

# TNET Cabling Information

## MODULAR CABLE (Silver Satin)

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	Blue	+12 VDC Power Source (optional)	This 26 gage 8-conductor cable is suitable for most TNET applications. TNET terminals can be powered if the cable length does not exceed 100 ft. This inexpensive cable is not plenum rated or intended for use in areas with high electromagnetic noise (hospitals, airports or manufacturing areas with large power supplies, motors, welders, etc). ** This standard telephone type cable is easy to terminate and test.
	2	Orange	Ground (required)	
	3	Black	TD+ RS-422 Transmit data +	
	4	Red	TD- RS-422 Transmit data -	
	5	Green	RD+ RS-422 Receive data +	
	6	Yellow	RD- RS-422 Receive data -	
	7	Brown	Ground (required)	
	8	Grey (Silver)	+12 VDC Power Source (optional)	

CATEGORY 3,4,5 2-Pair UTP (Unshielded Twisted Pairs) cannot be used, no ground connection is possible.

## CATEGORY 3,4,5 2-Pair STP (Shielded Twisted Pairs) Cable

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	N/C	No connection possible	This 24 gage cable cannot be used to power terminals. The noise rejection is better than silver satin. **
	2	Foil Shield	Ground (required)	
	3	Red/White	TD+ RS-422 Transmit data +	Examples; Belden #9502 - Foil shield Belden #8332 - Foil & Braided shield Belden #89729 - Individual shield plenum rated
	4	White/Red	TD- RS-422 Transmit data -	
	5	Green/White	RD+ RS-422 Receive data +	
	6	White/Green	RD- RS-422 Receive data -	
	7	Foil Shield	Ground (required)	
	8	N/C	No connection possible	

## CATEGORY 3,4,5 3-Pair UTP (Unshielded Twisted Pairs) Cable

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	N/C	No connection possible	This 24 gage cable cannot be used to power terminals. The noise rejection is better than silver satin. **
	2	Blue/White	Ground (required)	
	3	Red/White	TD+ RS-422 Transmit data +	Examples; Belden #9503 - Foil shield Belden #8333 - Foil & Braided shield Belden #89730 - Individual shield plenum rated
	4	White/Red	TD- RS-422 Transmit data -	
	5	Green/White	RD+ RS-422 Receive data +	
	6	White/Green	RD- RS-422 Receive data -	
	7	White/Blue	Ground (required)	
	8	N/C	No connection possible	

## CATEGORY 3,4,5 3-Pair STP (Shielded Twisted Pairs) Cable

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	N/C	No connection possible	This 24 gage cable cannot be used to power terminals. The noise rejection is better than 2 pair STP or 3 pair UTP **.
	2	Blue/White	Ground (required)	
	3	Red/White	TD+ RS-422 Transmit data +	Examples; Belden #9503 - Foil shield Belden #8333 - Foil & Braided shield Belden #89730 - Individual shield plenum rated
	4	White/Red	TD- RS-422 Transmit data -	
	5	Green/White	RD+ RS-422 Receive data +	
	6	White/Green	RD- RS-422 Receive data -	
	7	White/Blue	Ground (required)	
	8	N/C	No connection possible	

## CATEGORY 3,4,5 4-Pair UTP (Unshielded Twisted Pairs) Cable

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	Blue/White	+12VDC Power Source (optional)	This 24 gage cable can be used to power terminals if the cable length does not exceed 100 ft. The noise rejection is better than silver satin. **
	2	White/Blue	Ground (required)	
	3	Red/White	TD+ RS-422 Transmit data +	
	4	White/Red	TD-RS-422 Transmit data -	
	5	Green/White	RD+ RS-422 Receive data +	
	6	White/Green	RD- RS-422 Receive data -	
	7	Orange/White	Ground (required)	
	8	White/Orange	+12VDC Power Source (optional)	

## CATEGORY 3,4,5 4-Pair STP (Shielded Twisted Pairs) Cable

RJ45	Pin#	Wire Color *	Signal Definition	Notes :
	1	Blue/White	+12VDC Power Source (optional)	This 24 gage cable can be used to power terminals if the cable length does not exceed 100 ft. The noise rejection is better than other cable types. **
	2	White/Blue	Ground (required)	
	3	Red/White TD+	RS-422 Transmit data +	Examples; Belden #9504 - Foil shield Belden #8334 - Foil & Braided shield Belden #89728 - Individual shield plenum rated
	4	White/Red TD-	RS-422 Transmit data -	
	5	Green/White	RD+ RS-422 Receive data +	
	6	White/Green	RD- RS-422 Receive data -	
	7	Orange/White	Ground (required)	
	8	White/Orange	+12VDC Power Source (optional)	

On the RJ45 modular cable plug, position 1 is on left-hand side if held pins up with tab facing away.

\* Wire colors are not mandatory other than for easy recognition of wire pairings.

\*\* Noise rejection is further enhanced when cables are run inside conduit.