



# V6155

## Dual HD/SD SDI DISTRIBUTION AMPLIFIER

### INSTALLATION and OPERATION

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# VISTEK V6155 Dual HD/SD SDI Distribution Amplifier



## 1. DESCRIPTION

The V6155 is a Dual SDI Distribution Amplifier which operates at both HD and SD data rates. Due to limitations on the rear panel one amplifier has 4 outputs, while the second has 3 outputs. Each amplifier automatically detects the input signal as SD or HD, and has a reclocker. The reclocker in each amplifier may be independently switched OFF using on-board links.

The V6155 is a part of the V1600 range of interface modules and is built on a 3U high Eurocard which is fitted into the V1606 3U Chassis. The V1606 can have a total of up to 14 modules from the range. A suitable passive rear module, such as the V16HR3F, is required. The amplifier receives all its power and control from the rear module.

Each amplifier independently detects and adapts to either HD or SD automatically. Front panel LEDs indicate whether each amplifier has an input, and its standard – HD or SD. When operating SD the amplifiers will accept ASI signals, but only some of the outputs will be valid. (All outputs actually carry data, but the non-valid ones have inverted polarity.)

The DART remote monitoring and control system will indicate unit type, signal present and standard (HD or SD) and whether either reclocker is disabled.

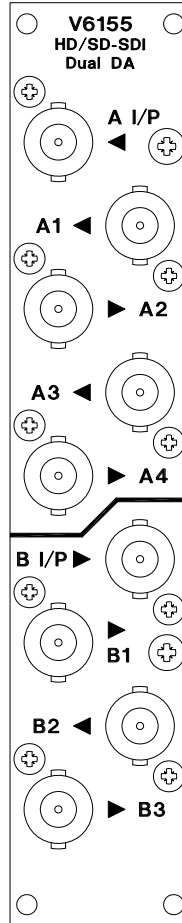


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## 2. INSTALLATION

### 2.1. REAR PANEL CONNECTIONS

#### V16HR3F



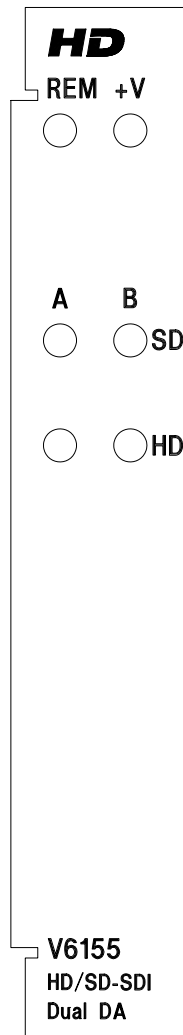
### 2.2. CONNECTIONS

SIGNAL	SOURCE	COMMENTS
A I/P	CH A - SDI Video I/P	Sourcing cable length up to 250m
A1, A3	CH A – O/Ps 1 and 3	SDI Outputs
A2, A4	CH A – O/Ps 2 and 4	SDI Outputs (ASI Compatible)
B I/P	CH B - SDI Video I/P	Sourcing cable length up to 250m
B1, B3	CH B – O/Ps 1 and 3	SDI Outputs (ASI Compatible)
B2	CH B – O/Ps 2	SDI Output

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## 2.3. FRONT PANEL



INDICATORS	DESCRIPTION
+V	Onboard regulated power is present
REM	Short blips to indicate access from the remote control system. A Rack Controller must be fitted to the Chassis.
A + SD	Indicates Channel A has an I/P at an SD data rate
B + SD	Indicates Channel B has an I/P at an SD data rate
A + HD	Indicates Channel A has an I/P at an HD data rate
B + HD	Indicates Channel B has an I/P at an HD data rate



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## 2.4. POWER CONSUMPTION

Module	Power
V6155	<5W

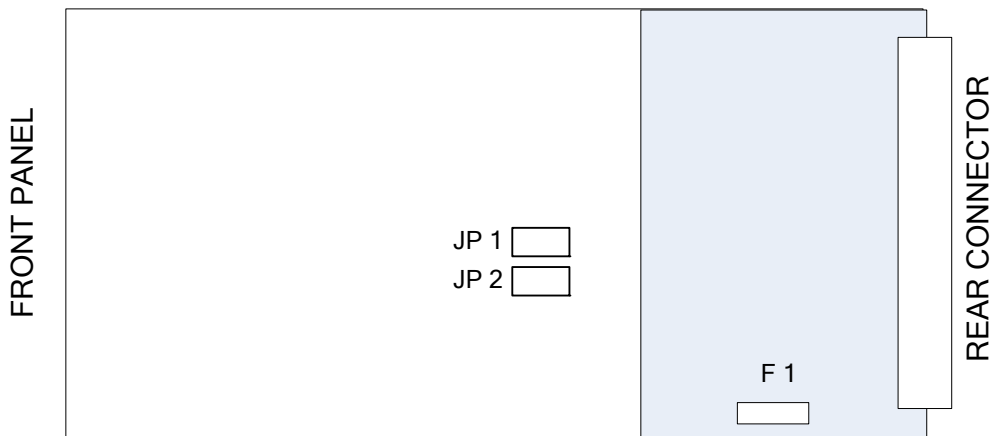
## 2.5. INSERTION DELAY

SIGNAL	DELAY
HD	<5ns
SD	<20ns

## 2.6. HARDWARE

The figure below shows diagrammatically the main board of the V6155 along with some components of interest. The shaded area at the rear of the board represents the IO Daughter Board.

Two links are provided for disabling the Reclockers.



## 2.7. LINK SETTINGS

The links settings are defined in this table:

		Left	Right
Ch A Reclocker	<b>JP 1</b>	Off	ON
Ch B Reclocker	<b>JP 2</b>	Off	ON

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## 3. ASI SIGNALS

Although the V6155 is essentially a SDI DA, it can be used for ASI signals on some outputs. The main difference between an ASI signal and a pure SDI signal is that SDI is polarity independent while ASI signals are not. (There are other technical differences, but this is the critical one which directly affects the signal integrity.)

Four outputs do have the correct polarity, and can safely be used for ASI signals as shown here:

**CH A O/Ps 2 and 4**

**CH B O/Ps 1 and 3**

## 4. DART CONTROLS

This unit has no controls, but does have status indication as follows:

Ch A – Reclocker  
Ch A – Input Locked  
Ch A – SD or HD  
Ch B – Reclocker  
Ch B – Input Locked  
Ch B – SD or HD