

Ex. No. 8	STAIR CASE WIRING
Date:	

AIM:

To set up a two-way switch stairway electrical wiring circuit and test the functionality for the following two connections:

- Straight connection
- Cross connection

APPARATUS REQUIRED:

Sl. No.	Apparatus	Range/Type (if any)	Quantity
1.	Two way switch (SPDT)	5A,230V	2
2.	Lamp	40W	1
3.	Connecting wires	-	As required
4.	Lamp holder		1
5.	Tester	500V	1
6.	Wire Stripper	150mm	1
7.	Screw Driver	150mm	1

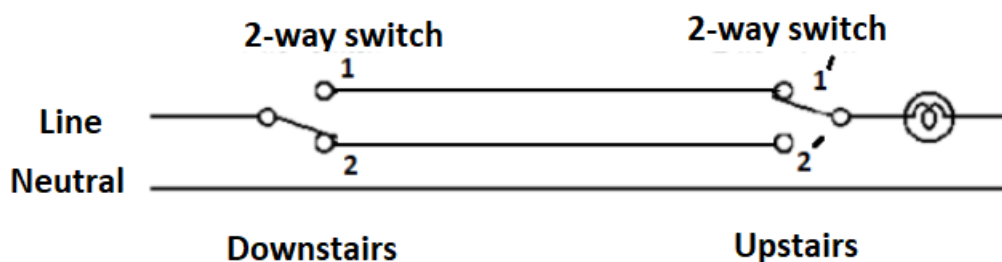
THEORY

Stair Case Wiring or Godown Wiring or Warehouse Wiring is a term used to denote, where a single light is controlled from Various Places. A Stair Case wiring can be used only for human comfort. Not only a light we can also adopt this wiring technique for some other electrical devices.

This Stair Case Wiring can be connected to two possible types.

- *Straight Connection.*
- *Cross Connection.*

STRAIGHT CONNECTION:



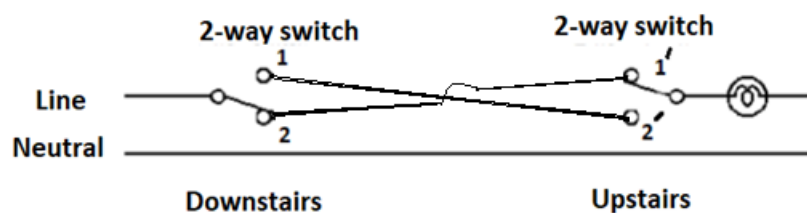
The above figure showing the Stair Case Wiring Circuit Diagram for a Straight Connection. Here the connections are done straight (1-1, 2-2) on the Switch 1 and Switch 2.

STRAIGHT CONNECTION WORKING:

S.NO	POSITION OF S1	POSITION OF S2	CONDITION OF THE LAMP
1	1	1'	BRIGHT
2	1	2'	DARK
3	2	2'	BRIGHT
4	2	1'	DARK

CROSS CONNECTION:

The above circuit diagram showing the Cross Connection of a Straight Case Wiring or Godown Wiring. Here the connections are done Cross (1-2, 2-1) On the Switch S1 and S2.



STRAIGHT CONNECTION WORKING:

S.NO	POSITION OF S1	POSITION OF S2	CONDITION OF THE LAMP
1	1	2'	BRIGHT
2	1	1'	DARK
3	2	1'	BRIGHT
4	2	2'	DARK

RESULT

Thus the concept of the wiring for a staircase with two-way switch was understood.