

**Solution Title:**

How to remotely execute a manual trigger on a DG2041A Arbitrary Function Generator?

**Solution Details:**

A sweep can be triggered either continuously by selecting the internal trigger option, externally by selecting the EXT trigger option or Manually by selecting the Manual option and pushing the Trigger button on the front panel.

The programming interface of the DG2041A allows the user to select manual trigger through the "TRIG:BUS" command, however it's not possible to remotely execute a manual trigger.

As a workaround, the user can follow the steps below to simulate a manual remote trigger of a sine wave sweep in this instance:

1- While sweep is disabled, either manually or through SCPI commands set the frequency of the wave to the desired sweep start frequency.

```
FUNC SIN /*Select sweep function*/  
APPL:SIN 5,5,0 /*Set frequency to 5 Hz (equal to start sweep freq), amplitude to 5 Vpp and 0  
Vdc offset*/
```

```
SWE:SPAC LIN /*Set sweep mode to linear*/  
TRIG:SOUR EXT /* Select external trigger source. */  
SWE:TIME 2 /*Set sweep time to 2 seconds*/  
FREQ:STAR 5 /*Set start frequency to 5 Hz*/  
FREQ:STOP 30 /*Set stop frequency to 30 Hz*/
```

```
OUTP ON /*To start OUTPUT */
```

2- Once a sweep is desired, the user can put the generator in sweep mode, if the trigger is set to EXT, the generator will sweep once and stop the sweep every time the generator is put in sweep mode.

Each time a sweep is desired, the user has to switch sweep on and then switched it off after the sweep is over for the purpose of not interrupting the sweep

```
SWE:STAT ON /*Enable the sweep function. */
```

\*INTRODUCE A WAIT HERE IN YOUR OWN PROGRAMMING / SCIRPTING ENVIRONMENT AT  
LEAST EQUAL TO THE SWEEP DURATION\*

```
SWE:STAT OFF /*Disable the sweep function. */
```