



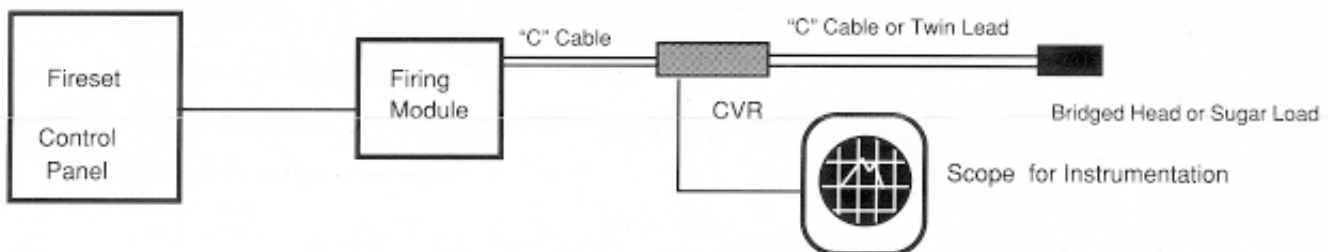
Firing “Bare” Exploding Bridgewires

Frequently, during shot setup or cable checkout, bare Exploding Bridgewires (EBWs) are fired in place of live EBW detonators. This can be very cost effective when testing EBW firesets, performing system check-outs, recording the current firing pulse or just listening to the “pop” of the bridgewire.

After initially “popping” the bridgewire, a detonator head can be reused almost indefinitely by drawing a graphite ‘line between the electrodes with a soft lead pencil. This may be simply accomplished by drawing a graphite line between the two visible metal electrodes within the detonator head. This graphite bridge furnishes a conductive path and provides a reasonable substitution for the exploding bridgewire. The “real” bridged heads can be saved for current measurements. A bridgewire can also be simulated by using a short length of fine wire, such as the braid from coax cable, held between two alligator clips. Obviously the closer to the actual bridgewire material and dimensions the better the simulation.

When measuring the current through the bridgewire with a Current Viewing Resistor (CVR), RISI P/N 188-7327, coating the wire with silicone grease or “Vaseline” will do wonders in reducing the jitter in the recorded trace. A typical setup with the CVR is shown in Figure 1. The CVR should be placed as close as possible to the Firing Module to additionally reduce “noise” on the waveform.

Figure 1



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Technical Topics

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TOPICS: System Testing
without Explosives

If a nearly exact simulation of the EBW explosive interface is required but without the complications of handling explosives, RISI can manufacture “sugar load” versions of any of our detonators. These use all real detonator components except for the explosives which are replaced with sugar at the proper density. They are available at the same prices as real detonators since all the same manufacturing steps are followed. RISI can also bridge heads with materials other than the standard gold.

Procurement of Bridged Heads or Rebridged Old Heads

Any RISI detonator can be purchased as a bare bridged head for such experiments. Some of the more common bridged heads available are:

RP-1 Bridged Detonator Head P/N167-4311 100 unit quantity \$19.10 each

RP-80 Bridged Detonator Head. P/N188-1928. 100 unit quantity \$ 6.30 each

Call for prices of other types or other quantities.

RISI will also inspect and rebridge used detonator heads for a fee of \$7.50 or \$5.00 for any rejects. Heads can be rebridged many times before they finally become too pitted for additional bridging. It is not cost effective to rebridge the RP-80 heads since the cost of inspecting and rebridging the used heads is greater than procuring new bridged RP-80 heads.

For Technical Contract and
Ordering Information, Contact:

We accept Visa, MasterCard
and American Express



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