

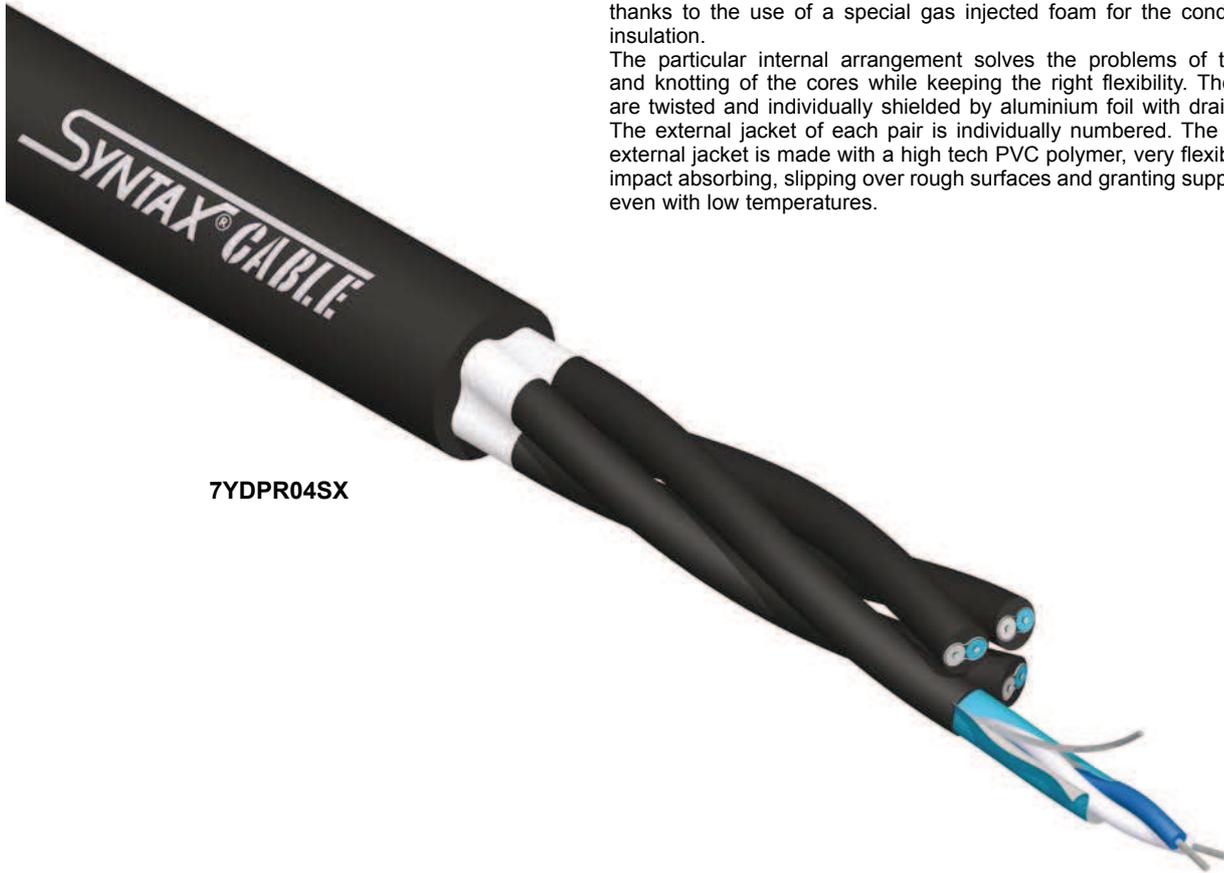
# DIGITAL CABLES

## DIGITAL MULTIPAIR mod. 7YD...SX

The SYNTAX DIGITAL MULTIPAIR cables are developed for those applications (either in fixed installations or outdoors) where the management of digital equipment are a very important part of the whole system.

The cables have been designed in accordance with the standard AES/ EBU specifications, 110 ohm impedance and a very low capacitance thanks to the use of a special gas injected foam for the conductors' insulation.

The particular internal arrangement solves the problems of twisting and knotting of the cores while keeping the right flexibility. The pairs are twisted and individually shielded by aluminium foil with drain wire. The external jacket of each pair is individually numbered. The overall external jacket is made with a high tech PVC polymer, very flexible and impact absorbing, slipping over rough surfaces and granting suppleness even with low temperatures.



