

Areca Thunderbolt Product Performance Report

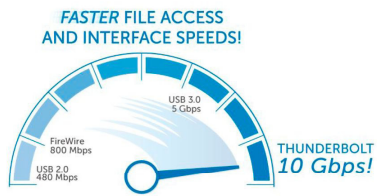


Product Testing:

1. ARC-5028T2 6-Bays Thunderbolt 2/USB 3.0 to SATA RAID Storage

Function Advantages:

FEATURES	BENEFITS
Bootable Drive Support	Provide user the capability of adding bootable drive via Thunderbolt on Apple thunderbolt-capable machine.
Advanced Configuration	Provide optimized parameter to adjust controlled firmware behavior for smooth data streaming.
USB3.0 Support	1. Offer high-performance connectivity and is backward compatibility with any computer (such as Mac Pro) running compatible versions of Mac OS X or Windows. 2. Allow both old Mac Pro and newest Mac Pro model to access same storage seamlessly.
Automatic On/Off Power Feature	Turn Areca Thunderbolt RAID storage power in unison with the host computer power status for data integrity.
Front Panel LCD and Buttons	Easy access for configuration and status report.
BBM Support	Supports a battery backup option that protects all data in ARC-5028T2 series cache memory in the event of unexpected power outage for data availability.



1. Areca Thunderbolt products perfect performance for Video editing ◦
2. Stable performance result to ensure no dropped frames during read and write ,data input and output ◦



Environment:

(1) MAC OS 10.9.2/MacBook Pro-

(2) Raid Advanced Configuration & 6 X WDC WD4001FFSX

The screenshot shows the RAID Storage Manager web interface for Areca Technology Corporation. The browser address bar displays 192.168.1.118:82. The left sidebar contains a tree view with categories: Raid System Console, RAID Set Functions, Physical Drives, System Controls, and Information. The 'Advanced Configuration' option is selected under System Controls. The main content area displays the 'Advanced Configurations' page with a table of settings:

Setting	Value
TLER Setting	Default
Timeout Setting	8 Seconds
Number Of Retries	2
Buffer Threshold Setting	25%
Amount Of Read Ahead	Auto
Number Of AV Streams	6
Optimize AV Recording	Mode3
Read Performance Margin	0%
Write Performance Margin	0%
Read And Discard Parity Data	Enabled
Hitachi SATA HDD Speed	Default
WDC SATA HDD Speed	Default
Seagate SATA HDD Speed	Default
BIOS Selection	Legacy INT13
Host Command Queue Mode	Normal

At the bottom of the configuration table, there is a green bar with the text 'Confirm The Operation' and two buttons: 'Submit' and 'Reset'.

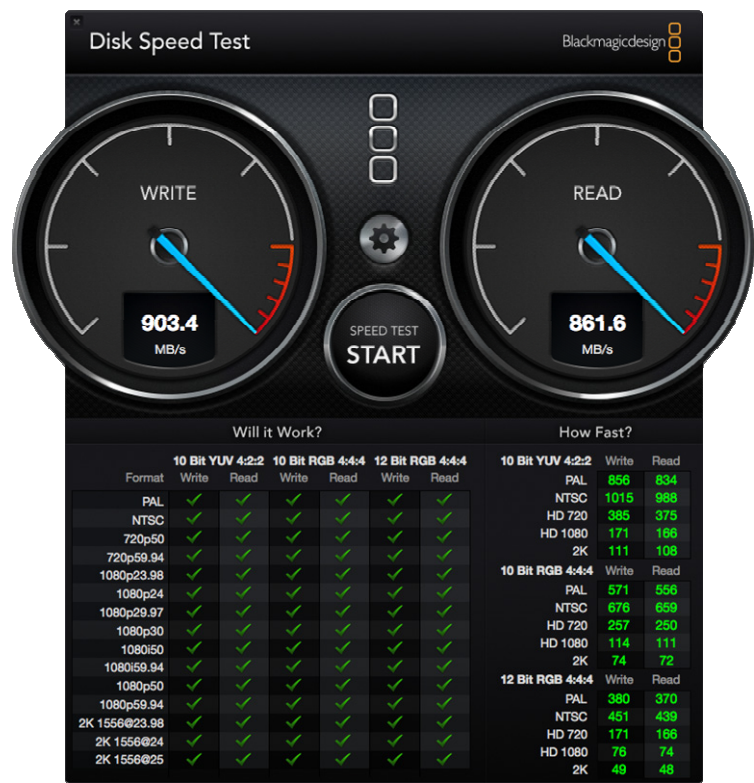
The screenshot shows the RAID Storage Manager web interface for Areca Technology Corporation. The browser address bar displays 192.168.1.118:82. The left sidebar contains a tree view with categories: Raid System Console, RAID Set Functions, Physical Drives, System Controls, and Information. The 'RAID Set Hierarchy' option is selected under Information. The main content area displays the 'RAID Set Hierarchy' page with two tables:

