### HYBRID CABLES

#### POWER + DIGITAL mod. 7XD1F315SX - 7XD2F315SX

The SYNTAX® POWER+DIGITAL is a hybrid cable with a jacketed 3 x 1.5 mm² main power cable combined with one or two DMX twisted pairs (7XD1F315SX or 7XD2F315SX).

The digital signal pair is shielded by an aluminium/polyester foil screen and covered with a black PVC jacket. The power line is equipped with its own PVC jacket for added safety in compliance with the I.E.C. regulation. Suitable for parallel controls of light mixing boards via power line and DMX signal via digital cable. Also used for analogic audio cabinets when power is supplied. The external flame-retardant black PVC jacket is very flexible, trampling-proof, impact absorbing and water-proof. Overall diameter 7XD1F315SX: 14 mm - 7XD2F315SX: 14.5 mm. Operating temperature -30° to 70° C.

#### 7XD1F315SX

- **1(2) x DIGITAL**
  - Conductors: Bare OFC 24 AWG 19 x 0.12 mm
  - Conductors jacket: red/black Foam - Skin Ø 1.4 mm
  - Drain wire: tinned OFC 24 AWG 7 x 0.20 mm
  - Screen: aluminium/polyester foil 100% coverage
  - External jacket: Black PVC Ø 4.3 mm flame-retardant
  - Nominal Impedence: 1-4 Mhz 110 ohm
  - D.C.R.:<90 Ω/Km
  - Capacitance:
    - cond./cond. 1Khz 40 nF/Km
    - cond./shield 1Khz 80 nF/Km

- **1 x POWER**
  - Conductors: 3 x 1.5 mm² twisted bare
  - Conductors jacket: 82 x 0.15 mm - OFC 15 AWG
  - External jacket: Black PVC Ø 7.5 mm flame-retardant

#### 7XD2F315SX

The combined SYNTAX® 7YPW3LN2 cable finds its main application in the digital signage field, whenever a clean, easy and fast cabling is required. The power line is equipped with its own PVC jacket for added safety in compliance with the I.E.C. regulation.

The data signals are conveyed by two Cat5e cable with the same performance of our 7XLANCAT5 cable, to ensure a reliable performance in critical conditions. The external flame-retardant black PVC jacket is flexible, trampling-proof, impact absorbing and easy to handle. Overall diameter 18.6 mm

#### 2 x CAT5E mod. 7YPW3LN2

- **2 x CAT5E**
  - Conductors: Solid bare OFC - Ø=0.51 mm
  - Conductors jacket: Polyolefin Foam - Ø=0.95 mm
  - Color code: Comply EIA/TIA 568
  - First screen: aluminium-maylar foil 100%
  - Second screen: tinned copper braid cov. >80%
  - Resistance of conductors: < 90 Ω/Km
  - Insulation resistance: > 10.000 Ω/Km
  - Capacity between conductors: 51 nF/Km
  - Impedance from 1 to 100MHz: 100 Ω

- **1 x POWER**
  - Conductors: 3 x 1.5 mm² twisted bare
  - Conductors jacket: 82 x 0.15 mm - OFC 15 AWG
  - External jacket: Black PVC Ø 7.5 mm flame-retardant
HYBRID CABLES

POWER + 2 x CAT5E + 2 x DIGITAL  mod. 7YPW3LN2DG2

The SYNTAX® 7YPW3LN2DG2 cable has the same specs as the 7YPW3LN2 cable with the addition of two AES/EBU digital pair cables. Overall diameter 19.6 mm

2 x CAT5E
- Conductors: Solid bare OFC - Ø=0,51 mm
- Conductors jacket: Polyolefin Foam - Ø=0,95 mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-maylar foil 100%
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10,000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω

2 x DIGITAL
- Conductors: tinned OFC 24 AWG - 28 x 0,10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Color code: aluminium/maylar foil 100% coverage
- First screen: 1-4 Mhz 110 ohm/100 mt
- Second screen: tinned copper braid cov. >80%
- Nominal Impedence: External jacket: matt Black PVC flame-retardant
- D.C.R.: conductors <86 Ω/Km
- Capacitance: shield <70 Ω/Km
cond./cond. 1Khz 37 nF/Km
cond./shield 1Khz 57 nF/Km

1 x POWER
- Conductors: 3 x 1.5 mm² twisted bare
- Conductors jacket: 82 x 0,15 mm - OFC 15 AWG
- Color code: Brown, Blue, Yellow-Green PVC
- External jacket: Black PVC Ø 7,5 mm flame-retardant