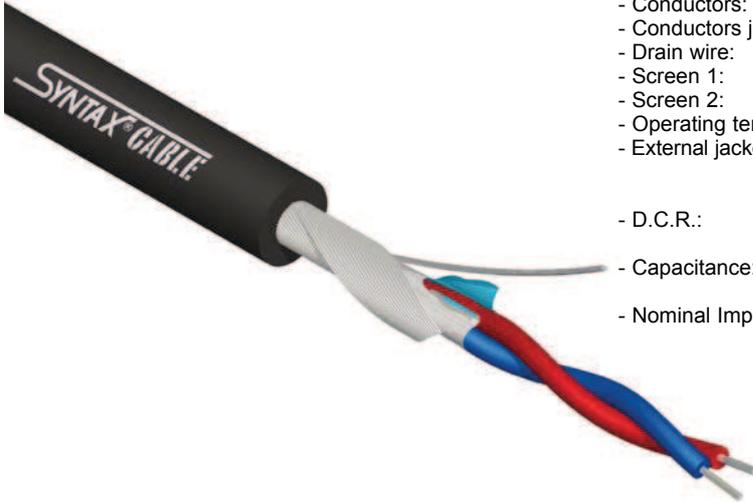
7YDPR04SX

- Conductors: tinned OFC 24 AWG - 28 x 0,10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 7 x 0,18 mm
- Screen: aluminium/mylar foil 100% coverage
- Operating temperature: -30° +70° C
- External jacket: matt Black super flexible PVC flame-retardant
- Nominal Impedence: 1-4 Mhz 110 ohm/100 mt
- D.C.R.: conductors <86 Ω/Km  
shield <70 Ω/Km
- Capacitance: cond./cond. 1Khz 37 nF/Km  
cond./shield 1Khz 57 nF/Km

N. PAIR	PART N.	Ø CABLE
4	7YDPR04SX	11,2 mm
8	7YDPR08SX	14,8 mm
12	7YDPR12SX	17,4 mm
16	7YDPR16SX	19,5 mm

# DIGITAL CABLES

## DIGITAL AES/EBU-DMX mod. 7XDDS03SXN - 7XDDS03SX



- Conductors: tinned OFC 24 AWG - 19x0,12 mm
- Conductors jacket: red/blue Foam Skin Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG - 19x0,12 mm
- Screen 1: high density spiral tinned OFC 95% cov.
- Screen 2: aluminium/polyester foil 100% cov.
- Operating temperature: -30° +70° C.
- External jacket: PVC Ø 5,5 mm flame-retardant  
Blue (7XDDS03SX)  
Black (7XDDS03SXN)
- D.C.R.: conductors <90 Ω/Km  
shield <40 Ω/Km
- Capacitance: cond./cond. 1Khz 40 nF/Km  
cond./shield 1Khz 80 nF/Km
- Nominal Impedance: 1-4 Mhz 110 Ω/100 mt

SYNTAX® single pair DIGITAL AES/EBU-DMX CABLE, (standard AES/EBU and DMX use specifications) is manufactured with reliably consistent impedance and features a special polymer sheath for low capacitance.

To ensure a high protection level from EMI/RFI noise, the shield is made up of two different screens:

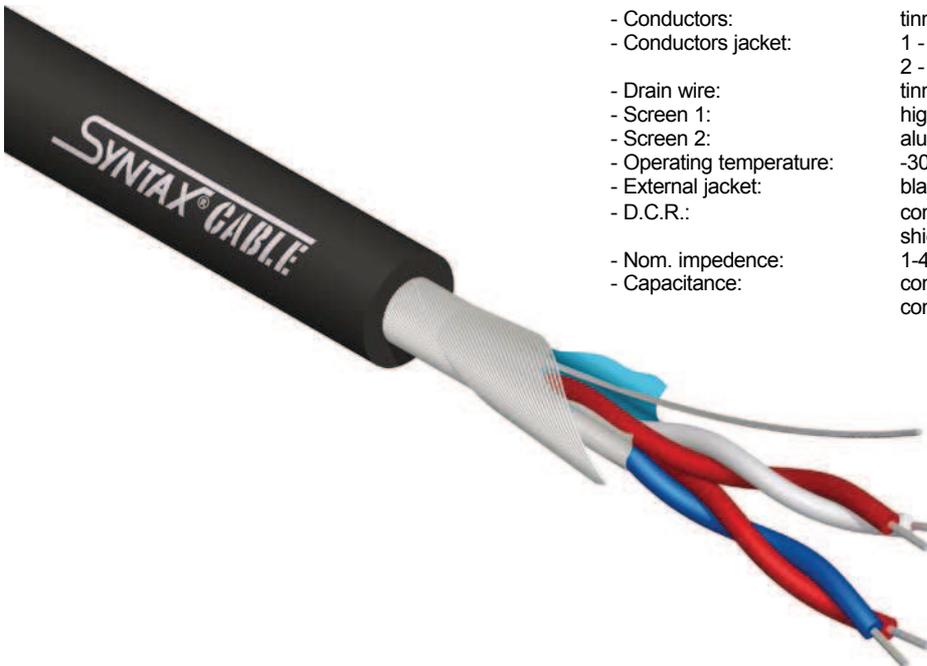
- the first is a high-density spiral tinned copper;
- the second is a aluminium/polyester foil.

