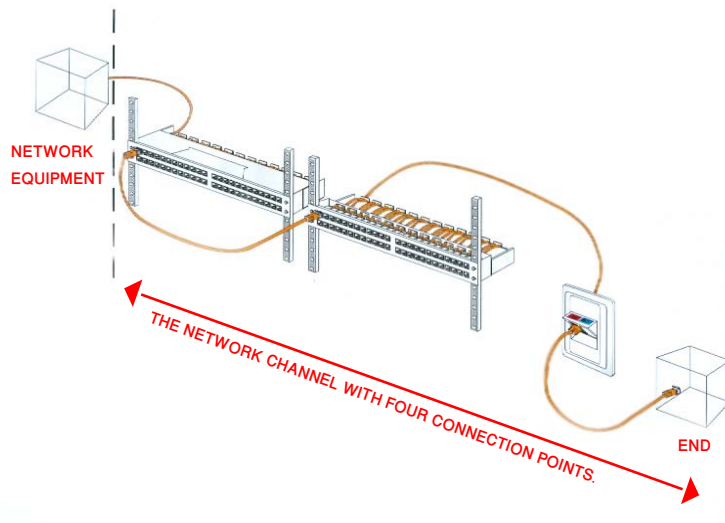


# CAT 6 UTP SYSTEM PRODUCTS



[www.infrastone.com](http://www.infrastone.com)

# CAT 6 UTP SYSTEM PRODUCTS



## THE CATEGORY 6 utp CABLING SYSTEM

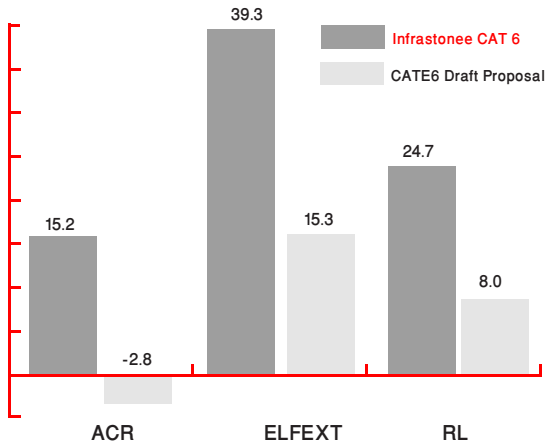
With Gigabit Ethernet, Broadband, Audio/Video and Security capabilities, our Cat6 Bulk Cable is ideal for your critical network installation. Whether you are wiring your home, office or entire campus, we have the solution that's right for you. Available in a PVC jacket, our cable can be installed just about anywhere. It is offered in one standard color, gray.

The patch panel is 19 inch rack mountable RJ45 panels, each panels has cutouts that Accept virtually all snap-in jacks ,the kits includes the new icon labels with plastic for easy port identification, blank anodized panels can be mounted directly to an EIA standard 19 inch relay back or cabinets

The series keystone jacks work together with high speed cables, cords and panels to provide Performance beyond proposed Category 6 standards, a new feature of this series jacks is a universal Colored wiring label that eliminates the need for separate codes for T568A/B wiring scheme

The patch cords meet or exceed attenuation and Cat6 specifications for patch cords As specified in ISO/IEC 11801, TIA/EIA 568B, available in variety of colors and lengths , the patch cords are ideal for high activities environments that enquire reliable Data transmission.

### TEST DATA



Note: Third--party independent test verification

Worst Case, 4-connector channel	ACR	ELFEXT	RL
Cat 6 Draft Proposal	-2.8	15.3	8.0
Infrastone Cat 6	15.2	39.3	24.7
Margin Cat 6	18.0	24.0	16.7

