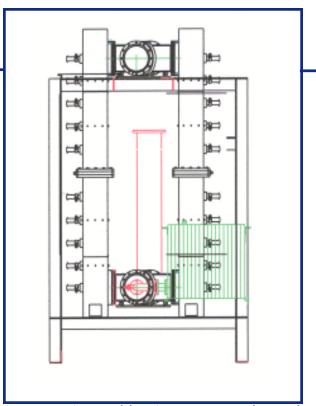


CONSTANT IMPEDANCE CHANNEL COMBINER

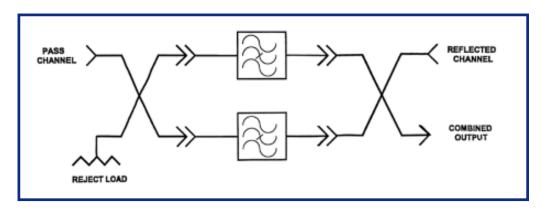
- Constant Impedance Design
- High Isolation
- Low Loss
- Low VSWR
- Compact Size
- High Power Handling



The MCI Channel Combiner is used where it is necessary to combine two or more channels to a common antenna. New channels can be added by connecting another channel combiner in tandem to the previous. The limitations of the number of channels to be combined are the power handling and the bandwidth of the antenna system used.

The combiner is a constant impedance type with bandpass filters acting as a through filter for one channel and a band stop filter for the other channel. The filters provide low loss and high isolation.

MCI also manufactures the broadband antenna systems that compliment these combining networks. Additional filtering for the wideband input available on request.





TYPICAL PERFORMANCE CHARACTERISTICS

	PASS CHANNEL	REFLECTED	
VSWR	< 1.08:1	< 1.08:1	
INSERTION LOSS	0.20 to 0.50 dB	0.10 to 0.20 dB	
ISOLATION	> 30 dB (to Reflected)	> 50 dB (to Pass)	
GROUP DELAY	+/- 50 ns	+/- 10 ns	

Results will vary depending on operating band and channel spacing.

		VHF		UHF
				· · · · · · · · · · · · · · · · · · ·
FREQUENCY	(MHz)	54-88	174-216	470-860
CHANNEL RANGE		2-6	7-13	14-69
MODEL		41246	41266	41276
COMBINED POWER	R	100kW	80kW	80kW
SIZE	in	70x60x30	40x24x24	80x48x36
	(cm)	(178x152.5x76)	(101x61x61)	(203.2x122x91.5)
WEIGHT	lbs	400	350	240
	(kg)	(181)	(159)	(109)
CONNECTORS	EIA	6 1/8	6 1/8	6 1/8
MODEL		41245	41265	41275
COMBINED POWER	R	80kW	60kW	40kW
SIZE	in	70x60x30	40x24x24	80x48x36
	(cm)	(178x152.5x76)	(101x61x61)	(203.2x122x91.5)
WEIGHT	lbs	350	300	240
	(kg)	(159)	(136)	(109)
CONNECTORS	EIA	4 1/16	4 1/16	4 1/16
MODEL		41244	41264	41274
COMBINED POWER	R	50kW	40kW	20kW
SIZE	in	70x54x20	40x17x15	40x24x30
	(cm)	(178x137x51)	(101x43x38)	(101x61x76)
WEIGHT	lbs	300	220	120
	(kg)	(136)	(100)	(54)
CONNECTORS	EIA	3 1/8	3 1/8	3 1/8
MODEL		41243	41263	41273
COMBINED POWER	R	15kW	10kW	6kW
SIZE	in	70x54x20	40x17x15	40x24x30
	(cm)	(178x137x51)	(101x43x38)	(101x61x76)
WEIGHT	lbs	170	130	110
	(kg)	(77)	(59)	(50)
CONNECTORS	EIA	1 5/8	1 5/8	1 5/8
MODEL		41242	41262	41272
COMBINED POWER	R	10kW	5kW	2kW
SIZE	in	70x54x10	40x17x10	40x24x30
	(cm)	(178x137x51)	(101x43x38)	(101x61x76)
WEIGHT	lbs	140	100	100
	(kg)	(64)	(45)	(45)
CONNECTORS	EIA	7/8	7/8	7/8

All specifications are subject to change without notice.

NOTES:

- Above models show two channel configurations.
 Powers shown are combined power output.
- 3) Higher power levels available: Contact factory.

