

ACT

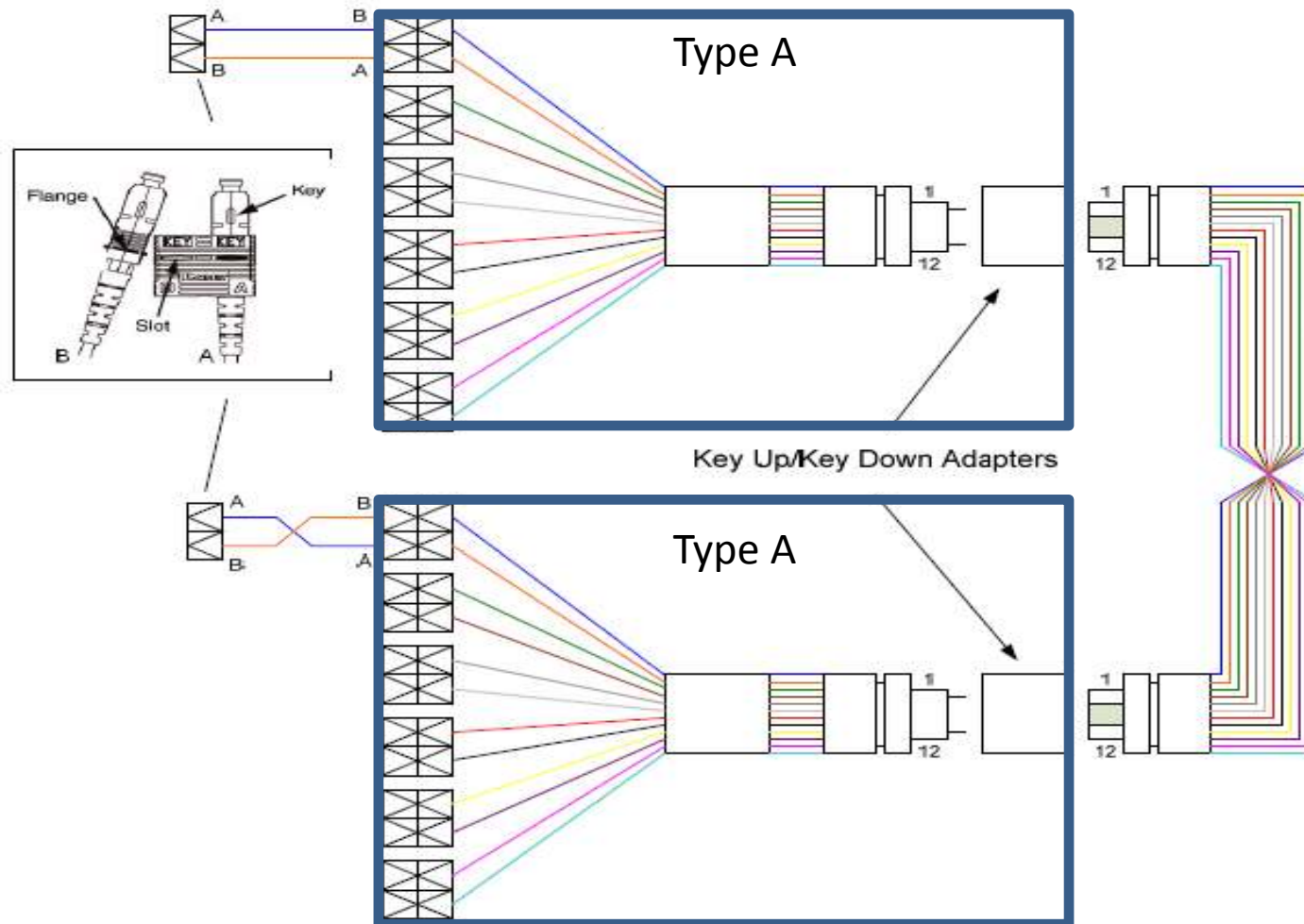


ACT

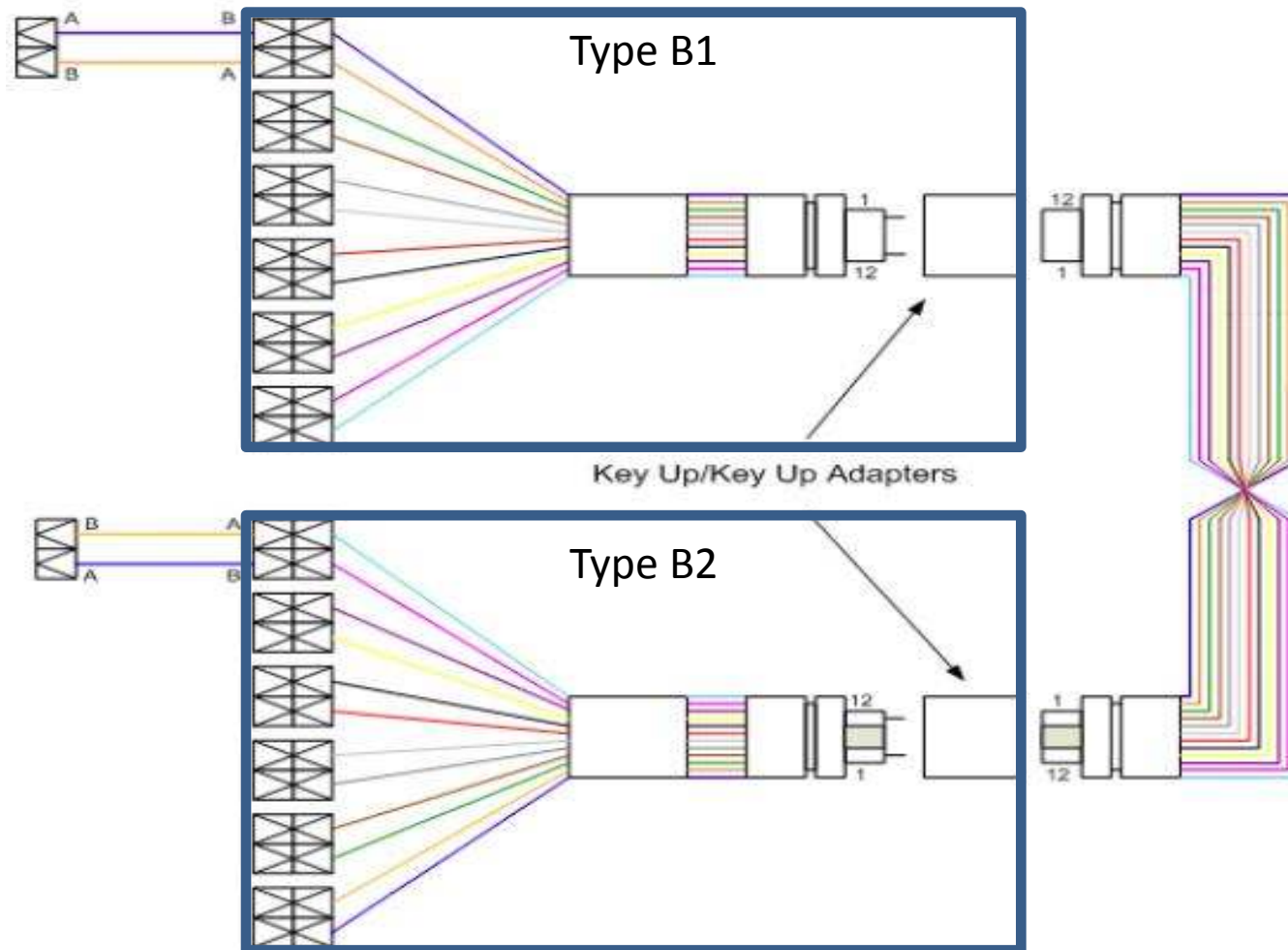
Fiber optic
Polarity



