

INSTRUCTION MANUAL

651142200H

OC-8d

Headend Combiner (Passive)

Stock No. 5957

DESCRIPTION

The Blonder Tongue OC-8d is a 5-1000 MHz passive output combiner with eight broadband input ports. Used in headends to combine up to eight modulators and/or processors, it is manufactured with radiation-proof passives.

The OC-8d features high isolation between ports and low net combining loss from each of the eight inputs and the thru-line input. A -20dB test jack, on the front panel, allows the operator to adjust headend output levels without disconnecting any equipment.

Two or more units can be combined to provide more than eight channels in larger systems. The OC-8d is a compact, 1-3/4" high unit designed for mounting in a standard 19" EIA rack.

FEATURES

- High isolation between ports
- Built-in output test jack permits testing with uninterrupted service
- Can be combined for use in larger systems

SPECIFICATIONS

Electrical			
Frequency Range:	5-1000 MHz	Isolation Between any Combination of Input Ports (1&2 or 3&4 or 5&6 or 7&8)	
Insertion Loss		5 to 1000 MHz:	25 dB
5- <40MHz:	10.75 dB	Isolation Between any Combination of Input Ports (1&3 or 1&5 or 1&7 etc.)	
40-550 MHz:	11.5 dB	5 to 1000 MHz:	40 dB
>550-750 MHz:	12.0 dB	Test Jack:	-20 dB
>750 - 860 MHz:	12.5 dB	Impedance:	75 Ohm
>860 - 1000 MHz:	13.25 dB		
Tilt:	2.75 dB		
	(5-1000 MHz)		
Flatness (Ref. to Tilt)			
5-550 MHz:	±0.25 dB		
>550 TO 1000 MHz:	±0.4 dB		
Mechanical			
Dimensions:	19" W x 1-3/4" H x 15-1/4" D		
Shipping Weight:	6.5 lbs.		
Signal Connections "F" Type			
Input:	8		
Output:	1		
Test:	1 (Front Panel)		

TESTING

The performance of the OC-8d can be checked at the -20 dB test jack (located on the front panel) without interrupting service. A standard 75 ohm "F" type connector is used.



**BLONDER
TONGUE**
LABORATORIES, INC.

The Standard of Quality in TV Signal Distribution

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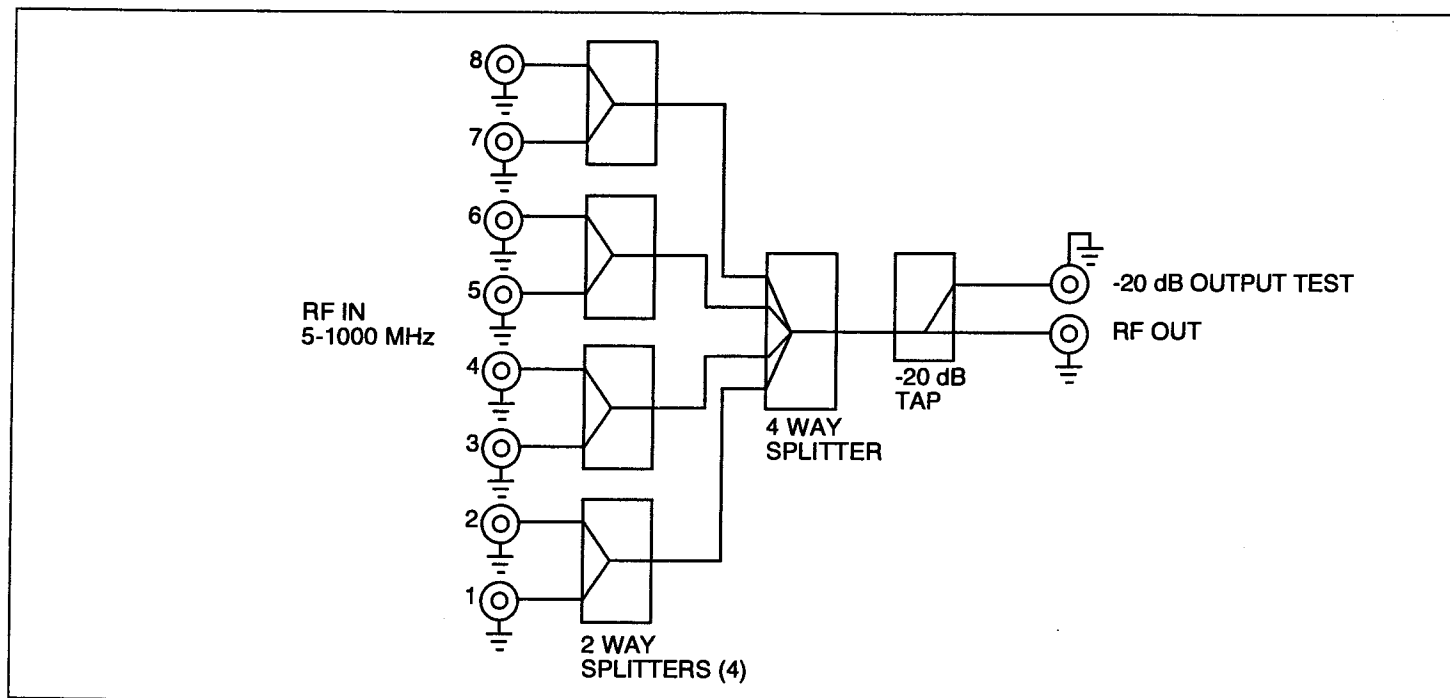


