

WHAT COMBINED TECHNOLOGY DID THE ORIGINAL MACHINES USE?

THEY USED A FREQUENCY GENERATOR WITH THE FULL FREQUENCY RANGE

An 18 million Hertz frequency generator will output all of the original frequencies that were used. A high-quality frequency generator will output accurate frequencies. It should be programmable and capable of holding many programmed channels. This will make it possible for the user to program a channel only once and then those frequencies can be run over and over again without the need of reprogramming the frequencies every time the instrument is used.



THEY USED A RADIO "CARRIER" FREQUENCY IN THE 3MHz RANGE

All of the original machines used a "carrier" frequency. The 1936 machine used a "carrier" frequency in the 3 million Hertz range. A "carrier" frequency can be mixed or modulated with many different frequencies. The original instruments were used within a few inches to 2 feet for maximum power transfer. They also had a 30 foot diameter or greater useful range so the user could move around freely.



THEY USED A PLASMA FILLED TUBE AS THE OUTPUT ANTENNA

The glass or Pyrex plasma tube is a noble gas antenna or emitter. Metal antennas work best when tuned to the frequency they emit. A plasma tube, unlike a metal antenna, has the capability of outputting frequencies over a very broad range without the need of being tuned. Unlike metal antenna's plasma tubes also make it so the user can safely touch them without any concerns.





HOW DID THE ORIGINAL MACHINES WORK? FREQUENCY RANGE

The most important information you need to know about any instrument you are considering purchasing is the frequency range of that instrument. Most people do not understand that the 63 original frequencies that were tested and used ranged from the audio range (1 to about 20,000 Hertz) to 17,033,000 Hertz. These frequencies were found over a 30 year period with the use of 4 machines. The number 2 machine became the number 3 machine when its power output was increased to 50 watts output. The actual range of the frequencies that were written down on laboratory notes and documents ranged from 15,779 Hertz to 17,033,000 Hertz. What many consider to be the most important frequency range of the written down frequencies covers from 15,799 Hertz to 1,607,450 Hertz.

The documents show that only 2 of the 63 original frequencies were in the audio range and 61 are in the RF or radio frequency range. Some people are under the incorrect assumption that you can separate radio frequencies from RF en-

ergy and then run them in an instrument. But RF means Radio Frequency so it is impossible to separate RF from a radio frequency. The range the frequency is in determines if it is a radio frequency or an audio frequency. This is important to understand because there are EM plasma tube instruments which use the Electro-Magnetic method to emit or output frequencies from their plasma tubes. These instruments are only capable of outputting audio frequencies. The EM method and RF method are like apples and oranges. They are two completely different methods of lighting the plasma tube. The EM method creates a high voltage electro-magnetic field, which some people are very concerned about, to light the plasma tube. The original method uses RF to light the plasma tube. This method has a very low electro-magnetic field which most people prefer to use.

Many people purchase these EM type plasma tube instruments only to find out later the instrument they purchased can only output 2 of the 63





original frequencies because 61 of them are RF frequencies and 2 are audio frequencies. Because these EM plasma tube instruments are limited to audio frequencies no higher than about 20,000 Hertz this means their frequency range is at least 119,200 Hertz lower than the lowest original radio frequency of 139,200 Hertz. This is why the frequency range of an instrument is very important to understand or you will make the mistake of purchasing the wrong machine. The original machines were all RF instruments.

There are many RF instruments sold today that claim they are genuine machines but they can only output a few of the original frequencies. This becomes very confusing for people who are looking for an instrument. If a frequency instrument cannot output even the most important range of frequencies from 139,200 Hertz to 1,607,450 Hertz then you are not getting what you really want. Many of these instruments that cannot output this range try to get around this important fact by claiming they can produce all of these RF frequencies through audio frequency square wave harmonics.

