



## A SINGLE-PULSE TRIGGER FOR THE TYPE 1217-B UNIT PULSE GENERATOR

When the new TYPE 1217-B Unit Pulse Generator<sup>1</sup> was in design, we considered adding a panel pushbutton to permit a single pulse to be produced manually. There are some serious disadvantages to a panel-mounted pushbutton; it may be hard to reach, and even if it can be reached it may be awkward and tiresome to push. A more comfortable method, and one which is more economical for users who do not need manual operation, is to make the pushbutton a hand-held device; hence the TYPE 1217-P2 Single-Pulse Trigger.

The trigger assembly consists of a Microswitch, battery, and bounce filter. The circuit arrangement applies a clean dc pulse (normally negative-going) to the input terminals of the TYPE 1217-B Unit Pulse Generator, which is set up to accept a negative-going external trigger. It will produce its single output pulse when the button is released. When the trigger input plug is reversed, a pulse will be produced when the button is first pushed.



There are myriad applications for a pulse generator which will produce a single pulse upon manual command. For example, in design of complex systems that are intended to operate at any high repetitive rates, it is often desired to cycle them slowly (to permit voltages to be read, for example). With a manual system the user can rapidly skip unwanted conditions, and then slow down and stop at the desired condition. The pushbutton, which in no way alters the pulse specifications of the generator, will also permit a pulse of given duration and amplitude to be injected into a working system at random times, thus approximating a controlled noise impulse.

<sup>1</sup> R. W. Frank, "More and Better Pulses from the Unit Pulse Generator," *General Radio Experimenter*, 36, 1 & 2, January-February, 1962.

### SPECIFICATIONS

**Pulse Output Amplitude:** -1.2 to -1.5 volts depending on battery used, behind 200 kilohms.

**Upon switch closure:** Rise to zero volts in approximately 0.02 second.

**Upon switch opening:** Fall to between -1.2 and -1.5 volts in approximately 0.02 second with output terminals open-circuited.

**Battery:** 1.5-volt penlite cell.

**Battery Life:** Shelf life of battery used.

**Weight:** 6 ounces (0.2 kg).

**Dimensions:** Diameter 1 1/4, length 4 1/2 inches (32 by 115 mm), over-all.

Type		Code Number	Price
1217-P2	Single-Pulse Trigger.....	1217-9602	\$25.00

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