# BSF45



**BAND SPLITTING FILTER** 

INSTRUCTION BOOK IB 6283-01

# INTRODUCTION:

The BSF45 BAND SPLITTING FILTER is a device that separates the 4.5MHz FM subcarrier from a Composite video signal, so they can both be used separately. The input is 4.5 MHz TV audio multiplexed on base-band video a (Composite Video signal). Video with no 4.5 MHz audio subcarrier appears at one BNC output. The 4.5 MHz TV sound subcarrier with no video appears at the other BNC output. This filter splits the two signals into their separate component parts and routes each part to their respective output connectors.

The BSF45 is ideal for separating Composite Video from a microwave or other composite source and then feeding the two components into a TV modulator that require separate base-band video and 4.5 MHz TV audio inputs. This unit can also be used to combine a 4.5 MHz TV audio subcarrier with Base-Band video to make composite video. When used in the reverse direction this filter will combine video and a 4.5 MHz subcarrier to produce composite video.

This unit will allow you to process video through Time-Base Correctors or Proc. Amps without causing SYNC-BUZZ in your TV audio. This is accomplished by splitting the 4.5 MHz signal out of the composite video, then routing the subcarrier around the video processor that would otherwise interrupt the aural subcarrier, and then recombine the two signals after processing.

The BSF45 is fully RF shielded in a die cast aluminum box and is equipped with input and output BNC (female) connectors. It is a passive filter so no power source is required. Simply connect the BNC cables and your up and operating. There are no controls to adjust and no periodic maintenance is required.

### INPUT SPECIFICATIONS

Impedance75 OhmsSignalNTSC Composite VideoVideo Level1 Volt p-p

# VIDEO OUTPUT

Impedance75 OhmsPass-band4.35 MHzChromanance Delay60 nSVideo Level1 Volt p-p

# TV AUDIO SUBCARRIER OUTPUT

Impedance 75 Ohms RF Pass-band 170 KHz Level -6 dB

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