

TwistedWave – iOS

Audio Recording App – sampling frequency up to 96kHz, 24-bit output file size. www.twistedwave.com

TwistedWave's Main Screen shows waveform displays, large meters, transport buttons at the bottom of the screen and the time code display at the top.



The meters do not monitor the Microphone Input until you start recording, so the best way to set recording levels is to hit "Record" (red button) and then immediately hit "Pause". This puts the App in Input Monitor Mode. An Input Gain (Mic Volume) control appears at the bottom of the screen. You can now adjust your Recording Level using the meters as your guide. The Input Gain control is not calibrated, so there is no reference point for repeating exact levels. However, the meters in this App are easy to read and are remarkably accurate. Once you have the signal level adjusted properly, hit "Pause" again to start Recording.



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		0)'05"850
0.0	2.0		Cursor Position
0.0			,
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		*****	• • •
			-12
		** ** **	-30
			-60
	Innut	Gain	
		Mc	nitor

When starting a New Recording, the following screen pops up, so you can select the sampling frequency and track format.

≁	4:30 PM			1				
	Nev	1	Cancel					
	4							
	48 000 Hz							
	64 000 Hz							
	8	8 200 Hz						
		6 000 Hz						
	Mono		Stereo					
<u> </u>								

You access the Settings menu from the Main Screen by pressing the "Gear" icon. Set the App to record 32-bit temporary files These files will be stored internally. Later, you can process them to 24-bit or 16-bit when you output the file in its final format.



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	0				
	Settings	Done			
32-bit temporar	y files				
The audio is stored i on, the audio quality twice larger.	n 16-bit files by defa is better, but the ten	ult. With 32-bit nporary files are			
Low latency reco	ording	\bigcirc			
Reduces the delay w cause some issues v	when monitoring a rec vith some microphon	ording. May es.			
External speake	rs	\bigcirc			
By disabling the microphone between recordings, TwistedWave can use external speakers for playback. With some microphones, however, it causes a glitch at the beginning of a recording.					
Bluetooth record	ding	\bigcirc			
Allow recording from	a Bluetooth device.				
Enable iOS proc	essing	\bigcirc			
When recording, iOS will automatically adjust the microphone gain. It is often a good idea to disable this.					

The choice of file type and word size in bits, is set in the Export File menu. You access the menu by pressing the Export icon located at the upper right of the Main Screen. The Export menu allows you to send files by email or cloud services using the Wi-Fi network connection. Pressing "Format" on the Export menu brings up this screen:

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Audio Export	Format	
WAVE		~
AIFF / AIFC		
CAF		
AAC (.m4a)		
Apple Lossless /	ALAC (.m4a)	
FLAC		
MP3		
Compression / E	Bit Depth	24 bits >

WAV, AIFF, CAF are all linear formats with no compression of the data. ALAC and FLAC are lossless, compressed formats, while AAC and MP3 are compressed data formats. The last item on the menu allows you to set Compression and Bit Depth.



Meter Check and Level Test

We made the tests with the "Input Gain" set to the center of the slider. We recommend this gain setting as a good starting point. Our acoustic signal generator calibrated to 114dB.SPL registers "-10" on the meter display. That same source set to 94dB SPL registers -30 on the meters. This confirms the App responds linearly to a change in level, which means that changes in the Output Level accurately follow changes in the Input Level. There is no compression effect due to signal processing.

The meter's scale markings are calibrated in dB. Our electrical measurement confirms these meters are 100% accurate. The red scale is 0dB to -6dB, the yellow -6dB to -12dB and the green scale is from -12dB down to infinity.



Twisted Wave Level Meters

The "Input Gain" for this App sets the Recording Level. The gain is unity or 0dB when the slider is in the center position. We've calibrated the SP15C, so it can record sounds up to 120dBSPL without distortion when the slider is set to the center position. You can choose to move the slider, cautiously, to increase or decrease the Recording Level. Moving the slider to the right will increase the level by up to 30dB, while moving it to the left will decrease the level down to -30dB. We strongly suggest you leave the Input Gain in the center position most of the time. If the sound is extremely loud, a slight nudge to the left is all that's needed. Same rule of thumb for softer sounds. A slight nudge to the right is all that's needed.

Twisted Wave Mic Volume							
Scale			-	center	+	++	+++
Gain dB	-30	-20	-10	0	+10	+20	+30

This table shows the detailed test results for this App's performance.

Twisted Wave Mic Volume = center							
scale	green	green	green	green	yellow	red	
scale marking	-60	-30	-20	-12	-6	0	
generator mV rms	na	6	19	49	95	190	
calculated level in dB	na	-30.0	-20.0	-11.8	-6.0	0	
PB level dB(analog)	na	30	20	12	6	0	
reference acoustic level		94dB SPL				120dB SPL	