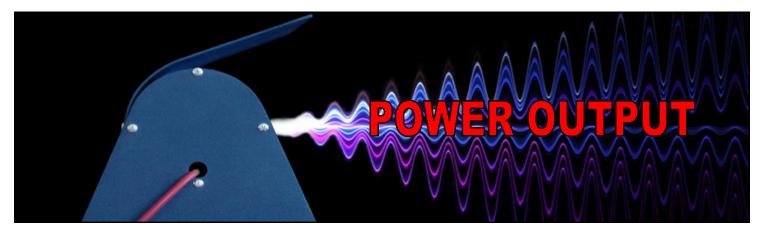
Technically they are correct but in the real world the power in harmonics drops off so quickly this doesn't work as well as they claim. This is because their instrument's frequency range is so low, including their power output, that it makes it more wishful thinking than reality. If an instrument has sufficient power and it can output the actual

frequency range you want, then you will not have to waste power in harmonics hoping to get the frequency you want through audio frequency square wave harmonics.

There is a plasma tube instrument that claims it "is the real deal." But it can only output through its plasma tube frequencies up to 180,000 Hertz at 100% modulation and up to 400,000 Hertz at only 5% modulation. This means it can only output 10 of 63 original frequencies which are within its frequency range capability and some of them with only 5% power.

How can they claim it is the "real deal" when it cannot output all of the original frequencies? They, like others, try to get around this important fact by claiming that their instrument can produce the original frequencies through the questionable audio frequency square wave harmonic method.

The majority of the machines on the market today fall into this category by making the same square wave harmonics claims. The GB-4000, SR-4 1 to 15 watt amplifier and the M.O.P.A. cover both frequency ranges without needing to use audio square wave harmonics. We do use square wave harmonics like the original machines did but not in trying to produce the original frequencies using that method. We built our instrument with the full range capability. This is why we can state our instruments cover the full frequency range of all 63 original frequencies and have the Full Range Resonant Frequency



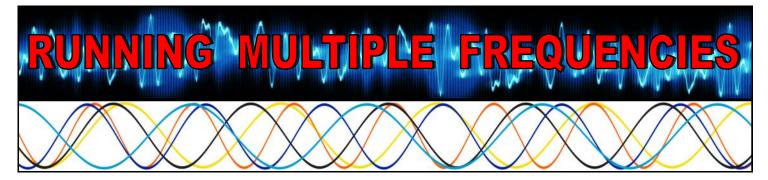
When the first original machine was developed back in the early 1920s it had an output of 8 to 10 watts. By the late 1920s the power output was increased to 50 watts. This 50 watt output was then considered the minimum power level needed for any machine which used a plasma tube. The next machine built in 1935 was increased to 500 watts output, but when the fifth machine was built in 1936 the power output was reduced back to 75 watts.

The 1936 number 5 machine was the only instrument that was ever sold or used by the public. It was sold in 1938 and 1939 by the Beam Ray Corporation. The 1950s model was an updated 1936 model which was limited to a 50 watt output, but it was capable of a much greater power output. The plasma tube was always used within a few inches to 24 inches of the targeted area for maximum power absorption. But when the original 1936 machine was tested with its 75 watt output it had a range of well over a 30 foot radius. This fact is known because the 1936 machine, when tested, wiped out every specimen in the laboratory. This laboratory was over 50 feet long. Also the laboratory instructions for the machines stated that all control specimens needed to be kept at least 80 feet from the plasma ray tube so they would not be affected by the frequencies. We point out this fact because some

companies today claim that their instruments have "the largest effective range of any plasma device" on the market. They make this claim because they have noticed effects over a 30 foot radius from their plasma tube. They incorrectly attribute this 30 foot distance to "Resonant Capacitive Coupling" due to their use of a 27 million Hertz RF "carrier" frequency. These claims are easily proven incorrect because the original 1936 machine used a "carrier" frequency in the 3 million Hertz range and it had the same effect at a 30 foot radius. Because the original 1936 number 5 machine documents clearly verify this 30 foot or greater radius range then this proves these claims are nothing more than just sales hype.

The GB-4000 and M.O.P.A. have a variable power output from 20 watts to a maximum power output of 190 watts. This makes it so our power output is variable and the user can choose the power level they would like to use.