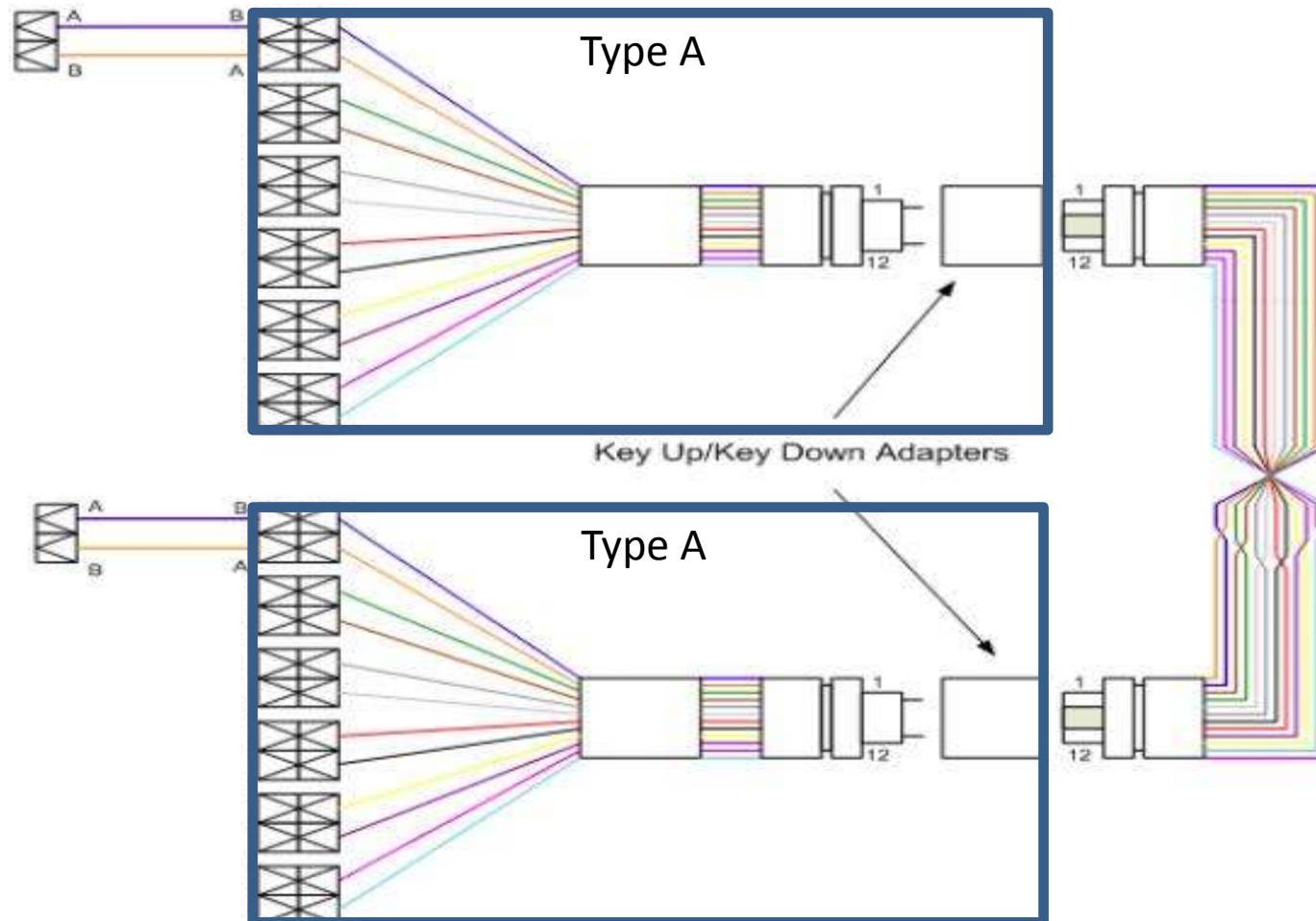
10G n 40G Migration – Polarity method A



10G n 40G Migration – Polarity method B



10G n 40G Migration – Polarity method C



10G and 40G Migration Table

TIA-568.C Standard (duplex signals)

