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# BASSWATCH

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Unit 25F Sunrise Business Park,  
Blandford Forum, Dorset DT11 8ST  
United Kingdom

email [jon@rc1.audio](mailto:jon@rc1.audio)

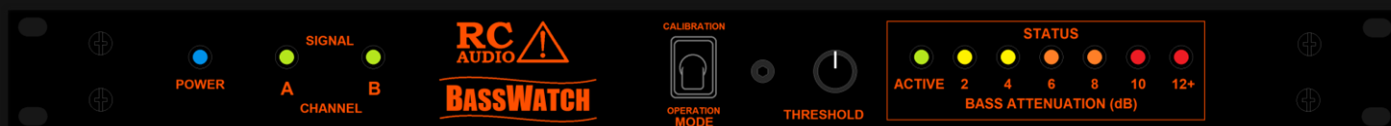
# Introducing the BASSWATCH

The BASSWATCH is a totally new type of product.

It maintains consistent mean levels of sub and low bass frequencies without any compromise in quality or dynamic range of the bass, and without any effect whatsoever on the frequencies above 100hz.

There is no compression, no pumping, no drifting of bass levels, just totally inaudible and transparent bass level control.

**It is a real game changer in many applications where the maximum bass level needs to be consistently controlled, even when the music is coming from very inconsistent sources (perhaps DJs).**



There is a huge inconsistency in mastering between tracks and artists these days, such that often one track will sound a little weak on bass whereas another similar track or artist will have wildly excessive bass levels.

If a system is set up to sound correct on the excessive bass tracks, then the other music will often sound very weak. Again, if the system is set up to sound right on the weaker tracks then the heavier ones will be drowned in excessive bass. Of course an engineer can attend for the duration of the event and keep adjusting the system as required between tracks and artists, but this is not always viable. Finally an automated solution - if the system is set to sound good on the weaker tracks and a BASSWATCH is installed then the BASSWATCH will automatically engineer the system's bass level so that all tracks, heavy or light, sound just right and excessive bass is avoided.

Quite apart from this providing a well engineered balanced sound for the audience, it is also useful offsite when bass noise pollution is an issue because **the BASSWATCH can consistently maintain the offsite bass levels exactly as required regardless of the music and levels being played.**

# What does it do?

The BASSWATCH disregards frequencies from around 100hz upwards and allows them to pass through unaffected, but it analyses the levels of the loudest significant components of the lower frequencies over a period of time in order to identify the levels of the bass.

- ***Just like an engineer would monitor bass levels.***

When this bass level drifts above the set threshold the BASSWATCH slowly and subtly adjusts the bass level so as to try to maintain the level around the threshold.

- ***Just like an engineer would gently ease the bass level down or up a tiny bit at a time to maintain the necessary balance/bass level.***

If there is a more sudden significant increase in bass the BASSWATCH will activate an emergency response and react quicker.

- ***Just like an engineer would pull the bass down faster if a super bass heavy track was suddenly dropped by a DJ.***

And, uniquely the BASSWATCH achieves these objectives without compression or pumping or otherwise compromising the dynamic range or quality of the audio signal.

- ***Just like an engineer occasionally easing the bass up or down does not cause audible compression or pumping or limiting.***

# What doesn't it do?

The BASSWATCH is not a conventional limiter and will not compress transients or prevent amplifiers from clipping, so system limiters should still be used as normal to offer system protection.



# Benefits for noise level compliance

There are usually two concerns regarding sound levels at events/venues, one concern is how loud the show is and the other is how much bass/sub content is being produced.

**The "loudness" is often measured with an A-weighted curve, such as dB LAeq, which does not significantly record much of the bass/sub content.**

**Our "LEVELIZA" has proven to be one of the world's best solutions for loudness (dB LAeq) noise level compliance. That problem has been solved very satisfactorily.**

However, the LEVELIZA is only concerned with maintaining consistent audible "loudness" and therefore, in a similar way to A-weighted measurement, disregards to some extent the low bass and sub content which doesn't usually contribute to the perceived loudness of the music - although offsite the bass is often the biggest problem.

**The "bass/sub" level is often measured by taking C or Z weighted measurements because they include these frequencies.**

**The BASSWATCH is uniquely beneficial in situations requiring noise level compliance for sub/bass frequencies because it will maintain the level of these frequencies very consistently around a preset threshold. Once a maximum offsite bass level has been decided upon the BASSWATCH can ensure that this level is complied with regardless of the music/signal that is played, and it will do that without limiting, compressing or pumping the sound so the audible result is very good.**

Additionally, the level threshold can be preset and locked behind a security screw, so once the level is carefully set it cannot easily be tampered with.

**The combination of a LEVELIZA and a BASSWATCH will provide total reliable control of loudness (dB LAeq) and bass/sub levels (measured C or Z weighted).**

And, unlike other solutions, they are fully automatic and do not apply compression, limiting, pumping, or loss of dynamic range or quality to the music.

Whether to maintain the sound and bass levels for the benefit of the audience, or to comply with offsite noise requirements, you can have

**Perfect Level and Bass Control with No Compromise in Audio Quality.**

# Technical Information

Dimensions:	Standard 19 inch 1U rack case by 250mm deep
Power requirement:	90-264V AC, 47-63 Hz, maximum 60mA current
Audio Connections:	Balanced XLR in and out for each channel
Power Connection:	Standard IEC power inlet type C14
Max Bass Reduction:	More than 30dB at 63hz
Display:	Signal Indicators each channel plus Bass Reduction in 2 dB increments

