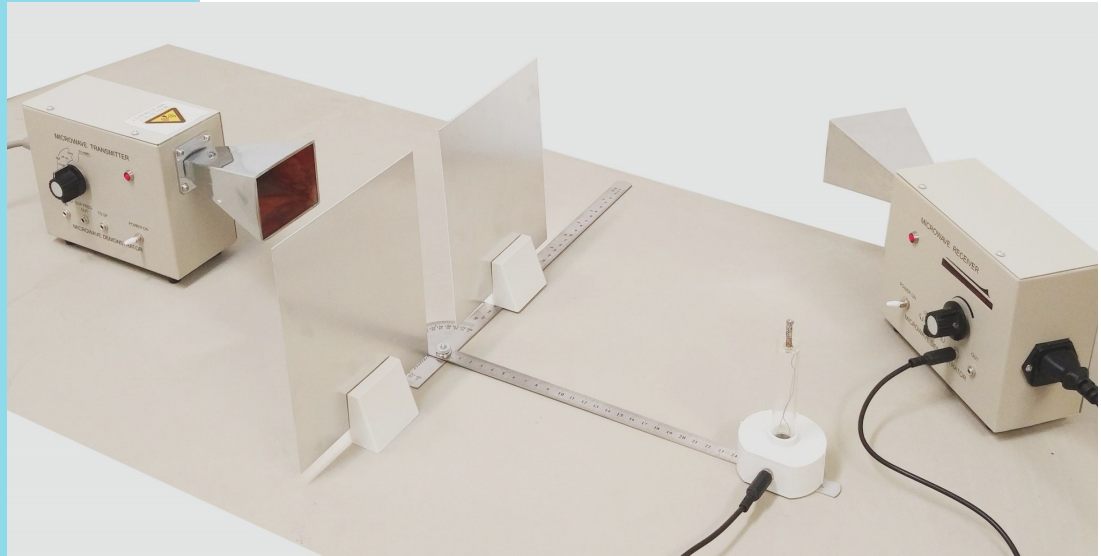


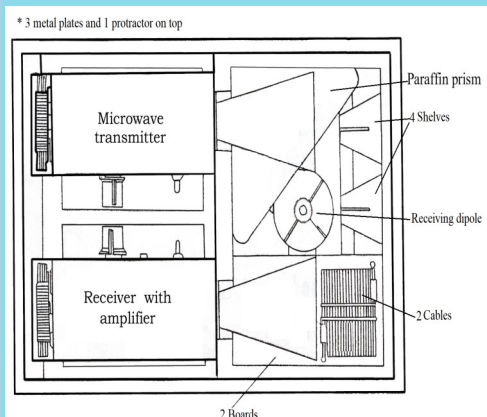
LEEI-61 Interference, Diffraction & Polarization of Microwave - Basic



- *Ideal for demo*
- *Easy to use, stable and reliable*
- *Affordable*

Microwave and light wave are both electromagnetic waves. They share common phenomena of all waves, such as reflection, refraction, polarization, interference, and diffraction. However, as the wavelength of a microwave is about 4 orders larger than that of a visible light wave, the experimental phenomena and apparatuses of microwave are different.

This LEEI-61 microwave demonstrator consists of a microwave transmitter, a microwave receiver with amplifier, and a receiving dipole with other accessories. It can be used to demonstrate many interesting microwave experiments as follows. By the assistance of a protractor/ruler and a multimeter or oscilloscope, qualitative or semi-quantitative measurements can be performed for these experiments.



Packing schematic

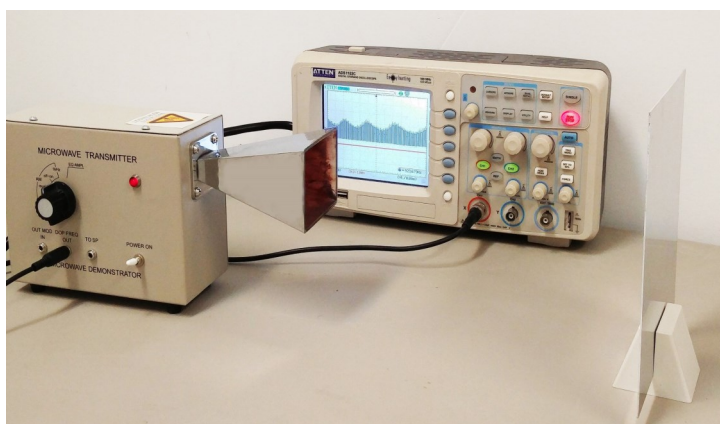
1. Relay of microwave
2. Transmission and absorption of microwave
3. Microwave as polarized wave
4. Reflection of microwave on a metal plate
5. Refraction of microwave
6. Interference of microwave
7. Formation of standing electromagnetic wave
8. Diffraction of microwave
9. Directional transmission of microwave
10. Doppler effect

Specifications

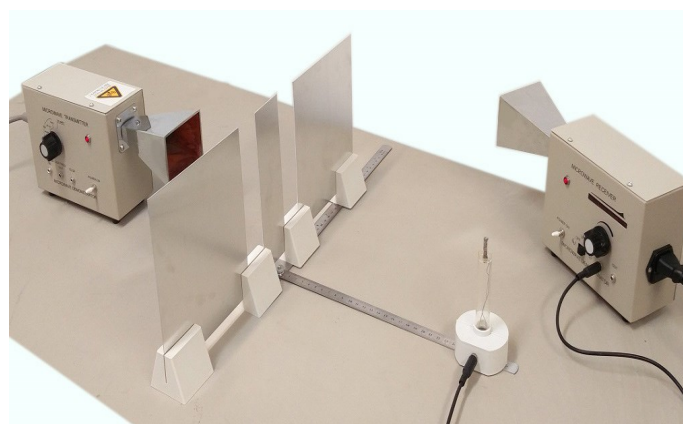
Microwave transmitter	Operating frequency: 11 ± 1.1 GHz Output power: ≥ 10 mW Internal modulating signal: monotone, diphone, music External modulating signal: ≥ 1 V _{PP}
Microwave receiver with amplifier	Gain of amplifier: ≥ 60 dB Receiving distance: ≥ 1 m (indicator); ≥ 3 m (speaker)

Part List

Microwave transmitter	1
Microwave receiver with amplifier	1
Receiving dipole	1
Cable, L=1.5 m	1
Cable, L=1.2 m	1
Large metal plates, 170 × 150 (mm)	2
Small metal plate, 170 × 50 (mm)	1
Paraffin prism	1
Board for refraction 150 × 80 × 40 (mm)	1
Board for absorption 150 × 80 × 20 (mm)	1
Shelves	4
Protractor/ruler (0~180°/ 0~300 mm)	1



Observing Doppler effect



Microwave double slits interference

Note: above product information is subject to change without notice.