Polarity Method	MPO/MTP® cable	MPO/MTP® Cassette	Duplex patch cable type
A	Type A (Key-Up to Key-Down)	Type A (Opposed Key adaptor)	1 x A-to-B 1 x A-to-A
B	Type B (Key-Up to Key-Up)	Type B1, B2 (Aligned Key adaptor)	2 x A-to-B
C	Type C (Key-Up to Key-Down)	Type A (Opposed Key adaptor)	2 x A-to-B

Opposed Key



Aligned Key



A-to-A patch cord



A-to-B patch cord



40G MPO/MTP® cable

Type A:
Key-up to Key-down

Fibers		Fibers
1		1
2		2
3		3
4	Key-up	Key-down 4
5	Position 1	Position 1 5
6		6
7		7
8		8
9		9
10		10
11		11
12		12

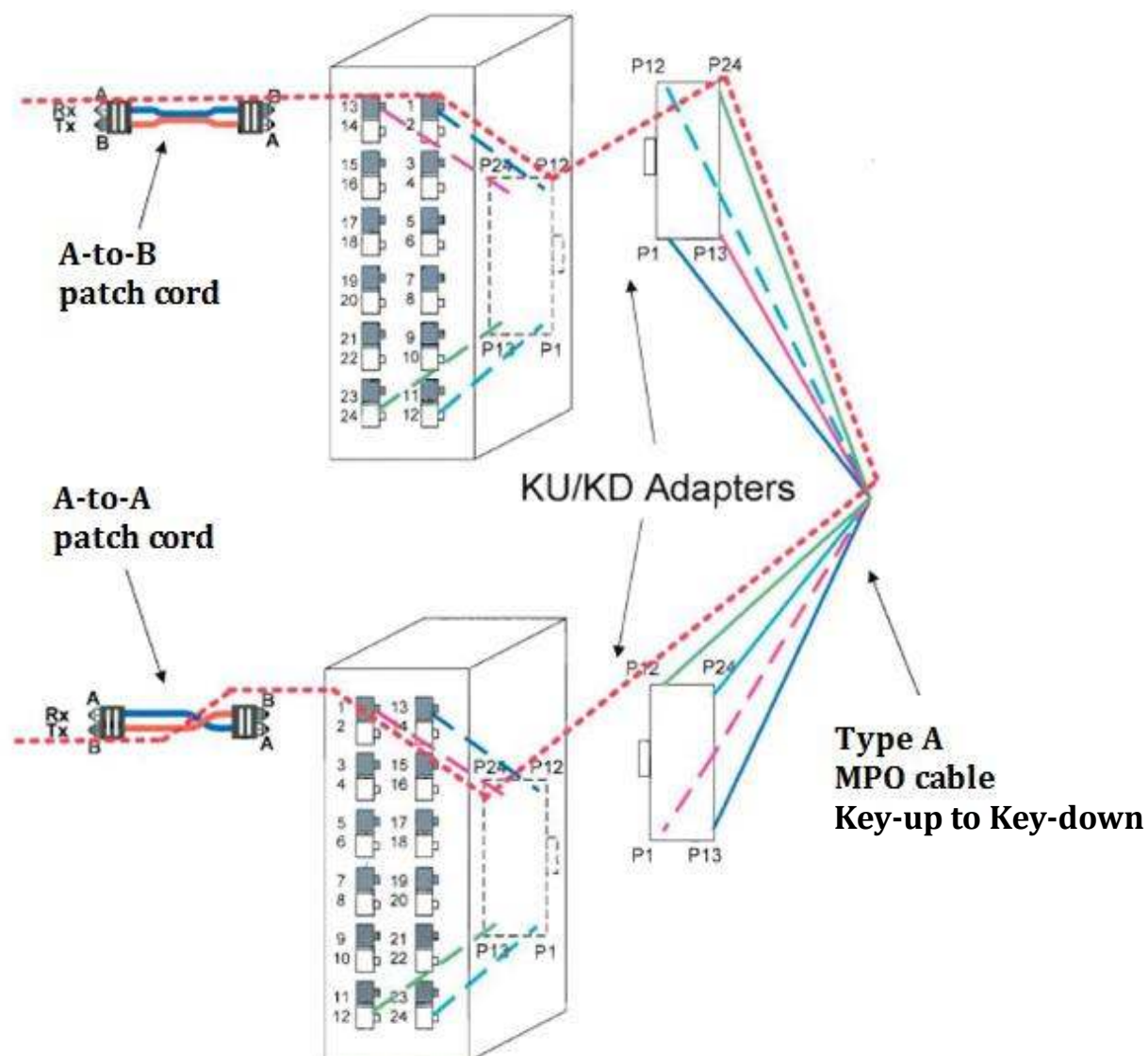
Type B:
Key-up to Key-up

Fibers		Fibers
1		12
2		11
3		10
4	Key-up	Key-up 9
5	Position 1	Position 12 8
6		7
7		6
8		5
9		4
10		3
11		2
12		1

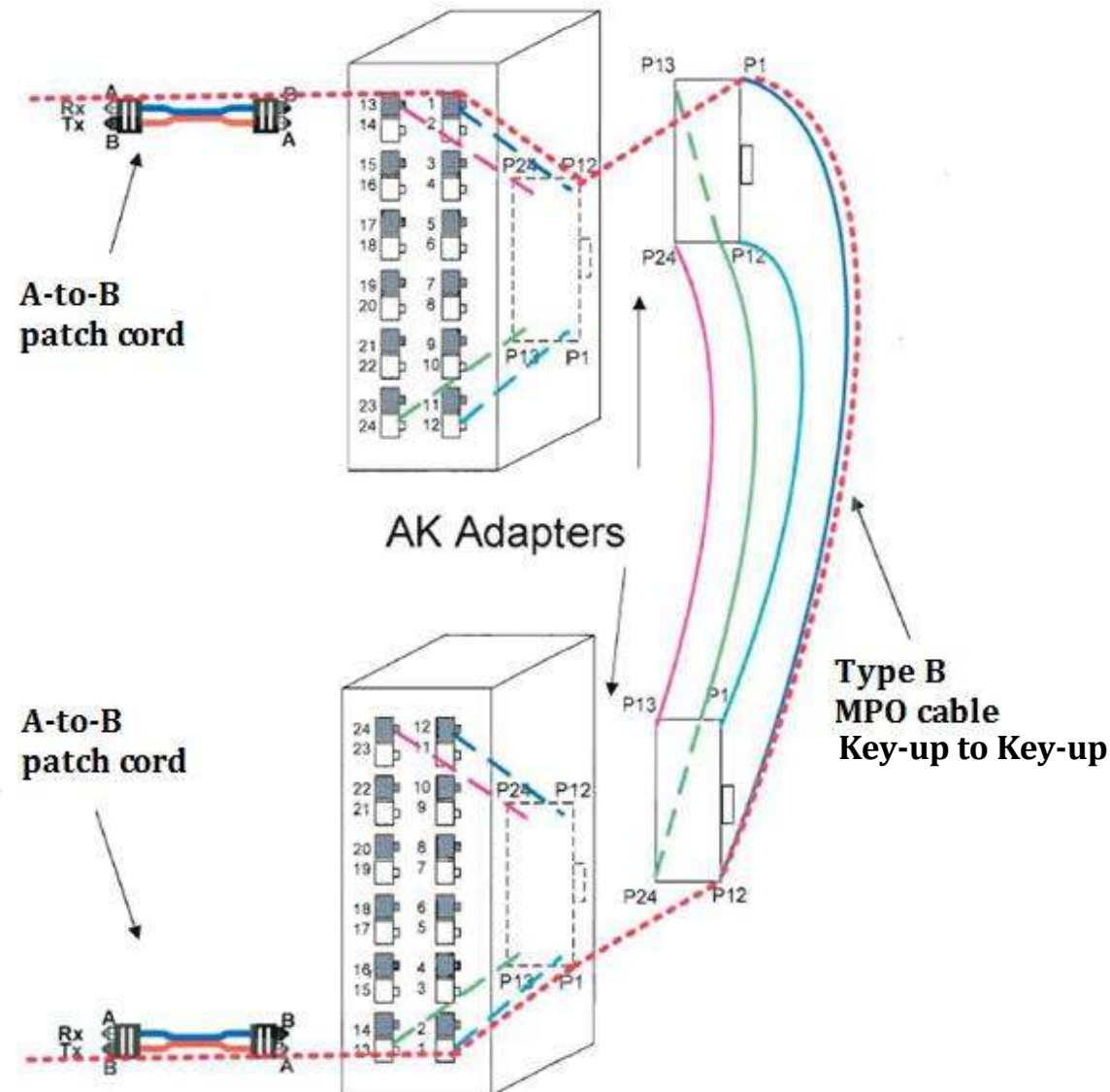
Type C:
Key-up to Key-down
Pair-wise Flip

