

COMMAND AND CONTROL EQUIPMENT

DRASH[®]

THE WARFIGHTER'S CHOICE



COMMAND AND CONTROL EQUIPMENT

- MODULAR
- RAPIDLY DEPLOYABLE
- MOBILE
- RUGGED
- RELIABLE
- VERSATILE



COMMAND & CONTROL EQUIPMENT

No one can argue that seeing the big picture in a battle situation is important to navigating the many obstacles to winning a war. Communicating this view is even more crucial. Yet all too frequently, operators are forced to rapidly put together information based on looking at multiple screens and listening to different communications, creating more steps in the information dissemination process than are absolutely necessary.

An increasingly complex battlefield environment requires the operator to be able to view the big picture. Such a system needs to surmount the challenges of too many information sources, limited communication, equipment sensitivity and bulky, inflexible systems.

Often, in a battle situation, there are many sources providing endless streams of information from diverse platforms. Without the benefit of data fusion and correlation to present accurate information about the battlefield from all information sources, the true picture is, at best, distorted.

Additionally, in order to make the best decisions, operators need to be able to collaborate with each other quickly between remote geographic locations. This can not always be done in real time, although minutes count in the decision-making process.

Traditional command and control equipment is sensitive to extreme weather conditions, particularly excessive heat, dust and corruption due to power failure. In a battle situation, conditions are not always optimal for the smooth operation of technological equipment.

Finally, both the equipment and furniture for the modern command and control center must be able to move with the Warfighter, deploying whenever and wherever there is a need.

THE DC2E SOLUTION

First introduced in 2005, the Deployable Rapid Assembly Shelter (DRASH) Deployable Command and Control Equipment (DC2E) was developed by DHS Systems to solve the information management problems facing the 21st century military operator. The DC2E provides lightweight, portable communications technology by fusing multiple feeds of information onto single or multiple displays. Special features include a touch panel control, high resolution image display, diskless drive and 24/7 operating capabilities.

DC2E FEATURES

- DLP Projector, sealed optics system; native 1400 x 1050 resolution designed for 24/7 operations.
- Environmental control for both projector and A/V system.
- Long lamp life; multi-voltage; low weight; low noise.
- Cantilevered projector mounting arm.
- Multiple, interconnectable projection screens.
- A/V diskless components do not corrupt due to power failure.
- Allows for Web interface or touchpanel control.
- A/V system supports multiple displays and display types.
- Combines multiple real-time video and computer inputs onto one display.
- Accepts and displays images with a resolution of up to 1600 x 1200 dpi.
- Flexible input/output configuration is field upgradable and capable of routing RGBHV over CAT-5.
- Includes weather resistant cases for easy transport.

ABOUT DRASH TUFF TABLES

DRASH Tactical Utility Field Furniture (TUFF) Tables are lightweight, rustproof, and durable tables built for field use. Tables are made from powder coated aluminum and fold for easy transport and storage.

DC2E MEDIUM SCREEN DISPLAY

BP300A019 / NSN's Pending



- DLP Projector includes a sealed optics system. System displays images with a resolution of up to 1400 x 1050 dpi (SXGA+).
- Designed for 24/7 operation. To ensure continuous operation, a maintenance kit is available for the projector that replaces all moving internal components within 7500 hours of system operation.
- 2000/4000-hour lamp life. Multi-voltage 2500 ANSI Lumens, 9 lbs (4 kg) low weight, 28 dB(A) low noise.
- Lightweight 1" square aluminum frame system with locking hinge points for fast set up and take down. Diagonal viewing area is 4 x 5 feet over 73 inches.
- Cantilevered projector mounting arm preserves valuable floor space.
- Integrated mounting points for shelter loudspeakers allow for high quality audio.
- Multiple projection screens connect together to form a single large screen.

Packed Screen Case:	Dimensions:	in.	50 W x 17.5 D x 13 H
		cm.	127 W x 44.5 D x 33 H
	Weight:	lb.	74
kg.		33.6	
Packed Projector Case:	Dimensions:	in.	24.5 W x 19.5 D x 15 H
		cm.	62 W x 50 D x 38 H
	Weight:	lb.	4
kg.		18.6	

OPTIONAL COMPONENTS:

Environmental Control System available to regulate projector temperature and prevent dust and debris from collecting on the projector in high temperature conditions (patent pending).

PACKING:

Screen and projector may be stored in two cases with wheels to easily transport from location to location.

DC2E J SERIES LARGE SCREEN DISPLAY

1002543



Designed to fit into a large Deployable Rapid Assembly Shelter (DRASH), the DC2E Large Screen Display system features three DLP projectors that project on to three separate large, diagonal viewing areas. Its unique configuration allows it to be set up nearly 5 feet above the floor allowing for ease of viewing from the back of the TOC. Regardless of its size, the Large Screen Display system packs down tightly into four lightweight cases.



Features

- Overall screen measures 5.5' x 19' to allow for three separate 54" x 72" x 90" diagonal viewing areas.
- Lightweight 1" square tube aluminum frame with locking hinge points allow for fast set up and take down.
- Three DLP projectors are designed for 24/7 operation.
- Includes long life mechanical elements, such as magnesium and ceramics as well over specified fans and a color wheel engine.
- Fully sealed optical architecture ensures faultless operation in harsh environments.
- Native 1400 x 1050 (SXGA+) resolution.
- Wide range of signal compatibility.
- Depot level, 7500 hour maintenance kit replaces all moving parts.
- 2000/2500 hour lamp life, multi-voltage 3100 ANSI lumens weighs only 9 lbs and has a low noise level of only 28 dB(A).
- Lightweight 2" tube frame supports all three projectors.
- Each of the three projector mounts allow for easy adjustments to compensate for uneven terrain.
- Images are five feet off the floor allowing for ease of viewing from the back of the TOC.

