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# ANALOG COMMUNICATION TRAINER

## Model Number : GOTT-ACT-9329



### DESCRIPTION

- Design and implementation of second order active filters and RF oscillators.
- Design and implementation of AM and FM modulator and demodulator.
- Design and implementation of DSB/SC and SSB modulator and demodulator.
- Design and implementation of TDM and FDM multiplexer and demultiplexer.
- Design and implementation of frequency converter and signal recovery.

#### **FEATURES**

CODE

- Textbook includes the theoretical and practical details. •
- Textbook includes the expected results for reference.
- Problem discussion attached together with answers for instructor
- Only need oscilloscope to obtain the measured results.

**FM DEMODULATOR & FM MODULATOR** 

#### **PRODUCT MODULES**

## **SECOND ORDER ACTIVE FILTER & RF OSCILLATOR**

600-101 600-104 **Second Order Active Filters FM Demodulator** Experiment 1: Second Order Active Experiment 1: MC4046 FM Modulator ٠ Low-pass Filter Experiment 2: LM565 FM Modulator • Experiment 2: Second Order Active FM Modulator High-pass Filter Experiment 1: MC4046 FM Demodulator Experiment 3: Second Order Active ٠ Experiment 2: LM566 FM Demodulator Band-pass Filter • **Experiment 4: Second Order Active** Band-stop Filter **RF Oscillators** Experiment 1: Colpitts Oscillator ٠ **Experiment 2: Hartley Oscillator** • Experiment 3: Crystal Oscillator • **Experiment 4: Voltage Controlled** • Oscillator **AM MODULATOR & AM DEMODULATOR** CODE **TDM MULTIPLEXER & TDM DEMULTIPLEXER** 600-102 600-105 AM Modulator **TDM Multiplexer** 

- **Experiment 1: Transistor AM**
- Modulator Experiment 2: MC1496 AM Modulator

#### AM Demodulator

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- **Experiment 1: Diode Detector** 
  - **Experiment 2: Product Detector**

CODE

600-103

### **DSB-SC AND SSB MODULATOR &** DSB-SC AND SSB DEMODULATOR



## **DSB-SC and SSB Modulator**

- Experiment 1: DSB-SC Modulator
- **Experiment 2: SSB Modulator** •

#### **DSB-SC and SSB Demodulator**

- Experiment 1: Product detector of **DSB-SC** Demodulator
- Experiment 2: Product detector of • SSB Demodulator



- Experiment 1: Waveform Generator
- Experiment 2: TDM Multiplexer •

#### TDM Demultiplexer

Experiment 1: TDM Demultiplexer •

#### FDM MULTIPLEXER & FDM DEMULTIPLEXER

CODE 600-106

CODE

#### FDM Multiplexer

- Experiment 1: FDM Signal Generator ٠
- Experiment 2: DSB-SC Modulated Signal • Generator
- Experiment 3: FDM Multiplexer

#### **FDM Demodulator**

Experiment 1: FDM Demultiplexer

CODE

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## Model Number : GOTT-ACT-9329

ANALOG-TO-DIGITAL CONVERTER & DIGITAL-TO-ANALOG CONVERTER		CODE 600-107			CODE 600-108
	<ul> <li>Analog-to-Digital Converter</li> <li>Experiment 1: ADC0804 A digital Converter</li> <li>Experiment 2: ADC0809 A digital Converter</li> <li>Digital-to-Analog Converter</li> <li>Experiment 1: R-2R Netw</li> <li>Experiment 2: DAC 0800 F</li> </ul>	Analog-to- Pork DAC		<ul> <li>Frequency Converter</li> <li>Experiment 1: Frequency Mu</li> <li>Experiment 2: Up/Down Free Converter</li> <li>Signal Recovery</li> <li>Experiment 1: Carrier Signal Circuit</li> <li>Experiment 2: Clock Recover</li> </ul>	quency Recovery
DC POWER SUPPLY & FUNCTION GNERATOR (OPTIONAL ITEM)					CODE 500-107
	<ul> <li>DC Power Supply</li> <li>Tripple Bipolar Voltage O</li> <li>DC 0 - +/-15V</li> <li>DC +/-5V</li> <li>DC +/-12V</li> <li>Constant &amp; variable Volta</li> <li>Low Ripple and Noise</li> </ul>		•	0 – 10kHz 0 – 1	00Hz kHz 0kHz 00kHz MHz

#### Manuals:

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

#### **General Terms:**

- (1) Accessories will be provided where applicable.
- (2) Manuals & Training will be provided where applicable.
- (3) Designs & Specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

#### Warranty:

2 Years

### **ORDERING INFORMATION :**

ITEM	MODEL NUMBER	CODE
ANALOG COMMUNICATION TRAINERS	GOTT-ACT-9329	600-000
DC POWER SUPPLY AND FUNCTION GNERATOR	GOTT-DC POWER SUPPLY & FUNCTION GENERATOR	500-107

Proposed design only, subject to changes without any notice.