

THE MOST VERSATILE FREQUENCY GENERATOR

THE GB-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.

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 crystal controlled, and guaranteed not to drift. Just enter a frequency 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 mode or multiple mode. When programmed it only takes three easy steps to run any of the 2,000 channels.

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

Step 2: Using the key pad enter the auto channel 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 auto channel 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 pre-selected 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. One circuit has a 0.75 watt power output for audio frequencies used without an RF carrier frequency. The other circuit is for audio frequencies used with an RF carrier frequency including higher RF frequencies up to 20 million Hertz. It has a 3.7 watt power output.

This means it not only has the power to run one fre-



quency 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. This makes it up to 8 times faster to use than any other generator.

Nobody wants to spend 40 minutes running 8 frequencies when you can spend only 5 minutes running 8 frequencies. Your time is valuable to you, why waste it.

The “GB-4000” can also run 2 frequencies simultaneously to 20MHz or 20 million Hertz.

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

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

The GB-4000 also has both an “Audio Mode” and an “RF Mode” for greater flexibility in running frequencies.

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 and can be held in your hand.

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

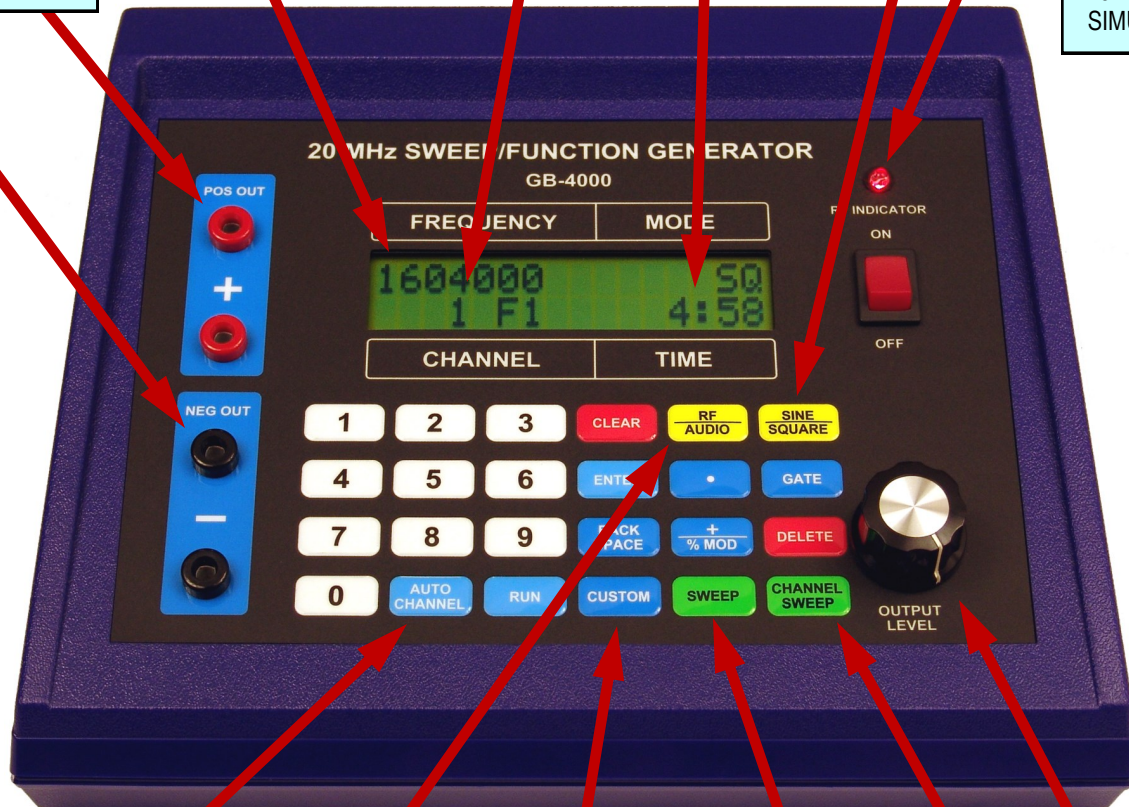
"#4 BUTTON"
MUTES THE BEEPER

"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 PROGRAM-
MABLE AUTO CHANNELS OF
WHICH 875 ARE PROGRAMMED

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

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

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

"#5 BUTTON"
ALLOWS YOU TO PAUSE
A PROGRAM

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

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

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

20 Million Frequencies

30 MHz 1-15 Watt Linear Amplifier

SR-4 Amplifier

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."

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".

M.O.P.A. Amplifier

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



Please note: This plasma tube is sold by a separate company. It has been fully tested by us and 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 to 190 watts gas filled plasma tube RF amplifier and is an updated replica of the original vacuum tube equipment that was manufactured during the 1930's/1950's era.

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 2.2 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. 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 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 well over 30 feet. With the plasma tube reflector it has a 180 degree range well over 40 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.

