



DEGEM  
SYSTEMS

Tech-Prep

Solar energy training system

Wind energy training system

Solar water heating energy  
training system

Polar robot & robotics principles  
training system

Conveyors & sorting machines  
training system

Cartesian robot & computerized  
storage training system

CNC lathe machine training  
system

CNC milling machine training  
system

Process control training system

Basic electronics training system

Basic communications systems

Basic pneumatics training system

Basic hydraulics training system

Basic mechanics training system

Pressure forming & inflation  
training system

Bending & vacuum forming  
training system

# TP-3722

## Basic Communications Training System

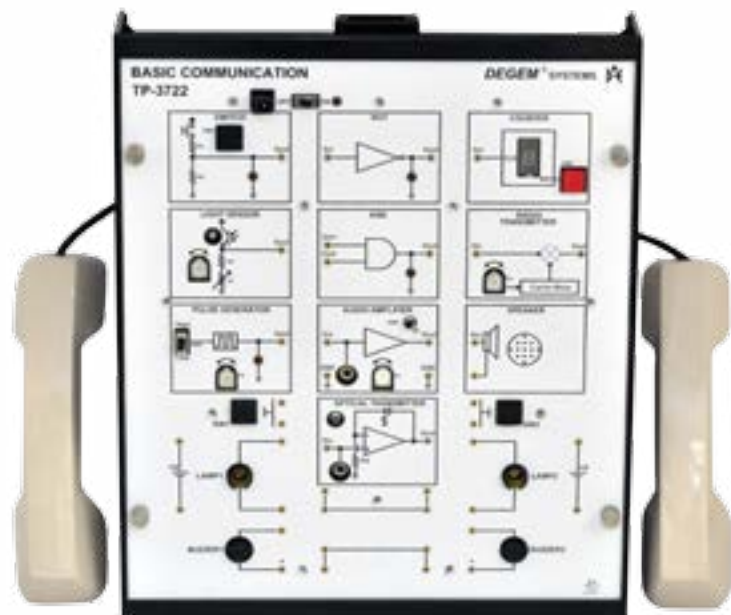
### Objectives

This course introduces the student to the principles of communications and telecommunication systems. The student explores and implements various topics such as: telegraph, audio frequency and volume, light and lasers, fiber optics and radio communications. In addition there are challenge exercises to increase student interest and comprehension of the course material. TP-3722 emphasizes a problem-solving approach, which will increase student interest and involvement throughout the course.

### Description

This training program is designed to expose students to the world of communications and to study communication techniques and needs. Students will learn the basic principles of communication systems, transmission, reception and amplification. They will also learn to build a telegraph, a telephone and optical communication systems as well as learning about telephone switching systems.

No previous scientific or technological knowledge is required, and the system is eminently suitable for students from the junior high school level and upwards. The training system contains all the electronic equipment necessary to carry out the experiments.



# Specifications

## TECHNICAL CHARACTERISTICS

- External power supply
- Audio amplifier
- Pulse generator
- Light sensor
- Lamp
- Laser
- Prism
- Folded clear rod
- Fiber optic cable
- Mirrors
- NOT gate
- AND gate
- Counter
- Optical transmitter
- Radio transmitter
- Fiber optic cable
- External loudspeaker
- Push button switches (3)
- Buzzers (2)
- Lamps
- Microphone

## LEARNING PROGRAM

- Tech Prep pedagogical guidelines
- Introduction to communications
- Telegraph communication
- Telephone communication
- Speakers and intercom
- Frequency and volume
- Telephone exchange
- Fiber optics, light and laser
- Optical communication
- AM radio transmitter

## SUPPLIED ACCESSORIES

The learning unit is provided with the following accessories:

- Set of patch cords
- External power adaptor (100-240 VAC)
- Radio

The courseware or e-book contains the essential theory and detailed procedures for each hands-on activity.