RJ-45 Pinout
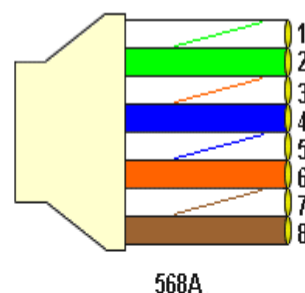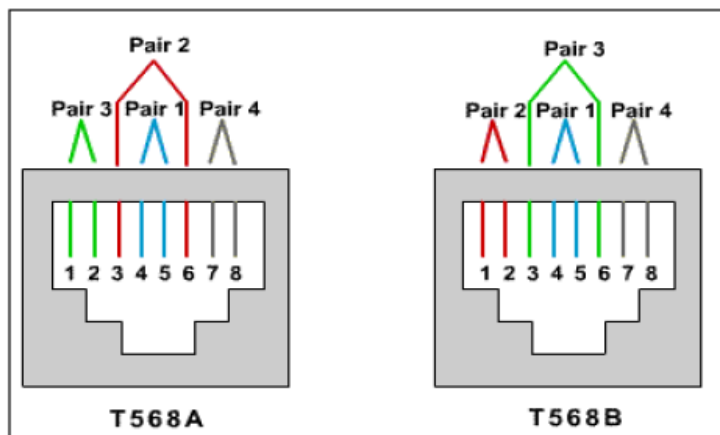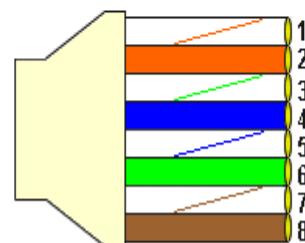
Diagram showing both T568-A and T568-B cabling wire colors

T568-A Cabling

| Pin#	Pair#	Function	Wire Color	Used with 10/100 BASE-T Ethernet?	Used with 100 BASE-T4 and 1000 BASE-T Ethernet?
1	3	Transmit	White/Green	Yes	Yes
2	3	Transmit	Green/White	Yes	Yes
3	2	Receive	White/Orange	Yes	Yes
4	1	Not used	Blue/White	No	Yes
5	1	Not used	White/Blue	No	Yes
6	2	Receive	Orange/White	Yes	Yes
7	4	Not used	White/Brown	No	Yes
8	4	Not used	Brown/White	No	Yes

T568-B Cabling

Pin#	Pair#	Function	Wire Color	Used with 10/100 BASE-T Ethernet?	Used with 100 BASE-T4 and 1000 BASE-T Ethernet?
1	2	Transmit	White/Orange	Yes	Yes
2	2	Transmit	Orange/White	Yes	Yes
3	3	Receive	White/Green	Yes	Yes
4	1	Not used	Blue/White	No	Yes
5	1	Not used	White/Blue	No	Yes
6	3	Receive	Green/White	Yes	Yes
7	4	Not used	White/Brown	No	Yes
8	4	Not used	Brown/White	No	Yes

RJ-45 Jak'ın pin sırası

2 3 4 5 6 7 8 1

87654321
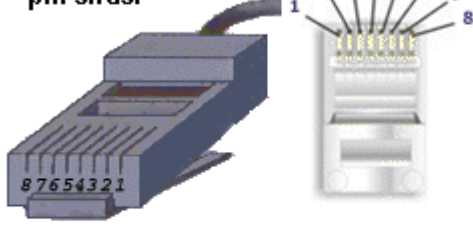
568A şemasına göre pinlere gelecek tellerin renkleri

1
2
3
4
5
6
7
8

568B şemasına göre pinlere gelecek tellerin renkleri

1
2
3
4
5
6
7
8

PC — Düz Kablo (Straight-Thru Cable) — HUB
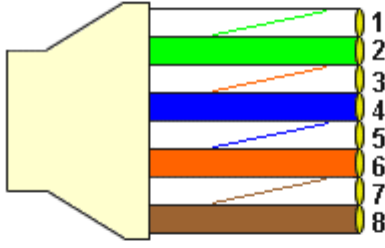
PC — Çapraz Kablo (Crossover Cable) — PC

HUB — Çapraz Kablo (Crossover Cable) — HUB
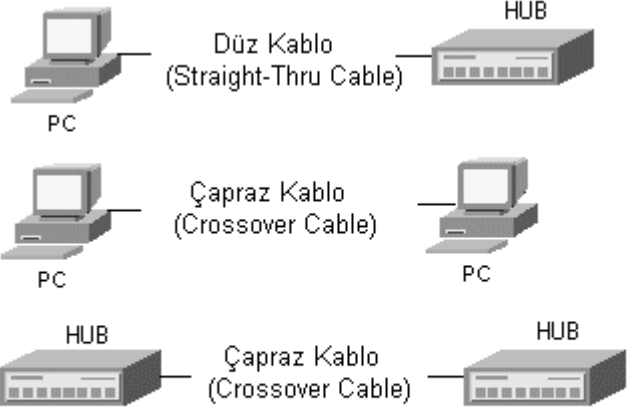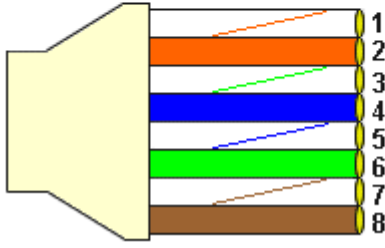
Düz Kablo (Straight-Thru Cable)