Fibers		Fibers
1		2
2		1
3		4
4	Key-up	Key-down 3
5	Position 1	Position 1 6
6		5
7		8
8		7
9		10
10		9
11		12
12		11

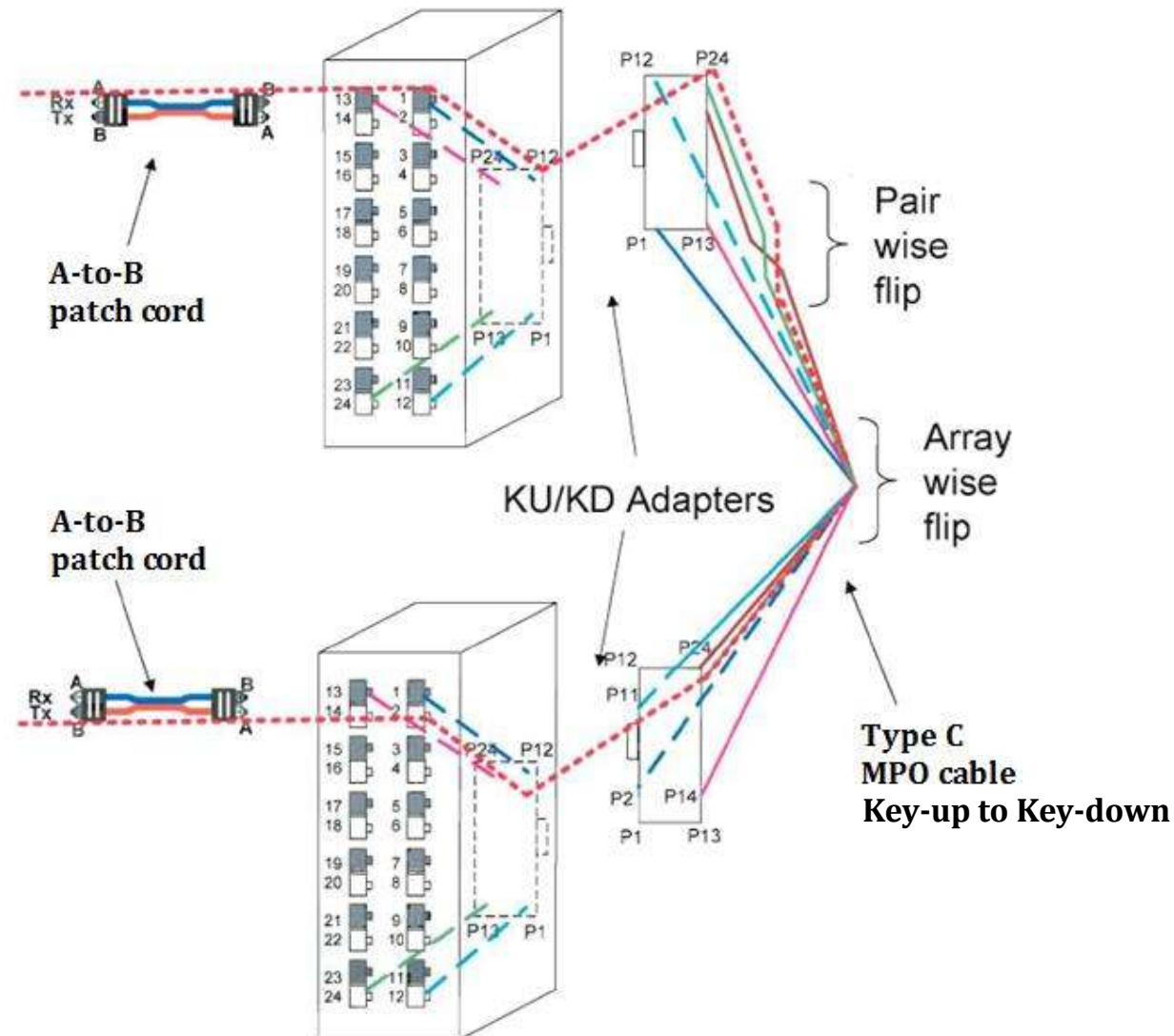
10G n 100G Migration – Polarity method A



