NETWORK AND TELECOMMUNICATION

ACADEMIC BACKGROUNDS:

- 1987-1993 Georgia University of Technology (Former USSR) **Specialize: Radio Transmitting Device of Satellite Telecommunication Systems** (Master of Science).
- 1997-1998 Advanced course at the Saint–Petersburg State University of Technology in computer simulation of ground stations Modem for Sputnic communication (Russia).

PREVIOUS EMPLOYMENT:

- 2002-2018 The World Bank Cambodia (IT Analyst, Client Services).
- 1999 -2001 Worked as Systems Engineer at VIRTU International Limited.
- 1995 -1997 Worked as assistant manager in operation and technical department at CAMINTEL.
- 1993 – 1995 Worked as engineer in Operations and Technical Department in HUB-station (ex-UNTAC Networks) at Ministry of Post and Telecommunications of Cambodia.

Teaching Experiences:

- 2000 Royal Academy of Cambodia (MSc.IT).
- 2002 Build Bright University (MSc.IT).
- 2019 National Polytechnic Institute of Cambodia (BSc.Telecom).
- 2020 Norton University (BSc.IT)
- 2023 Cambodia Academy of Digital Technology (BSc.Telecom).

BAD ORANGES GO BROWN SON

WAS ROME BUILT YESTERDAY

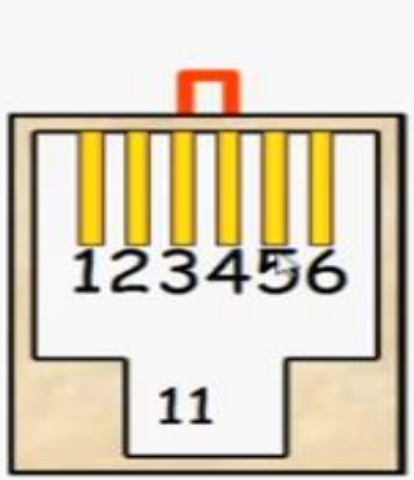
CORRELATE PINS TO RJ NUMBER

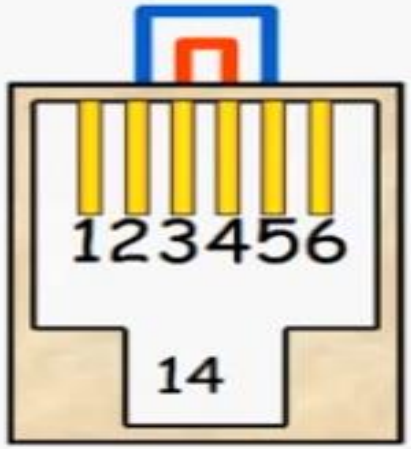
Which pins are active is determined by the Registered Jack number.

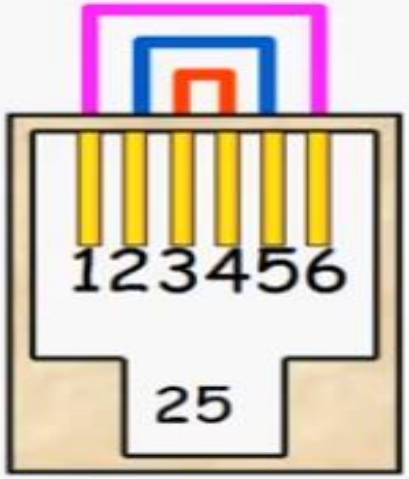
RJ-11 supports 1 telephone line (Tip & Ring).
T=pin 4, R=pin 3.

RJ-14 supports 2 telephone lines (T1, R1 & T2, R2).
T1=pin 4, R1=pin 3, T2=pin 2, R2=pin 5.

RJ-25 supports 3 telephone lines (T1, R1 & T2, R2 & T3, R3).
T1=pin 4, R1=pin 3, T2=pin 2, R2=pin 5, T3=pin 1, R3=pin 6.

