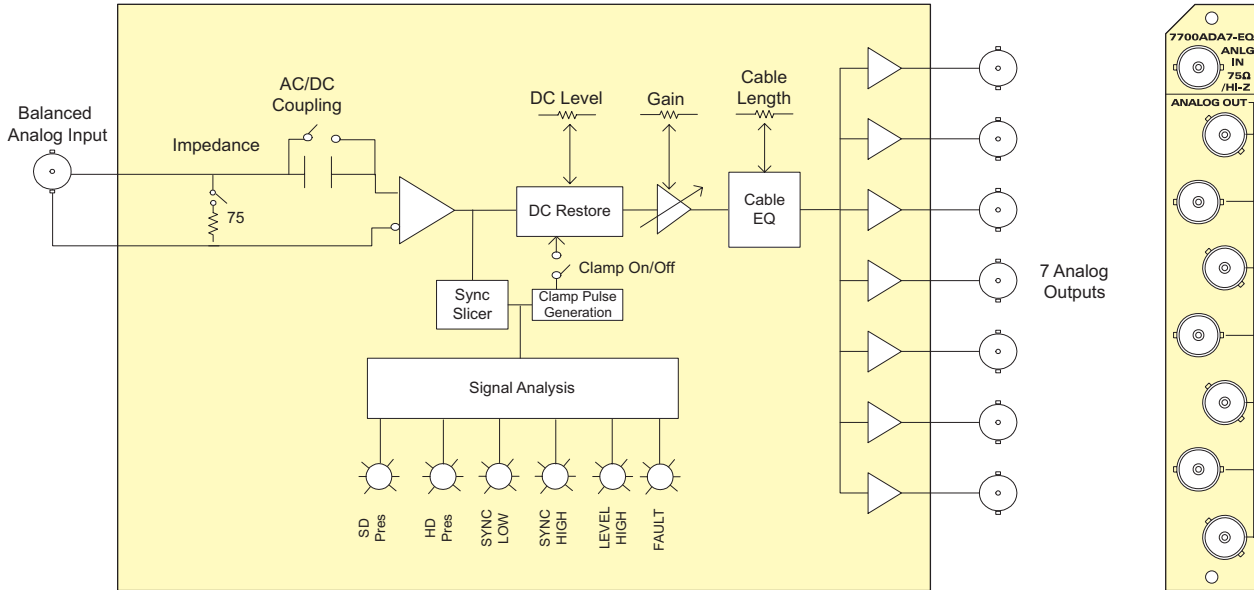# 7700ADA7-EQ
Analog Video Distribution Amplifier

The 7700ADA7-EQ Equalizing Analog Distribution Amplifier is a general purpose amplifier for distributing analog video signals. The 7700ADA7-EQ features one balanced equalized input with seven outputs. It has been designed to distribute a wide range of analog video signals. It can also distribute other pulses and signals that are less than 2V p-p.

The 7700ADA7-EQ occupies one card slot and can be housed in a 1RU frame which will hold up to 3 modules, a 3RU frame which will hold up to 15 modules, a 350FR portable frame which will hold up to 7 modules or a standalone enclosure that will hold 1 module.

▶Features & Benefits

• 75Ω or high impedance input (jumper selectable)
• High common mode range and common mode rejection ratio (CMRR)
• Gain control
• Jumper selectable AC or DC coupling
• Jumper selectable fast or slow back porch clamp

• DC level control when clamp is enabled
• Cable equalizer adjustment range: 0 to 300m of 8281 or 1694A
• Looping feature with external "T" connector and external termination
• Consistent input impedance if card power is lost

▶Specifications

Analog Video Input:

Standards:	Any analog video format, up to 2V p-p and 30MHz bandwidth
Connector:	BNC input per IEC 61169-8 Annex A
Common mode range:	> 6V p-p
CMRR:	> 70dB to 1kHz
Signal amplitude:	2.5V p-p max
Cable equalizer:	0 to 300m of Belden 8281 or 1694A cable
Impedance:	75Ω terminated, 35kΩ Hi-Z (jumper selectable)
Coupling:	AC or DC (jumper selectable)
Return loss:	> 40dB to 10MHz, > 30dB to 30MHz
Clamp range:	> ±600mV
Fast clamp attenuation of 60Hz:	> 36dB

Analog Video Outputs:

Number of Outputs:	7
Connector:	BNC per IEC 61169-8 Annex A
Output impedance:	75Ω
Gain control range:	±5dB
DC level:	< ±100mV (with DC Coupling active and back porch clamp disabled)
DC level Control range:	< ±200mV (with back porch clamp enabled)
Freq. Response:	< ±0.05dB no equalization (to 5.5MHz) < ±0.09dB for 5 to 100m Belden 8281 or 1694A (to 5.5MHz) < ±0.15dB for 100 to 300m Belden 8281 or 1694A (to 5.5MHz)
Differential Gain:	< 0.17% 0 to 300m
Differential Phase:	< 0.19° 0 to 300m
C/L gain inequality:	< ±0.1% for all cablelengths
C/L Delay:	< ±2ns
Output isolation:	> 42dB to 10MHz, > 32dB to 30MHz
Output return loss:	> 40dB to 30MHz
Noise performance:	< -78dB RMS NTC7 weighting < -70dB RMS 15kHz to 5.5MHz

Electrical:

Voltage:	+12V DC
Power:	5W

Physical (number of slots):

350FR:	1
7700FR-C:	1
7800FR:	1

▶Ordering Information

7700ADA7-EQ	Analog Video Equalizing Distribution Amplifier (1x7)

Ordering Options Rear Plate must be specified at time of order
Eg: Model +3RU

Rear Plate Suffix

+3RU	3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Enclosures

350FR	3RU Portable Multiframe which holds up to 7 single slot modules
7700FR-C	3RU Multiframe which holds up to 15 single slot modules
7800FR	3RU Multiframe which holds up to 15 single slot modules
7701FR	1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR	Standalone enclosure

7700 Series Modular - Reclocking Distribution Amplifiers