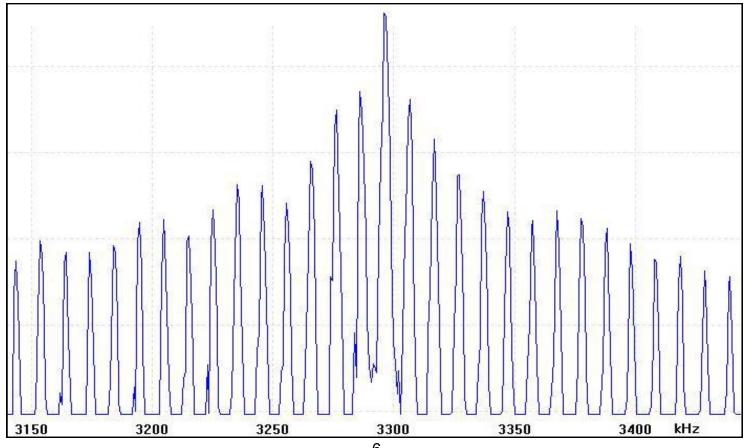
We have a frequency range from 1 Hertz to 20 million Hertz with all of our instruments. This change was made May 1, 2015 but many of our competitors, even after 3½ years, are still using our old M.O.P.A. plasma tube specifications of only 40,000 Hertz in their comparisons. It appears they are doing this because it is hard to compete with our current 20 million Hertz frequency range capability.

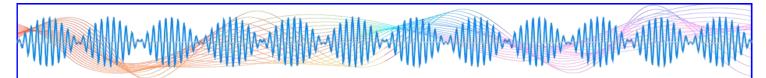


The GB-4000 is capable of outputting from 2 to 8 audio frequencies simultaneously. It can also output 2 radio frequencies simultaneously including the RF "carrier" frequency. The original machines from the number 2 to the number 4 had the capability of outputting 2 radio frequencies plus the RF "carrier" frequency including an audio "Gate" or pulsing frequency. The original number 5 machine was changed so it could output an audio frequency range up to 42,500 Hertz which could be modulated onto a fixed RF "carrier" frequency in the 3 million Hertz range. The combination of using audio frequencies with the RF

"carrier" frequency produced harmonic sideband frequencies. The original number 5 machine could produce from 20 to over 100 sideband frequencies simultaneously depending on the audio frequency used.

Below is a spectrum analysis graph of an original number 5 machine showing these harmonic sideband frequencies. The GB-4000, SR-4 and M.O.P.A. have this same capability. Using this method the number 5 instrument produced higher harmonic frequencies of the 139,200 Hertz to the 1,607,450 Hertz range. These higher harmonic frequencies were in the 3,000,000 Hertz





range. These higher harmonic frequencies were not square wave harmonic frequencies but were created using harmonic sideband frequencies. In our GB-4000, SR-4 and M.O.P.A. we have included all of the methods used in the original machines so the user can use any of these original methods. It is stated in the original documents that the number 5 worked better than any of the previous 4 machines. Even though the original number 5 had this multiple harmonic sideband capability when it was built in 1936, later in the 1950s they updated the number 5 machine so it could run and output 10 audio frequencies simultaneously. They certainly would not have done this if it would have negatively affected how well the original machine worked. This was done for the time saving benefit it gave to the user. Today many programs that are used may have from 5 to over thirty frequencies and each frequency is run for 3 to 5 minutes. This could take up a lot of time which most people do not have. Consider this fact, if you had 8 frequencies to run for 3 minutes each it would take 24 minutes to run all 8 frequencies. With our instruments it would only take 3 minutes, not 24 minutes. It is easy to see why in the 1950s they added this time saving multiple audio frequency capability.

Even though the original number 5 machine, which worked better than any of the previous 4 machines, successfully used this multiple harmonic sideband and audio frequency method this

should have been sufficient proof these methods worked, but this is not the case. We have been successfully using these methods for over 18 years now, running up to 8 audio frequencies simultaneously. Some competitors speak negatively about running multiple audio frequencies trying to convince potential customers it doesn't work. They claim two different things. We quote: "it reduces the power of the frequencies so they will not work" or it creates, "very inefficient "noise" like frequencies...like an orchestra where every instrument plays a different tune creating an incredible cacophony taking away from the clarity of the signal."

