

## OPERATING INSTRUCTIONS

## ACCESSORIES

range). If now the output increases to say 40 volts, necessitating a change to the 100 V. a.c. range, the pointer will indicate + 7 on the db. scale.

The 4:1 increase in the voltage range calls for an addition of 12 to the db. indication, so that its true value represents + 19 db. The increase over the original reading is  $19 - 9 = 10$  db.

A range of accessories is available to extend the normal ranges of measurement. These include d.c. voltage multipliers (up to 30kV) d.c. current shunts (125mV. drop), current transformers and a resistance range extension unit, as follows:

### D.C. VOLTAGE MULTIPLIERS

General Note: When measuring high a.c. and d.c. voltages (say above 800V.) unless the common positive terminal is either earthy or connected to earth, errors will be introduced if the instrument is touched during a reading.

#### *Combined 10kV. and 30kV. d.c. Voltage Multiplier*

A combined 10kV. and 30kV. d.c. multiplier is available for use with the instrument. The Multiplier should be connected to the Avometer set to the 10V. d.c. range. It is recommended that the meter is kept as near earth potential as possible and the Multiplier used at the high potential end, e.g. when measuring an e.h.t. voltage when the negative line is earthy, the Multiplier should be connected between the point of positive potential and the positive terminal of the meter. In addition, the low potential end of the meter must be connected to the low potential of the supply being measured using the low potential lead provided. A cap is provided which should always be in position over the high voltage terminal not in use.