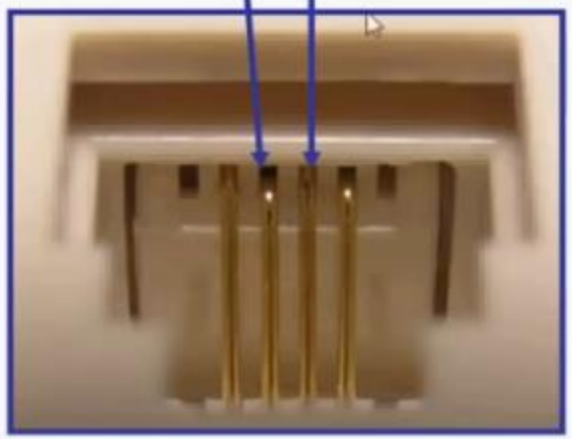




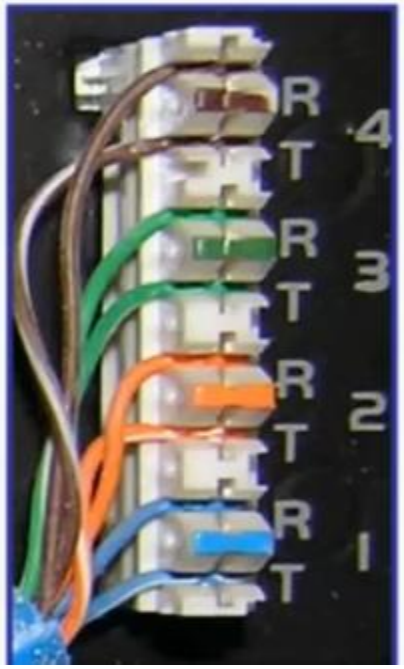


NORMAL (DEFAULT) HOUSE WIRING

4pair (quad) cable from teleco demarc to inside distribution panel.



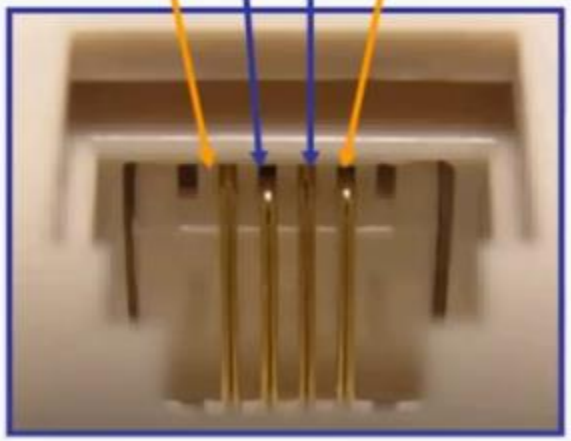
6P4C wired RJ11



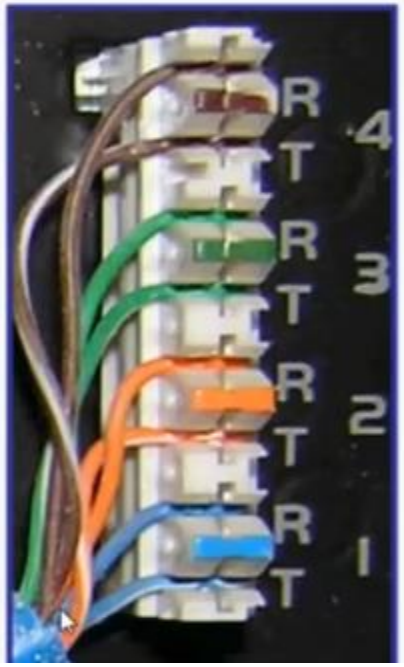
Old 2pair house wire.
Grn=T, Red=R

ADDING A SECOND LINE (PRESENTS A PROBLEM)

4pair (quad) cable from teleco demarc to inside distribution panel.



