

# Generator Micro Sdram FILES and FORMAT

The Generator can have thousands of files stored on the micro Sdram card. Presently there is a dedicated name for 10 of the possible files stored on the card. There must be one file with the name “protocols-0.txt”. This file is the first and power-on default file that is always read whenever the Generator is either first turn on or the Rotary Knob reset button is pressed. The mandatory file “protocols-0.txt” file is the only file required but having the 9 other files “protocols-1.txt” through “protocols-9.txt” can be a very convenient way to switch from one protocol run to a different protocol with just a few button presses. Consider always having all 10 “protocols-x” files stored on the card even if they are all identical except for the file name. These files can serve as a template should you need to construct a protocol without the aid of a computer and text editor program.

The micro Sdram card can be any size up to 64 gigs. However because the operational protocol files are so simple and small, a less expensive 256 meg micro Sdram will serve very nicely for 99.99% of the users needs. The protocol files must be placed in the root directory of the card.

## SELECTING PROTOCOLS FILES:

As you should already know there are only two buttons on the Generator. One will always be red while the other will be either black or blue. The red button is used to start and stop a program when the display is in the “Setup=0” mode. When in any other of the 6 possible display screens, the red button is used to “Update” stored parameter in the Generator, or store parameter settings to the selected Sdram “protocols-x” file, or to “Load” one of the other “protocols-x” files. Where “x” equals a file number ranging for 0 to 9.

The black or blue button is used to select one of the options mentioned in the previous paragraph. If this button is held down and then followed by a momentary press of the red button, the generator will ask if you would like store any changes you made to the present loaded “protocols-x” text file on the Sdram card. You are given a 3 second option to bail out of proceeding with the store to card request. To continue with the storing of data to the Sdram card just continue holding the black or blue button down until the “Sdram Card UPDATING” message is displayed on the screen. At this point you can release the button and the present generator settings will be written to the card.

To “Load” one of the other “protocols-x” file, a different protocol file number must be dial in using the Rotary knob on the Generator. On screen five where “Setup=5” is displayed, there is a dial-able parameter that is labeled “Protocols Files = x”. Where “x” equals a number from 0 to 9. This label will display the present protocol file loaded into the Generator when the Generator loads a protocol file. However it can be dialed and changed to select another protocol file load and run simply by dialing in a different protocol number. If the number is dialed to a different number from the present loaded protocol file, and the red button is pressed, a “Load File No. x” will be displayed instead of a simple “Update” request being displayed. While this message is displayed and if the black or blue button is press and held down for 3 seconds, a new “protocols-x.txt” file will be loaded into the generator. Should you want to bailout on loading a new “protocols-x.txt” file, simply don’t hold the button down for the 3 seconds.

It is important to note that whenever the protocol file is loaded in the generator and the “Protocol File = x” message are not the same, the red button will call up a LOAD request verse an UPDATE request when pressed. If you want to only UPDATE, insure these numbers are the same by dialing the value

back to the original number that appears with a protocol file is first loaded. If you ever get lost on where you are at in the loading or storing process you can always press the Rotary Knob reset to start over with loading in the “protocols-0” text file.

### **File Format:**

The “protocols-x” files are extremely simple and have the following format;

EXAMPLE Image:

#### **Protocols-0 #**

```
1,10.00,0.20,40.00,0.50,40.00,0.50,7.83,0.50  
2,15.66,0.25,40.00,0.50,40.00,0.50,40.00,0.50  
3,10.00,0.25,40.00,0.50,40.00,0.50,111.00,0.50  
4,20.00,0.25,40.08,0.50,40.00,0.50,432.00,0.50  
5,28000.00,0.50,40.00,0.50,40.00,0.50,528.00,0.50  
6,7.83,0.20,15.66,0.50,28.00,0.70,34000.00,0.50  
7,15.66,0.45,1500.66,0.50,528.00,0.75,7000.00,0.45  
8,10.00,0.50,15.00,0.50,5280.00,0.50,20.00,0.50  
9,37000.00,0.10,15.66,0.50,528.00,0.75,24000.00,0.40  
10,28000.00,0.10,105.66,0.50,528.00,0.75,24000.00,0.40  
11,7.83,0.20,1500.66,0.50,528.00,0.75,1000.00,0.45  
12,15.66,0.25,108.00,0.50,528.00,0.75,6000.00,0.50  
13,10.00,0.30,15.64,0.50,528.00,0.75,20.00,0.40  
14,37000.00,0.35,128.66,0.50,528.00,0.75,24000.00,0.40  
15,28000.00,0.50,256.66,0.50,528.00,0.75,24000.00,0.40  
0,1,2,5000,60000,1,5,3,4,1.00,0
```

