

C6A UTP Snap-In Patch Panel

■ PART NO: MPL241-C6A

Feature



Leading 10G UTP Patch Panel is part of the ACTON' Augmented Category 6 10G cabling solution. Innovative mechanism optimizes the internal magnetic coupling. Each set is equipped with rear cable manager so the bigger O.D. bulk cables could be organized systematically. With 24 port modular-fit design, a reliable and flexible 10Gbps running at 500MHz over UTP copper is provided. ACTON Leading 10G solution – simply the best!

Application

Cat.6A channel performance, supports a 4-connector topology for distances up to 100 metres
Externally coated with anti-EMI finish, effectively suppress alien crosstalk in a bundle cabling configuration
Press-Fit technology applied, no solder, no lead
Shuttered / unshuttered for options
Accepts 110 punch down tool

Physical Specification

Panel: SPCC black powder coat finish
Plastic frame: ABS high-impact UL94V-0 thermoplastic
Spring wire: Phosphor Bronze temper wire, 50u" gold over 100u" nickel undercoat
IDC housing: Polycarbonate resin high-impact UL94V-0 thermoplastic
IDC contact: Phosphor Bronze with nickel undercoat
Mating: 750 mating cycles with FCC compliant RJ-45 plug
Wire accommodation: accommodates 22~24 solid cable for 200 times termination
Operating temperature: -10°C ~60°C
Operating humidity: 10% ~ 90%RH
Storage temperature: -40°C ~68°C

Electrical Specification

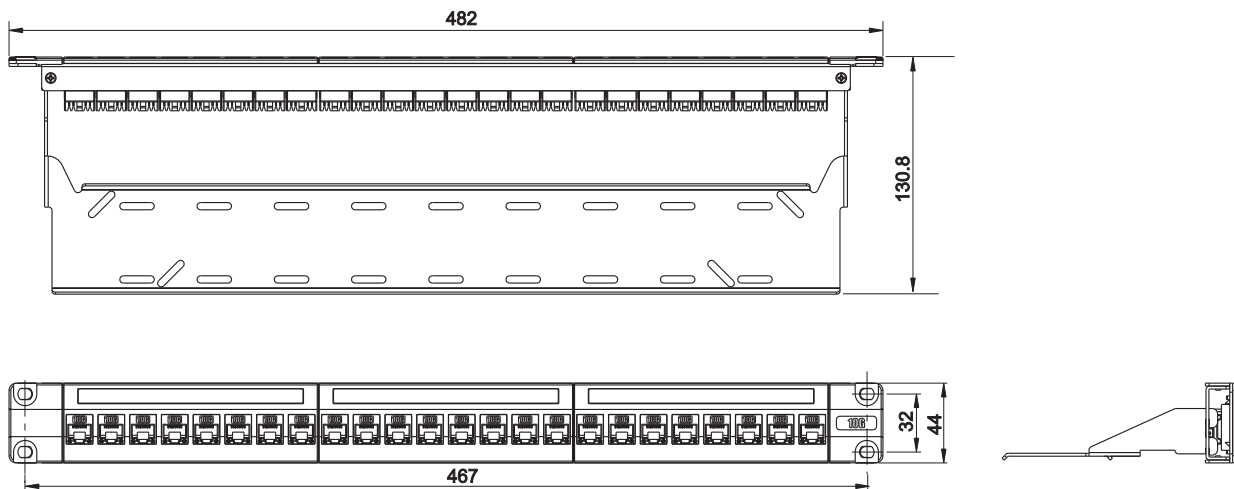
Insulation resistance: 500M Ω
Dielectric withstanding voltage: 1000V AC
Current rating: 1.5Amps
DC resistance: 0.1 Ω
Contact resistance: 20m Ω

Standard Verification

TIA/EIA-568-B.2-10 Draft 9.0
FCC part 68, Subpart F
Amendment 1 to ISO/IEC 11801, 2nd Ed.
UL 1863

