



# Digital Cinema Product Guide

## Distribution & Ingestion of Digital Content

The digital cinema industry has standardized on CRU's rugged and reliable drive carriers, frames, and enclosures, with over 1 million units deployed for the duplication, distribution and ingestion of DCP.

Buyers of CRU digital cinema solutions generally belong to one of three categories: content distributors, OEM server manufacturers and theatres/cinemas (or their VAR/system integrators) who are upgrading or installing digital cinema equipment.

### Digital Cinema/Digital Content Distributors

6601-7100-0500 (DX115 DC, Carrier Only, SATA 6.0Gbps, Black, RoHS).

6603-4701-0900 (DX115 MoveDock Carrier Adapter, USB3.0 w/ USB 2.0 Cable, Silver, RoHS).

\*USB 3.0 Move Dock w/ USB 3.0 cable also avail. USB 3.0 Cable will not work with older USB 2.0 Move Docks.

\*Move Dock Adapters with EU, UK and AUS power supplies are also available.

- The DX115 DC Carrier integrates with any capacity SATA disk drive from any manufacturer, such as those from Western Digital, Seagate, and Hitachi. Example HDD's include the Seagate 500GB ST500DM002 or Seagate 1TB ST1000M003.
- After duplication, the DX115 DC Carrier and USB3.0 MoveDock are integrated together and shipped to theaters in a shock-resistant protective case like the CRU Case p/n 3850-8050-10. For the DX115 Carrier only, use the CRU Case p/n 3850-8050-11.
- If the cinema has a DC server with a pre-installed CRU DX115 DC Frame or our 8-, 4-, or 2-bay DX115 DC SATA rackmount enclosures, then the MoveDock is not necessary.
- CRU now offers complete DCP kits: Reference DCP Kit #1 and DCP Kit #2 at [www.cru-inc.com/digitalcinema](http://www.cru-inc.com/digitalcinema)



DX115 DC Carrier Only  
6601-7100-0500



USB 3.0 MoveDock Adapter  
6603-407X-090X



### Digital Cinema OEM Server Manufacturers

6602-6500-0500 (DX115 DC, Frame Only, SATA 6.0Gbps, Auto Power + LED Feature, Black, RoHS).

- Our Digital Cinema OEM server manufacturers purchase the DX115 DC "Frame Only", which allows their servers to accept the DX115 DC Carriers. The DX115 DC Frame is installed into any standard open 5.25" peripheral bay available within the server and is connected via an internal SATA cable (not provided) to a 3GB/s or 6Gb/s SATA host.



DX115 DC Frame Only  
6602-6500-0500



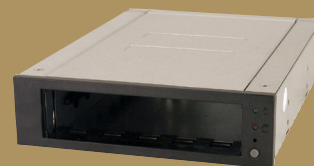
Dolby DSS200 for example  
Shown with 6602-6500-0500 Frame and 6601-7100-0500 Carrier



### CRU DC Products



DX115 DC Carrier



DX115 DC Frame



MoveDock

### Theatre/Cinemas or VAR/System Integrators

- The CRU RAXDC 4U 8-bay, 2U 4-bay and 1U 2-bay systems are high quality and highly reliable storage solutions designed specifically for digital cinema applications. They allow for up to eight DX115 DC Carriers to be installed, ideal for multiple ingestion of DCPs.
- External data connection choices include eSATA port multiplier, eSATA point-to-point, USB2.0, USB3.0 or 8088 Mini SAS. All enclosures include the "Auto Power" feature, which allows CRU DX115 DC Carriers to power up automatically after installation without having to push the on/off button on each bay.

### Recommendations for DCP Duplication Methods

- Purchase a bare disk drive replicator such as the King Hit XG1060 1:5 (1:59 Drive Linked), King Hit Sumo 1:23 (1:47 Drive Linked), ICS Rapid Image 7020 (1:19), KanguruClone 14HD (1:14), ICS IM 4000 (1:11), or OmniClone 10Xi (1:10). Connect the replicator to our eSATA point-to-point DX115 DC RAX rackmount enclosures, choosing from the 8-, 4-, or 2 bay options, making sure to use one cable per bay. (We can help determine whether additional SATA adapter cables are needed).
- Purchase a tower-based duplication system that has open 5.25" bays available for installation of our DX115 DC Frames (CRU part number 6602-6500-0500) in each bay. Examples of these units include the Addonics HD5NBHS (1:5 Drive) and Addonics HDUS11NB (1:11 Drive).
- Purchase a pre-built, DCP Duplicator Appliance: e.g. CineCert's Lihue, D2 DCP Duplicator 1:8, 1:16, or 1:24, UREACH KV500 & KV600 Rack Mount 1:4, 1:10, or 1:16 Duplicator.
- Purchase a dedicated server to be used for duplication. This server should have external eSATA or 8088 data connections allowing for access to our DX115 DC RAX rackmount enclosures.

*Note that duplication software is not included with CRU systems and will have to be obtained or written.*

*Additionally, note that the replicator recommendations listed above have not been qualified by CRU. Some of the recommendations are based on known existing customer configurations and provided for your convenience. CRU will not offer advice or details on the actual process of DCP duplication nor are we to be held responsible for the quality of the recommended replicators or any issues that might arise with their products.*

### DCmini Cartridge and Adapter Solution

The CRU DCmini hard drive enclosure is designed specifically for the distribution of Digital Cinema media on 2.5" drives.

The benefits of the DCmini Cartridge vs. DX115 DC Carrier and USB Move Dock include:

- DCmini Cartridge is bus-powered via USB 3.0 and USB 2.0. No external power supply required.
- Compatible with all existing CRU DX115 DC Frames, RTXDC & RAXDC 1, 2, 4 and 8 bay enclosures (using adapter).
- Offers a competitive option for those customers that are currently using 2.5" drives.
- DCmini Cartridge accepts all 2.5", 9.5mm SATA drives - any manufacture and capacity.
- Weighs about 1 lb (Cartridge, Drive and Shipping Case) which drastically lowers shipping costs to the cinemas.



DCmini Cartridge  
6601-6600-0500



DC Adapter  
6603-6500-0500



DCmini Cartridge + Adapter  
in DX115 DC Frame

### CRU Rackmount Enclosures for DC



RAX845DC- 4U 8Bay



RAX425DC- 2U 4Bay



RAX215DC - 1U 2Bay



RTX115-DC 3Q



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