Another version in our hybrid series range, the SYNTAX 7YPW3LN1VD1DG2 cable is designed as the 7YPW3LN2DG2 cable, but it has one CAT5 and one HDTV video cable instead of two CAT5 cables. Overall diameter 19.6 mm

POWER + 1 x CAT5E + 1 x VIDEO + 2 x DIGITAL  mod. 7YPW3LN1VD1DG2

1 x CAT5E
- Conductors: Solid bare OFC - Ø=0,51 mm
- Conductors jacket: Polyolefin Foam - Ø=0,95 mm
- Color code: Comply EIA/TIA 568
- First screen: aluminium-maylar foil 100%
- Second screen: tinned copper braid cov. >80%
- Resistance of conductors: < 90 Ω/Km
- Insulation resistance: > 10,000 Ω/Km
- Capacity between conductors: 51 nF/Km
- Impedance from 1 to 100MHz: 100 Ω

1 x VIDEO
- Conductors: solid OFC red copper 1 x 0,81 mm
- Conductors jacket: Ø 3,75 mm foam-polyolefin
- Shield 1: OFC inner copper braid
- Shield 2: aluminium foil
- External jacket: gray PVC numbered Ø 5.8 mm
- Capacitance: 60 nF/Km
- Resistance of insulation: >10 Ω/Km
- Electrical resistance: Inner conductor < 36 Ω/Km
- Electrical resistance: Screen < 8 Ω/Km
- Nominal impedance: 75 Ω/Km ± 3

2 x DIGITAL
- Conductors: tinned OFC 24 AWG - 28 x 0,10 mm
- Conductors jacket: white/blue gas injected foam - Ø 1,4 mm
- Color code: aluminium/maylar foil 100% coverage
- First screen: 1-4 Mhz 110 ohm/100 mt
- Second screen: tinned copper braid cov. >80%
- Nominal Impedence: External jacket: matt Black PVC flame-retardant
- D.C.R.: conductors <86 Ω/Km
- Capacitance: shield <70 Ω/Km
cond./cond. 1Khz 37 nF/Km
cond./shield 1Khz 57 nF/Km

1 x POWER
- Conductors: 3 x 1.5 mm² twisted bare
- Conductors jacket: 82 x 0,15 mm - OFC 15 AWG
- Conductors jacket: Brown, Blue, Yellow-Green PVC
- External jacket: Black PVC Ø 7,5 mm flame-retardant

The SYNTAX® cable has the same specs as the 7YPW3LN2 cable with the addition of two AES/EBU digital pair cables. Overall diameter 19.6 mm
The hybrid SYNTAX® 7YVD6DG8 cable is ideally suitable for the broadcasting world, as it has been conceived to manage combined audio and video signal distribution. The twisted pairs have been designed in accordance with the AES/EBU audio standard and the video cables are suitable for HDTV high performance applications.

Using this cable and the exclusive SYNTAX SV 25/6 multipin audio/video combo connector, it is possible produce several extension leads and eventually link them to any audio/video stage-box. Overall diameter 24 mm.

### 6 x VIDEO
- **Conductor:** solid OFC red copper 1 x 0.81 mm
- **Conductor jacket:** Ø 3.75 mm foam-polyolefin
- **Shield 1:** OFC tinned copper braid
- **Shield 2:** aluminium foil
- **External jacket:** gray PVC numbered Ø 5.8 mm
- **Capacitance:** 60 nF/Km
- **Resistance of insulation:** >10 Ω/Km
- **Electrical resistance:** Inner conductor < 36 Ω/Km
- **Electrical resistance:** Screen < 8 Ω/Km
- **Nominal impedance:** 75 Ω/Km ± 3

### 8 x DIGITAL
- **Conductors:** tinned OFC 26 AWG
- **Screen 1:** high density spiral tinned OFC
- **Screen 2:** aluminium foil/polyester
- **External jacket:** black PVC numbered Ø 3.6 mm
- **D.C.R. conductors:** < 140 Ω/Km
- **D.C.R. shield:** < 22 Ω/Km
- **Capacitance cond./cond.:** 1KHz 50 nF/Km
- **Nominal impedance:** 110 Ω

### NOMINAL ATTENUATION (dB/100 m)

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<th>Frequency (MHz)</th>
<th>Attenuation (dB)</th>
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