Thyristors and Power Control Circuits
580997 (91011-20)
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## General Description

The Thyristors and Power Control Circuits module enables students to perform practical exercises that demonstrate thyristor and power control circuit fundamentals.

The system contains the following circuit blocks:

- Driver
- Silicon Controlled Rectifier (SCR)
- Triac AC Power Control
- SCR DC Gate Half-wave and Full-wave
- SCR AC Gate and UJT Half-wave and Full-wave/Motor

This board is available in the following language variants:

- English variant: 91011-20
- French variant: 91011-21
- Spanish variant: 91011-22

## Topic Coverage

- Thyristor: Component Familiarization, Circuit Fundamentals
- Silicon Controlled Rectifier (SCR): Testing, DC Operation, Gate Trigger Voltage and Holding Current
- Rectifiers: Half-Wave Rectifier, SCR Controlled Half-Wave Rectifier, Full-Wave Rectifier, Phase Control
- UJT: Characteristics, Half and Full-Wave Phase Control
- Bidirectional Conduction, Triggering Modes (4)
- Troubleshooting Basics and Troubleshooting Thyristor Circuits

## Optional Manual(s)

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<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Thyristor and Power Control Circuits (Student Manual)</td>
<td>589699 (91570-P0)</td>
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<tr>
<td>1</td>
<td>Thyristor and Power Control Circuits (Student Workbook)</td>
<td>580728 (91570-Q0)</td>
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<tr>
<td>1</td>
<td>Thyristor and Power Control Circuits (Instructor Guide)</td>
<td>580730 (91570-R0)</td>
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\[1\] The manuals Thyristor and Phase Control Circuits, both the student manual and instructor guide, are also available in computer-based format.
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