Mechanical Drawing

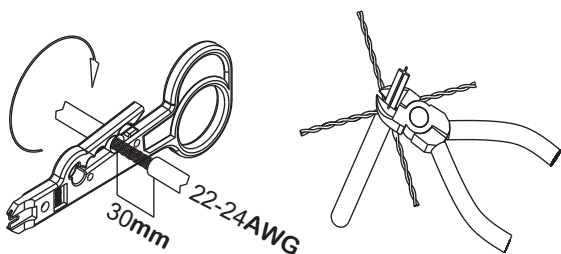
(Unit:mm)



Installation Manual

1

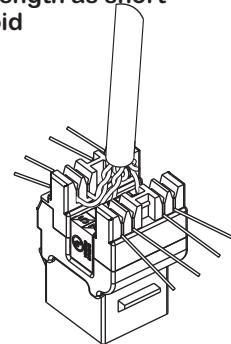
Strip the cable jacket around 30 mm. Spread each pair and then trim off the filler.



2

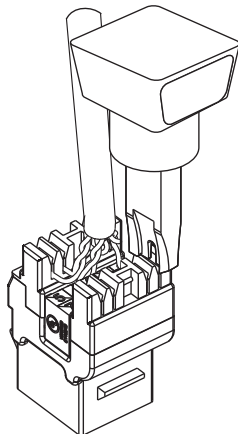
Seat each wire to the desired wiring scheme. Ensure to have untwisted length as short as possible. Also try to avoid overlapping one pair over the other.

Color	T568B	T568A
White-blue	5	5
Blue	4	4
White-orange	1	3
Orange	2	6
White-green	3	1
Green	6	2
White-brown	7	7
Brown	8	8



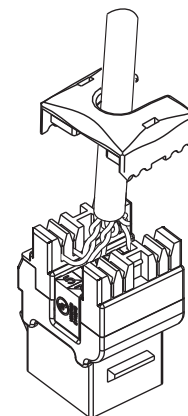
3

Use a 110 impact tool for termination. note: set the tool to "low impact".



4

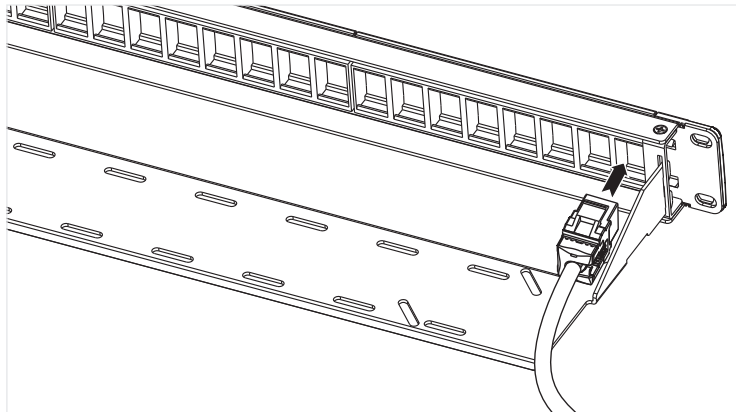
Hood the cap to secure the conductivity and transmission performance.



Note: ANSI/TIA-568-B.2 defines the horizontal cable to be 22-24 AWG insulated solid conductor. Please ensure it's the right cable you're using before installation.

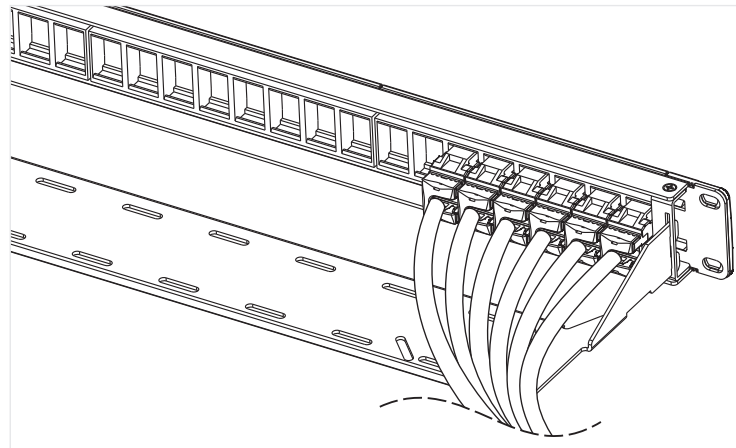
5

Snap the terminated module into the blank panel.



