

Model R5CE**Universal Monitoring Digital Distribution Amplifier****Introduction**

The R5CE is a Component Digital monitoring Distribution Amplifier providing 4 equalized, re-clocked and separately buffered serial digital outputs and 4 analog monitoring outputs. One analog output is NTSC/PAL and 3 are configurable to a wide variety of formats including composite, composite and Y/C (S Video), or component including SMPTE/N10 (YUV), RGB, or true Betacam levels. The R5CE automatically configures to 525 or 625 line component digital inputs and outputs analog NTSC (525 line input), PAL (625 line input) and component analog as configured by the dipswitches.

The R5CE encodes the full dynamic range of input component video - values below black and above white are not clipped. In the NTSC mode, the 7.5 IRE pedestal can be disabled by external dipswitch selection. The R5CE also features a PLL filter, which reduces SDI input jitter for stable composite or component analog outputs.

Specifications

+/- .25db to 5Mhz frequency response (Y)

<1% 2T K factor (Y)

<1.5% Diff. Gain, <1.5 degree Diff. phase

Output level adjustment (internal), +/-20%

All outputs are separately buffered

Power Consumption: +6.5 Volts/4 Watts, -6.5 Volts/0.2 Watts

Dip Switch Functions

Dipswitches SW1-SW3 control the output of the 3 configurable outputs

SW 1 CMPST CMPNT (Output selection)

CMPNT (UP): Component output

CMPST (DOWN): Composite output

SW 2 RGB YUV/YC (Output selection)

YUV/YC (UP): Output Y, R-Y, B-Y if SW1 is COMPNT. If SW1 is CMPST, output 1 composite & 1 Y/C

RGB (DOWN): Output RGB if SW1 is COMPNT. If SW1 is CMPSTE, output 3 composites.

SW 3 BETA SMPTE (Output selection)

BETA (UP): Selects BETA 525 levels (if configured for Component output)

SMPTE (DOWN): Selects SMPTE levels (if configured for Component output)

NOTE: No effect with 625 input

Model R5CE**Universal Monitoring Digital Distribution Amplifier****Dip Switch Functions (cont'd.)****SW 4 Blank**

NAR (UP): Vertical (line numbers indicate where video starts)
 line 13, field 1; line 12, field 2 (525 line)
 line 10, field 1; line 322, field 2 (625 line)
 Horizontal (active video line durations)
 ITU-R.470 (720 pixels PAL/NTSC)

WIDE (DOWN): Vertical (line numbers indicate where video starts)
 line 22, field 1; line 21, field 2 (525 line)
 line 23, field 1; line 335, field 2 (625 line)
 Horizontal (active video line durations)
 ITU-R/SMPTE (710 pixels NTSC, 702 pixels PAL)

SW 5 Pedestal (Composite outputs only)

ON (UP): 7.5 IRE pedestal for NTSC
 OFF (DOWN): No pedestal for NTSC-J
 NOTE: No effect with 625 input

SW 6 TEST

OFF (UP): Disables internal test signal
 ON (DOWN): Selects internal 75% Colors Bars test signal

OUTPUT SELECTION MATRIX**OUTPUT FORMAT for 3 configurable outputs**

	DIP SWITCH SETTING		
	SW1	SW2	SW3
3 composite	CMPST	RGB	N/A
1 composite & 1 Y/C	CMPST	YUV/YC	N/A
RGB	CMPNT	RGB	N/A
SMPTE component (BETA 625)	CMPNT	YUV/YC	SMPTE
BETA 525 component	CMPNT	YUV/YC	BETA

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R5CE
Rear Panel Layout

