

# Switchcraft®

## NORMALLING MADE EASY -OVERVIEW OF PATCHBAY NORMALLING

### Definition

Normals is a common term that refers to the “normal” or regular path of a signal in a patching system. When a signal is re-routed, it is considered to be breaking the “normals”. The main function of normalised jacks (sockets) is to eliminate the need for either looping plugs or a permanently placed patchcord in the circuit.

### Abbreviations

FN – Full normals

HN – Half normals

NN – No or non-normals

T – Terminal that mates with tip of jack plug

R – Terminal that mates with ring of jack plug

S – Terminal that mates with sleeve (ground) of jack plug

TN – Tip normal terminal

RN – Ring normal terminal

### Full Normals (or Fully Normalled)

- Top and bottom jacks (in a patchbay) have T, R, S, TN, and RN contacts. In a wired patchbay, the two TN terminals are tied together as are the RN terminals.
- Allow for a continuous signal flow without the use of a patchcord or looping plug.
- Allow the user to re-route source (top row of jacks), destination (bottom row of jacks), or both signals.
- Typically found connected to a mixing console.
- On un-wired patchbays, user must tie (connect) the top and bottom normal circuits together.

### Half Normals (Half Normalled)

- Top jacks have T, R, S, while bottom jacks have T, R, S, plus TN and RN. In a wired patchbay, T and R on top are tied to TN and RN on the bottom jacks.
- Acts as a monitor to allow the user to listen-in on a signal without interrupting it.
- Acts as a Y junction to allow the user to send a signal to two different destinations.

### Non Normals (Non-normalled)

- Top and bottom jacks have T, R, S only.
- Only useful as a cost saving measure.
- Typically used in applications where no standard signal path will take place.
- Require a patchcord or looping plug to continue signal flow.

### Internally Shunted

- Means tip, ring and sleeve contacts, etc., are internally connected to the tip, ring and sleeve contacts, etc., of the jack below.