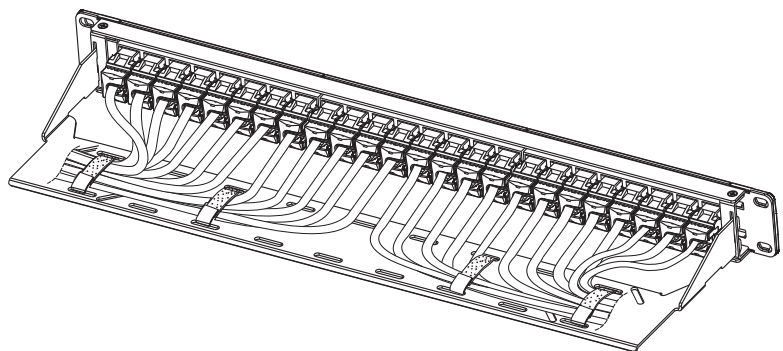
6

Repeat the Sept 5 to complete the installation.

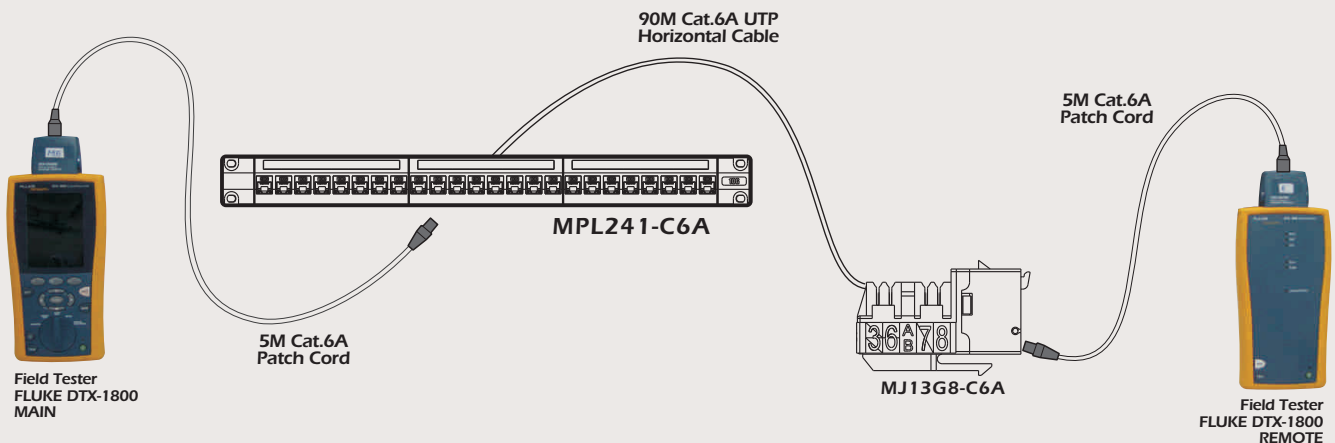


7

In order to stay the performance stable. Please secure bundle cables with attached straps.



Transmission Performance Test Report



Cable ID: MPL241-C6A

Test Summary: PASS

Date / Time: 11/30/2007 05:32:23pm
 Headroom: 7.1 dB (NEXT 36-45)
 Test Limit: TIA Cat 6A Ch draft 8.0
 Cable Type: Cat 6A UTP

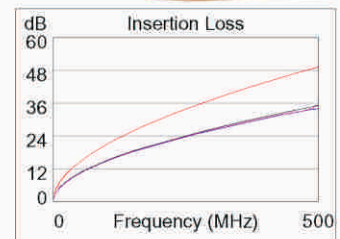
Operator: Hank Huang
 Software Version: 2.0400
 Limits Version: 1.2400
 NVP: 68.2%

Model: DTX-1800
 Main S/N: 9116083
 Remote S/N: 9116084
 Main Adapter: DTX-CHA001
 Remote Adapter: DTX-CHA001

