

The diagram illustrates the functional blocks and signal flow of the CONTROL BOARD ASSY. It is divided into three main sections: CONTROL BOARD ASSY, PA LOW-PASS ASSEMBLY, and ANTENNA.

CONTROL BOARD ASSY:

- Input Section:** Includes two SUB-CARRIER inputs (#1 IN and #2 IN), each passing through an AUTOMATIC LEVEL CONTROL and a 10 KHZ LOW-PASS FILTER. A VIDEO IN input passes through a 525 LINES PREPHASIS block.
- Processing Section:** The video signal passes through a VIDEO DEVIATION ADJUST and a variable capacitor. The sub-carrier signals pass through AUDIO MODULATION ADJUST and 75 MHZ SUBCARRIER OSCILLATOR blocks.
- Output Section:** The processed signals pass through a 75 MHZ SUBCARRIER OSCILLATOR, AUDIO DEVIATION ADJUST, and a 10 KHZ LOW-PASS FILTER before being sent to the ANTENNA.

PA LOW-PASS ASSEMBLY:

- Power Path:** A POWER SUPPLY feeds a LOCK DETECT block, which connects to a PHASE LOCK LOOP CROUPT. The output of the PHASE LOCK LOOP CROUPT passes through a DUAL MODULOS block and a 1/2 VCD block to a DIVIDE BY 2 block. The output of the DIVIDE BY 2 block passes through a VOLTAGE CONTROLLED OSCILLATOR, a POWER AMPLIFIER, an ISOLATOR, and a LOW-PASS FILTER before reaching the ANTENNA.
- Signal Path:** The output of the VIDEO DEVIATION ADJUST and variable capacitor section passes through a variable capacitor and a LOW-PASS FILTER before reaching the ANTENNA.

ANTENNA: The final output of the system, receiving signals from the PA LOW-PASS ASSEMBLY and the CONTROL BOARD ASSY.