RAID Set	Devices	Volume Set(Ch/Id/Lun)	Volume State	Capacity
Raid Set # 000	E#1Slot#1	ARC-5028-VOL#000(0/0/0)	Normal	24000.0GB
	E#1Slot#2			
	E#1Slot#3			
	E#1Slot#4			
	E#1Slot#5			
	E#1Slot#6			

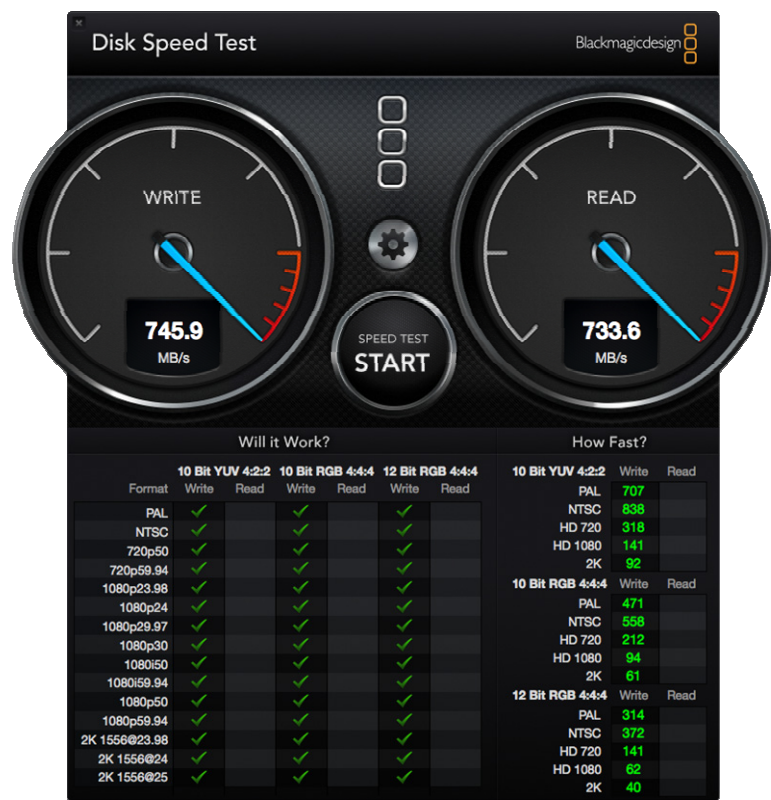
Enclosure#1 : RAID Adapter V1.0			
Device	Usage	Capacity	Model
Slot#1(5)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0
Slot#2(4)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0
Slot#3(3)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0
Slot#4(2)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0
Slot#5(1)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0
Slot#6(0)	Raid Set # 000	4000.8GB	WDC WD4001FFSX-68JNUN0