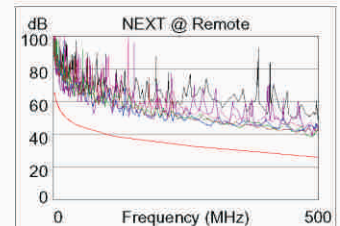
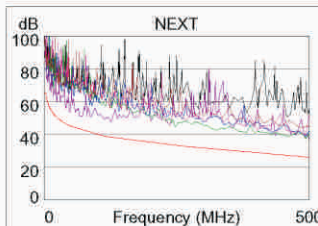
Wire Map (T568B) PASS



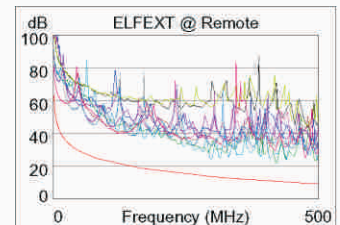
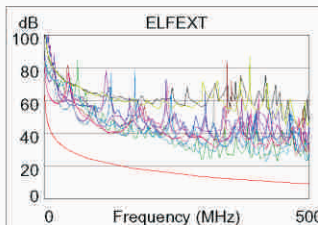
Length (ft), Limit 328	[Pair 12]	277
Prop. Delay (ns), Limit 555	[Pair 45]	439
Delay Skew (ns), Limit 50	[Pair 45]	26
Resistance (ohms)	[Pair 12]	12.8
Insertion Loss Margin (dB)	[Pair 45]	14.0
Frequency (MHz)	[Pair 45]	499.0
Limit (dB)	[Pair 45]	49.3



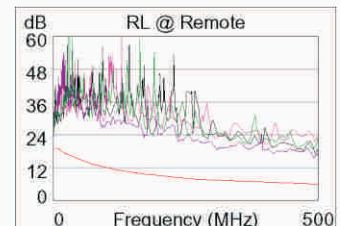
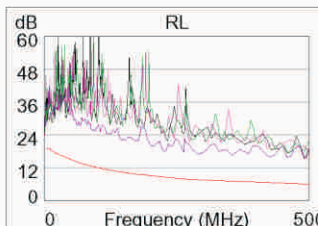
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45	36-45	36-45	36-78
NEXT (dB)	7.1	9.4	10.2	12.1
Freq. (MHz)	67.5	77.0	500.0	487.0
Limit (dB)	42.8	41.8	26.1	26.4
Worst Pair	36	36	36	36
PSNEXT (dB)	9.6	11.5	9.8	11.9
Freq. (MHz)	67.5	77.0	494.0	488.0
Limit (dB)	40.0	39.0	23.4	23.5



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	36-45	45-36	45-36	36-45
ELFEXT (dB)	10.1	10.3	11.5	11.4
Freq. (MHz)	298.0	298.0	420.0	420.0
Limit (dB)	13.8	13.8	10.8	10.8
Worst Pair	45	36	36	36
PSELFEXT (dB)	12.3	12.9	13.9	14.7
Freq. (MHz)	298.0	298.0	420.0	441.0
Limit (dB)	10.8	10.8	7.8	7.4



	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	12	12	45	45
RL (dB)	8.4	8.8	9.0	9.6
Freq. (MHz)	5.3	4.3	429.0	492.0
Limit (dB)	19.0	19.0	6.0	6.0



Cable ID: CH7 (End 2)

