

## RC5S-B2A2

### RAMCAT5 & digital audio - system cable audio networks

- 2 Data Cables CAT5e - heavy duty
- SF/UTP (overall foil + braid shield)
- 2 Digital Audio Cables, 110 Ω, AWG24
- EtherSound™ tested by Digigram up to 120 m



This system cable with 2x CAT5 and 2x AES/EBU was developed for mobile audio networks (e.g. for the connection of Stage Racks with the Allen&Heath iLive mixers which need 2 Cat5 cables). As a 2-fold network cable element the especially robust, double shielded and windable RC5SB is used. Thanks to solid AWG24 conductors it allows EtherSound™ up to 120 metres. The suitability for the mobile use is reached by the special construction with a cross-shaped twisting element. Two additional digital audio cables (AWG24, 110 Ω) allow additional functions such as Intercom, monitoring, serial remote control etc.

Dieses Systemkabel mit 2x CAT5 und 2x AES/EBU Leitungen wurde für den Betrieb von mobilen Audio Netzwerken (z.B für die Verbindung der abgesetzten Stage Racks mit den iLive Mischpulten von Allen&Heath, welche 2 Cat5 Kabel benötigen) entwickelt. Als 2-faches Netzwerk Kabelement kommt das besonders robuste, doppelt geschirmte und trommelbare RC5SB zum Einsatz. Dank AWG24 Massivleitern ermöglicht es EtherSound™ bis zu 120 Meter. Die Eignung für den mobilen Betrieb wird durch den besonderen Aufbau mit kreuzförmigem Verseilelement erreicht. Zwei zusätzliche digitale Audioleitungen (AWG24, 110 Ω) ermöglichen Zusatzfunktionen wie Intercom, Monitoring, serielle Fernsteuerung usw.

#### Composite

|                     |                       |
|---------------------|-----------------------|
| Twisting            | 2 x Data + 2 x Audio  |
| Taping              | fleece                |
| Outer Jacket        | PVC                   |
| Overall Diameter    | 16.4 mm               |
| Min. Bending Radius | 10 x overall diameter |
| Working Temperature | -20°C / +70°C         |

#### Composite

|                        |                       |
|------------------------|-----------------------|
| Verseilung             | 2 x Data + 2 x Audio  |
| Bewicklung             | Vlies                 |
| Außenmantel            | PVC                   |
| Außendurchmesser       | 16,4 mm               |
| Min. Biegeradius       | 10 x Außendurchmesser |
| Zul. Temperaturbereich | -20°C / +70°C         |

#### Audio Cable

|               |   |
|---------------|---|
| Conductor     | stranded tinned copper, 7 x 0.20 mm (AWG24/7) |
| Cross Section | 0.22 mm <sup>2</sup>                          |
| Insulation    | Foam-Skin-PE (red and blue)                   |
| Shielding     | tinned stranded drain wire + AL/PETP foil     |
| Jacket        | PVC, grey, numbered, 4.0 mm Ø                 |

#### Audioleitung

|                   |   |
|-------------------|---|
| Leiteraufbau      | verzinnte Cu-Litze, 7 x 0,20 mm (AWG24/7) |
| Leiterquerschnitt | 0,22 mm <sup>2</sup>                      |
| Isolation         | Foam-Skin PE (rot + blau)                 |
| Abschirmung       | Beilaufitze verzinkt + AL/PETP Folie      |
| Außenmantel       | PVC, grau, nummeriert, 4,0 mm Ø           |

|                          |              |
|--------------------------|--------------|
| Conductor Resistance     | < 85 Ω/km    |
| Capacitance              | 47 pF/m      |
| Characteristic Impedance | 110 Ω        |
| Attenuation [db/100m]    |              |
| 1 MHz                    | 2.3          |
| 3 MHz                    | 3.9          |
| 10 MHz                   | 6.9          |
| Insulation Resistance    | > 10 GΩ x km |
| Test Voltage             |              |
| Cond./Cond.              | 1200 V       |
| Cond./Screen             | 500 V        |

|                      |              |
|----------------------|--------------|
| Leiterwiderstand     | < 85 Ω/km    |
| Kapazität            | 47 pF/m      |
| Wellenwiderstand     | 110 Ω        |
| Dämpfung [db/100m]   |              |
| 1 MHz                | 2.3          |
| 3 MHz                | 3.9          |
| 10 MHz               | 6.9          |
| Isolationswiderstand | > 10 GΩ x km |
| Prüfspannung         |              |
| Ader/Ader            | 1200 V       |
| Ader/Schirm          | 500 V        |

