Breakaway Live is easy to adjust while providing for an enormous variety of processing choices!
Each slider control located on the main GUI screen adjusts several internal parameters in an intelligent manner, eliminating much of the guess-work usually involved in tweaking processors. Each control has a very wide range of adjustment.

Peak Reference Level This is the overall volume control.

Final Drive This is the loudness vs clarity tradeoff. The Final Drive slider controls the Final Clip Drive, Final Limiter Threshold, as well as the Bass Clipper Threshold as necessary to minimize IMD (inter-modulation distortion). At +3.0dB and above, it will also allow the bass clipper to produce higher frequencies than normal, to retain bass punch even at extreme loudness levels. Be careful when adjusting this control -- there's a lot of available power here. Set the oscilloscopes to display Output (not de-emph)
and watch and listen carefully. Remember, what you see on the oscilloscopes is your outgoing audio -- the product of your station. A little clipping goes a long way.

Range This slider adjust the Range of the the AGC and Multiband Compressors. Range controls how much gain may be applied to bring up quiet program material. If you're hearing excessive gain in the intro and outro of songs, turn Range down. Watch the meters while adjusting this control -- notice how the scale moves. Total possible gain is derived by adding the AGC and Multiband range together. For example, with the Plutonium preset, Range at 50 and Power at 50, AGC range is 18dB and Multiband range is 10dB, for a potential 28dB of total gain.

Power This slider adjusts the Ratio of the AGC and Multiband Compressors. Turning Power all the way down is essentially bypass, as none of the gain would be applied. Turning Power all the way up will make the compressors completely equalize the difference between Quiet and Loud, as well as completely equalize the frequency balance. If you turn Ratio up, make sure to listen to some vocal-heavy near-a'cappella music, or dry voice, to make sure that bass and treble are not boosted excessively. Keeping the Ratio control somewhere in the middle is usually a good choice -- it allows the AGC to do most of the level adjustment while the Multiband re-equalizes some but not all of the frequency balance.
The effect of this control will depend on the preset. For example, with many presets, such as Plutonium, Input AGC range is already at Infinite:1, while Multiband ratio is at 4:1. Turning Power up to 75 already puts the Multiband Ratio at Infinite:1, and it can't go any higher, so turning Power up further has no effect for this particular preset. Reference Settings, on the other hand, start with Input AGC ratio 3:1 and Multiband ratio 2:1. Here, the Power slider truly has full range, 0 to 100.

Speed Controls how quickly the compressors respond. This control adjusts many internal parameters to make the sound consistent at every setting, including Attack, Release, Multiband limiter thresholds, Multiband Thresholds and Drive. Turning this control down can really "open up" the sound, and turning it up yields an extremely dense, processed sound.

Bass Breakaway Broadcast Processor is capable of quite an insane amount of bass boost. An

advanced bass clipper takes care of the peaks, but due to real-world constraints, you can only put so much bass in before things turn to mud. The range of this control is extremely wide -- be careful! The Bass control adjusts several internal parameters. As this control is turned up, Parametric Bass Boost EQ is progressively applied, B1/B2 Multiband Thresholds are raised (thus compressing bass less), and B1/B2 Output Mix levels are raised. As this control is turned down, no Bass Boost EQ is applied (other than what is inherent to certain presets), but the B1/B2 multiband thresholds are lowered, causing more bass compression. Don't be afraid to turn this control down -- it can be a very useful tool, as it still allows dynamic bass boost inherent to certain presets, when there is room for it. It can also yield a very punchy bass sound when turned down. As you adjust this control, be mindful of the output oscilloscope -- make sure you aren't asking too much of your output channel. Don't be afraid to turn Final Drive down a bit to allow for more bass boost -- even a single dB can make a huge difference!

Bass Shape The Bass Shape slider controls the frequency range of the bass boost / cut done by the Bass control. If Bass is set to Normal, this control has no effect, except with "The Regulator" preset. Bass Shape near 0 uses a 23 Hz Parametric EQ, 3 octaves wide, for an extremely warm, deep bass boost. Turning Bass Shape upwards moves the center frequency of this Parametric EQ upwards, up to 71 Hz, while keeping the width at 3 octaves. This can yield a more appropriate bass boost for smaller speakers. Turning Bass Shape down actually moves the center frequency upwards while decreasing the width, down to a maximum of Center Frequency 40 Hz, 1 octave wide. This yields an extremely boomy bass sound, which can mean killer bass for urban stations.

All sliders are saved individually for each factory preset, to make it easy to compare back and forth once you are homing in on your ideal sound.

The software provides 26 different presets, allowing you to pick the best starting point

Each preset controls nearly 100 internal parameters, and the controls in the user interface (GUI controls) allow you to very easily make modifications to tailor each preset to reach your ideal sound as described below:

Reference Jazz Based on Reference Settings, this preset has lower bass and treble thresholds, yielding a more flat frequency response with a lot of jazz recordings. Also highly recommended for fine arts and public radio stations. Suitable for voice over recording and Amateur Radio.