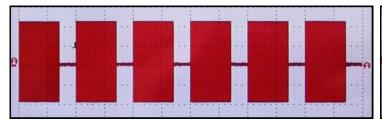
The original number 5 machine had a power output of 75 watts and the use of these methods did not affect the power of the frequencies or how well those frequencies worked. M.O.P.A. has a maximum power output of 190 watts which is over 2 times more powerful than the original machine, so power in the frequencies could never be a problem. Clarity of frequencies could not be a problem either because they did not have this problem with the original number 5 machine. Today communication technology is capable of sending hundreds of frequencies simultaneously over copper or fiber optical transmission lines without the loss of "clarity with noise like frequencies." These claims are nothing more than a Red Herring. "A Red Herring is something that misleads or distracts from a relevant or im-



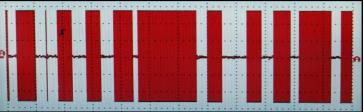
portant issue that leads the readers towards a false conclusion." Let us consider the square wave waveform which was produced by the original number 5 machine. It produces infinite harmonics and if we want "clarity of the signal" and no "noise" we certainly would not want to use this waveform. But this would mean that these instruments would not work very well and no one would purchase them. Here is the definition of a square wave: "Square waves are equivalent to a sine wave at the same fundamental frequency

wave harmonics at decreasing amplitudes." Below are two oscilloscope graphs of the GB-4000.

The one on the left shows a single square wave audio frequency running. The one on the right shows 8 running simultaneously. Notice there is no loss of clarity or noise using the original method developed in the 1930s/1950s. For all of the documented information about the original machines and running multiple frequencies go to www.rifevideos.com. They have a Free 258 page report that covers all of the machines. Chapters 5 through 12 covers this information.



added to an infinite series of odd-multiple sine-



HOW WE PRODUCE FREQUENCIES FROM 1 TO 20,000,000 HERTZ

We have tried to stay true to the original machine concepts while using modern technology. The GB-4000 can run 1 single frequency at a time or from 2 to 8 individual audio frequencies simultaneously up to 40,000 Hertz. In order to output up to 8 individual audio frequencies simultaneously we use 1 Digital Synthesizing Processor (or DSP) and 2 Direct Digital Synthesizers (or DDS) for creating arbitrary waveforms from a single, fixed-frequency reference clock. The GB-4000 also uses a fixed crystal oscillator which is set at 3.1 MHz for our RF "carrier" frequency. The M.O.P.A. has its own variable "carrier" frequency that covers a range from about 2,200,000

Hertz to 3,800,000 Hertz. This gives a much greater flexibility so the user has the option to use various "carrier" frequencies. The Digital Synthesizing Processor is capable of outputting 1 to 8 individual frequencies simultaneously up to 40,000 Hertz. These frequencies are then summed together so all of these frequencies are at the same power level. They are then converted to analog using a Digital-to-Analog Converter (DAC) and output from the GB-4000 into the M.O.P.A. or SR-4 15 watt amplifier. The 2 arbitrary Direct Digital Synthesizers are used to output up to 2 frequencies simultaneously from 40,000 Hertz to 20 million Hertz.

THE MOST VERSATILE FREQUENCY GENERATOR

THE 63-4000

3.7 Watts Digital/Analog Sweep Function Generator with 1/100th Hertz Resolution

"Can run 2 to 8 frequencies at once. That's just one of the "GB-4000" differences!"

The "GB-4000" is one of the most versatile 20 Megahertz sweep function generators ever built with the average person in mind. It incorporates the very best of function generator technology with the most advanced electronics for a truly superior design, yet it is so easy to use that anyone can operate it with its multi-function keypad.

The "GB-4000"s frequencies are precise with a .001 resolution and guaranteed not to drift. Just enter a frequency to run and that is the exact frequency you will get.

