

TLC703

Balance to Unbalance Converter

Introduction:

TLC703 is a G.703 balance to unbalance converter, it solved the signal convert problem between 750hm copper shaft to 120 ohm, twisted-pair adopt TLC703, users can complete 750hm copper shaft communication only use usually 1200hm twisted-pair copper shaft.

Packing List:

TLC703 is shipped with following items.

- 1. TLC703 Converter ×1
- 2. User manual ×1

Features:

- 1. Plug-and-play, small volume, easy installation
- 2. No power supply needed, no consumption
- 3. 1.6 or 5.6 BNC connector

Specifications:

Standard: ITU/CCITT G.703

twisted-pair signal: T+, T-, R+, R-, GND

Copper signal: TX, RX

Working: Transparent convert

Baud rate: 2Mbps

Isolation: 1000V

Interface style: BNC(75 ohm, unbalance)

RJ45(100 ohm, balance)

Environment, Power and Dimension

Working temperature: -40 to 80°C Storage temperature: -40 to 85°C

Relative humidity: 5% to 95%

Input power: No power supply needed

Consumption: No consumption L×W×H: 66mm×42mm×20mm

Shell: Iron

Color: Black or white

Weight: 50g

Warranty: 5 years

Approvals: FCC, CE, RoHS approvals

Circuit diagram:

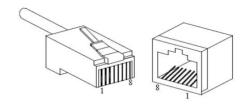
1.Connecting screen line

TLC703 leave factory setup fulfill with mostly users, users can setup screen line connecting 750hm copper shaft to 1200hm interface as follow lines configure:

RJ-45(120Ohm)	Jumper	Coax BNC(75ohm)
Pin3 (TX Shield)	JP1	Tx OUT Shield
Pin6 (TX Shield)	JP2	Rx OUT Shield

(Notice: JP1,JP2 have cut out before product leave factory)

2. Twisted-pair/copper shaft connecting line arrange

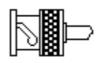


Map1. RJ45 pin map

Balance port (left: Male RJ45,right: Female RJ45)







Map2, copper shaft port BNC appearance map

Imbalance port (copper shaft BNC, in turn: Male,Female,side)
TLC703 have two style product, It is using in different copper shaft cable (BNC male and BNC female). Two product all use RJ45 with screen port .as follows is connection line arrange about twisted-pair and copper shaft cable:

Signal	RJ45	DTE	BNC	DTE
	Description	RJ45	Description	BNC
RxA	Receive Input	1	Receive Input	Tip
	Negative			
RxB	Receive Input	2	Receive	Ring
	Positive		Ground	
TxA	Transmit Output	4	Transmit	Tip
	Negativ		Output	
TxB	Transmit Output	5	Transmit	Ring
	Positive		Ground	
S1	Transmit Ground	3		
S2	Receive Ground	6		

Notice: TLC703 has two style product(M and F), please look at packaging.

Dimension:



Certifications:



3onedata

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