Reference Classical This is a 4-band preset, designed for extremely clean leveling of wide dynamic range music, while still standing up to the scrutiny of a high-end stereo system. Excellent for classical stations, and plenty of room for loudness by turning up Final Drive. Suitable for voice over recording and Amateur Radio.

Reference Heavy Next step in the evolution of a brand new audio processing algorithm is

generally more aggressive processing. This preset is identical to Reference Settings except Input AGC ratio is Infinite:1 (for full gain riding) and Multiband Ratio is 4.0:1 (for a much more aggressive sound). This preset could be adapted to almost any format by using the GUI controls. The NR version (Noise Reduction) has downward expanders enabled, for cleaning up noisy source material.

Amsterdam Named after the biggest city in the Netherlands, this 6-band preset is tuned to sound a lot like a particular radio station there. Extremely aggressive processing, extremely loud, with a bit of intentional pumping, cranked midrange and sizzling treble. This is one of the loudest presets. Only one is louder -- New York.

CHR This 6-band preset yields huge bass and slam, a bit of bass pumping for flavor, and LOUD. Vocals stand out, and incredible cut-to-cut consistency with source material of varying loudness. This preset works great for contemporary hit (or Urban) stations.

Cleveland This 6-band preset is based on Plutonium and uses Parametric EQ bass to give the characteristing midrange "honk" sound that some people love, and others do not. Could be said to both emulate the sound of radio stations in the Cleveland area, and to emulate an aspect of processing of a certain other famous audio processor that happens to be designed there.

Dance This 5-band preset is not very loud out of the box, but has a lot of interent bass boost, so it's a good candidate for a truly big slammin' sound for dance music by turning Bass down and Final Drive up. Very slow time constants for B1 and B2, to avoid pumping even with the most intense dance music.

Easy Listening With relatively aggressive multiband but not much clipping -- this 6-band preset is very mellow - smooth, clean high-end, ideal for female oriented formats where TSL is important. Also appropriate for Talk stations.

French Kiss A loud preset with an incredible openness and clean bass punch, much due to the use of intentional bass-modulated wideband pumping. This 6-band preset yields an extremely wet sound, and if you desire less pumping, try turning Range down a bit.

Helix This 7-band preset by Jesse G does almost all work in the Infinite:1-ratio multiband section, and yields incredible cut-to-cut level and spectral consistency, and huge bass sound. For a warm analog sound not unlike 8100/XT2, try turning Bass all the way down (!) and Final Drive up. By Jesse Graffam.

Jill FM Big, eclectic, smooth 70s sound. By Jesse Graffam.

New York It can't get much louder than this. No, your modulation monitor isn't broken -- just like in the real NYC, this preset will peg it at 100% and not let go except for during pauses. Unlike in the real NYC though, Breakaway Broadcast Processor's advanced distortion cancelling clipper actually keeps it (relatively) listenable and undistorted. By Jesse Graffam.

Oldies This 7-band preset uses relatively aggressive noise reduction and multiband re-equalizing

for a clean and consistent (yet
processed) sound with music of greatly varying vintage. Suitable for voice over recording and Amateur Radio.

Plutonium This is arguably the flagship preset. A development of Reference Heavy but tuned to be competitive, it's truly universal, competitively loud, yet clean on everything -- xylophone, saxophone, telephone, or any other kind of phone. We believe this preset is basically as loud as FM can be without compromises. No trace of midrange honk or pumping - clean, punchy bass, and enough dynamics to keep listeners interested. The NR version has Downward Expanders enabled, to reduce source material noise. Suitable for voice over recording and Amateur Radio.

Protection Clip 6dB This preset completely bypasses the dynamics core (agc, multiband, limiters, bass clippers), keeping only high and low pass filters, phase scrambling, pre-emphasis and the advanced distortion cancelled clippers. This preset is useful if you want to use a different front-end, such as the HD output of any Orban processor (for example 1100 or 8500), while still taking advantage of Breakaway Broadcast's superior clipper back-end. Make sure to back off the limiter in any pre-processor you use, and they would only add distortion with no loudness advantage (due to pre-emphasis completely undoing any peak control done previously). Be careful never to clip the input of BBP -- use the Final Drive control to gain loudness.

Protection Limit 12dB This is a preset tuned to do use the multiband dynamics core and AGC to transparently limit arbitrary pre-processed incoming program material, and could be useful with processed audio from another processor.

The Regulator This thunderous but relatively lightly processed 5-band preset was originally intended for Urban stations, but is also in use on a major classic hits station. It just goes to show -- take the name of the preset with a grain of salt -- theoretically, almost any preset can work for almost any format.

Zenith A full warm preset with a straight-up sound. Not your grandmothers TV set.

Microphone Suitable for voice over recording and Amateur Radio.

Microphone2 Suitable for voice over recording and Amateur Radio. Somewhat more mellow outcome than the above “Microphone” preset