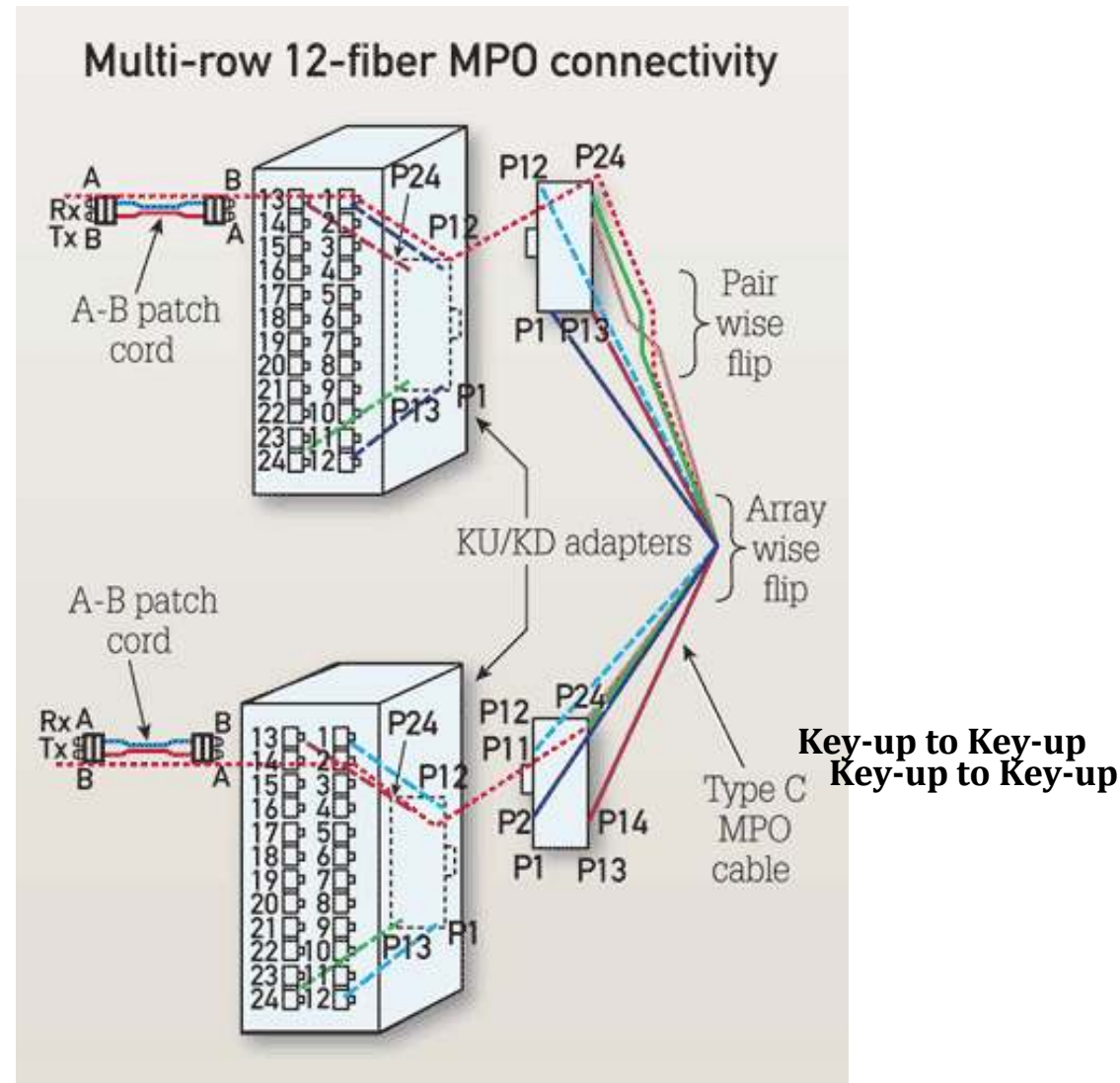
10G n 100G Migration – Polarity method B