Where **Protocols-0 #** is the alignment line. The key character “#” designates a NL (new line) character followed by the 1<sup>st</sup> parameter line is next. The “#” designates to the software that parameter lines are to follow;

Where **1**, is the parameter line number. Parameter line numbers are always the first field of every parameter line. Parameter line numbers must always be consecutively number and followed by a comma.

Where **10.00**, is the generators channel 1 frequency. This is always a floating point number with 2 decimal places. A comma is always used to separate parameters fields.

Where **0.20**, is the generators channel 1 duty cycle. This is always a floating point number with 2 decimal places. A comma is always used to separate parameters fields.

Where **40.00**, is the generators channel 2 frequency with the same field requirements mentioned above.

Where **0.50**, is the generators channel 2 duty cycle with the same field requirements mentioned above.

Where **40.00**, is the generators channel 3 frequency with the same field requirements mentioned above.

Where **0.50**, is the generators channel 3 duty cycle with the same field requirements mentioned above.

Where **7.83**, is the generators channel 4 frequency with the same field requirements mentioned above.

Where **0.50**, is the generators channel 4 duty cycle with the same field requirements mentioned above.

**All the following lines follow the same format except for the very last line. The last parameter line is always started with a “0,”.**

Where **0**, designates the last line of the file and the comma is a field separator.

Where **1**, designates to start a program run with this line if running in SIMPLE mode.

Where **2**, designates to start a program run in Mode=2. This value can be either a 1 for Mode=1 for SIMPLE mode, a 2 for Mode=2 for PROTOCOL mode, or a 3 for Mode=3 for SWEEP mode.

Where **5000**, designates a frequency will run for 5 seconds. Seconds are written in milliseconds. There are 1000 milliseconds to a second, hence 5000 milliseconds is equal to 5 seconds.

Where **60000**, designates the program run time is 1 minute. Minutes are also written in milliseconds. There are 1000 milliseconds to a second, hence 60000 milliseconds is equal to 60 seconds or 1 minute.

Where **1**, designates the 1<sup>st</sup> parameter line to use in a starting “PROTOCOL” range. It is the parameter that can be seen on the “Setup=3” display screen.

Where **5**, designates the 2<sup>nd</sup> parameter line to use in a stopping “PROTOCOL” range. It is the parameter that can be seen on the “Setup=3” display screen.

Where **3**, designates the 1<sup>st</sup> parameter line to use in a starting “SWEEP” range. It is the parameter that can be seen on the “Setup=4” display screen.

Where **4**, designates the 2<sup>nd</sup> parameter line to use in a stopping “SWEEP” range. It is the parameter that can be seen on the “Setup=4” display screen.

Where **1.00**, designates an increment by 1 hertz when doing a “SWEEP”. This is always a floating point number with 2 decimal places. A comma is always used to separate parameters fields. It is the parameter that can be seen on the “Setup=4” display screen.

Where **0**, identifies the present Generator “protocols-x” file number. “x” is the actual number. It is the parameter that can be seen on the “Setup=5” display screen.

**NOTE: The “Setup=3” screen only can be seen when in Mode=2 and the “Setup=4” screen only can be seen when in Mode=3. Else these display screens will be blank. When in Mode=1 or SIMPLE mode, both “Setup=3” and “Setup=4” screens will be blank.**