



In any receiver a key element is the detector. Its purpose is to remove the modulation from the carrier to give the audio frequency representation of the signal. Synchronous detection is used for the detection or demodulation of Amplitude Modulation (AM). This form of modulation is still widely used for broadcasting on the long, medium and short wave bands despite the fact that there are more efficient forms of modulation that can be used today. Synchronous detectors are considerably more complex than simple envelope detectors. **Sciencetech 2209 Synchronous AM Detector** is a experiment platform with both modulator and synchronous detector for demodulation. This provide Students the basic knowledge of how a synchronous detector works, and students can also measure the modulation index and observe the different waveform for Amplitude Modulation. Sciencetech 2209 comes with inbuilt Power Supply.

### Features

- A self contained learning platform
- Functional blocks indicated on board mimic
- On board modulator and demodulator
- Input-output and test points provided onboard
- Built in DC Power Supply
- Compact size
- Online Product Tutorial

### Scope of Learning

- Study and observe the working of Amplitude Modulator
- Study and observe frequency of Synchronous detector

### Technical Specifications

<b>Function</b>	: Sine
<b>Block Diagram</b>	: 1.Modulator AM modulator 2.Demodulator i.AM modulator ii.Low pass circuit
<b>Mains Supply</b>	: 230V $\pm$ 10%, 50Hz
<b>Test Points</b>	: 8 nos
<b>Power Consumption</b>	: 3VA (approximately)
<b>Interconnections</b>	: 2mm Banana sockets
<b>Dimensions (mm)</b>	: W 255 W x H 155 x D 55
<b>Weight</b>	: 2 Kg (approximately)
<b>Product Tutorial</b>	: Online on <a href="http://www.SciencetechLearning.com">www.SciencetechLearning.com</a>

#### Included Accessories :

Patch cord (Red) 2mm 16"	: 4 nos.
Patch cord (Black) 2mm 16"	: 4 nos.
Patch cord (Blue) 2mm 16"	: 2 nos.
Mains cord	: 1 no.