10G n 100G Migration – Polarity method C



<http://www.cablinginstall.com/articles/print/volume-19/issue-3/features/maintaining-fiber-optic-polarity-with-array-cabling.html>



10G and 100G Migration Table



TIA-568.C Standard (duplex signals)

Polarity Method	MPO/MTP® cable	MPO/MTP® Cassette	Duplex patch cable type
A	Type A (Key-Up to Key-Down)	Type A1, A2 (Opposed Key adaptor)	1 x A-to-B 1 x A-to-A
B	Type B (Key-Up to Key-Up)	Type B1, B2 (Aligned Key adaptor)	2 x A-to-B
C	Type C (Key-Up to Key-Down)	Type C (Opposed Key adaptor)	2 x A-to-B

Opposed Key



Aligned Key



A-to-A patch cord



A-to-B patch cord



100G MPO/MTP® cable wiring

Type A:
Key-up to Key-down

Fibers		Fibers
1		13
2		14
3		15
4		16
5		17
6		18
7		19
8	Key-up	Key-down
9		20
10	Position	Position
11	1/13	13/1
12		21
13		22
14		23
15		24
16		1
17		2
18		3
19		4
20		5
21		6
22		7
23		8
24		9



Type B:
Key-up to Key-up

Fibers		Fibers
1		24
2		23
3		22
4		21
5		20
6		19
7		18
8	Key-up	Key-up
9		17
10	Position	Position
11	1/13	24/12
12		16
13		15
14		14
15		13
16		12
17		11
18		10
19		9
20		8
21		7
22		6
23		5
24		4



Type C:
Key-up to Key-down
Pair-wise Flip

Fibers		Fibers
1		14
2		13
3		16
4		15
5		18
6		17
7		20
8	Key-up	Key-down
9		19
10	Position	Position
11	1/13	13/1
12		22
13		21
14		24
15		23
16		2
17		1
18		4
19		3
20		6
21		5
22		8
23		7
24		10