(A). Blackmagic Disk Speed Test-Thunderbolt Interface

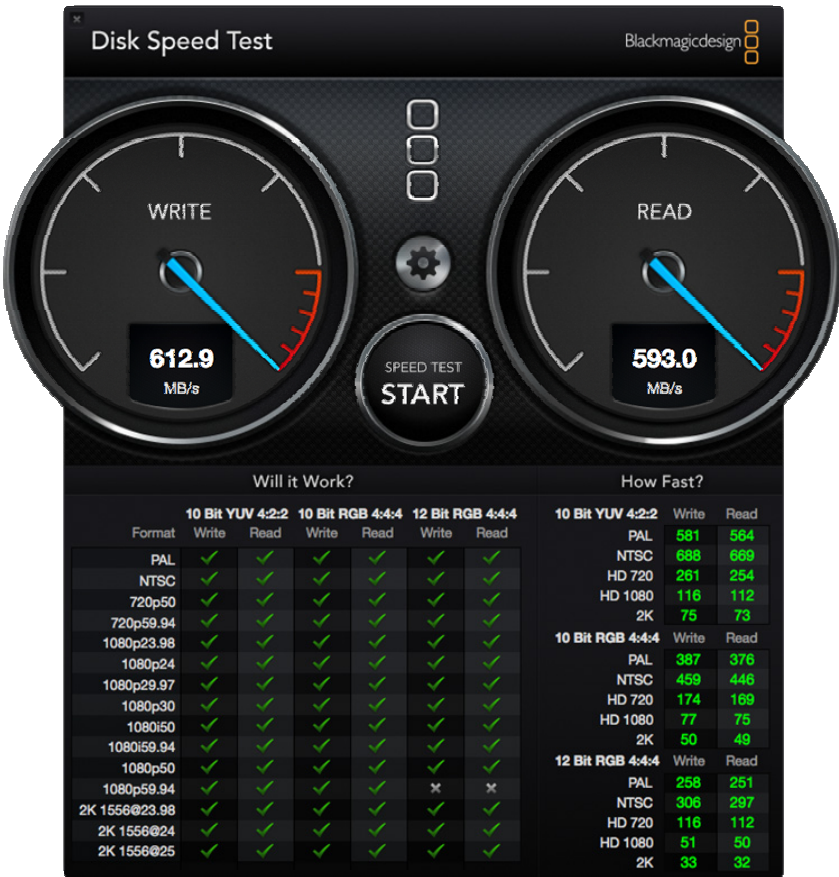
(a). RAID Level: RAID 0



(b). RAID Level: RAID 5