### Data Cable

|                         |   |
|-------------------------|---|
| <b>Conductor</b>        | solid bare copper wire, Ø 0.52 mm (AWG24/1)       |
| <b>Core Insulation</b>  | Foam-Skin-PE                                      |
| <b>Core Stranding</b>   | 2 cores twisted to a pair                         |
| <b>Cable Stranding</b>  | 4 pairs twisted within a central PE cross         |
| <b>Overall Shield</b>   | AL/PETP foil + tinned copper braid (coverage 80%) |
| <b>Jacket</b>           | PVC   |
| <b>Overall Diameter</b> | 6.6 mm  |

|                                 |             |
|---------------------------------|-------------|
| <b>Conductor Resistance</b>     | < 85 Ω/km   |
| <b>Capacitance</b>              | 48 pF/m     |
| <b>Characteristic Impedance</b> | 100 Ω ± 15% |
| <b>Signal Speed</b>             | 0.76 c      |
| <b>Propagation Delay</b>        | 4.9 nsec/m  |
| <b>Delay Skew</b>               | 0.25 nsec/m |

### Datenleitung

|                         |  |
|-------------------------|--|
| <b>Leiter</b>           | blanker Cu-Massivleiter, Ø 0.52 mm (AWG24/1)           |
| <b>Aderisolation</b>    | Foam-Skin-PE   |
| <b>Paarverseilung</b>   | 2 Adern zum Paar                                       |
| <b>Gesamtverseilung</b> | 4 Paare über PE-Kreuz                                  |
| <b>Gesamtschirm</b>     | AL/PETP Folie + verzinntes Cu-Geflecht (Bedeckung 80%) |
| <b>Außenmantel</b>      | PVC  |
| <b>Außendurchmesser</b> | 6.6 mm   |

|                              |             |
|------------------------------|-------------|
| <b>Leiterwiderstand</b>      | < 85 Ω/km   |
| <b>Betriebskapazität</b>     | 48 pF/m     |
| <b>Wellenwiderstand</b>      | 100 Ω ± 15% |
| <b>Signalgeschwindigkeit</b> | 0.76 c      |
| <b>Signallaufzeit</b>        | 4.9 nsec/m  |
| <b>Laufzeitunterschied</b>   | 0.25 nsec/m |

| Frequency [MHz]<br>Frequenz [MHz] | Attenuation<br>Dämpfung<br>[dB/100m] |              | Next<br>[dB] |              | ACR<br>[dB] |              | RL<br>[dB] |              |
|-----------------------------------|--------------------------------------|--------------|--------------|--------------|-------------|--------------|------------|--------------|
|                                   | NOM                                  | MAX<br>CAT5e | NOM          | MIN<br>CAT5e | NOM         | MIN<br>CAT5e | NOM        | MIN<br>CAT5e |
| 1                                 | 2.0                                  | 2.1          | 85           | 65           | 83.0        | 62.9         | 26         | -            |
| 4                                 | 3.9                                  | 4.0          | 74           | 56           | 70.1        | 52.0         | 28         | 23.0         |
| 10                                | 6.1                                  | 6.3          | 70           | 50           | 63.9        | 43.7         | 30         | 25.0         |
| 16                                | 7.8                                  | 8.0          | 68           | 47           | 60.2        | 39.0         | 30         | 25.0         |
| 20                                | 8.7                                  | 9.0          | 63           | 46           | 54.3        | 37           | 30         | 25.0         |
| 31.25                             | 10.9                                 | 11.4         | 58           | 43           | 47.1        | 31.6         | 28         | 23.6         |
| 62.5                              | 15.9                                 | 16.5         | 55           | 48           | 39.1        | 31.5         | 26         | 21.5         |
| 100                               | 20.6                                 | 21.3         | 52           | 35           | 31.4        | 13.7         | 24         | 20.1         |
| 155                               | 24.8                                 | -            | 49           | -            | 24.2        | -            | 21         | -            |
| 200                               | 29.3                                 | -            | 46           | -            | 16.7        | -            | 19         | -            |

■ [black]

| Order Code<br>Bestell-Nr. | Outer Jacket<br>Außenmantel | Colour<br>Farbe | Weight<br>Gewicht | Standard Length [m]<br>Standard Längen [m] | Max. Length / Reel<br>Max. Länge / Spule |
|---------------------------|-----------------------------|-----------------|-------------------|--|--|
| RC5-SB2A                  | PVC                         | black           | 340 g/m           | 50 / 100                                   | 300 m                                    |