

# INTRO

Before looking at the chart below, it's important we discuss a few key topics to make sure you understand what you're looking at. This industry is very confusing and full of misinformation, and also irrelevant information. Some of it is deliberate, some of it is not. Many of the devices on the market right now have features that simply were not used by Dr. Rife. (magnetic fields, quantum fields, various wave formats, etc..) Furthermore, many of these devices have OMITTED key features that Dr. Rife preferred.

It's important to note: the GB4000 is designed to ***precisely replicate the methods, frequency formats, and frequencies used by Dr. Royal Rife***, and nothing else. (and his associates Phillip Hoyland, John Crane and John Marsh of course. And later Dr. Hulda Clark and others.)

**When shopping frequency generators, there are 4 primary things to look for: power, frequency range, delivery method, and time saving features.** There are several other features that make the GB stand out, but we'll get to those later. In order to understand the charts below, it is important to recap a few definitions to make sure we're all on the same page and understand what we're looking at

(Comments in red are the *personal opinion of the author*)

## POWER

Almost all 'Rife Machine' makers claim theirs is "the strongest". Obviously, this is not possible. How can they ALL be the strongest? The basic problem here is that "Power" in this case ***should be measured in Watts***. Not Volts, and not Amperage like many of them tout. (some even say they're the 'strongest', yet won't provide us with specifications!) These are Radio and Audio frequencies being produced. A radio station doesn't brag about their volts or amperage. They brag about their Watts, because this indicates how FAR the signal will travel. The higher the watts, the stronger the signal, the farther it will travel. In our case, this indicates how deeply penetrating it can be when applied to the body. Remember, the goal is to create a high resonance frequency that can reach deep tissue areas.

Here are a few simple things to keep in mind. Electrical 'power' is the product of voltage (potential energy) and current (amperage), and it's measured in watts.

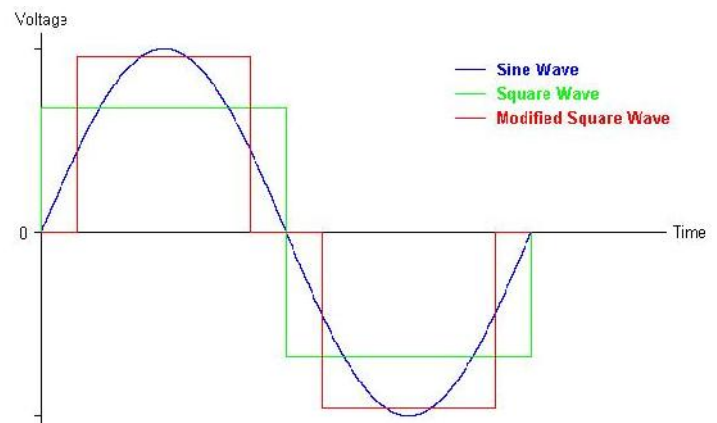
**Watts = Voltage x Amps.** Total amount of power Output, or Consumption. (OUTPUT should be the information you want in the case of these frequency generators!)

Ex. You could have a light bulb operating at 50 volts and 2 amps of current... 50 volts x 2 amps = 100 watts

Ex. You could have another light bulb operating at 25 volts and 4 amps of current. 25 volts x 4 amps = 100 watts

Even though the light bulbs have slightly different construction and are hooked to different energy supplies, both would be burning 100 watts of power, and both would have the same brightness.

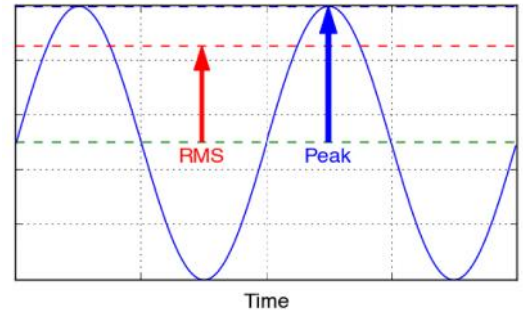
Voltage is like the pressure in a garden hose with a hand operated spray nozzle at the end. It basically represents the maximum potential for energy spikes. In our case, the 'rise and fall' of the radio wave itself. *A higher spike creates more vibrational resonance, which is the goal here. So, IT IS ACCURATE TO SAY THAT 'THE HIGHER THE VOLTAGE, THE BETTER IT IS'. This is more about the quality of the wave... not the power output of the signal.*



Amperage is like the flow rate, or current, in a garden hose (ex. Gallons-per-minute) When the nozzle is turned off, there's still pressurized water in the hose, but there's no flow. When a light is turned off the electrons are still in the wire, but they aren't flowing -- there's no current.

