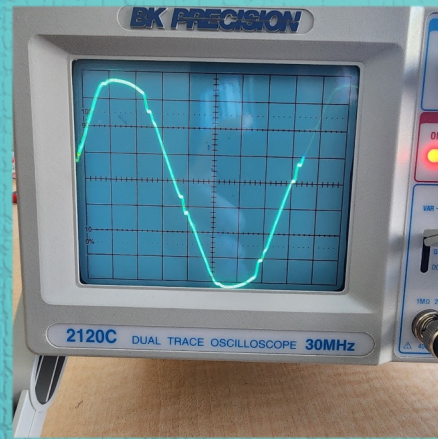


AC TO DC CONVERTER

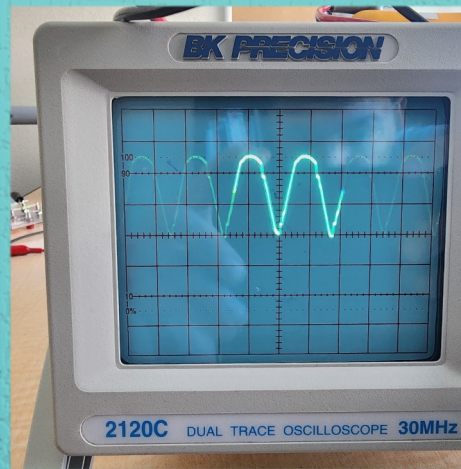
TRAVIS BOUSE – COLLEGE OF SOUTHERN NEVADA

ABSTRACT

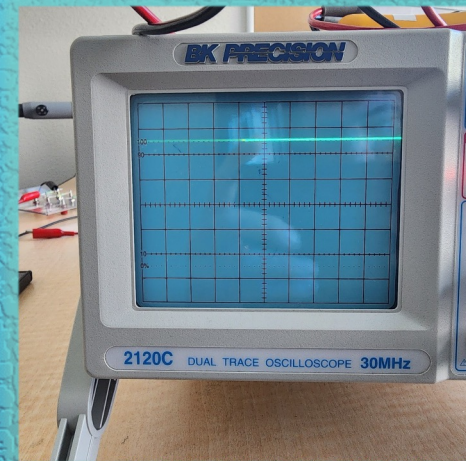
A FULL-WAVE RECTIFIER IS A VITAL ELECTRONIC COMPONENT THAT EFFICIENTLY CONVERTS ALTERNATING CURRENT (AC) TO DIRECT CURRENT (DC) BY RECTIFYING BOTH POSITIVE AND NEGATIVE HALF-CYCLES OF THE INPUT WAVEFORM. IT EMPLOYS A CONFIGURATION OF DIODES TO ALLOW CURRENT FLOW IN A SINGLE DIRECTION. THIS PROJECT DELVES INTO THE OPERATING PRINCIPLES, CIRCUIT CONFIGURATIONS, AND PERFORMANCE CHARACTERISTICS OF FULL-WAVE RECTIFIERS, HIGHLIGHTING THEIR SIGNIFICANCE IN MODERN ELECTRONIC APPLICATIONS.



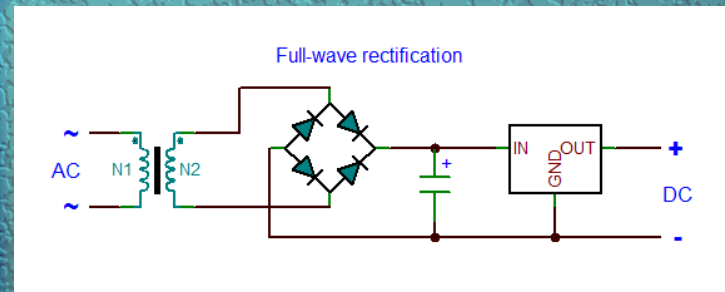
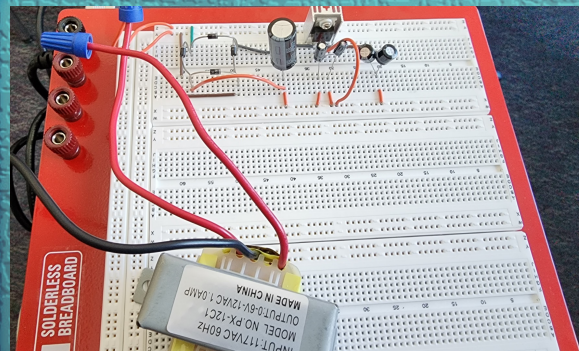
120V AC TO 12V AC
AS MEASURED AFTER
TRANSFORMER



12V AC TO 12V DC
AS MEASURED AFTER DIODES



12V DC
AS MEASURED AFTER FIRST
CAPACITOR



ACKNOWLEDGMENTS
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