Date / Time: 11/06/2007 06:08:42pm

Test Limit: TIA Cat 6A Ch dr 6.0

Measurement Bias Correction: On

DEC

Operator: PRESENT

Overall Status: **Pass**

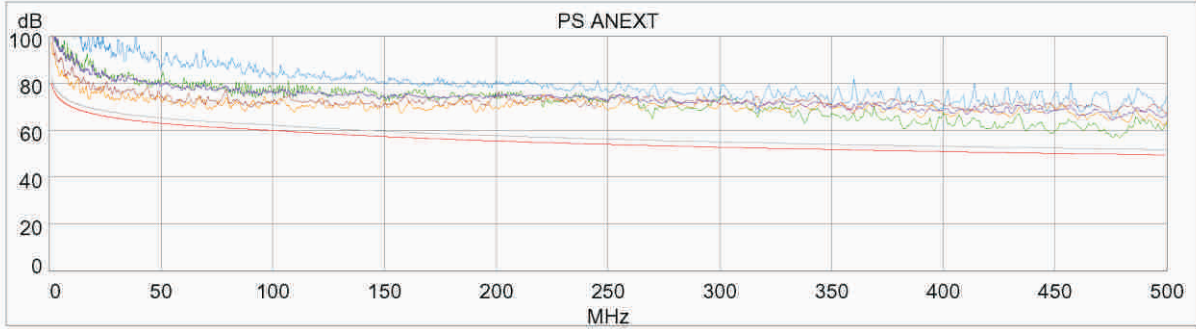
SW Version: 2.1

PS ANEXT

Pair	Frequency	Value	Limit	Margin	Status
12	499.0 MHz	62.34 dB	49.53 dB	12.81 dB	Pass
36	479.0 MHz	56.98 dB	49.79 dB	7.18 dB	Pass
45	476.0 MHz	65.37 dB	49.84 dB	15.54 dB	Pass
78	* All test data above limit caps				
Average	476.0 MHz	64.45 dB	52.09 dB	12.36 dB	Pass

Disturber List

- CH1
- CH2
- CH3
- CH4
- CH5
- CH6

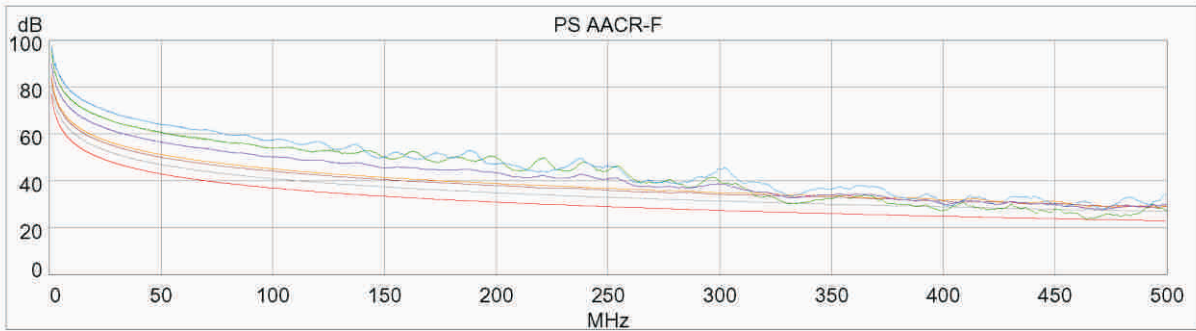


PS AACR-F

Pair	Frequency	Value	Limit	Margin	Status
12	462.0 MHz	28.72 dB	23.71 dB	5.01 dB	Pass
36	464.0 MHz	23.79 dB	23.67 dB	0.12 dB	Pass
45	471.0 MHz	27.89 dB	23.54 dB	4.35 dB	Pass
78	439.0 MHz	29.99 dB	24.15 dB	5.84 dB	Pass
Average	471.0 MHz	27.89 dB	27.54 dB	0.35 dB	Pass

