internal - 32,44.1,48,88.2,96,176.4,192kHz. Externally synced to Main AES3 digital input at 32 to 192 kHz. Software selectable. |
| Word Length | 24 bit |
| Output Ref. Level | -20 to 0 dBFS software selectable |

| Composite Baseband Output | |
|---|---|
| Connectors | BNC unbalanced, chasis floating, [1] |
| Configuration | 2 outputs. Independent level control. MPX+MPX, MPX+PILOT or BYPASS |
| Source impedance | 75Ω |
| Load impedance | 50Ω or greater |
| Output level | -18dBu to +18dBu |
| Pilot level | 0% to 15% |
| D/A conversion | 24 bit, differential |
| SNR / THD | >80 dB [6] / <0.01% [6] |
| Stereo Separation | >60dB |
| Crosstalk | >70dB |
| Pilot protection | >90dB rel. to 9% pilot injection, ±250 Hz |
| 38 kHz suppression | >80dB (referenced to 100% modulation) |

| Size and Weight | |
|---|---|
| Dimensions (W;H;D) | 483 x 44 x 180 mm / 19 x 1.875 x 7” |
| Shipping Weight | 540 x 115 x 300 mm / 2.6kg |

[1] -  EMI suppressed
[2] -  Electronically balanced
[3] -  Transformer balanced and floating; 110Ω impedance
[4] -  Software selectable

[5] -  Bypass mode, digital input, flat, 20Hz-15kHz bandwidth, referenced to +12dBu output level
[6] -  Bypass mode, flat, 20Hz - 15kHz bandwidth, digital input referenced to -10dBFS, unweighted

WE NEVER SPARE EFFORTS AND RESOURCES TO TURN OUR IDEAS INTO SUCCESSFUL PRODUCTS