The "GB-4000" has 2,000 programmable channels which can hold up to 48 frequencies each. These channels can be programmed in single frequency mode or multiple frequency mode. Single mode allows you to run the frequencies one at a time and multiple mode allows you to run up to 8 audio frequencies simultaneously saving you time. When programmed it only takes three easy steps to run any of the 2,000 programmable channels.

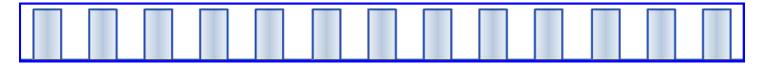


Step 1: Press the auto-channel button using the keypad.

Step 2: Using the key pad enter the autochannel number you want to use.

Step 3: Using the keypad press the run button. Then sit back and let the "GB-4000" automatically run all the frequencies which have been programmed into the autochannel which you want to use.

The "GB-4000" can easily be custom programmed using the key pad. For those who like computers it comes with software that allows you to custom program it from your computer also. The "GB-4000 also has an optional channel sweep feature with a 2



to 20,000 Hertz sweep capability for any channel or frequency that may be run.

The "GB-4000" also has the ability to sweep up or down through hundreds or even millions of frequencies over a preselected period of time. The advantage to this is you can run through many frequencies one right after another.

Most generators only have one output circuit, but the GB-4000 has two for greater flexibility in running frequencies. The "Audio Mode" has a 0.75 watt power output for audio and RF frequencies from 1 Hertz to 400,000 Hertz used without an RF "carrier" frequency.

The other circuit, called "RF Mode" is for audio frequencies used with an RF "carrier" frequency including all higher RF frequencies up to 20 million Hertz. It has a 3.7 watt power output which means it not only has the power to run one frequency at a time but it is the only frequency generator, like the original 1950's instruments, that can run up to 8 frequencies simultaneously up to 40,000 Hertz with sufficient power for all 8 frequencies. This makes it up to 8 times faster to use than any other frequency generator on the market today.

Nobody wants to spend 24 minutes running 8 frequencies when you can spend only 3 minutes running them. Like most of us your time is valuable to you. Why waste your time with other instruments that can only run 1 frequency at a time instead of up to 8 frequencies at one time.?

The "GB-4000" also has the capability to run 2 frequencies simultaneously from 1 Hertz up to 20 million Hertz for those who want to do broad range converging sweeps.

The "GB-4000" has both sine and square wave capabilities. Square wave has a 10 to 100% duty cycle capability.

The original 1930s/1950s instruments only used three waveforms called sine, damped and square wave. The damped waveform, which only has 11% power output, was replaced by the square wave waveform because it is the most powerful. This waveform is capable of 100% power output. All other waveforms such as triangle and trapezoid, ramp up and ramp down are just sales hype and do not have the power or harmonics that the square wave has. Because of this fact they were never used in the original instruments. This is the reason why we do not use them either even though we could.

The "GB-4000" has a 1 to 5000 Hertz gating or pulsing feature with a 10 to 90% duty cycle capability.

Many other frequency generators only have two connectors but the "GB-4000" has four, doubling its capability.

Each generator is a small unit weighing only two pounds. It can be run 24/7 without any concern of overheating.

If you're one of the many people wanting to own a function generator with the capabilities of the "GB-4000" then this is the frequency generator you should choose.

