Notice for Using the Data Timing Generator

Observe the following requirements for using the DTG5000 Series Data Timing Generators in a safe and correct way.

Requirements on grounding of the device under test (DUT)

Pay attention when connecting the data timing generator to the DUT. Be sure the DUT is properly grounded. Refer to the following figure for grounding information.
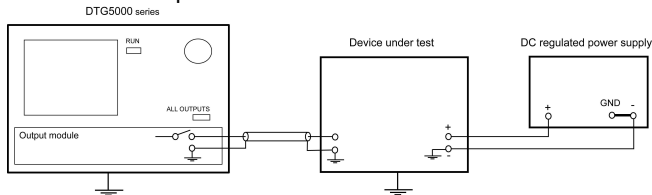

CAUTION. *If the DUT is grounded incorrectly, damage to the output circuit may occur due to excessive current.*

The allowable maximum current of each data timing generator output module is as follows:

>   DTGM10 output module: ± 40 mA
>   DTGM20 output module: ± 80 mA
>   DTGM30 output module: ± 80 mA

Note: Provide the divice under test with GND area as large as possible.

Requirements for changing connections to the device under test

To protect the data timing generator from excessive current, perform the following procedure when you change the connections to the DUT:

1. With the RUN button (or a command), set the data timing generator to Stopped state (the internal clock oscillator stops).
2. Turn the output relay(s) off on the output module(s) installed in the data timing generator:
    - When turning off all the outputs relays: push the ALL OUTPUTS button.
    - To turn the output relay(s) off, push the LEVEL button → move the cursor to the output channel(s) you want off→ set the channel(s) to Off
3. Turn off peripheral circuits and perform replacement / switching of the DUT.
4. Turn peripheral circuits on first, then set the output module output relay(s) to On. Then, set the data timing generator to Running state with the RUN button. The internal clock oscillator is operating.

Note: To avoid adverse effects caused by the DUT, be sure to turn the data timing generator output relay(s) off when it is the Stopped state.

For detailed information about using the data timing generator, refer to the DTG5000 User manual.