568A<------>568A

veya

568B<------>568B

Çapraz Kablo (Crossover Cable)

568A<------>568B

Aşağıdaki tablo ağ cihazlarının kurulumu esnasında ihtiyaç duyulan bağlantı biçimini tanımlar

	PC-Ethernet	Hub	Switch	Router	Workstation
PC-Ethernet	Crossover	Straight	Straihgt	Crossover	Crossover
Hub	Straight	Crossover	Crossover	Straight	Straight
Switch	Straihgt	Crossover	Crossover	Straight	Straight
Router	Crossover	Straight	Straight	Crossover	Crossover
Workstation	Crossover	Straight	Straight	Crossover	Crossover
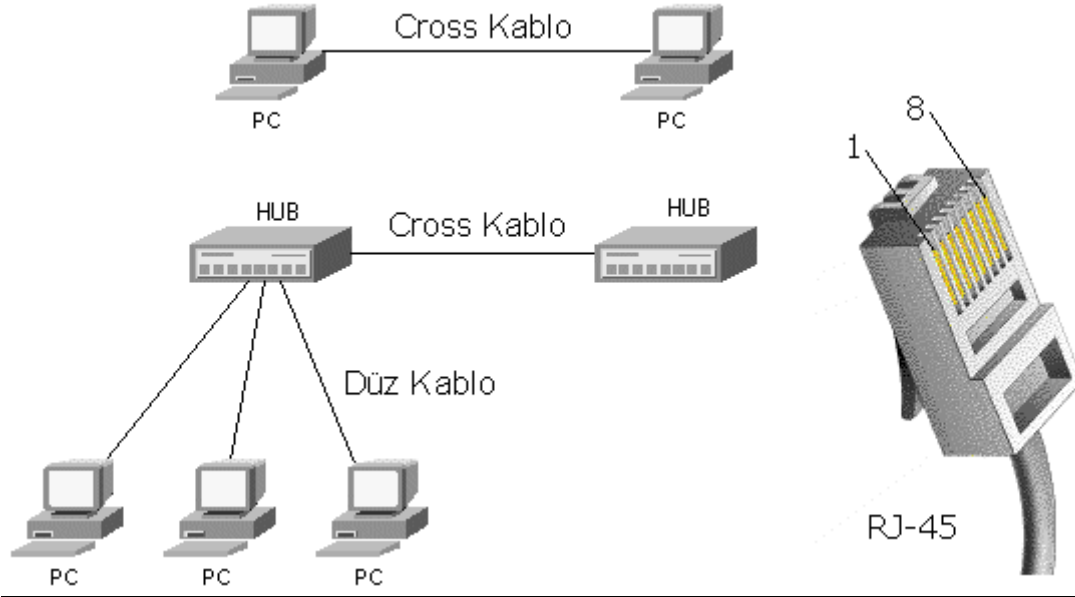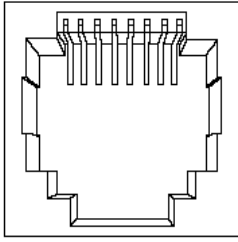
Figure B-1 10/100 RJ-45 Pinouts
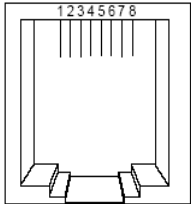
Pin	Label
1	RD+
2	RD-
3	TD+
4	NC
5	NC
6	TD-
7	NC
8	NC

Figure B-2 RJ-45 Pinouts for 10/100/1000 and 1000BASE-T GBIC Module Ports

Pin	Label
1	TP0+
2	TP0-
3	TP1+
4	TP2+
5	TP2-
6	TP1-
7	TP3+
8	TP3-

Düz Kablo (Straight-through)

Figure B-8   *Two Twisted-Pair Straight-Through Cable Schematic for 10/100 Ports*

```
Switch              Switch

3 TD+  ──────────▶  3 RD+
6 TD−  ──────────▶  6 RD−

1 RD+  ◀──────────  1 TD+
2 RD−  ◀──────────  2 TD−          H5578
```