**Here's another sales tactic about Power that is misleading...** Most manufacturers that actually do list their power in Watts as PEAK power, when in fact, a more true rating called RMS (Root Mean Square) is more important. As a basic rule of thumb, **RMS power is considered true power** and all other ratings are relatively mute when making comparisons. (This is true for stereo audio equipment and frequency generators alike.)

**RMS Power Rating:** The RMS power rating is the measure of **continuous power that an amplifier can output, with NO LOSS of signal integrity**. RMS power is derived from Root Mean Square, which is a statistical measurement of the magnitude of a varying quantity and is applied to voltage or current. Yeah... you can disregard that and just concentrate on the fact that RMS power should be what you use to compare any similar products.



**Peak, Max, or Dynamic Power Rating:** No matter how you word it, this form of power rating refers to the maximum amount of power an electronic device can handle, or output, **in a brief instant without damage**. Often times this rating could be reached with a big bass hit or a very loud note in a song for example. We do not recommend that you use the peak, max or dynamic power rating when configuring your system because it does not reflect the product's capability under everyday use. Manufacturers still advertise peak power because most consumers are unaware of its meaning and believe that larger numbers are better. **Peak power is used to make a product seem more powerful than it actually is**, sometimes even five or six times more powerful than the RMS rating.

Play it safe and ask for the true RMS power ratings when comparing electronic devices.

## **FREQUENCY RANGE** (frequency = cycles per second, measured in 'Hertz', or Hz)

"Frequency range" refers to how HIGH the instrument can go. The GB goes to 20,000,000Hz (20MHz). That's 20,000,000 cycles per second. There is a reason it goes that high. Simply put, **Dr. Rife's original documented cancer sets ran in the millions of Hertz**. The highest known frequency he used was over 17,000,000 Hertz. This is precisely why the GB goes that high, so you can experiment with ALL of the original Rife sets for cancer. Dr. Hulda Clark's frequencies are mostly in the hundreds of thousands of Hertz range (KHz). Many devices only go to 10,000 Hz. Or 21,275 Hz. Or 1,000,000Hz. (Why get a generator that is limited, when you can get one that is not?)

**Here's a popular sales tactic that is misleading...** some manufactures use "Resolution" to confuse you about their frequency range. (JW Labs/True Rife) The device only goes to 10,000Hz, but they tell you it produces 100,000,000 frequencies. Sounds great! Until you realize it's a meaningless feature.

## **What is Resolution?**

Resolution is defined as "the act or process of separating into parts". For example, if you take a standard ruler, the divisions are in millimeters and centimeters, and the best "resolution" is 1 millimeter. In the case of Rife machines, this refers to the 'number of decimals' the generator can create.



Ex. A frequency of 100.1234 has a higher resolution than 100.1

**The FACT is that this kind of resolution is NOT necessary and can even be detrimental to achieving results!**

This trick used by one or competitors. The device only goes UP to 10,000Hz. (lowest range on the market) However, the resolution is to the 1,000th power, so they are counting every little 1,000<sup>th</sup> increment! (100.1234, 100.1235, 100.1236, etc...)

WHY IS THIS NOT NECESSARY? First, Dr. Rife and Dr. Clark both show us that the organisms we want to affect ARE NOT THIS PRECISE. They generally have a simple base frequency like 1,101Hz. Or 343,456Hz. Or 1,604,200Hz, etc.... In fact, the MOST an organ, or unwanted organism has been found only goes to the 100th place. Like the Schuman Frequency of 7.83 Hz. Second, Rife and Clark show us these organisms don't remain that accurate or constant! (Ex. A parasite may resonate at 12,222 Hz on a detection device. However, in REALITY, it may be 'hovering' there. (Example: maybe from 12,200 Hz – 12,300 Hz) **This is precisely why an Analog signal is preferred!** Analog signals have a tiny float in them. NO NEED to be digitally accurate to .0001! It is IRRELEVANT and should not be used as a 'sales pitch'.

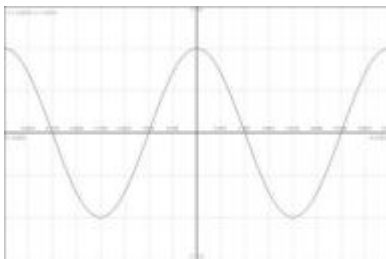
(The 'Channel Sweep' button on the GB allows you to 'hover' your frequencies like this if you want.)