Figure 1 - Block Diagram

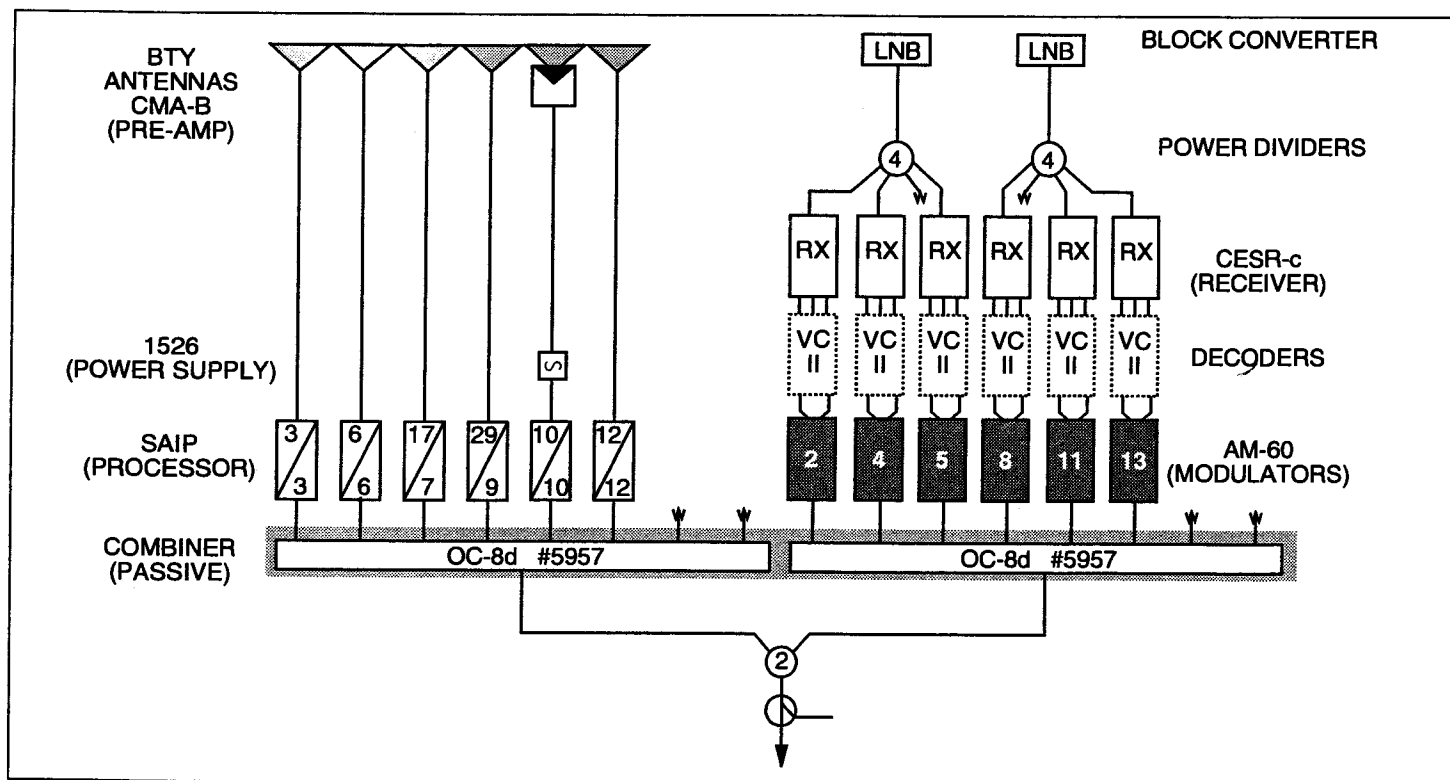


Figure 2 - Typical Application

SERVICE

Each OC-8d is built to give long dependable service; however, should it develop trouble, pack it carefully with a note describing the problem and mail postage paid to:

Service Department
Blonder Tongue Laboratories, Inc.
One Jake Brown Road
Old Bridge, NJ 08857