Disturber List

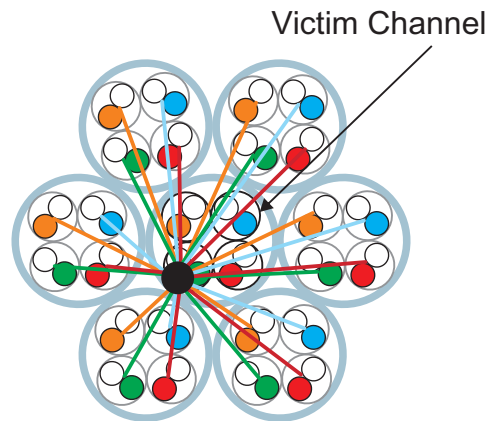
- CH1
- CH2
- CH3
- CH4
- CH5
- CH6



Typical Leading 10G channel performance

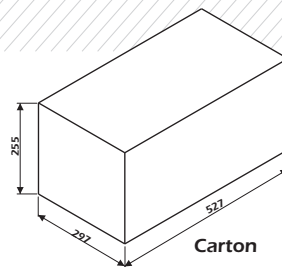
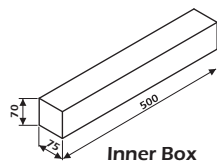
Frequency (Mhz)	NEXT (dB)	IL (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	PSANEXT (dB)	PSAELFEXT (dB)	RL (dB)
1	65.0	2.2	62.0	63.3	60.3	75.0	77.0	19.0
4	63.0	4.1	60.5	51.2	48.2	74.0	65.0	19.0
8	58.2	5.7	55.6	45.2	42.2	71.0	58.9	19.0
10	56.6	6.4	54.0	43.3	40.3	70.0	57.0	19.0
16	53.2	8.1	50.6	39.2	36.2	68.0	52.9	18.0
20	51.6	9.1	49.0	37.2	34.2	67.0	51.0	17.5
25	50.6	10.2	47.3	35.3	32.3	66.0	49.0	17.0
31.25	48.4	11.4	45.7	33.4	30.4	65.1	47.1	16.5
62.5	43.4	16.3	40.6	27.3	24.3	62.0	41.1	14.0
100	39.9	20.8	37.1	23.3	20.3	60.0	37.0	12.0
200	34.8	30.0	31.9	17.2	14.2	55.5	31.0	9.0
250	33.1	33.8	30.2	15.3	12.3	54.0	29.0	8.0
300	31.7	37.3	28.8	13.7	10.7	52.8	27.5	7.2
400	28.7	43.6	25.8	11.2	8.2	51.0	25.0	6.0
500	26.1	49.3	23.2	9.3	6.3	49.5	23.0	6.0

Performance compliant with TIA-568B.2-10



Packaging

1 set per inner box (Dimension: 500*75*70mm)
 12 inner box per carton (Dimension: 527*297*255mm)



Ordering Information



P/N	Port	Description
MPL241-C6A	24Port, 1unit	Cat.6A channel compliant UTP snap-in patch panel, 110
MPL481-C6A	48Port, 1unit	



P/N	Port	Description
MPL242-C6A	24Port, 1unit	Cat.6A channel compliant UTP shuttered snap-in patch panel, 110
MPL482-C6A	48Port, 1unit	

Relative Products

C6A 1 80° Keystone Jack

Color Option: WH BK BL RE YE GN IV

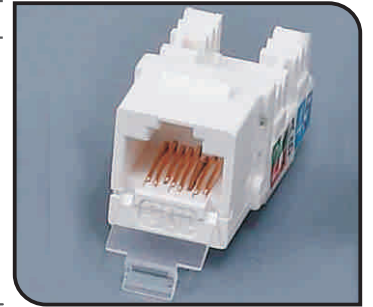
P/N	Color Option	Description
MJ13FD8-C6A-WH	Office White	Cat.6A channel compliant UTP top-entry shuttered keystone jack, 110
MJ13FD8-C6A-BK	Black	
MJ13FD8-C6A-BL	Blue	
MJ13FD8-C6A-RE	Red	
MJ13FD8-C6A-YE	Yellow	
MJ13FD8-C6A-GN	Green	
MJ13FD8-C6A-IV	Electric Ivory	



C6A 90° UTP Keystone Jack

Color Option:
 WH BK BL RE YE GN IV

P/N	Color Option	Description
MJ13GD8-C6A-WH	Office White	Cat.6A channel compliant UTP right-angled shuttered keystone jack, 110
MJ13GD8-C6A-BK	Black	
MJ13GD8-C6A-BL	Blue	
MJ13GD8-C6A-RE	Red	
MJ13GD8-C6A-YE	Yellow	
MJ13GD8-C6A-GN	Green	
MJ13GD8-C6A-IV	Electric Ivory	



C6A Patch Cord

Color Option:
 BK BL RE OR GN GR

P/N	Color Option	Description
M409U-BK-YY	Black	Cat.6A UTP patch cord YY-Length
M409U-BL-YY	Blue	
M409U-RE-YY	Red	
M409U-OR-YY	Orange	
M409U-GN-YY	Green	
M409U-GR-YY	Gray	



C6A Cable

P/N	Description
MU1-C6A	100 Metres Cat.6A UTP solid cable, 23AWG