"GB-4000" FEATURES

20,000,000 FREQUENCIES FROM 1 "DSP" AND 2 ARBITRARY WAVEFORM "DDS's" FOR PERFECT ACCURACY

60-DAY NO RISK MONEY-BACK GUARANTEE TWO-YEAR WARRANTY ON PARTS AND LABOR

HAS A 3.1 MHz RF CARRIER FREQUENCY WHICH CREATES MANY SIDEBAND FREQUENCIES

LCD DISPLAYS FREQUENCY YOU ARE USING LCD DISPLAYS AMOUNT
OF TIME SELECTED WHEN
CHANNEL IS RUNNING

"SQUARE/SINE BUTTON"
ALLOWS YOU TO CHANGE FROM
SQUARE TO SINE WAVE MODE

SMALL LIGHT WEIGHT DESIGN ONLY 2 POUNDS

"#4 BUTTON" MUTES THE BEEPER "RF INDICATOR LIGHT" LIGHTS WHEN RUNNING IN RF MODE

HAS FOUR CONNEC-TIONS DOUBLING ITS CAPABILITY LCD DISPLAYS THE AUTO CHANNEL YOU ARE USING

CAN RUN FROM 2 TO 8 FREQUENCIES SIMULTANEOUSLY



"AUTO CHANNEL BUTTON"
ALLOWS YOU TO RUN ANY OF
THE 2000 CUSTOM PROGRAMABLE AUTO CHANNELS OF
WHICH 875 ARE PROGRAMMED

"#5 BUTTON"
ALLOWS YOU TO PAUSE
A PROGRAM

"RF/AUDIO BUTTON" ALLOWS YOU TO CHANGE FROM RF TO AUDIO MODE

"CUSTOM BUTTON"
ALLOWS YOU TO CREATE
UP TO 2000 CUSTOM
PROGRAMMABLE CHANNELS

"SWEEP BUTTON"
ALLOWS YOU TO SWEEP
THROUGH 1 TO 20,000,000
FREQUENCIES

"#6 BUTTON"
ALLOWS YOU TO SKIP A
FREQUENCY OR GROUP
OF FREQUENCIES

"OUTPUT KNOB" MAKES IT EASY TO CONTROL THE POWER LEVEL

"CHANNEL SWEEP " ALLOWS UP TO A 20,000 HERTZ FREQUENCY SWEEP IN AUTO CHANNELS

20 Million Frequencies

30 MHz 1-15 Watt Linear Amplifier

5R-4Amplifier

Now increased to 15 Watts power output.
4 hookups - Built to work exclusively with the "GB-4000"



All though the "GB-4000" works great alone, many people have asked if it was possible to increase the 3.7 watt power output of the "GB-4000."

With this in mind we developed the "SR-4" amplifier with a 1 to 15 watts variable power output capability controlled by the "GB-4000." It can be run 24/7 without any concern of overheating.

Function generators cannot put out 15 watts but a separate connectable amplifier can. To get the power output of the "SR-4" amplifier all you have to do is connect the "GB-4000" to it with a BNC cable. The amplifier then amplifies the "GB-4000's" frequencies from 1 to 15 watts output.

One of the great features of the "SR-4" is more hookups. The "SR-4" now has four sets of hookups for multiple use. All of the positive out hookups are connected together and all of the negative out hookups are connect together so it does not matter which one you use.

If you are considering purchasing the "GB-4000" and want to have the advantages of the "SR-4" 1 to 15 watt power output amplifier then all you have to do is order it when you purchase the "GB-4000."

ModPAL Amplifier

For those who want more Power! "M.O.P.A." 190 Watts - Works exclusively with the "GB-4000"



Please note: The plasma tube is sold by a separate company. But we designed and tested it so it is matched to the "M.O.P.A." circuit for the greatest power output. It is guaranteed to work with the "M.O.P.A."

A smaller plasma tube will not be able to handle the power output of the "M.O.P.A" and will void the warranty. We will help make sure you get the correct plasma tube when you purchase the "M.O.P.A."

The "M.O.P.A." (Master Oscillator Power Amplifier) is a variable 20 watt to a maximum of 190 watts RF plasma tube amplifier. It is an updated replica of the original vacuum tube equipment that was manufactured during the 1930's/1950's era. It can be run 24/7 without overheating.

Though it has been updated with modern electronics it still uses the RF tank coil and 812a vacuum tube needed to produce the original analog sine wave and square wave waveform output from the old 1936/1950's style equipment.

It has two variable frequency ranges. One is from about 2.2MHz to about 3.8MHz and when producing harmonic sidebands its frequency range goes from about 1.7 to 4.3MHz. The second frequency range covers the GB-4000's complete frequency range from 1 Hertz to 20MHz or 20 million Hertz.

Why have an instrument that only has a 180,000 Hertz to 400,000 Hertz frequency range when you can have an instrument with a 20 million Hertz range and is \$1200.00 less expensive.