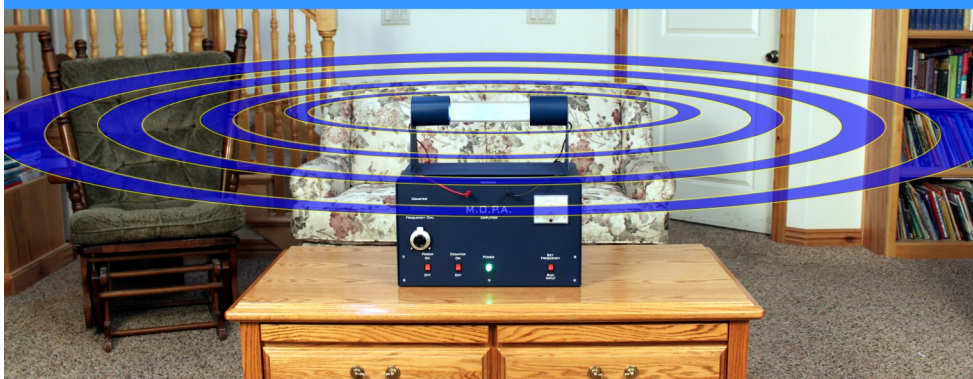
In order to try and claim range superiority some companies, with less powerful instruments (100 watts), are attributing this over 30 feet range capability to their use of a higher RF carrier frequency. But this range capability, which the original 75 watt 1936/1939 instrument had, is not based on a higher RF carrier frequency but is a natural plasma tube function based on the power output of the instrument and the use of a 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.

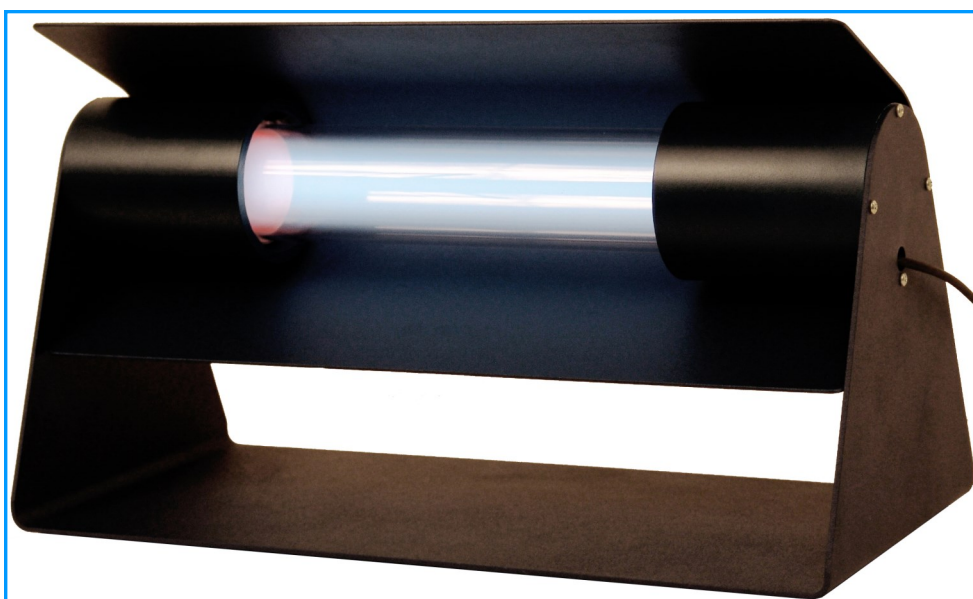
The "M.O.P.A.," not only has the ability to run a single frequency but it is the only instrument which uses the 1950's capability to run 2 to 8 frequencies simultaneously up to 40,000 Hertz. This is an enormous time saving feature. It also has the ability to output two frequencies simultaneously from 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 and have about a \$1200 savings. The GB-4000 with "M.O.P.A.," comes with a 2 year warranty and life-time support. See the "M.O.P.A.," specifications on the next page.

Over 60 Foot Diameter



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



Over 40 Foot Reflector Range



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

M.O.P.A. Specifications

1. Fabrication: Built in the USA and tested for quality assurance with two year *limited warranty.
2. 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).
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 at 240 milliamps.
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 decide to keep them or return them for a full refund, less shipping and repackaging fee. Returned generator must be in original condition. The "GB-4000", "SR-4" and * "M.O.P.A." amplifiers also include a full two-year *limited warranty on parts and labor. (Exception: 90 days on 812a vacuum tube.)

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 Future Tech Today 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. generator/amplifier can be shipped within 3 days after receiving the purchase agreement. Allow up to 3 days for delivery. Shipping is FREE within the 50 states. We ship priority mail or FedEx.



**Order Your
"GB-4000"
Today**

For the quickest ordering call:

1-541-434-0318

or toll free:

1-866-747-7447



**The Only Function Generator Capable Of Running
8 Frequencies Simultaneously**

Future Tech Today

www.futurefrequency.com