The drain wire between the two screens makes connection easier.

Black or Blue PVC flame-retardant external jacket, trampling-proof, impact absorbing and flexible for longer lifespan.

**Furter model is the halogen free 7XDDHF03SX for installation use with external green jacket LSZH**

## TWO PAIRS DIGITAL mod. 7XDDS07SX



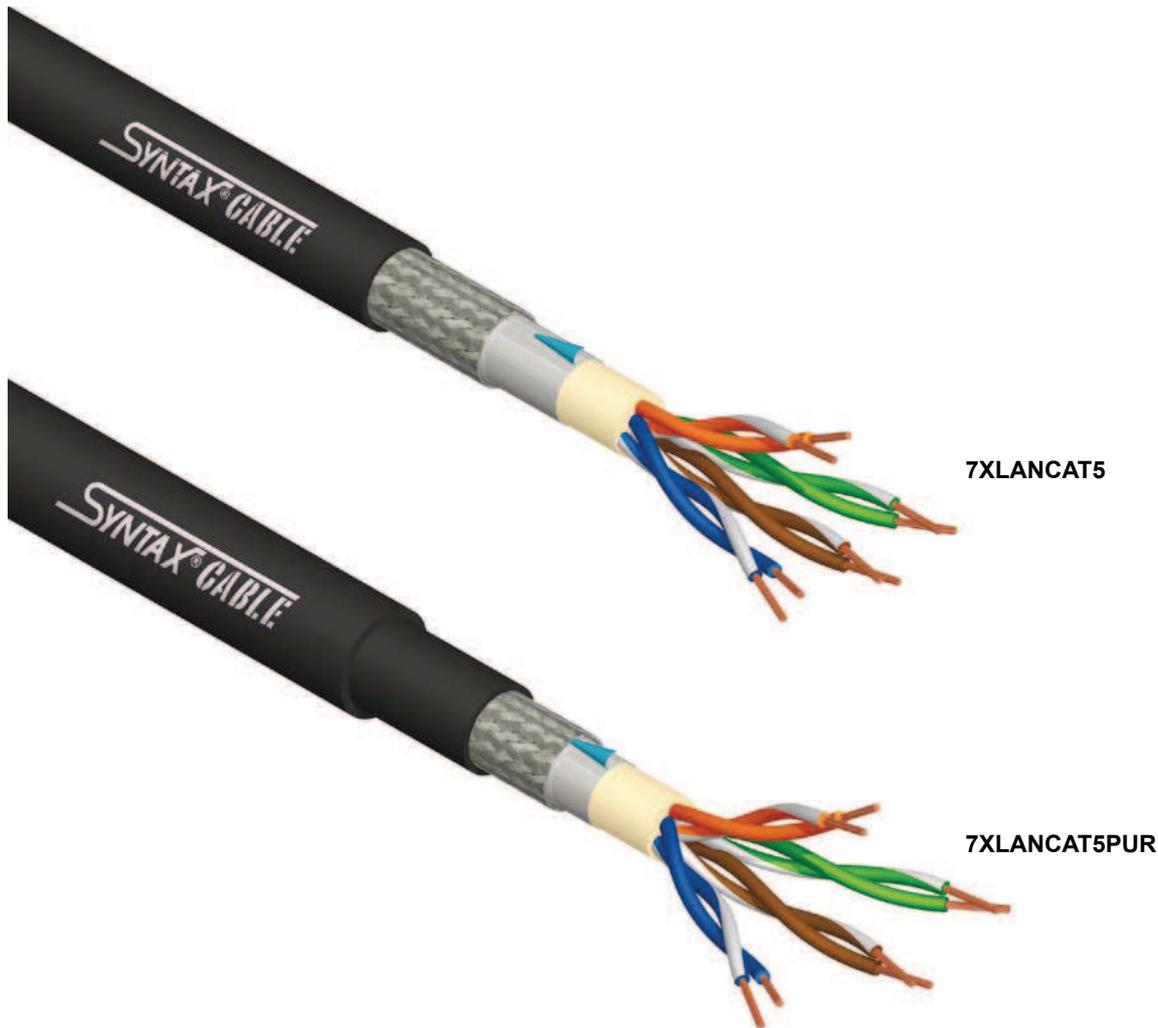
- Conductors: tinned OFC 24 AWG 19 x 0,12 mm
- Conductors jacket: 1 - red/blue Foam - Skin Ø 1,4 mm  
2 - red/black Foam - Skin Ø 1,4 mm
- Drain wire: tinned OFC 24 AWG 19 x 0,12 mm
- Screen 1: high density spiral tinned OFC 95% coverage
- Screen 2: aluminium / polyester foil 100% coverage
- Operating temperature: -30° +70° C.
- External jacket: black PVC Ø 7,2 mm flame-retardant
- D.C.R.: conductors <90 Ω/Km  
shield <25 Ω/Km
- Nom. impedance: 1-4 Mhz 110 ohm
- Capacitance: cond./cond. 1Khz 40 nF/Km  
cond./shield 1Khz 80 nF/Km

