

# Mini Function Blocks™ (MFB)

The VAC Mini Function Block™ (MFB) delivers professional AV performance in a remarkably small package. MFB audio and video DA and switch products, DTMF decoder, and switch relay are ideal for applications demanding miniaturized and highly rugged devices that operate from a wide range of DC input voltages. As an added benefit, MFB products are exceptionally cost-effective.

The MFB product line consists of 24 products that can either be hardwired into the user's system or installed for quick disconnect with terminal block connectors. Mini Function Blocks are only 2.0" x 1.5" x 0.5" and weigh less than 8 oz (not including terminal block connectors). All electrical components are encapsulated in a tough, weather-resistant epoxy. MFB products have four 6-32 threaded inserts for convenient and secure mounting.

## The Smallest, Most Versatile DAs, Switches and Controllers Available! MFB Bricks® Are Used In...

- NASCAR
- Military and Commercial Underwater Remote Operated Vehicles
- Unmanned Aerial Vehicles
- Helicopters
- Aerial Filming
- Portable/Field and Remote Video Recording

<p style="text-align: center;"><b>1X4 Composite &amp; Y/C Video DA</b></p> <ul style="list-style-type: none"> <li>• DC-200MHz Bandwidth</li> <li>• 75 Ohm Input and Output Impedance</li> <li>• Four identical outputs</li> <li>• Accepts 0.5 - 2Vpp signal (within +1V)</li> <li>• Power consumption &lt; 100mA; 45mA typ.</li> <li>• <b>Composite Video Part Numbers:</b> <ul style="list-style-type: none"> <li>Unity Gain With Solder Pads: 11-011-504</li> <li>Global Gain With Solder Pads: 11-013-504</li> <li>Unity Gain With Terminal Blocks: 11-011-904</li> <li>Global Gain With Terminal Blocks: 11-013-904</li> </ul> </li> <li>• <b>Y/C Video Part Numbers:</b> <ul style="list-style-type: none"> <li>Unity Gain With Solder Pads: 14-011-504</li> <li>Unity Gain With Terminal Blocks: 14-011-904</li> </ul> </li> </ul>	<p style="text-align: center;"><b>1X4 Audio DA - Unity Gain</b></p> <ul style="list-style-type: none"> <li>• DC-100MHz Bandwidth</li> <li>• 10k Ohm Input Impedance</li> <li>• 100 Ohm Output Impedance</li> <li>• Four identical outputs</li> <li>• Accepts 0.25 - 3Vpp signal (within +1.5V)</li> <li>• Power consumption &lt; 50mA</li> <li>• <b>Unbalanced Mono Audio Part Numbers:</b> <ul style="list-style-type: none"> <li>With Solder Pads: 16-071-704</li> <li>With Terminal Blocks: 16-071-004</li> </ul> </li> <li>• <b>Balanced Mono Audio Part Numbers:</b> <ul style="list-style-type: none"> <li>With Solder Pads: 16-071-804</li> <li>With Terminal Blocks: 16-071-904</li> </ul> </li> </ul>
<p style="text-align: center;"><b>1X4 Composite Video DA Clamping -or- DC Restore</b></p> <ul style="list-style-type: none"> <li>• DC – 200MHz Bandwidth</li> <li>• Variable Gain, 0.75x to 1.75x</li> <li>• Select Clamping or DC Restore</li> <li>• 75 Ohm input and outputs</li> <li>• <b>PART NUMBERS:</b> <ul style="list-style-type: none"> <li>With Solder Pads: 32-013-154</li> <li>With Terminal Blocks: 32-013-194</li> </ul> </li> </ul>	<p style="text-align: center;"><b>DTMF Decoder</b></p> <ul style="list-style-type: none"> <li>• 50 dB Dynamic Range</li> <li>• Recognizes all 16 DTMF tones</li> <li>• Six programmable outputs (N.O., N.C., Momentary Contact Closure or TTL)</li> <li>• <b>PART NUMBERS:</b> <ul style="list-style-type: none"> <li>With Solder Pads: 72-000-706</li> <li>With Terminal Blocks: 72-000-906</li> </ul> </li> </ul>

## 4X1 Composite & Y/C Video Switch Remote Control

- DC - 100 MHz Bandwidth
- 75Ohm Input Terminations
- TTL Binary Control Signal, 2 Bits
- Power Consumption < 50mA
- **Composite Video Part Numbers:**
  - With Solder Pads: 17-015-724
  - With Terminal Blocks: 17-015-924
- **Y/C Video Part Numbers:**
  - With Solder Pads: 17-045-704
  - With Terminal Blocks: 17-045-904

## 4X1 Mono Audio Switch Remote Control

- DC - 100 kHz Bandwidth
- Open Circuit Input Terminations
- TTL Binary Control Signal, 2 Bits
- Output 3Vpp max. into 600 Ohms
- Power Consumption < 50mA
- **Unbalanced Mono Audio Part Numbers:**
  - With Solder Pads: 17-075-764
  - With Terminal Blocks: 17-075-964
- **Balanced Mono Audio Part Numbers:**
  - With Solder Pads: 17-085-764
  - With Terminal Blocks: 17-085-964

## Switch Relay

- Four independent relay circuits
- Configure as N.O., N.C. contact closure or power switch control
- Safely switch up to 1A @ 24V DC; 300 amps @ 115V AC
- Accepts TTL or Contact Closure control signals
- **PART NUMBERS:**
  - With Solder Pads: 47-000-704
  - With Terminal Blocks: 47-000-904



## General Product Photos



4X1 Composite Video Switch  
PN: 17-015-724



Clamping/DC Restore Video DA  
PN: 32-013-154