

## Hills CX12 Active Combiner

**FC658145**

The Hills CX-12 Active RF Combiner is a practical and efficient solution for combining up to 12 RF signals from a variety of sources and different channels into one output. It has built-in gain to overcome internal losses.

A test port provides a convenient access point for signal measurements and diagnostics without taking the system off-line.

### Specifications

Frequency Range	40MHz - 860MHz
Gain	20db $\pm$ 2dB
Test Port	-30dB
Noise Figure	< 2dB
Input/Output Impedance	75 $\Omega$
Return Loss	> 14dB
Maximum Output Level	100dB $\mu$ V (12 Channels)
Power	12V / 600mA Regulated Power Supply

## Hills CX8 Active Combiner

**FC658097**

An Active Device which permits up to 8 input VHF / UHF signals (45 – 860 MHz) to be combined into a single output socket. The unit has built in gain to combat any attenuation through the combining process. The unit is capable of delivering a high output signal and is provided with a test point to permit measurement of the output levels. A gain control is included.

The CX8 offers a practical and efficient solution of combining signals from various sources and on different channels without introducing signal loss.

### Features:

- Combines 12 Input Signals
- Broadband Operation
- Digital TV Compatible
- Test Port
- F Connectors
- Fully Shielded Housing
- Easy Installation



### Specifications

Gain	15db $\pm$ 1.5dB with all ports terminated	
Impedance	In	75 Ohm
	Out	75 Ohm
Test Point	- 30 dB on output	
Gain Control	-15dB adjustable	
Output Level	122dB $\mu$ V	
Power	15 VDC, 500mA	
Dimensions	Unit	270*90*53 mm
	Packaged	310*100*70 mm
Weight	(packaged)	782g



### Frequency Agile Audio-Video Modulators

- A thumbwheel switch which permits adjustment to the vision carrier frequency
- Six switches provide fine-tuning to permit adjustment to the exact frequency required (eg. for channels PAL B or G, the 250KHz switch would be operated)
- Other finer offset variations are possible using these switches

A series of double sideband AV modulators which can be tuned to a VHF or UHF TV channel. These units can be readily adjusted to the desired frequency, by means of easy to use tuning controls on the front panel. Available for different standards. The basic unit is supplied with a switching facility to adjust the vision to sound carrier spacing to either 5.5 or 6MHz, for PAL B, G or PAL I. Spacings for other standards such as 4.5 (NTSC M) or 6.5MHz (PAL D) are available to order.

<b>FC658106</b>	<b>VHF 138.25 - 224.25MHz</b>
<b>FC658107</b>	<b>HYP 231.25 - 439.25MHz</b>
<b>FC658096</b>	<b>UHF 471.25 - 855.25MHz</b>



### Specifications

Video Standard	PAL B/G or PAL 1 switchable	
Operating Temp.	0 to 45°C Ambient	
Power	15vDC 300mA per unit	
RF output	>100dB $\mu$ V/PLL in lock mode	
Impedance	RF Out	75 $\Omega$
	Video	75 $\Omega$
	Audio	10K $\Omega$
Level Adjustment	min 15dB	
Spurious Output	-50dB inside freq. range	
Phase Noise (typical)	88dBm/Hz/Fv-10KHz	
Audio Carrier Level	-15 to 25dBc/adjustable	
Video & Audio Input Connector	F Type female	
Input Level	Video	min 0.7Vpp/9dB AGC cct. keeps mod depth constant
	Audio	280mV-700mV RMS/adjustable
Freq. Response	$\pm$ 2dB/0.5MHz to 5MHz	
S/N	Video Ratio	56dB/weighted PAL 0.2-5MHz
	Audio Level	55dB/FM
FM THD	max 1.2%/Dev $\pm$ 35KHz	
Physical Dimension	310 x 100 x 75mm	
Weight	(Unit)	0.75g

A single modulator may be powered by use of a simple 15V plug pack (BC87118). This connects to the modulator via a socket on the front panel. Alternatively, a bank of up to 8 modulators may be powered by a Hills MPS9 power unit. (FC687368D) Each modulator plugs into the next via a link connector carrying the 15volts DC.