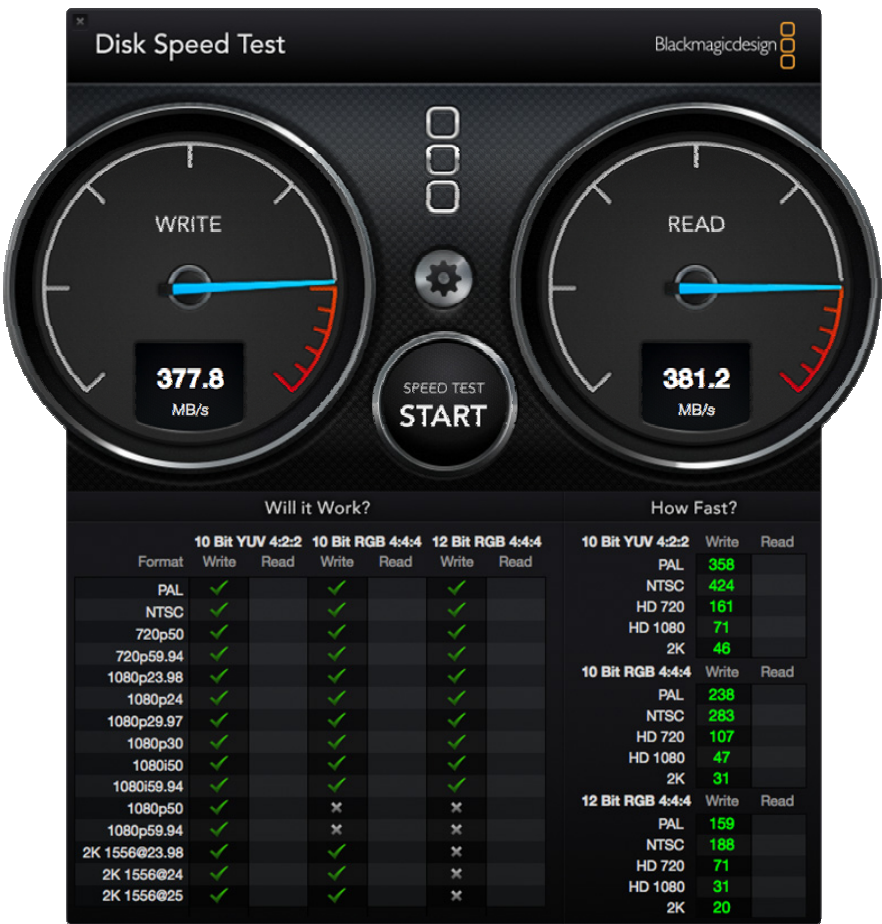


(c). RAID Level: RAID 6

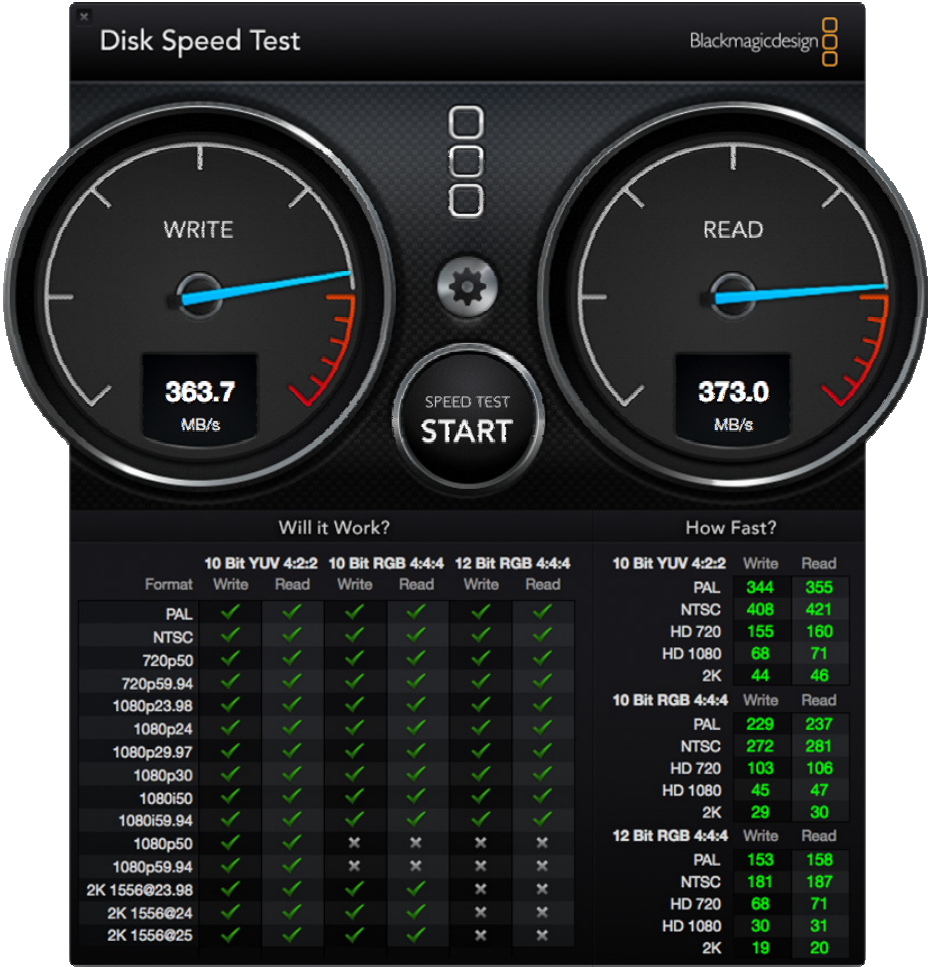


(B). Blackmagic Disk Speed Test-USB 3.0 Interface

