

# FIBER OPTIC TRAINER

## EXPERIMENT 5 STUDY OF BENDING LOSS

### Objective :

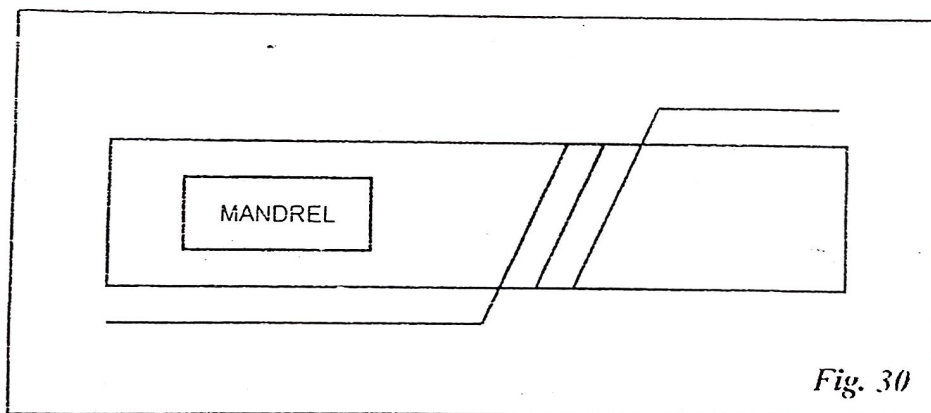
The objective of this experiment is to study bending loss.

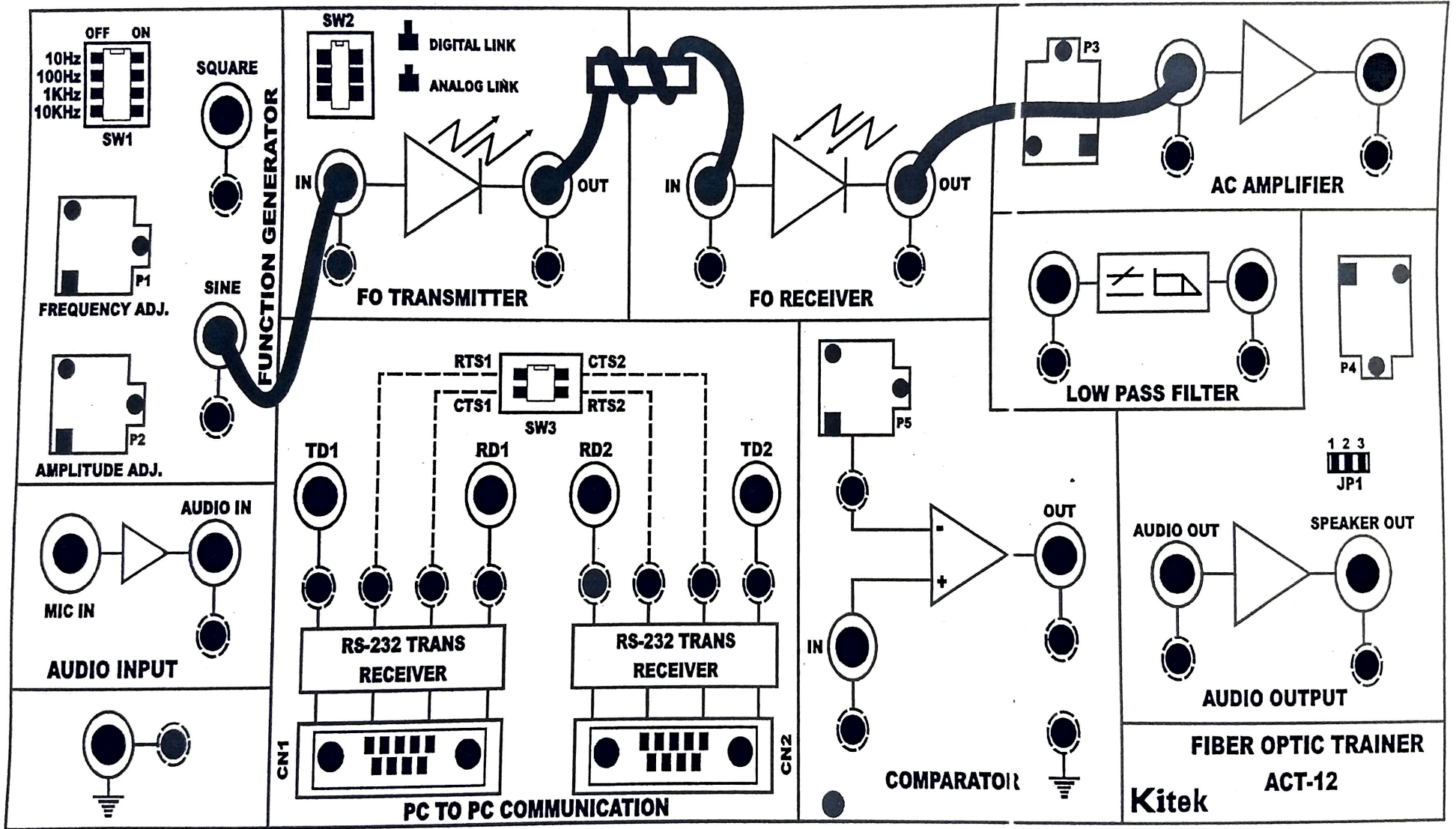
### Theory :

Whenever the condition for angle of incidence of the incident light is violated the losses are introduced due to refraction of light. This occurs when fiber is subjected to bending. Lower the radius of curvature more is the loss.

### Procedure :

1. Repeat all the steps from 1 to 6 of the previous experiment 7 using 1 m cable.
2. Wind the 1 meter FO cable on the mandrel and observe the corresponding AC amplifier output on CRO. It will be gradually reducing showing loss due to bends ( as shown in fig. 30 & diagram 8 ).





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**Kitek ACT-12**

DIAGRAM 6

- 50 -