The SYNTAX® two twisted pairs digital cable is manufactured with reliably consistent impedance and features a special polymer sheath for low capacitance. The shield is made up of two different screens: the first is a high-density spiral tinned copper, the second is a aluminium/polyester foil.

The drain wire between the two screens makes connection easier.

The second pair may be used for the feedback signal on digital data lines. The external jacket is black PVC flame-retardant, trampling-proof, impact absorbing, water-proof and flexible for longer lifespan

## ETHERNET CABLES mod. 7XLANCAT5 - 7XLANCAT5PUR



SYNTAX® offers a cable with high intrinsic quality, excellent flexibility and robustness to tackle the difficult jobs in the entertainment world, ensuring reliable performance in critical conditions.

With the great spread of the Internet, this kind of cables, widely used in the computer world, are produced on a large scale to drive down prices, often at the expense of transmission quality and manageability.

The Syntax CAT5e cable is designed for use in broadcasting and in all the network installations for transmission of high Class D bit-rates; it is compliant with ISO/IEC 11801 - EN 50173 - EIA/TIA 568B.2, ensuring accurate transmission of data up to 90 meter cable length.

To maintain the correct data transfer along the entire length, it is very important that the body of the cable is not deformed by an alteration in the internal position of the four twisted pairs. In this regards, the use of a particular foamy compound keeps the twisted pairs fixed and properly spaced. Moreover, the presence of two shields (one in aluminium foil and the other in tinned copper braid) guarantees a 100% protection from external noise. The version PUR up-jacketed has been particularly designed for heavy outdoor application, for use on cable drum, for mobile transmission vehicles and wherever a high abrasion resistance and continuous bending cycles are needed, preserving an enduring transmission quality. When using this version, the second jacket should be removed near the RJ45 connector, in order to get the right diameter for assembling.

### GENERAL CHARACTERISTICS

- Conductors: Solid bare copper wire -  $\varnothing=0,51$  mm
- Conductors jacket: Polyolefin Foam -  $\varnothing=0,95$  mm
- Color code: green, white-green, orange, white-orange, blue, white-blue, brown, white-brown
- First screen: aluminium-maylar overlapping foil 100%
- Second screen: tinned copper braid coverage >80%
- Resistance of conductors: < 90  $\Omega$ /Km
- Insulation resistance: > 10.000  $\Omega$ /Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100  $\Omega$
- Operating temperature: -30° C / +70° C
- 7XLANCAT5 Jacket: PVC compound black  $\varnothing=6,4$  mm
- 7XLANCAT5PUR First jacket: PVC compound black flame retardant  $\varnothing=6,4$  mm
- 7XLANCAT5PUR Second jacket: Polyurethane compound black  $\varnothing=7,7$  mm

FREQUENCY	1 MHZ	4 MHZ	10 MHZ	16 MHZ	20 MHZ	32.25 MHZ	62.50 MHZ	100 MHZ
Attenuation (dB/100 m)	2.0	3.8	6.1	7.5	8.6	10.7	15.6	19.9
Next (dB) min	66.3	57.3	51.3	48.2	46.8	43.9	39.4	36.4