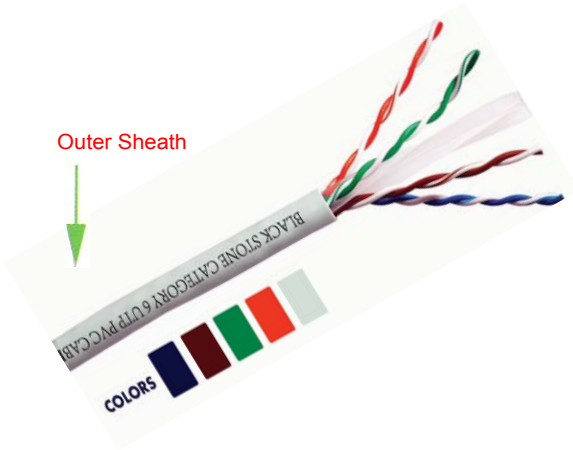
## CATS UTP CLARITY 6 CHANNEL WORST CASE PERFORMANCE

Freq MHZ	NEXT	ATTN	ACR	ACR Spec	ACR Margin	PSACR Spec	PSACR Margin	Return Loss	ELFEXT
1	84.0	1.7	82.4	70.5	11.8	68.2	11.4	27.5	77.7
4	70.6	3.5	67.3	59.0	8.3	56.5	8.2	25.5	65.1
8	66.3	4.9	61.6	52.5	9.1	50.0	10.1	25.9	58.9
10	66.4	5.5	61.4	50.3	11.2	47.7	10.4	26.1	57.3
16	60.5	6.9	53.8	45.2	8.6	42.6	8.7	26.2	53.7
20	58.1	7.8	51.0	42.2	8.4	40.0	7.9	28.2	52.2
25	57.7	8.8	49.4	39.9	9.5	37.2	8.8	29.0	51.7
31	55.7	9.8	46.3	37.0	9.3	34.3	10.0	27.9	51.6
63	52.1	14.3	38.5	26.9	11.6	42.2	12.8	26.9	48.3
100	55.1	17.7	36.6	18.6	18.0	15.8	14.0	28.7	42.7
155	48.5	22.7	24.6	9.7	15.2	6.8	14.1	28.2	41.8
200	49.1	26.5	22.6	3.24	19.4	0.4	14.8	27.5	40.0
250	45.9	30.2	15.2	-2.8	18.0	-5.8	14.2	24.7	39.3
300	41.4	32.9	9.2	Proposed Category 6 standard requirements not specified Beyond 250MHZ				24.0	30.7
350	36.4	34.6	-1.7	Proposed Category 6 standard requirements not specified Beyond 250MHZ				18.1	34.2



# utp category 6 specification

Inner conductor AWG 23 Bare Cu wire



More flexible separator, optimum pair to pair & powersum crosstalk.

## Products Description

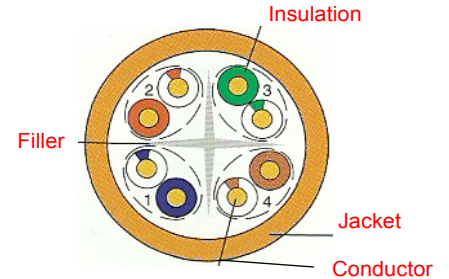
Standard Length: 305 m per Box  
 Application: POTS , T1&T1 fractional , ISDN basic & primary Rate , 4/16 Mbps Token Ring (IEEE802.5) , 10 BASE-T (IEEE 802.3) , 100 Mbps TP-PMD , 52/155 Mbps ATM (ATM Forum), 100BASE-T4 (fast Ethernet), 100 VG-AnyLAN (IEEE802.12) , 100 BASE-T (Fast Ethernet), 1 Gbps Ethernet (IEEE 802.3).  
 transmission

### Cable Data

■ Conductor	Solid bare copper
■ AWG	23
■ ConductorDia (mm)	0.57
■ Insulation	PE
■ Average thickness (±0.03mm)	0.28
■ Min point thickness:	0.24
■ Insulation Dia (±0.03mm)	1.00
■ Twisting lay length (mm)	30 underneath
■ Cabling lay length (mm)	200 underneath
■ Jacket	PVC
■ Average thickness	0.5
■ Min point thickness	0.4
■ Outer Dia (±1.0mm)	6.6
■ Rip cord	YES
■ Weight Nom(kg/km)	16 KG
■ Core color:	
■ Pair 1:	Blue - white / blue
■ Pair 2:	Orange - white / blue
■ Pair 3:	Green - white / green
■ Pair 4:	Brown -white / brown

## Presentation

### UTP



### Cross section

## Products Description

### Electrical Performance (At 250MHz)

- 1.0-100.0 MHZ Impedance (ohms) 100±15
- 1.0-250.0 MHZ Impedance (ohms) 100±22
- Impedance Delay screw (ns/100m) <45
- Pair to Ground Capacitance Unbalance (PF/100m) 330 Max
- Conductor DC resistance 20%(ohms/Km) ≤73.2
- Resistance Unbalance(%) 5
- Test object Jacket
- Test Material PVC
- Before Tensile strenght (Mpa) ≥13.8
- Aging Elongation (%) ≥100
- Aging condition (Cxhrs) 100X240
- After Tensile strength (Mpa) ≥85% of unaged
- Aging Elongation (%) ≥50% of naged
- Cold bend (-20+2 Cx4 hrs) No crock