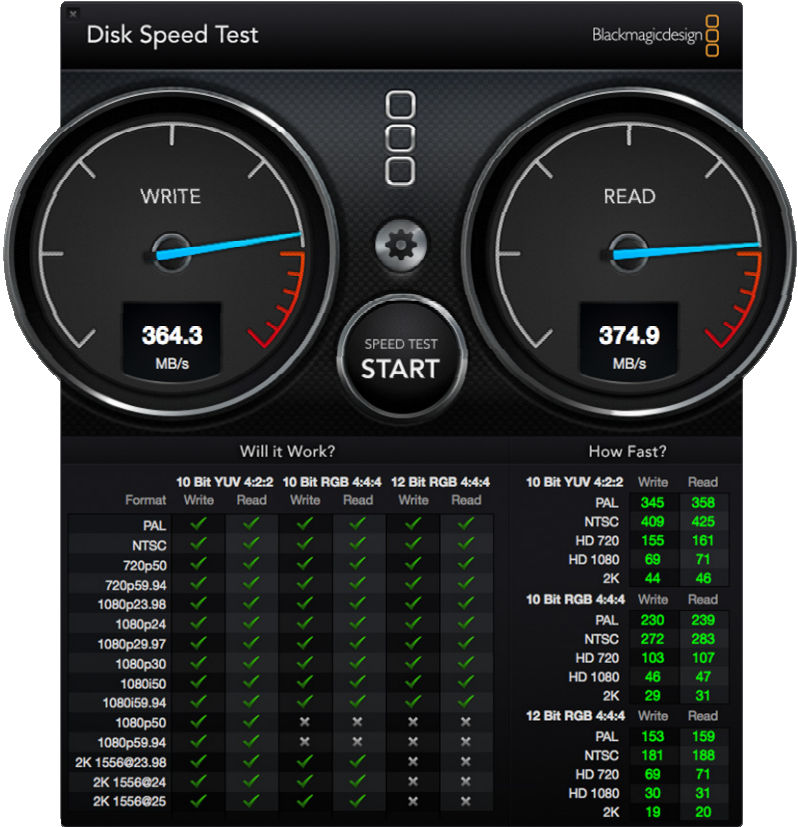
(a). RAID Level: RAID 0



(b). RAID Level: RAID 5

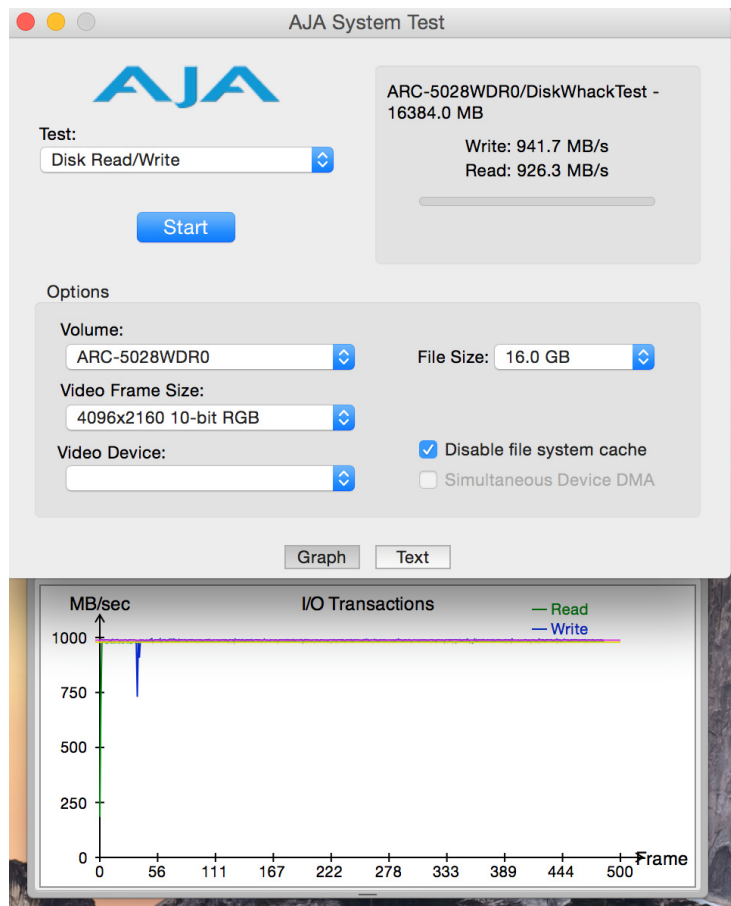


(c). RAID Level: RAID 6

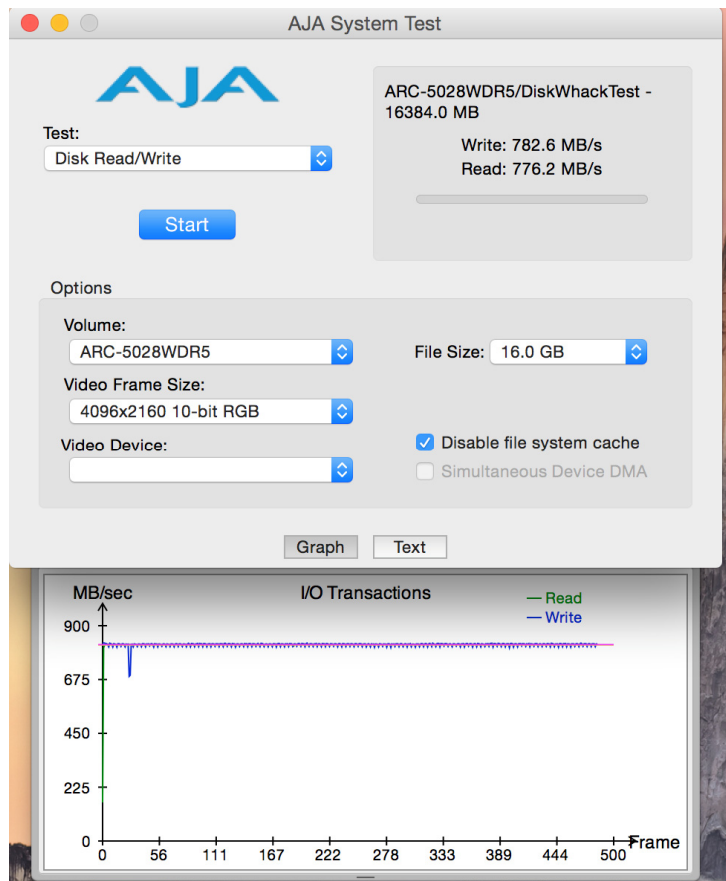