PC'den HUB'a düz bağlantı

```
     TX+ ①────────① RX+
     TX- ②────────② RX-
     RX+ ③────────③ TX+
     RX- ⑥────────⑥ TX-
PC
```
HUB HUB

İki Hub arasında çapraz kablo

```
RX+ ①  ╲  ╱  ① RX+
RX- ②   ╲╱   ② RX-
TX+ ③   ╱╲   ③ TX+
TX- ⑥  ╱  ╲  ⑥ TX-
```
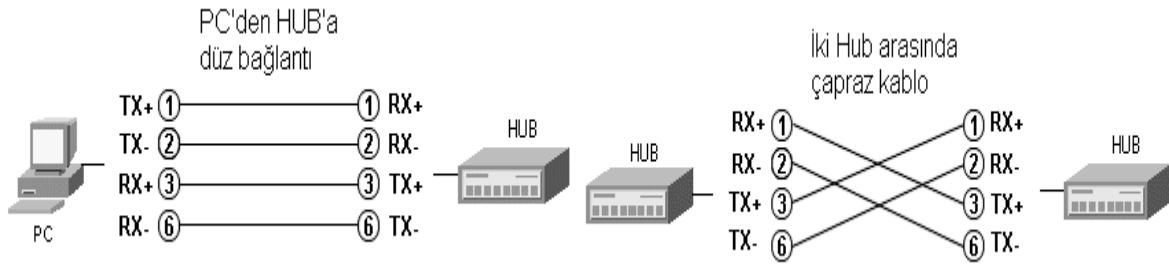HUB
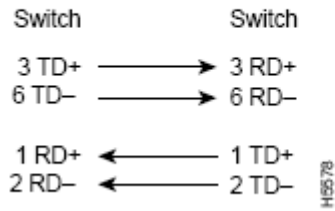
Figure B-10   *Four Twisted-Pair Straight-Through Cable Schematic for 10/100 Ports*

```
Switch              Switch

1  RD+  ◀──────────  1  TD+
2  RD-  ◀──────────  2  TD-
3  TD+  ──────────▶  3  RD+
6  TD-  ──────────▶  6  RD-

4  NC                4  NC
5  NC                5  NC
7  NC                7  NC
8  NC                8  NC          65271
```
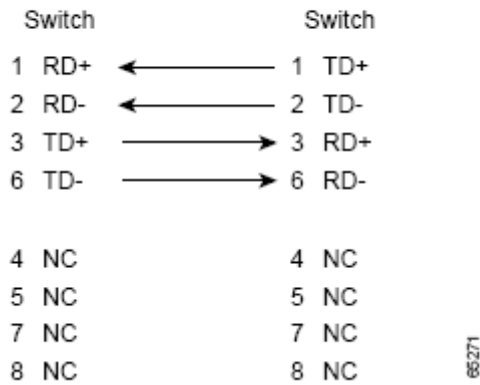
Figure B-12   *Four Twisted-Pair Straight-Through Cable Schematic for 10/100/1000 and 1000BASE-T GBIC Module Ports*

```
Switch              Switch

1  TPO+  ◀────────▶  1  TP1+
2  TPO-  ◀────────▶  2  TP1-
3  TP1+  ◀────────▶  3  TPO+
6  TP1-  ◀────────▶  6  TPO-

4  TP2+  ◀────────▶  4  TP3+
5  TP2-  ◀────────▶  5  TP3-
7  TP3+  ◀────────▶  7  TP2+
8  TP3-  ◀────────▶  8  TP2-        65272
```

Çarpraz Kablo (Crossover)

Figure B-9   Two Twisted-Pair Crossover Cable Schematic for 10/100 Ports
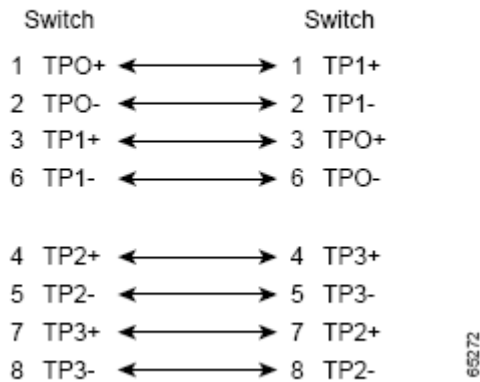
Switch

```
3 TD+
6 TD–

1 RD+
2 RD–
```