## Audio Frequencies vs. Radio Frequencies

In a nutshell, **Radio Frequencies (RFs) are higher than Audio Frequencies.** (40,000Hz and BELOW is generally considered the Audio Range. Above 40,000Hz, you move into the RF Range.) The science indicates more power and more cycles per second (higher frequency) allows the signal to penetrate tissue more deeply. Many of the first known frequencies from the 20's and 30's were in the *millions* of hertz range. Much of Dr. Clark's frequencies are in the 100Khz+ range.

## Sine Wave vs Square Wave

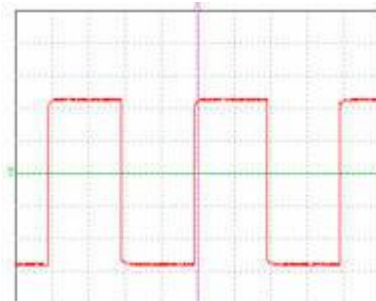
Sample Sine Wave



Signal gently rises and falls. Can vary the rate of this rise and fall (frequency), top and bottom limits (volts), duration, (duty cycle), etc...

In the Radio frequency range, sine wave is generally used.

Sample Square Wave



Signal sharply rises and falls. Can vary the rate of this rise and fall (frequency), top and bottom limits (volts), duration, (duty cycle), etc...

In the lower Audio range, a square wave pattern is *always* used. (below 40,000hz)

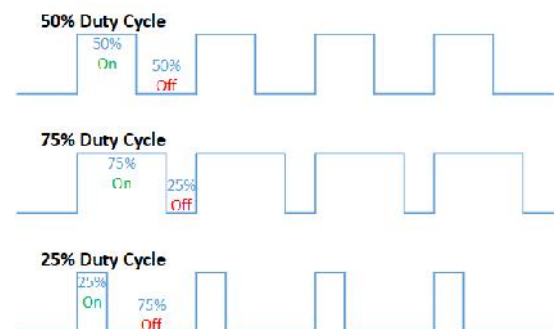
**Side Note:** You can feel the lower Audio frequencies! Like electrical ticking. You do NOT feel the higher RF frequencies the same way. These signals pass through cells easier.

## What is a Duty Cycle?

"In electronics, duty cycle is the percentage of the ratio of pulse duration, or pulse width (PW) to the total period (T) of the waveform. **It is generally used to represent time duration of a pulse when it is high** (1). ...."

[https://en.wikipedia.org/wiki/Duty\\_cycle](https://en.wikipedia.org/wiki/Duty_cycle)

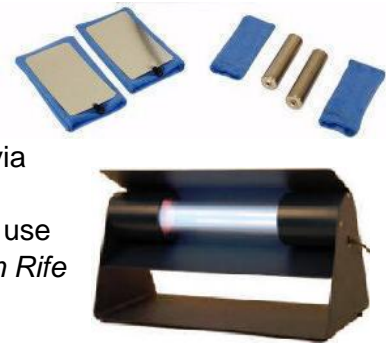
Back in the 1950s when Crane and Marsh took an off-the-shelf function generator and created their first contact pad machine, this instrument only



had the capability to use a 50% duty cycle. (The ray tube instrument also only used a 50% duty cycle.) A 50% duty cycle means that the frequency is ON 50% of the time and OFF 50% of the time. However, many people were reporting on the Rife lists that they got better results using a 90% duty cycle on the low audio frequencies. This because a **90% duty cycle has 80% more resonance than a 50% duty cycle**. Coordinative resonance was the basis of Dr. Rife's work. Why should a person be limited to only a 50% duty cycle, when you can have one that is variable? We believe in having more features not less.

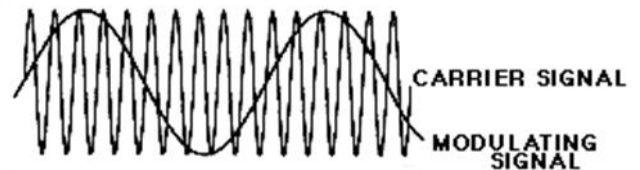
## Delivering the Signal

Several types of modern day frequency generators exist. Some use Direct contact to the body using hand-held metal or crystal cylinders and/or 'contact pads' connected via wires to the generator. Others use high voltage and wattage to energize gas filled plasma/argon lamps to Broadcast the signal, while the individual sits nearby. Others use magnetic fields to deliver help deliver signal. Still others even *claim to be able to "run Rife frequencies" through a computer and speakers!* (beware)