(C). AJA Test-Thunderbolt Interface

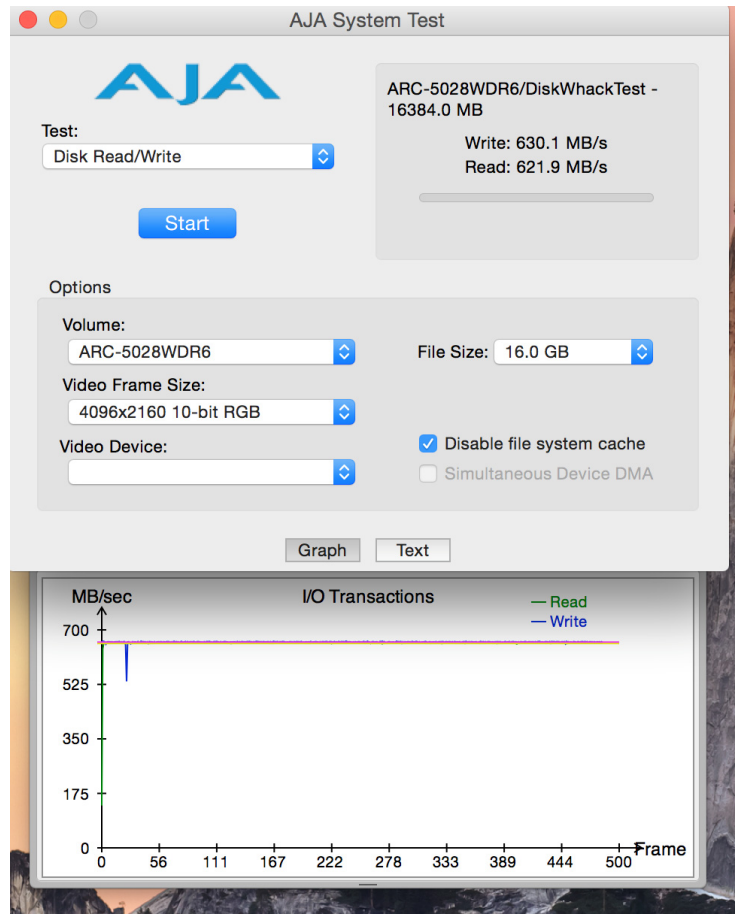
(a). RAID Level: RAID 0



(b). RAID Level: RAID 5



(b). RAID Level: RAID 6