PERFORMANCE CHECK LIST

MODEL:		<input checked="" type="checkbox"/> AM40-550B #59402	<input type="checkbox"/> AM60-550B #59417	SERIAL NO:
AM Series		<input type="checkbox"/> AM40-750B #59403	<input type="checkbox"/> AM60-750A #59418	

em	Parameter	Result	Spec.
1.	Output Frequency Range	AMxx-550	54 - 547.25 MHz
		AMxx-750	54 - 745.25 MHz
2.	Output Level Control Range (Factory Set to Max. Output)	AM40-xxx	32 to 42 dBmV
		AM60-xxx	50 to 60 dBmV
3.	Aural/Visual Carrier (Factory Set to -15 dB)		-11 to -22 dB
4.	Visual Carrier Freq. Tolerance (After Warm-Up at Room Temperature)	Standard Channels	±10 KHz
		Aeronautical Channels	±2.5KHz
5.	4.5 MHz Inter-Carrier Frequency Tolerance		±100 Hz
6.	Channel Passband Response	Fv -0.5 to Fv +4.2 MHz	±1.5 dB
7.	VSB Response & Attenuation	Fv -1.50 MHz	-35 dB
		Fv -2.42 MHz	-35 dB
		Fv -3.58 MHz	-36 dB
		Fv -6.00 MHz	-45 dB
		Fv +6.00 MHz	-45 dB
8.	In-Channel Carrier-To-Noise Ratio		64 dB
9.	Broadband Noise (Out of Channel) (4 MHz BW)		-76 dBc
10.	Spurious Output (For A/V = -15 dB & C/V = -17 dB) (5-1000 MHz)	In Channel	-60 dBc
		Out of Channel	-60 dBc
11.	Output Return Loss (On Channel)		10 dB
12.	IF Loop Level		35 +2/-1 dBmV
13.	Video Input for 87.5% Modulation		1.0 Vp-p
14.	Maximum Video Modulation Depth		99%
15.	Video Over-Modulation LED Indicator Cal.		85 - 95%
16.	Audio Input Sensitivity (25 KHz Peak Deviation)		260 Vrms
17.	Aural Over-Mod. LED Indicator Cal.		25 ±3 KHz
18.	EAS/ALT Input Operation AUTO/MANUAL		
19.	Intermittent and Microphonic Test		

Checked By: _____

651204000A



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The lightning flash with arrow symbol within an equilateral triangle is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**




The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER FROM THIS UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. SEE ADDITIONAL SAFETY INSTRUCTIONS BELOW.

NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV System Installers attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

IMPORTANT SAFEGUARDS

1. **Read Instructions** - All the safety and operating instructions should be read before this product is operated.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the product and in the operating instructions should be adhered to.
4. **Follow Instructions** - All operating and use instructions should be followed.
5. **Cleaning** - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. **Attachments** - Do not use attachments not recommended by Blonder Tongue as they may cause hazards.
7. **Water and Moisture** - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like. Refer to individual instruction manuals included with products designed for indoor use only. Do not expose these products to rain or moisture.
8. **Accessories** - Do not place this product on an unstable cart, stand, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, bracket, or table recommended by Blonder Tongue. Any mounting of the product should follow the instructions, and should use a mounting accessory recommended by Blonder Tongue.
9.  A product and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the product and cart combination to overturn.
10. **Ventilation** - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the instructions are adhered to.
11. **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home or business, consult your dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
12. **Grounding or Polarization** - If this product is equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin, the plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

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BLONDER TONGUE LABORATORIES, INC.

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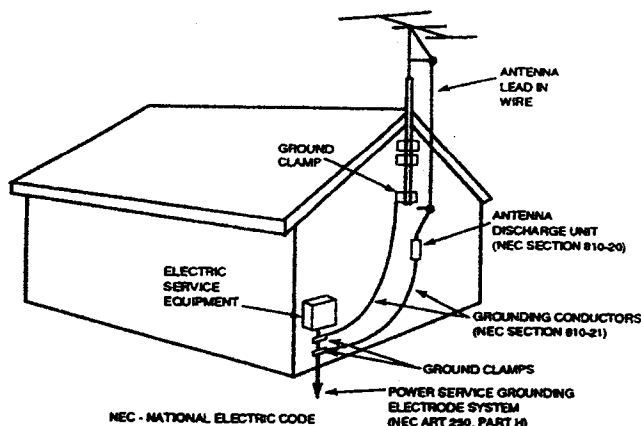
Old Bridge, NJ 08857-1000 USA
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If this video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other), the plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

13. **Power Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
14. **Lightning** - For added protection for this product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line-surges.
15. **Power Lines** - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
16. **Overloading** - Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
18. **Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
19. **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled, or objects have fallen into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e. If the product has been dropped or the cabinet has been damaged.
 - f. When the product exhibits a distinct change in performance-this indicates a need for service.
20. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by Blonder Tongue or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
21. **Safety Check** - Upon completion of any service or repairs to this product ask the service technician to perform safety checks to determine that the product is in proper operating condition.
22. **Outdoor Antenna Grounding** - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

See notes and diagram below.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS



1. Drill a hole in wall (Careful! there are wires in that wall!) near set just large enough to permit entry of cable.
2. Punch cable through hole and form a rain drip loop close to where it enters house.
3. Put a small amount of caulking around cable where it enters house to keep out drafts.
4. Install static electricity discharge unit.
5. Connect antenna cable to set.