# utp category 6 specification

## TYPICAL CABLE PERFORMANCE

Frequency MHz	Return loss dB	Attenuation dB/100m	NEXT dB	ACR dB	PSNEXT dB	ELFEXT dB dB/100m	PSELFEXT dB/100m	Delay ns/100m
0.772	19.4	1.8	76.0	74.0	74.0	70	67	575.0
1.0	20.0	2.0	74.3	72.3	72.3	67.8	64.8	570.0
4.0	23.0	3.8	65.5	61.0	63.3	55.8	52.8	552.0
8.0	24.5	5.3	60.8	55.0	58.8	49.7	46.7	546.7
10.0	25.0	6.0	59.3	53.0	57.3	47.8	44.8	545.4
16.0	25.0	7.6	56.2	49.0	54.2	43.7	40.7	543.0
20.0	25.0	8.5	54.8	46.0	52.8	41.8	38.8	542.0
25.0	24.3	9.5	53.3	44.0	51.3	39.8	36.8	541.2
31.25	23.6	10.7	51.9	41.0	49.9	37.9	34.9	540.4
62.5	21.5	15.4	47.4	32.0	45.4	31.9	28.9	538.6
100.0	20.1	19.8	44.3	24.5	42.3	27.8	24.8	537.6
200.0	18.0	29.0	39.8	10.8	37.8	21.8	18.8	536.5
250.0	17.3	32.8	38.3	5.5	36.3	19.8	16.8	536.3

## Order Information

Part number	Description	Inner box	Carton	Carton measurement	Carton weight
BSCA46000-500	Cat 6 UTP solidcable	1PC	305m  1000f	L31cm x W34cm x H 37cm	16KG
BSCA46000-LSZH	Cat 6 UTP solidcable	1PC	305m  1000f	L31cm x W34cm x H 37cm	16KG
BSCA46000-CMR	Cat 6 UTP solidcable	1PC	305m  1000f	L31cm x W34cm x H 37cm	16KG



# CAT 6 UTP 24-Port PATCH PANEL

BSPPC60024500



Bold port numbering enables quick and ready identification of outlets.

Front surface is uninterrupted by screw heads for a clean appearance.

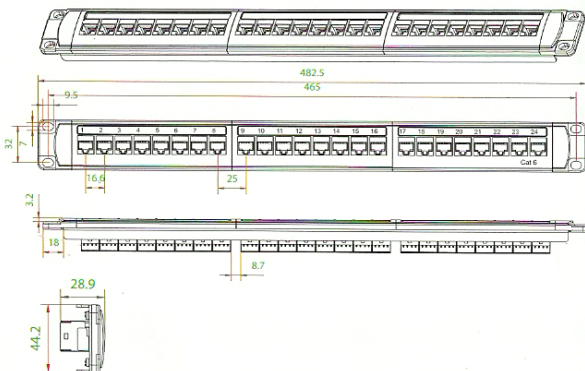
Blank anodized panels can be munted directly to an EIA standard 19 inch rack or cabinet.

Feature universal wiring for both T 568A and T 568B and voice application.

## Products Description

The patch panel is a 19 inch rack mountable RJ45 jack panels , Each panel has cutouts that accept virtually all snap-in jacks , the kits includes the new icon labels with plastic holders that you mount on the front of the panel for easy port identification .Blank anodized panels can be mounted directly to an EIA standard 19 inch relay back or cabinets.

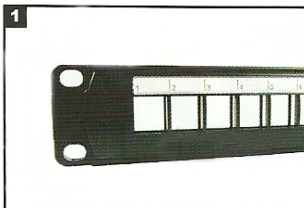
## Presentation



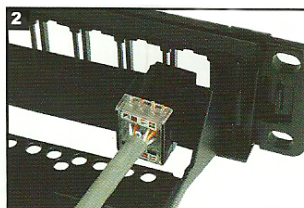
## Features and benefits

- Design to mount to any standard 19" rack or cabinet
- 24 -port Cat 6 Patch panel
- Space saving ,high-density 1U
- Black Electrostatic Powder-Coated Steel: phosphor bronze with tin plating over nickel . Meet or exceed the requirement of ANSI / TIA / EIA 568B.2
- Use keystone jacks and keystone inserts to configure your panel to accommodate a variety of schemes
- Sturdy Aluminum plate around RJ 45 Jacks
- Phosphor bronze with 6-50 micro inches gold plated
- Available with T568 A. T568 B wiring pattern and meeting the requirement of Cat 6 standard
- Color Coded TIA/EIA 568A (international) and 568B (AT&T Standard) wiring For Easy Installation
- Termination accepts 22,24 26 AWG (0.64 ,0.5 and 0.4)solid wires
- Metal sheet: Corrosion resistant steel
- Plastic :fire self-extinguish high impact plastic

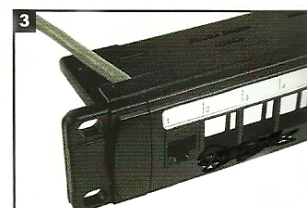
## Installment instructions



The bracket of Cat patch panel.