## What is a Carrier Wave?

"In telecommunications, a carrier wave, carrier signal, or just carrier, **is a waveform that is modulated (modified) with an information bearing signal for the purpose of conveying information.** [1] (Like a song to your radio. *In our case, the low audio frequencies.*) This carrier wave usually has a much higher frequency than the input signal does. The purpose of the carrier is to transmit the information through space as an electromagnetic wave (as in radio communication), .... The term originated in radio communication, where the carrier wave creates the radio waves which carry the information (modulation) through the air from the transmitter to the receiver."



[https://en.wikipedia.org/wiki/Carrier\\_wave](https://en.wikipedia.org/wiki/Carrier_wave)

## Why A RF Carrier Wave?

**The use of a carrier frequency is the main difference between our generator and nearly all other pad instruments.** All of the ray tube instruments built from 1936 to the 1950s used an RF (Radio Frequency) carrier frequency with low audio frequencies. Low audio frequencies are like the human voice, which cannot travel more than a short distance. A carrier frequency was used so that the frequencies could be broadcast through the air, by use of a ray tube, and also made it so the frequencies could fully penetrate the body, including the bone. ***Without this carrier frequency, the audio frequencies may not go through all the cells of the body.***

In 1936, Philip Hoyland built the first audio frequency instrument. In these early designs, a radio frequency was also used to "carry" a newer set of lower audio frequencies into the body... ***and just as important, to create 'sideband harmonics'*** (extra frequencies or vibrations). This was a crucial feature of Rife & Hoyland's devices that worked so well. In the 1950s, Rife's research partners John Crane and John Marsh revived and loosely replicated this lower audio frequency instrument, using simple off-the-shelf technology of the day. (The RPG1000) *From this time on, Dr. Rife's original high frequencies were no longer used in any of the equipment, nor were his RF carrier waves used.* (until the GB4000. And now a couple others) Without the RF carrier frequency, they could not get the same harmonics and penetration as the earlier ray tube instruments. Most of today's modern frequency generators are patterned after these early 50's style instruments, that do not use a carrier.

(side note: on the GB, you can simply turn the carrier OFF if you like. Then it will run just like all other basic devices.)

## Running Multiple Frequencies – Huge Time Saving Feature

Some manufacturers of other instruments claim that using more than one frequency at a time will cause too much conflict with the other frequencies, or 'cancel each other out', and make it so none of the frequencies work.

There is NO scientific proof that running more than one frequency at a time conflicts with each other. Dr. Rife never found this to be the case. Dr. Rife ran many frequencies at the same time and found that there were not enough conflicts to make it so the frequencies did not work. We will now quote Dr. Rife and give proof that he not only used many frequencies simultaneously, but found that not only did they work but they worked very well. We will also show that Dr. Rife, John Crane and John Marsh were building an instrument in the 1950s that would output 10 frequencies at the same time in order to save the doctors using the equipment both time and money. Here is Dr. Rife's statement:

RIFE: *"We found the frequency of the virus, we found the frequency of the rod, which we had for years of course. But if we use the two of them simultaneously over the same carrier wave, the patient gets well and the Guinea pig gets well, but if you use one or either individually you either kill the patient or you don't do nothing".* (Marsh collection, Rife audio CDs.... [www.rifevideos.com](http://www.rifevideos.com))

In Dr. Rife's 1936 lab film, Dr. Rife showed that he could run 5 frequencies simultaneously. Why would he demonstrate this capability if he had not tested it? Later, in a letter sent to Dr. Robert P. Stafford on November 14, 1959 John Crane told Dr. Stafford about the new instrument they were building that would run 10 frequencies simultaneously:

CRANE: *"We are building various pieces of test equipment for the new Frequency Instrument and as planned now – it will only have one switch to turn it off and on. Everything else will be accomplished internally – all frequencies will be crystal controlled with 10 frequencies riding the same carrier wave simultaneously. 100% modulation is our goal which is the point of maximum transmission of energy".*

It was this well documented information that caused us to build this generator so it could output up to 8 frequencies simultaneously. If we could have output more we would have, but this was the limit of the processor that we used. As you can see, the reason other manufacturers claim that the frequencies will interfere with each other is because their instruments can only output one frequency at a time.

