
ABSTRACT

Micro Ohm Meter

An ohm meter is an electrical instrument that measures electrical resistance. Standard ohm meter like those found in multimeters can accurately measure resistance up to few hundred ohms. At levels below a few hundred ohms the intrinsic resistance of the ohm meter, the leads, and contacts can distort the reading and affect the result. For precise resistance measurement micro ohm meter can be use.

To measure resistance of component a test current is forced through the component and the test meter measures the voltage. Thus further by ohms law resistance is found.

Micro ohm meter is used in various applications like transformer and motor winding resistance, switch and contact break resistance wire and cable resistance and many more.

INTRODUCTION

Ohmmeter is an electronic device used to measure electrical resistance of a circuit element. Electrical resistance is a measure of how much an object opposes allowing an electrical current to pass through it. Ohmmeters come with different levels of sensitivity. Some Ohmmeters are designed to measure low-resistance materials, and some are used for measuring high-resistance materials.

It is widely used to check a complete circuit or to measure the resistance of a circuit element. Micro Ohmmeter, Mega Ohmmeter and Milli- Ohmmeters are used to measure resistance in different applications of electrical testing. A Micro Ohmmeter is used to measure extremely low resistances with high accuracy at particular test currents and is used for bonding contact applications. Micro Ohmmeter fluke is a small portable device, which is used to measure voltage, current and test diodes. This meter has multi selectors to select the desired function, and it automatically ranges to select most measurements. Mega Ohmmeter is used to measure large resistance values. Mille Ohmmeter is used to measure low resistance at high accuracy confirming the value of any electrical circuit.