6P4C wired RJ14

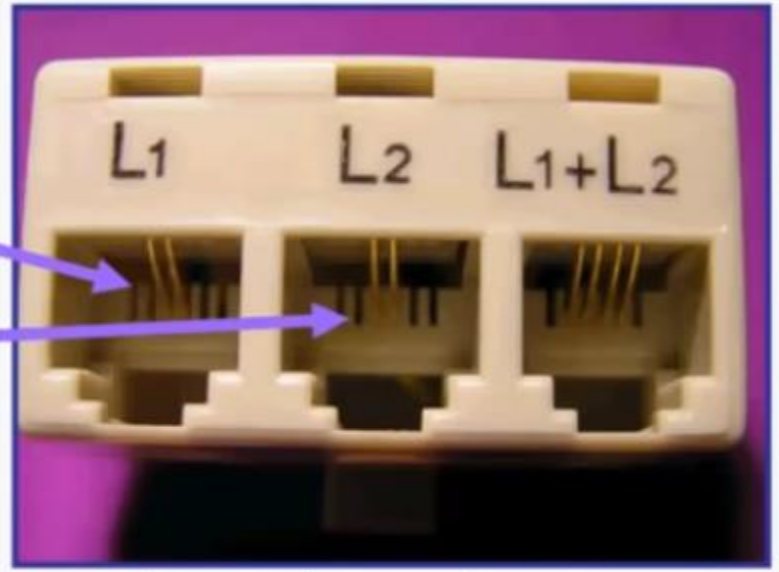


Old 2pair house wire.
G=T1, R=R1, B=T2, Y=R2

A CHEEP SOLUTION

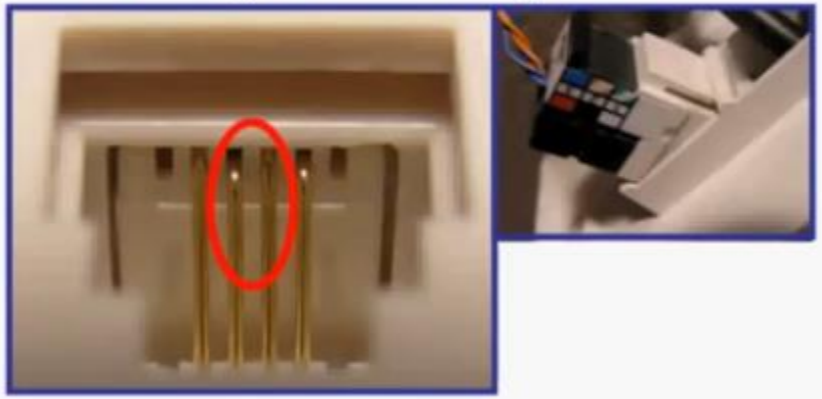
Phone #1

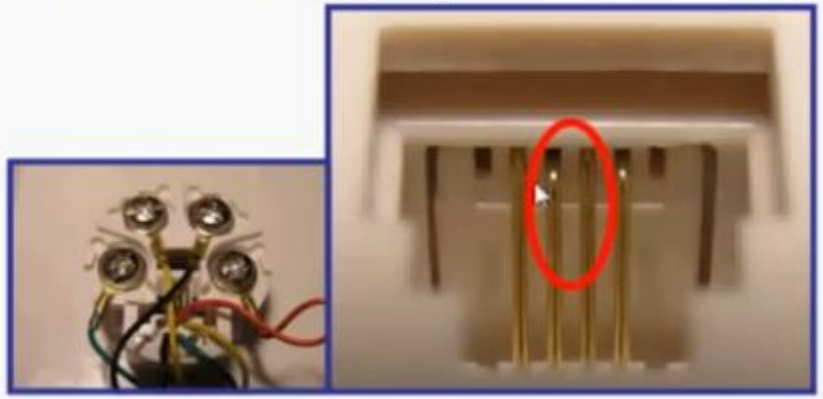
Phone #2



Buy a cheep adapter.

In the room you want only line 2 - reverse the wires on the jack connections.



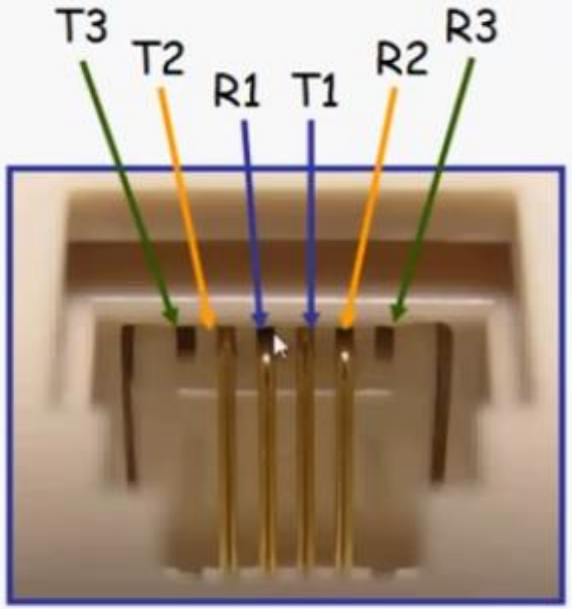


ADDING A THIRD LINE (ALSO PRESENTS A PROBLEM)

If you have old GRBY wire you'll have to pull new wire because it only has two pair.

If you have quad cable to the jack locations, you can replace the four contact (6P4C) units with six contact (6P6C) units.

A six contact jack (wired RJ 25) will require a three pair silver satin cable from the three line phone...or...you can punch the third line down on the center jack pins to bring only line three out in a single location.



A PEEK MAY TELL...OR NOT

So, how to tell what you currently have?

1. If the jack has only four metal pins...it's definitely NOT RJ25.

2. If there is DC voltage measured only between pins 3&4, it's wired as RJ11 (single line).

3. If there is DC voltage (approx. 25 – 50v) measured between pins 2&5 in addition to 3&4, it's been wired as RJ14 (for two lines).

A small cautionary note: the service provider normally supplies Direct Current voltage across the Tip (ground) and Ring (battery) wires to provide *talk battery* to the phone. This is not normally dangerous. However, when a call comes in, a much higher AC voltage is applied to make the phone ring. While this is current limited so as to be non-lethal, the pulsing nature of this current can cause hop-skip-and-jump reactions in most people. Always use caution when measuring any operational circuit.

d. Provide pictures of front and back of NCR;
each picture should give about 60 cm view

e. Provide picture of Wiring Closets and identify on floor plan

f. Provide a picture of PTT block