Position the keystone jack for installation.



Insert the jack into the mounting location properly



# CAT 6 UTP 24 PORT PATCH PANEL IDC Style

**BSPPC60024500**

Front surface is uninterrupted by screw heads for a clean appearance.

Bold port numbering enables quick and ready identification of outlets.



Fit for the 110 punch down tools

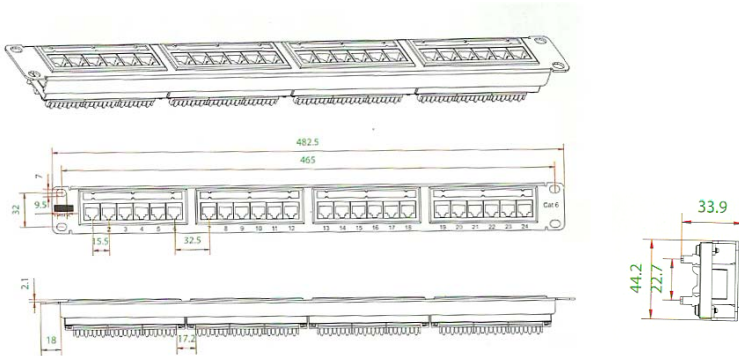
Feature universal wiring for both T 568A and T 568B and voice application.

Blank anodized panels can be mounted directly to an EIA standard 19 inch rack or cabinet.

## Products Description

The patch panel is a 19 inch rack mountable RJ45 jack panels , Each panel has cutouts that accept virtually all snap-in jacks , the kits includes the new icon labels with plastic holders that you mount on the front of the panel for easy port identification .Blank anodized panels can be mounted directly to an EIA standard 19 inch relay back or cabinets.

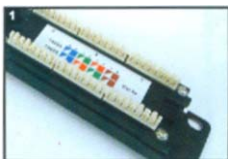
## Presentation



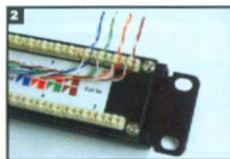
## Features and benefits

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- 24 -port 6 Patch panel
- Space saving ,high-density 1U
- Black Electrostatic Powder-Coated Steel: phosphor bronze with tin plating over nickel . Meet or exceed the requirement of ANSI / TIA / EIA 568B.2
- Use keystone jacks and keystone inserts to configure your panel to accommodate a variety of schemes
- Sturdy Aluminum plate around RJ 45 Jacks
- Phosphor bronze with 6-50 micro inches gold plated
- Available with T568 A. T568 B wiring pattern and meeting the requirement of Cat 6E standard
- Color Coded TIA/EIA 568A (international) and 568B (AT&T Standard) wiring For Easy Installation
- Termination accepts 22,24 26 AWG (0.64 ,0.5 and 0.4)solid wires
- Metal sheet: Corrosion resistant steel
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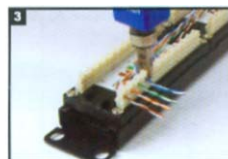
## Installment instructions



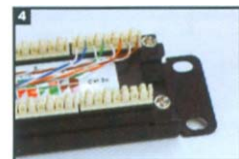
View the color on the rear of the panel to determine proper location of the conductors based upon preferred wiring scheme.



Insert each wire into the appropriate channel according to the color code on the panel.



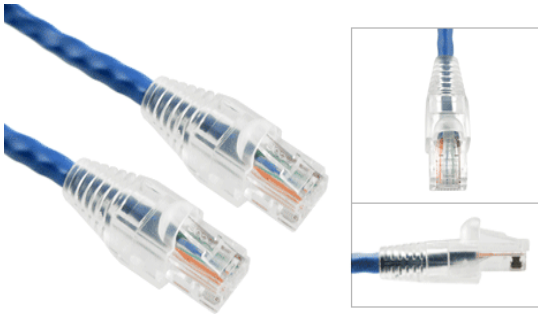
Terminate wires using Blackstone tool (P/N: BSA01) or equivalent.



