



Micro Communications, Inc.

SERIES 50550

# UHF COAX SWITCHLESS COMBINER

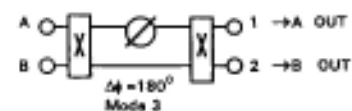
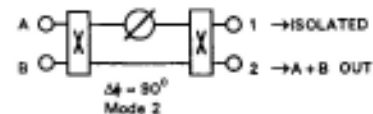
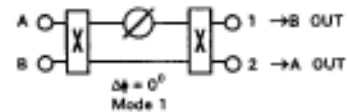
- Ideal for Main/Standby
- Switches under Tx power
- No loss of on air signal
- Compact Size
- Microprocessor Control
- Quick Installation

MCI's Coax switchless combiner is designed to combine two similar transmitters into a single output. This proven design consists of quadrature hybrids and a single ended phase shifter. MCI's switchless combiner allows the broadcaster to switch between either of two transmitter systems. All mode switching is done without shutting down the transmitters. Mode switching is controlled with MCI's "Micro Switcher". This controller eliminates complex relays found in many controllers. The compact, unitized design simplifies installation. Coax feeds between transmitter outputs and test load connections are all that is required for setup. The stand alone system can be positioned easily within the transmitter building.



MODE CHART

| MODE | INPUT  | $\Delta \phi$ | OUTPUT                                   |
|------|--------|---------------|--|
| 1    | A or B | $0^\circ$     | A $\rightarrow$ 2, B $\rightarrow$ 1     |
| 2    | A + B  | $90^\circ$    | A+B $\rightarrow$ 2, Iso $\rightarrow$ 1 |
| 3    | A or B | $180^\circ$   | A $\rightarrow$ 1, B $\rightarrow$ 2     |





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| SPECIFICATIONS  |                               |
|-----------------|-------------------------------|
| VSWR:           | 1.08:1 over channel           |
| Frequency:      | UHF band specify channel      |
| Insertion Loss: | 0.20 dB max (0.10 dB typical) |
| Rejection:      | see plot                      |
| Isolation:      | -30 dB or more                |
| Impedance:      | 50 ohms                       |
| Connections:    | standard EIA coax             |

|                                 |              | UHF              |
|---------------------------------|--------------|------------------|
| <b>FREQUENCY</b>                | <b>(MHz)</b> | 470-860          |
| <b>MODEL</b>                    |              | 50554            |
| <b>MAX POWER (combined out)</b> |              | 50 kW            |
| <b>CONNECTORS</b>               |              | 4 1/16           |
| <b>SIZE</b>                     | <b>in</b>    | 47 x 35 x 78     |
|                                 | <b>(cm)</b>  | (120 x 89 x 198) |
| <b>WEIGHT</b>                   | <b>lbs</b>   | 550              |
|                                 | <b>(kg)</b>  | (250)            |
| <b>MODEL</b>                    |              | 50553            |
| <b>MAX POWER (combined out)</b> |              | 30 kW            |
| <b>CONNECTORS</b>               |              | 3 1/8            |
| <b>SIZE</b>                     | <b>in</b>    | 47 x 35 x 78     |
|                                 | <b>(cm)</b>  | (120 x 89 x 198) |
| <b>WEIGHT</b>                   | <b>lbs</b>   | 550              |
|                                 | <b>(kg)</b>  | (250)            |
| <b>MODEL</b>                    |              | 50552            |
| <b>MAX POWER (combined out)</b> |              | 10 kW            |
| <b>CONNECTORS</b>               |              | 1 5/8            |
| <b>SIZE</b>                     | <b>in</b>    | 40x32x72         |
|                                 | <b>(cm)</b>  | (102x62x183)     |
| <b>WEIGHT</b>                   | <b>lbs</b>   | 350              |
|                                 | <b>(kg)</b>  | (158)            |

All specifications are subject to change without notice.

Options available:                      Wattmeter  
     Couplers  
     Fine Matches  
     Test Load



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