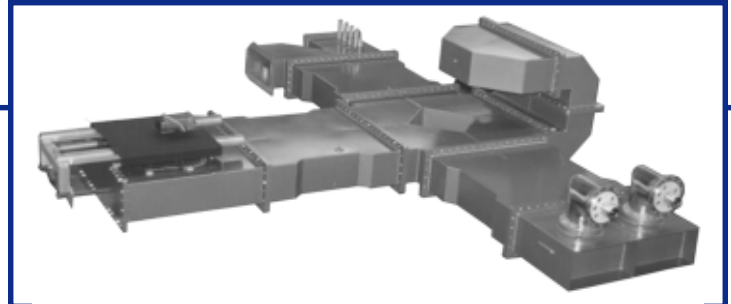




HIGH POWER HOT SWITCH™ COMBINER



- Microprocessor Controlled
- Choke-Type Phaser Non-Contacting
- High Isolation
- UHF Applications to 280kW
- All Waveguide Construction

Micro Communications, Inc., manufactures an assortment of RF switching systems for UHF, including switchless combiners designed to utilize peak power levels as high as 280 kilowatts.

The microprocessor control unit provides the broadcaster with the missing link between the RF system and efficient station operation. This unit allows remote and/or local control of the switchless combiners. The broadcaster needs only to provide a momentary contact for each position required.

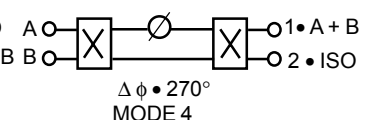
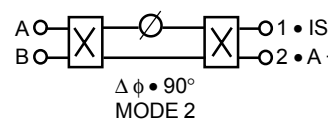
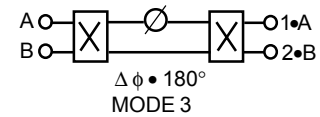
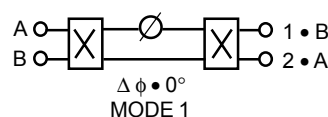
MCI series 55080 switchless combiner uses (2) 90° hybrids and a one-sided phase shifter. The advantage is a single drive system. The phase

shifter uses a high power non-contacting short circuit.

MCI's switchless combiners are capable of transmitting full power from two transmitters (inputs A & B) to either output, or from either transmitter to either output.

Switchless combiners are also available from Micro Communications, Inc., for FM, LoV and HiV.

| MODE | INPUT | $\Delta\phi$ | OUTPUT |
|------|--------|--------------|--------------------|
| 1 | A or B | 0° | A → 2, B → 1 |
| 2 | A + B | 90° | A + B → 2, ISO → 1 |
| 3 | A or B | 180° | A → 1, B → 2 |
| 4 | A + B | 270° | A + B → 1, ISO → 2 |





| SPECIFICATIONS | |
|------------------------------|-------------------------|
| Frequency: | Specify Channel |
| VSWR: | < 1.10 Over Pass Band |
| Insertion Loss: | < 0.1 dB |
| Isolation Between any Ports: | > 30 dB |
| Switching Time: | 5 Seconds between modes |

| | | UHF | | |
|--------------------------------|-------------|------------------|------------------|------------------|
| FREQUENCY (MHz) | | 470-608 | 566-728 | 698-860 |
| CHANNEL RANGE | | 14-36 | 30-56 | 52-69 |
| MODEL | | 55099 | 55098 | 55097 |
| SIZE | | WR1800 | WR1500 | WR1150 |
| COMBINED OUTPUT POWER | | 280kW | 280kW | 280kW |
| SIZE | ft | 14x14x4 | 12x12x4 | 10x10x3 |
| | (m) | (4.26X4.26X1.22) | (3.65X3.65X1.22) | (3.04X3.04X0.91) |
| WEIGHT | lbs | 800 | 620 | 420 |
| | (kg) | (363) | (281) | (190) |
| INPUT FLANGE | | WR1800 | WR1500 | WR1150 |
| OUTPUT FLANGE | | WR1800 | WR1500 | WR1150 |
| MODEL | | 55089 | 55088 | 55087 |
| SIZE | | WR1800 | WR1500 | WR1150 |
| COMBINED OUTPUT POWER (| | 140kW | 140kW | 140kW |
| SIZE | ft | 14x14x4 | 12x12x4 | 10x10x3 |
| | (m) | (4.26X4.26X1.22) | (3.65X3.65X1.22) | (3.04X3.04X0.91) |
| WEIGHT | lbs | 800 | 620 | 420 |
| | (kg) | (363) | (281) | (190) |
| INPUT FLANGE | | 6 1/8 EIA | 6 1/8 EIA | 6 1/8 EIA |
| OUTPUT FLANGE | | WR1800 | WR1500 | WR1150 |

All specifications are subject to change without notice.

- NOTES:** 1. 9 inch or 8 inch coax output can be supplied except on models 55099, 55098, and 55097.
2. Transmitter interlock and status provided through the use of micro switches.