Inspect wires to ensure proper color-coding following termination.



# CAT 6 UTP PATCH CABLES



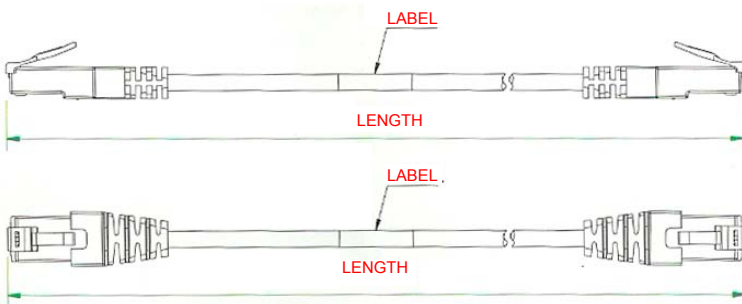
## Products Description

infrastone patch cords meets or exceeds attenuation and Cat6 specifications for patch cords as specified in ISO/IEC11801, TIA/EIA 568B, available in variety of colors and lengths, the patch cords are ideal for high activities environments that require reliable Data

### Products Description

- 6-50 micron RJ-45 staggered gold plated connectors
- Fitted with strain relief boots
- With or without reports made to the order
- 100% Tested Wiring Sequence and Continuity
- Excellent Attenuation and Crosstalk Characteristics
- Connector with staggered pin configuration to limit cross talk
- Exceed Category 6 requirement
- They are available in a variety of the lengths

## Presentation



Use \* to specify the length :

1=1 meter, 2= 2 meters, 3=3 meters

Use # to specify the color:

A = black B =blue C =red D= orange  
E=yellow F= gray G =green

# CAT 6 UTP MODULAR PLUGS

## Products Description

Boots offer cable-end color ID, strain relief and RJ45 plug tab protection from snagging on cables or connectors when routing in ceilings and under floors, Suitable for Indoor Installations.

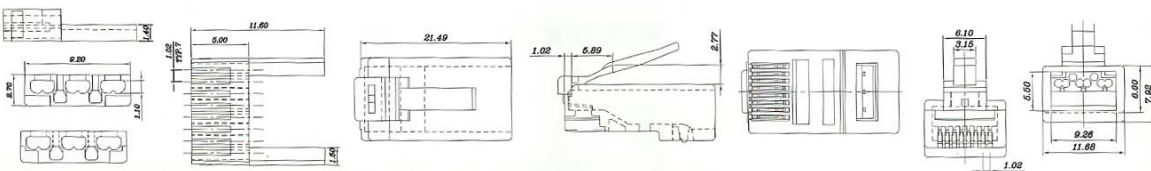


## Products Description

- 6-50 micron RJ-45 staggered gold plated connectors
- Fitted with strain relief boots
- With or without reports made to the order
- 100% Tested Wiring Sequence and Continuity
- Excellent Attenuation and Crosstalk Characteristics
- Connector with staggered pin configuration to limit cross talk
- Exceed Category 6 requirement
- They are available in a variety of the lengths

### RJB01-UC6

## RJB01-UC6 Presentation



## Order Information

Part number	Description	Inner box	Carton	Carton measurement	Carton weight
RJB01-UC6	Cat 6 UTP Modular plugs	500PCS	5000PCS	L53.5cmxW 31.3cmxH 23.4cm	9KG
BSAC1M600-UC6-*-#	Cat 6 UTP Patch Cable	30PCS	30PCS		
BSAC1M600-LSZH-*-#	Cat 6 UTP Patch Cable	30PCS	30PCS		
BSAC1M60-CMR-*-#	Cat 6 UTP Patch Cable	30PCS	30PCS		



## CAT 6 UTP KEYSTONE JACKS

P/N : BSKJB-8000-500

The V style IDC contacts flex not fatigue when terminated .

Compliant with Telecommunication component and channel requirement of T568A and T568B.



Termination caps prevent wire from dropping off.



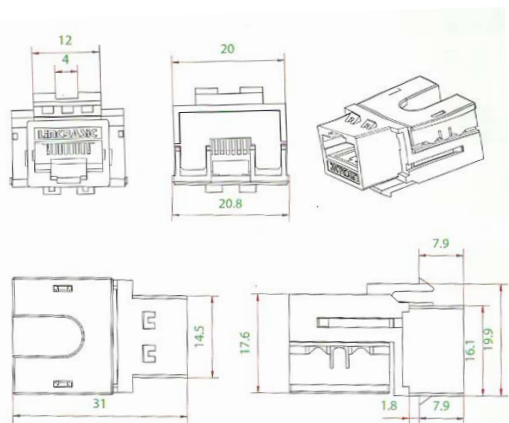
The new design allows high density solutions.