Over 60 Foot Diameter



360°- Over 30 Foot Radius All Around The Plasma Tube

The "M.O.P.A." is connected to the "GB-4000" through a BNC connector. When connected to the "GB-4000" the audio frequencies can be amplified by the "M.O.P.A." and output through the gas filled plasma tube. The "M.O.P.A.s" RF output frequency then becomes the "carrier" or mixing frequency for all audio or RF frequencies output from the "GB-4000".

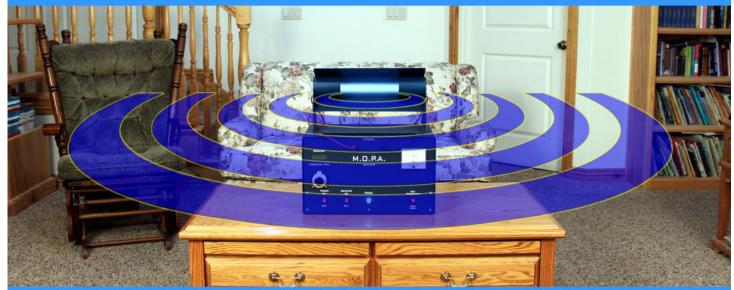
The "M.O.P.A.s" RF output frequency can also be set to a specific frequency within its frequency range. That frequency can then be gated or pulsed with a duty cycle from a 10% to a 90% output from the "GB-4000."

The "M.O.P.A." is a non-contact 190 watt output instrument which allows the user to move around freely. It has a greater 360 degree range than the original 75 watt 1936/1939 equipment did, which was over 30 feet.

With the plasma tube reflector it has a 180 degree range well over 30 feet which is one of the largest ranges of any instrument on the market today. The additional 115 watts of power is what makes this possible.

In order to try and claim range superiority some companies, with less powerful instruments (100 watts or less), are attributing this over 30 feet range capability to their use of a higher RF "carrier" frequency. But this range capability, which the original 75 watt 1936/1939 instrument had, is not based on a higher RF carrier frequency but is a natural plasma tube function based on the power output of the instrument. With the use of our removable reflector, which prevents a 50% loss of power going out of the backside of the plasma tube, this also increases the 180 degree range.

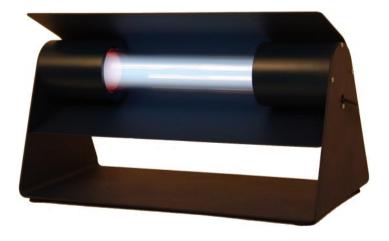
Over 40 Foot Reflector Range



180°- Over 40 Foot Plasma Tube Range With Directional Reflector

The "M.O.P.A." has the ability to mix or modulate frequencies with its 20 Megahertz frequency range. It has the highest spectrum of any plasma device because it can produce over 100 harmonic sidebands simultaneously like the original 1936/1939 instrument did. Its variable RF "carrier" frequency makes it possible to put it on any frequency within its 2.2 to about 3.8MHz range for greater flexibility. Why have a fixed "carrier" frequency in a plasma tube instrument when you can have a variable one?

The "M.O.P.A." not only has the ability to run a single frequency but it is the only instrument which uses the 1950's capability to run 2 to 8 audio frequencies simultaneously up to 40,000 Hertz which is an enormous time saving feature. It also has the ability to output two frequencies simultaneously from 1 to 20 Megahertz.



With this capability it can run all the original frequencies which range from about 139,000 Hertz to just over 17 million Hertz. Why settle for only a three or four hundred thousand Hertz frequency range when you can have a 20 MHz range. The GB-4000 with "M.O.P.A." comes with a 2 year warranty and lifetime support. See the "M.O.P.A." specifications on the next page.