Switch

```
3 TD+
6 TD–

1 RD+
2 RD–
```

H5579

İki PC arasında
çapraz kablo

```
TX+ ①          ① TX+
TX- ②          ② TX-
RX+ ③          ③ RX+
RX- ⑥          ⑥ RX-
```
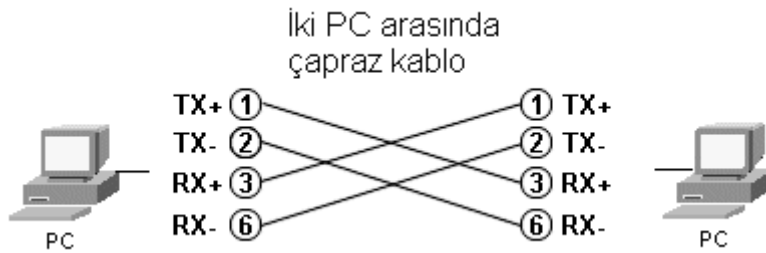
PC   PC
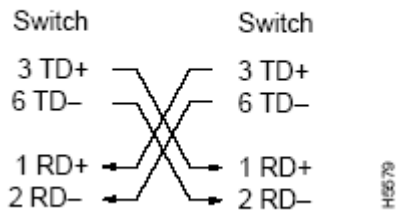
Figure B-11   Four Twisted-Pair Crossover Cable Schematic for 10/100 Ports

MGMT 10/100   Switch/Hub

```
1  RD+  ───────────►  1  RD+
2  RD-  ───────────►  2  RD-
3  TD+  ───────────   3  TD+
6  TD-  ───────────   6  TD-

4  NC                 4  NC
5  NC                 5  NC
7  NC                 7  NC
8  NC                 8  NC
```

65273
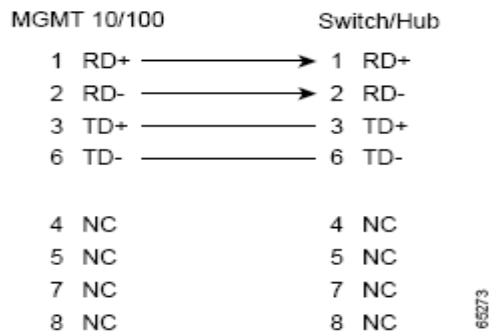
**Figure B-13   Four Twisted-Pair Crossover Cable Schematics for 10/100/1000 and
1000BASE-T GBIC Module Ports**

Switch   Switch

```
1  TPO+  ◄───   ───►  1  TP0+
2  TPO-  ◄───   ───►  2  TP0-
3  TP1+  ◄───   ───►  3  TP1+
6  TP1-  ◄───   ───►  6  TP1-

4  TP2+  ◄───   ───►  4  TP2+
5  TP2-  ◄───   ───►  5  TP2-
7  TP3+  ◄───   ───►  7  TP3+
8  TP3-  ◄───   ───►  8  TP3-
```

65274
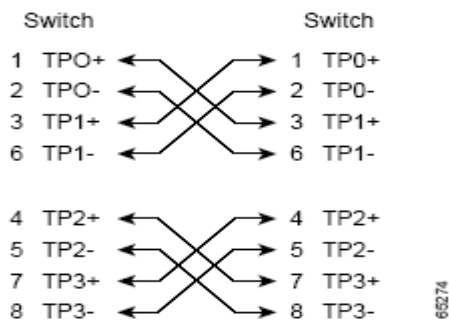
RJ-45 Rollover Console Cable (RJ-45, DB9, DB25)

Console Port (DTE)	RJ-45-to-DB-9 Adapter Cable		RJ-45-to-DB-25 Terminal Adapter	Console Device
Signal	RJ-45 Pin	DB-9 Pin	DB-25 Pin	Signal
RTS	1	8	5	CTS
Not connected	2	6	6	DSR
TxD	3	2	3	RxD
GND	4	5	7	GND
GND	5	5	7	GND
RxD	6	3	2	TxD
Not connected	7	4	20	DTR
CTS	8	7	4	RTS

Router or switch Console port (DTE)	RJ-45 to RJ-45 Rollover Cable (left end)	RJ-45 to RJ-45 Rollover Cable (right end)	RJ-45 to DB9 Adapter	Console Device (PC workstation serial port)
Signal	From RJ-45 Pin No.	To RJ-45 Pin No.	DB9 Pin No.	Signal
RTS	1	8	8	CTS
DTR	2	7	6	DSR
TxD	3	6	2	RxD
GND	4	5	5	GND
GND	5	4	5	GND
RxD	6	3	3	TxD
DSR	7	2	4	DTR
CTS	8	1	7	RTS

RS-232 – RS-232 Konsol Kablo (3Com 3300/1100)

PC-AT Serial Cable 9-pin to 9-pin

Switch 3300
Cable connector: 9-pin female

PC-AT Serial Port
Cable connector: 9-pin female

Screen	Shell			Shell	Screen	only required if screen
DTR	4			1	DCD	
TxD	3			2	RxD	always required
RxD	2			3	TxD	
CTS	8			4	DTR	required for handshake
Ground	5			5	Ground	always required
DSR	6			6	DSR	
RTS	7			7	RTS	required for handshake
DCD	1			8	CTS	