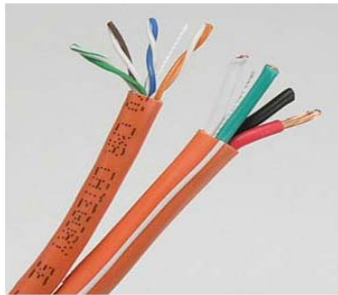


# Cat 5E + AUDIO 16/4 Composite Cable



### Electrical Performance

**CAT5E UTP LAN CABLE** For details, please see Attachment 1  
**Audio 16/4 Cable** For details, please see Attachment 2

### Description

**One 4 Pair Cat5E UTP Cable**  
**Complies to TIA 568-C.2**  
24 Awg Solid Bare Copper Conductor / PE Insulation  
  
**One Audio Cable 16/4**  
16 AWG Oxygen Free Bare Copper  
4 Conductors

### Electrical Characteristics

**CAT5E UTP LAN CABLE** For details, please see Attachment 1  
**Audio 16/4 Cable** For details, please see Attachment 2

### Applicable Standards

For use in Home Network Systems  
**Reference Standard**  
SCTE IPS-SP-001, TIA-568-C.2

### Mechanical Characteristics

Test Object		Outer Jacket
	Test Material	PVC
Before	Tensile Strength (Mpa)	>=1.034
Aging	Elongation (%)	>=200
	Aging Condition (°C x hrs)	113.0 ± 1.0 x 168
After	Tensile Strength (Mpa)	>=85% unaged
Aging	Elongation (%)	>=50% unaged
	Cold Bend (-20 ± 2°C x 4 hrs)	No crack

### Physical Characteristics

**CAT5E TUP LAN CABLE** For details, please see Attachment 1  
  
**Audio 16/4 Cable** For details, please see Attachment 2

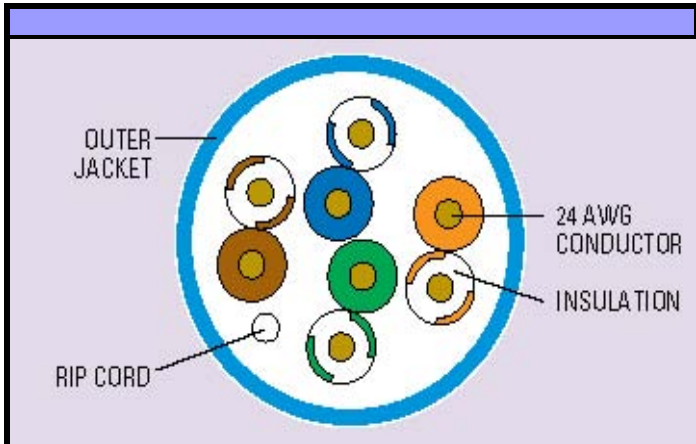
### Cable Marking

H15E164MYL CATEGORY 5E 350MHZ 4 PR 24 AWG AND 4 COND  
16 AWG AUDIO CABLE CMR FT4 C(ETL)US XXXXXXXX \*\*\*FT

### Part Numbers

Part #	Color	Put-up
	Yellow	500' Reel

# Cat5E + AUDIO 16/4 Attachment 1



### Description

24 AWG Cat5E CMR, High-Performance Data Cable

### Applicable Standards

- ETL Listed Type CMR
- C(ETL) listed CMG FT4
- ETL Verified to TIA - 568-C.2, and ISO/IEC 11801
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 100BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

### Physical Characteristics

Number of Conductor Pairs	4
Size	24 AWG
Stranding	Solid
Conductor Material	Solid Annealed Bare Copper
Shield Material	Unshielded
Rip Cord	Yes
Insulation Material	Polyethylene
Insulation Overall Diameter	0.035 in. ± 0.0002 in.
Insulation Average Thickness	0.0081 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.023 in.
Outer Jacket Nominal O.D.	0.200 in. ± 0.008 in.
Nominal Weight	20 lbs.

### Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Tensile Strength	Before	> = 13.8 Mpa
	Aging	> = 100%
Aging Condition		100°C x 240 hours
	After	> = 85% of unaged
	Aging	> = 50% of unaged

### Color Code

Pair 1	White / Blue	Blue
Pair 2	White / Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown

### Electrical Performance


Frequency (MHz)	Attenuation (dB/100m)		Return loss (dB)		NEXT (dB)		PS-NEXT (dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	1.8	1.5	23.0	33.0	72.0	81.1	70.0	78.7
1	2.0	1.8	23.0	38.6	70.3	79.4	68.3	76.9
4	4.1	3.6	23.0	39.8	61.2	69.9	59.3	67.4
8	5.8	5.1	24.5	38.2	56.8	61.9	54.8	59.4
10	6.5	5.8	25.0	38.0	55.3	62.4	53.5	59.9
16	8.2	7.4	25.0	37.4	52.3	57.8	50.3	55.2
20	9.3	8.2	25.0	36.8	50.8	56.4	48.8	53.8
25	10.4	9.3	24.3	35.2	49.3	56.3	47.3	53.6
31.25	11.7	10.5	23.6	33.3	47.9	53.8	45.9	51.1
62.5	17.0	14.9	21.5	32.2	43.4	49.8	41.4	47.4
100	22.0	19.2	20.1	31.3	40.3	47.5	38.3	45.0
155	28.1	24.2	18.8	29.8	37.4	45.1	35.4	42.6
200	32.4	27.3	18.0	28.5	35.7	43.3	33.7	40.2
250	38.9	30.9	17.5	27.3	34.8	41.4	32.5	39.0
300	41.0	34.1	16.8	25.6	33.1	40.2	31.1	37.7
350	44.9	37.8	16.3	23.2	32.1	39.0	30.1	36.5

Frequency (MHz)	ELFEXT (dB)		PS-ELFEXT (dB)		ACR (dB)		PS-ACR (dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
0.772	66.0	73.3	63.0	72.7	70.2	79.2	68.2	77.0
1	63.8	71.3	60.8	70.6	68.2	77.6	66.3	75.0
4	51.7	59.4	48.7	58.7	57.2	66.3	55.2	63.5
8	45.7	53.2	42.7	51.1	51.0	59.8	49.0	56.9
10	43.8	50.5	40.8	49.7	48.8	56.6	47.0	53.7
16	39.7	47.0	36.7	45.1	43.0	53.0	42.1	47.4
20	39.7	45.0	34.7	43.6	41.5	50.5	39.5	45.0
25	35.8	43.3	32.8	42.0	38.9	47.0	36.9	43.7
31.25	33.9	41.3	30.9	40.5	36.5	43.3	34.2	40.0
62.5	27.8	35.8	24.8	34.5	26.4	35.0	24.4	31.2
100	23.8	31.3	20.8	30.3	18.3	26.2	16.3	24.2
155	19.9	27.5	16.9	26.9	10.0	20.9	7.3	15.9
200	17.7	24.7	14.7	24.5	5.0	16.0	2.0	10.0
250	17.1	22.2	14.0	22.5	0.0	10.6	-	4.0
300	16.7	20.5	13.5	20.7	-	6.1	-	-1.3
350	16.0	19.4	12.8	19.6	-	1.2	-	-6.4

\* Values above 100MHz are information only

### Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Maximum Pair-to-Pair Ground Capacitance Unbalanced	330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Maximum Delay Skew	40 nS / 100 Meters

<b>AUDIO CABLE</b>		
<b>16 AWG / 4 Conductor</b>		
		
Description		
16/4 Stranded CMR/CL3R Sound Audio Cable		
Applicable Standards		
<ul style="list-style-type: none"> <li>• For Communication and Signal Control Systems</li> <li>• 4 Oxygen Free Bare Copper Conductors in an Overall Jacket</li> </ul>		
Physical Characteristics		
	<b>Conductor</b>	<b>Oxygen Free B.C.</b>
	Number of Conductors	4
	AWG	16
	Stranding	65/34
	Diameter (inches)	0.0063
	Dia. Over Dieleccric (inches)	0.058
	<b>Insulation</b>	<b>Fire Retardant PVC</b>
	Dia. Over Dieleccric (inches)	.092 nom
	<b>Jacket</b>	<b>Fire Retardant PVC</b>
	Dia. Over Dieleccric (inches)	0.28
	Nom. Jacket Thickness (inches)	0.022
	Min. Spot (inches)	0.018
	Conductor Resistance (ohms)	3.7
	Nominal Weight (pounds)	27
Cable Marking		
	<b>Insulation Colors</b>	Black / Red/ White/ Green