Some unknowledgeable people claim and incorrectly believe that running multiple frequencies simultaneously causes the purity of each individual waveform to be lost as well as creating the possibility of canceling out or creating other frequencies. They claim it *"would be like an orchestra where every instrument plays a different tune creating an incredible cacophony taking away from the clarity of the signal."* The definition of cacophony is *"a discordant and meaningless mixture of sounds."*

A meaningless mixture of sounds only matters if we are wanting to listen to music, not when we run specific frequencies that are not even heard by the ear. Just because each individual instrument in an orchestra plays a different tune does not mean the other tunes are canceled out. Even though frequencies combined together may seem to lose their individual clarity, all the components of each frequency are still present and it is the power output and high bandwidth capability that makes this possible.

Think of an orchestra playing many different instruments. Though they combine together to make beautiful music, each instrument's full sound components are still present and nothing is lost, even if you add additional instruments to the orchestra. ***In order for a frequency to be 'canceled out', the same frequency must be introduced 180 degrees out of phase. Since the GB-4000 does not output the same frequency 180 degrees out of phase, the canceling of a frequency is not possible.***

Side note: The GB400 also allows you run frequencies 1 at time if you wish. As we've said many times, the GB4000 does it all. Why limit yourself?



## What is Gating?

Gating is an advanced "pulsing" feature that Dr. Rife instruments used to produce high potential spikes in the frequencies. ***Gating is the turning on and off of a frequency.*** 'It pulses the pulse.' EX: if you run a frequency of 10,000Hz, that gets run as is. If you use Gating set at 100Hz, it will pulse the 10,000hz 100 times a second. Gating is believed to induce the effect of entrainment, which is defined as "the tendency for two oscillating bodies to lock into phase so that they vibrate in harmony. (That's the whole goal here... to induce entrainment!)

(Side Note: You don't have to mess with gating if you don't want to. MOST devices do not even offer this feature!)

## What is a Sweep?

***A Sweep allows you to run ALL frequencies in a specified range of your choosing, one frequency at a time.*** The instrument sweeps from your beginning frequency to your ending frequency, then back and forth, hitting all the frequencies in between those 2 points. Example: Dr. Clark tells us she found all Influenza live in a frequency range from 313.15KHz (313,150Hz) up to 323.9KHz (323,900Hz) If you don't know what specific strain you have, you can 'run a sweep' from 313,000Hz – 324,000Hz, covering ALL the flu frequencies. Sweeps generally are run for 30, 60, 120 minutes or longer. The larger the sweep range, the longer the sweep run time.

## What is Channel Sweep?

***The Channel Sweep feature (sometimes called a 'Wobble' feature) let's you hover your frequencies above and below the target frequency(s) by an amount you dictate.*** As mentioned above in the Resolution section, Dr. Rife and Dr. Clark show us these organisms don't always remain constant. They can sometimes shift frequencies very slightly. Example: A parasite may resonate at 10,500Hz on a detection device. However; in REALITY, it may be 'hovering' there. (maybe from 10,475Hz – 10,525Hz ??) In this example, I personally would run 10,500Hz for 5 minutes. Then I would run it again with Channel Sweep turned on, set at 200Hz. This means it goes ABOVE the target frequency by 100Hz, and BELOW the target frequency by 100Hz. So it will 'hover' between 10,400 – 10,600Hz, hitting all the frequencies.

This helps to make sure we're 'reaching out' to hit the immediate frequencies around the target!

## Analog vs Digital Electronics

Electronic devices can be divided into two basic categories: analog and digital.

Analog refers to circuits in which quantities such as ***voltage or current vary at a continuous rate. Due to this variance, the resulting output will also vary slightly.*** In regard to Rife devices, the signal being produced should be analog due to the same fact we just discussed above in the Channel Sweep section. (Organisms can be 'hovering' very closely to their primary frequency. Analog signals float the same way. Very slightly.)

Digital refers to circuits in which quantities such as ***voltage or current do NOT vary.*** Digital circuits are more accurate because they count with complete precision. In digital electronics, quantities are counted rather than measured. There's an important distinction between counting and measuring. When you count something, you get an exact result. When you measure something, you get an approximate result.

You can precisely count the number of jelly beans in a jar, for example. But if you weigh the jar by putting it on an analog scale, your reading may be a bit imprecise, because you can't always judge the exact position of the needle. Say that the needle on the scale is about halfway between 4 pounds and 5 pounds. Does the jar weigh 4.5 pounds or 4.6 pounds? You can't tell for sure, so you settle for approximately 4.5 pounds.