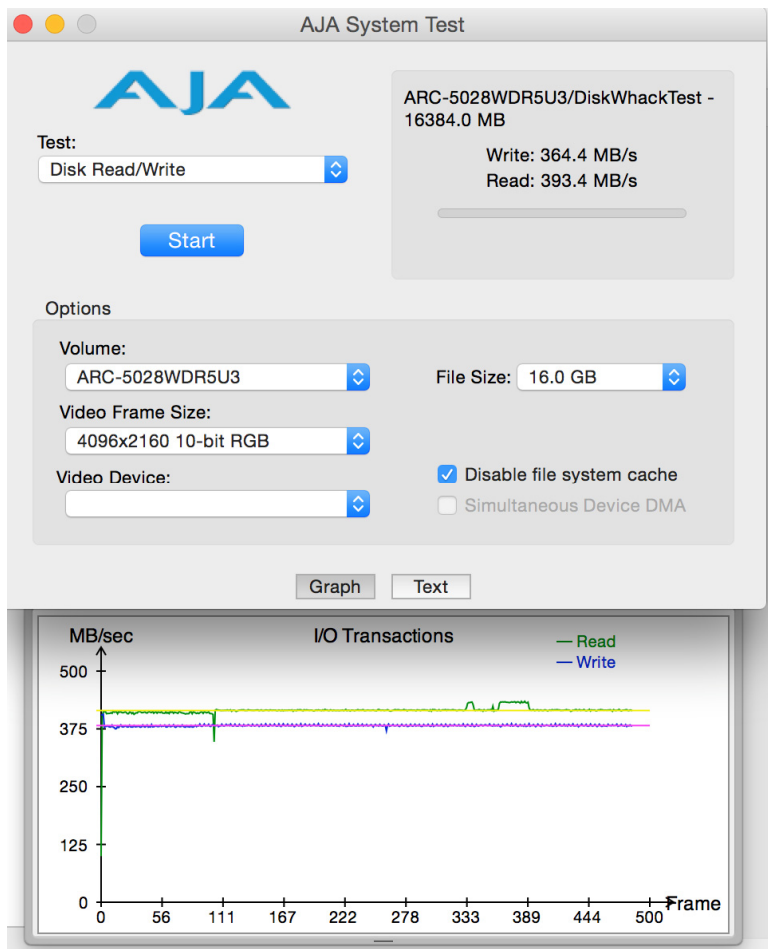


(D). AJA Test-USB 3.0 Interface

(a). RAID Level: RAID 0



(b). RAID Level: RAID 5



(b). RAID Level: RAID 6