1500 matching recycles.



Allow RJ45 plugs to provide high-density solutions.

### Presentation



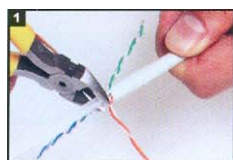
### Products Description

Horizontal style Cat6E 90 degree keystone jacks, it features dual color-coded wiring label with both T568A/B wiring pattern. Rear termination field for easy termination of a jack while installed in a wall plate, surface mount boxes, and blank patch panels for a wide variety of Applications.

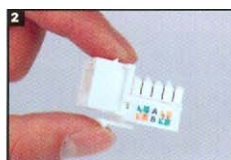
### Features and benefits

- Available in Cat 6E, T568A/B wiring schemes, meet or exceed TIA/EIA Cat6E requirements
- Housing : high temperature thermoplastic
- Compact jack design, 8 positions and 8 conductors
- Contact: phosphor bronze , phosphor bronze with 6 to 50u" gold plate
- Accept 22-26 AWG solid with a insulation diameter of 0.4-0.6 mm
- Easy to be terminated, extremely low attenuation loss and high return loss
- High reliability and superior performance
- Available in different colors

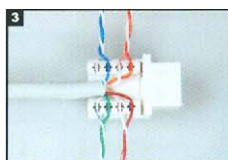
### Installment instructions



1 Fan out cables based on desired wiring scheme, cut the pair separator and rip cord(if present) as close as possible to the jacket. Note: Be careful not to nick conductors



2 View the color on the module to determine proper location of the conductors based upon preferred wiring scheme.



3 Terminate wires using BSTONE tool (P/N: BSA01) or equivalent.



4 Terminate wires using Blackstone tool



5 Install dust caps by snapping into plac as shown.





## CAT 6 UTP KEYSTONE JACKS

P/N : BSKJC600500

The V style IDC contacts flex not fatigue when terminated .

Compliant with Telecommunication component and channel requirement of T568A and T568B.

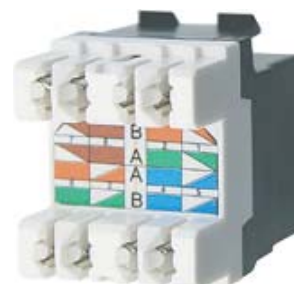


The new design allows high density solutions.

Termination caps prevent wire from dropping off.



1500 matching recycles.



Allow RJ45 plugs to provide high-density solutions.

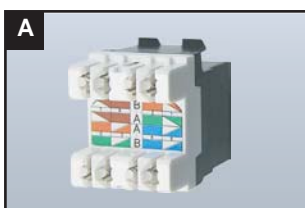
### Products Description

Horizontal style Cat6E 90 degree keystone jacks, it features dual color-coded wiring label with both T568A/B wiring pattern. Rear termination field for easy termination of a jack while installed in Patch panel, surface mount boxes, and blank patch panels for a wide variety of Applications.

### Features and benefits

- Available in Cat 6E, T568A/B wiring schemes, meet or exceed TIA/EIA Cat6E requirements
- Housing : high temperature thermoplastic
- Compact jack design, 8 positions and 8 conductors
- Contact: phosphor bronze , phosphor bronze with 6 to 50u" gold plate
- Accept 22-26 AWG solid with a insulation diameter of 0.4-0.6 mm
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- Available in different colors

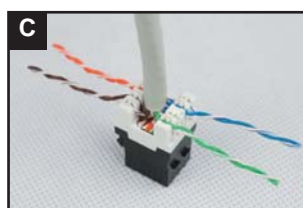
### INSTALLATION INSTRUCTIONS



View the wiring scheme.



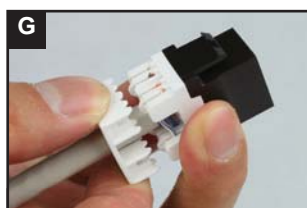
Cut the pair separator and rip cord (if present) as close as possible to the jacket. Note: Be careful not to nick conductors.



Insert each wire into the appropriate channel according to the color code on the module.



Terminate wires using B-STONE tool (P/N: BS-TS1) or equivalent.



Snap dust caps.



Finish the installation.

