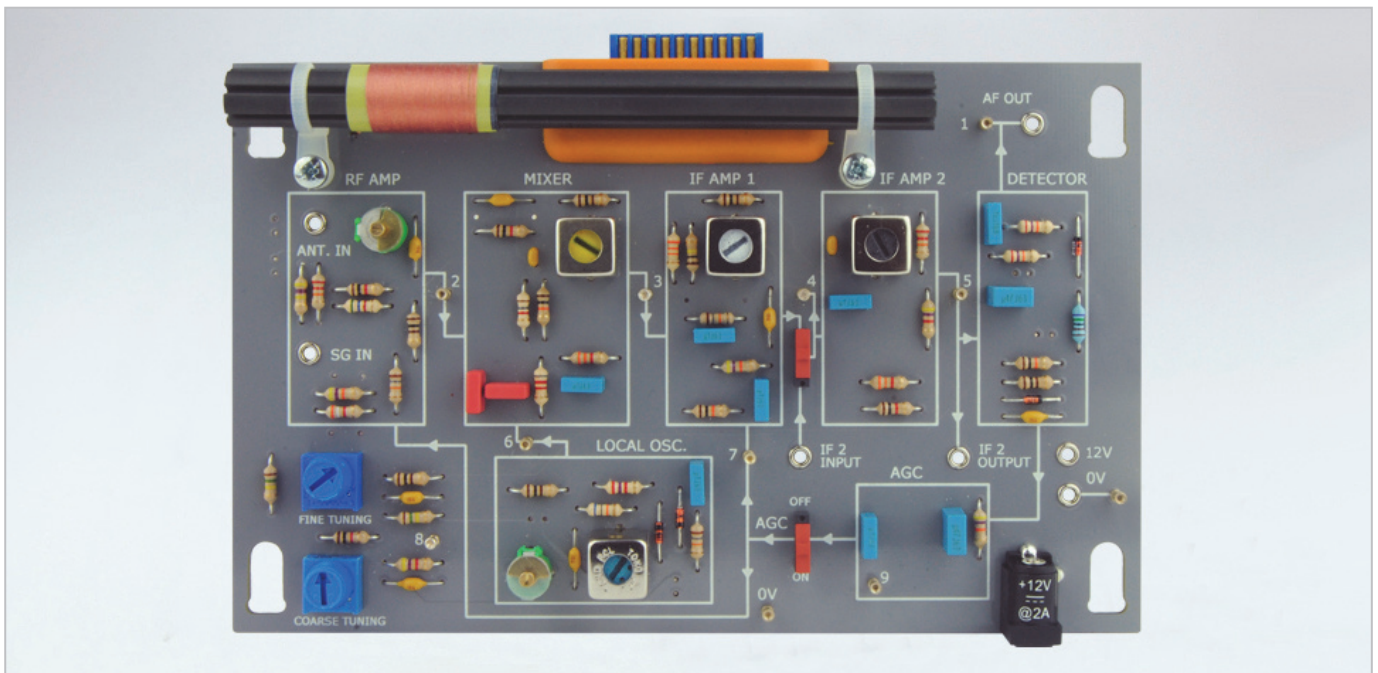


## Product Information Sheet

### 320-53 Superhet Receiver Card



Students investigate the principles and operation of a working superheterodyne receiver. This resource is ideal for use within an electronics program.

The card is designed for use with the 320-00 Electronics Study Trainer.

Practical activities based around this card are available within the digital curriculum materials provided with the 320-00 Electronics Study Trainer.

The card may also be used with our optional cloud-based software. This contains theory presentations, investigations, and assessments, which link directly to the practical activities carried out using this resource.

#### Practical Tasks Include the Following:

- Recognize the basic operation of a radio receiver
- Identify the problems in channel selection
- Measure the intermediate frequency (IF) and local oscillator (LO) frequency of a superhet receiver
- Recognize the principle of operation of a superhet receiver
- Examine the local oscillator
- Explore the radio frequency (RF) amplifier
- Investigate the mixer
- Measure the bandwidth of an intermediate amplifier stage
- Measure tuned gain of an intermediate amplifier stage
- Recognize the function performed by a multistage IF amplifier
- Determine the need for automatic gain control (AGC)
- Observe the operation of AGC

#### Items Included:

- Circuit Card

#### Other Items Required:

- 320-00 Electronics Study Trainer
- Digital Multimeter (DM1 or similar)
- Dual Trace Oscilloscope (OSC1 or similar)

#### General Information:

Card Dimensions:  
160 x 100 x 35 mm (W, H, D)

Packaging:  
Orders for multiple 320-series cards are shipped in storage boxes.

Shipping Volume:  
Single card: 0.001 m<sup>3</sup>  
Storage box: 0.015 m<sup>3</sup>

Shipping Weight:  
Single card: 0.3 kg  
Storage box: 0.5 kg

Please contact LJ Create for estimated shipping volume and weight for your specific order requirements.

**Order Code: 320-53**

P9449-B

For more information visit [www.ljcreate.com](http://www.ljcreate.com)