SYSTEM DESCRIPTION

3.1 BLOCK DIAGRAM:

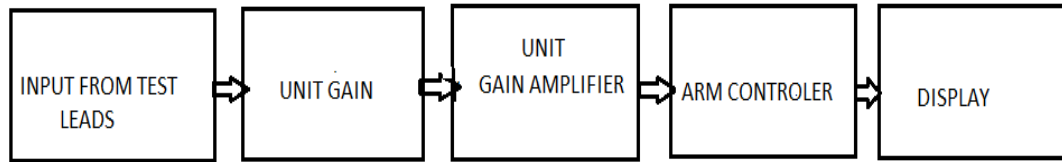


Fig. Block diagram micro ohmmeter

3.2 CIRCUIT DIAGRAM

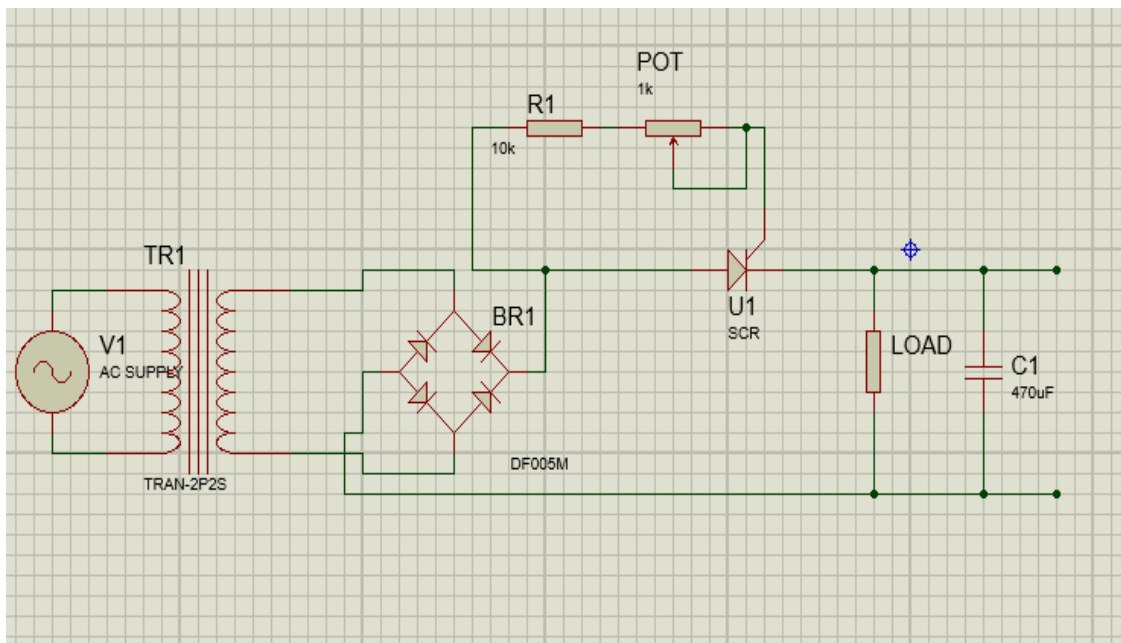


Fig (a) circuit diagram for test leads

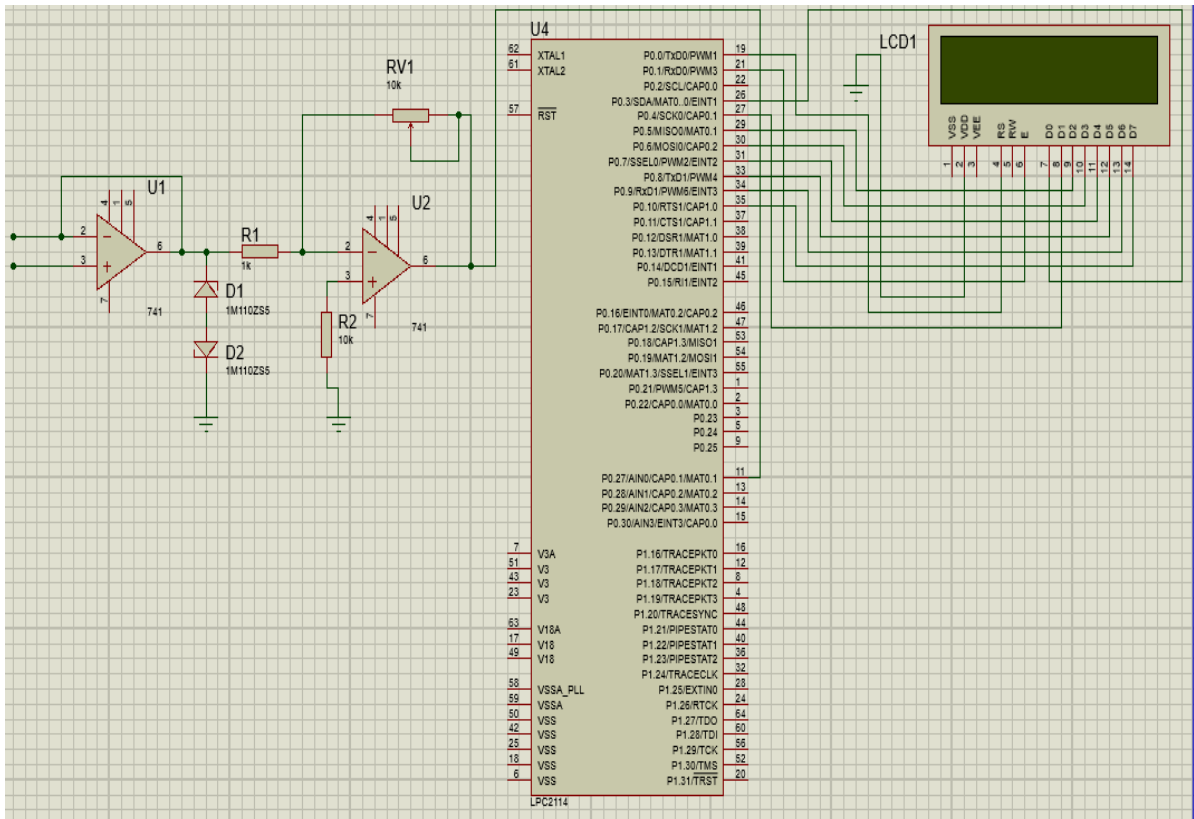


Fig (b) circuit diagram for interfacing of LCD