M.O.P.A. Specifications

- 1. Fabrication: Built in the USA and tested for quality assurance with two year *limited warranty.
- Proven design: Solid state combined with vacuum tube technology used for over 80 years.
- 3. Amplification method: Original vacuum tube amplification.
- **4.** Amplification voltage: High voltage (1350 volts).
- **5.** Amplification current: Low current (20 to 240 milliamps for longest 812a vacuum tube life).
- **6.** Vacuum tube vs. Solid state amplification: Modern solid state uses low voltage and high current designs. The M.O.P.A. uses the high voltage low current design.
- 7. Milliamp meter: Built in.
- 8. RF carrier waveform: Sine wave.
- 9. Sine wave digital or analog: Analog.
- 10. Frequency Counter: Built in for accurate reading of the carrier frequency.
- **11.** Carrier frequency tuning: Variable tuning capacitor.
- 12. First frequency range: Variable RF carrier approximately 2.2 MHz to about 3.8 MHz.
- **13.** Second frequency range: Input from the GB-4000 variable from 1 to 20MHz (20 million Hertz).
- **14.** Power output: Variable modulated power output of 20 to 190 watts.
- **15.** Maximum output: When gated or modulated 190 watts.
- **16.** Frequency input method: Designed to work exclusively with the GB-4000 frequency generator through a BNC cable connection.
- 17. Frequency output modulation: GB-4000 frequencies from 1 to 400,000 Hertz AM modulation.
- **18.** Maximum frequencies output: When connected to the GB4000 it can output up to 8 audio frequencies simultaneously.
- **19.** Gating or pulsing: 1 to 5000 Hertz using the GB-4000.
- **20.** Frequency delivery: Gas filled tube (Sold by approved separate company. *Limited warranty applies only if another type of plasma tube is used, then there is no warranty).
- 21. SWR meter: None. Gas filled tube is connected directly to the RF tank coil requiring no SWR (Standing Wave Ratio) meter. This method, unlike the SWR meter systems, delivers almost 100% power output to and through the gas tube.
- **22.** Suggested range: 1 to 12 feet when using gas tube.
- 23. Greatest power absorption range: 1 inch to 2 feet when using gas tube.
- **24.** Useful range, WITH gas tube reflector: 180 degrees 1 to over 40 feet in front of the gas tube.
- 25. Useful range, WITHOUT gas tube reflector: 360 degrees at 1 to over 30-feet radius all around the gas tube.
- **26.** Useful range definition: Physiological effects with at least 0.11 watts of energy at 30 feet based on the "Inverse Square Law" Calculations. The M.O.P.A., has 0.21 watts at 30 feet and 0.11 at 40 feet.
- 27. Size: Compact design 10.5" Wide X 17" Long X 10" High.
- 28. Power used: Can be built for use with 110/120 volts AC or 220/240 volts AC.
- 29. Power usage approximately 350 watts. When connected to the GB-4000 approximately 375 watts.
- 30. Weight: 19 pounds.

Our "GB-4000" money-back guarantee makes your decision easy!



Try the "GB-4000", "SR-4" amplifier, or M.O.P.A. amplifier for 60-days. You have 60 days to use them and decide if you want to keep them. Returned equipment must be in original condition. The "GB-4000", "SR-4" and * "M.O.P.A." amplifiers have a full two-year *limited warranty on parts and labor. (Exception: 90 days on 812a vacuum tube.) A 10% restocking fee applies to all sales.

The GB-4000 generator list price is \$1725.00. The SR-4 linear amplifier list price is \$595.00 if purchased together. The M.O.P.A. oscillator/amplifier is \$2495.00. The M.O.P.A. requires a signed purchase agreement and comes with a two-year *limited warranty. To purchase the GB-4000, SR-4 amplifier or M.O.P.A. generator/amplifier please call Quantum Balancing at the numbers below. We accept all major credit cards, money orders or cashier checks. For personal checks allow up to two weeks to clear. Please add sales tax where applicable. Your ordered GB-4000 and SR-4 amplifier will be shipped in 1 to 2 days after the order is received at our office. The M.O.P.A. amplifier can be shipped within 1 to 3 days after receiving the purchase agreement. Allow up to 5 days for delivery. FedEx shipping FREE within the 50 states. Call for priority mail quote.





To order call: 1-800-435-1392 (orders only) 1-719-684-2111 (inquiries)



The Only Function Generator Capable Of Running

8 Frequencies Simultaneously

www.quantumbalancing.com