Dimensions/Weight

Packed Screen and Frame Cases:

Case 1:

Dimensions: 71" W x 24" D x 17" H
Weight: 137 lbs.

Case 2:

Dimensions: 71" W x 24" D x 14" H
Weight: 143 lbs.

Case 3:

Dimensions: 71" W x 24" D x 14" H
Weight: 146 lbs.

Packed Projector Case:

Case 4:

Dimensions: 52" W x 18" D x 18.5" H
Weight: 150 lbs.

MICROPHONE SYSTEM

1003688 / NSN's Pending



- Includes Nine Delegate Stations, One Chairman Station and One Control Unit
- Participants may easily follow and take part in a discussion through a table top station loudspeaker and a station microphone.
- The Chairman's Station allows the operator to take over the conference session with a push of a button.
- Control unit can handle up to 25 stations per line equaling a total of 50 stations.

PACKAGING

The 1003688 Microphone System with supplied extension cables stow in two cases. Both cases have integrated wheels for easy transport.

Dimensions/Weight

Case 1:

22"W x 31.3"D x 9.3"H
(55.9 x 79.5 x 23.6 cm)
Weighs 36 lbs. (16.3 kg)

Case 2:

22"W x 31.3"D x 9.3"H
(55.9 x 79.5 x 23.6 cm)
Weighs 28.5 lbs. (12.9 kg)

DRASH TACTICAL UTILITY FIELD FURNITURE (TUFF) TABLES

- Made from lightweight, rustproof, powder coated aluminum.
- Folds for easy transport/storage.
- Supports 2,000 lbs (907 kg) of distributed weight.
- Cable management adapters available as an accessory.

Small: BP300A005	Dimensions:	in.	24 x 72
		cm.	61 x 183
	Weight:	lb.	32
kg.		17	
Large: BP300A000	Dimensions:	in.	30 x 72
		cm.	76 x 183
	Weight:	lb.	38
kg.		14.5	



DC2E AUDIO-VISUAL SYSTEMS



The DC2E's Audio-Visual System comes in four different configurations: Mini, Small, Medium and Large (see right). The following features are available for all configurations:

- Diskless components for increased reliability. Systems do not require additional software.
- Supports multiple displays and display types.
- POTS Line connects to standard analog phone line for audio conferencing.
- CTL LAN connects to LAN for WEB based control of the AV System.
- Display processor combines 4, 6 or 12 real-time video and computer inputs in Windows onto one display. Windows can be scaled up to a full screen. Capable of accepting and displaying images with a resolution of up to 1600 x 1200.
- Flexible configuration of four inputs and four outputs to 32 inputs and 32 outputs in multiples of four in a single enclosure.
- Includes molded, weather-resistant transport cases for the control system and accessories.

DC2E A/V SYSTEM COMPARISON MATRIX

System Name	Video Inputs			Video Outputs		Multi - Window		Audio Inputs		Audio Outputs	Touch - Panel		Web Control	Acc. Case	Tele - Conf	Powered Speaker
	HD15 (RGB)	CAT5 (RGB)	CV (C)	HD15	CAT5	6 Win	4 Win	Mic Level	Line Level	Line Level	With Video	W/O Video	Yes/No	QTY	Yes/No	QTY
Large A/V System 110v BP300A008	1	20	8	5	8	1	2	4	4	4	1	0	Yes	2	Yes	2
Medium A/V System 110v BP300A007	2	12	4	4	4	1	1	4	4	4	1	0	Yes	1	Yes	2
Medium A/V System 110/220v BP300A016	2	12	4	4	4	1	1	4	4	4	1	0	Yes	1	Yes	2
Small A/V System 110v 1003081	1	8	2	3	4	0	2	3	4	4	1	0	Yes	1	Yes	2
Mini A/V System 110v BP300A011	4(A)	0	2(A)	2(B)	0	0	1	2	2	2	0	1	Yes	1	Yes	1

Notes:

(A) Inputs 1 & 2 can be selected as either an RGB (HD15) signal or a composite (CV) signal. For example, you can not display the RGB_1 (HD15) input and Composite_1 (CV) input at the same time on the display.

(B) Both outputs display the same image. The outputs are mirrored.

(C) CV = Composite Video

MINI AUDIO-VISUAL SYSTEM

BP300A011

- Interface via touch panel or secure Internet connection.
- Video In: Four HD15 Computer Inputs that accept up to 1600 x 1200 resolution. Two BNC Composite Inputs for DVD/DSS and/or Camera/UAV.
- Audio In: Two Mic level XLR Inputs and two Line Level XLR Inputs for DVD/DSS audio.
- Video Out: Two HD15 (mirrored) outputs supporting 1024 x 768, 1280 x 1024 and 1400 x 1050 user selectable resolutions.
- Audio Out: Two Line Level XLR outputs, one dedicated to speaker.
- Includes one AC powered speaker with integrated 20 Watt amplifier for audio distribution.

PACKAGING

Mini AV Case

5RU OD green case containing the Control System, Quad Window Display Processor and Audio Matrix/Mixer.

Outer Dimensions: 40.4"L x 27"W x 16.6"H
(103 x 69 x 42 cm)

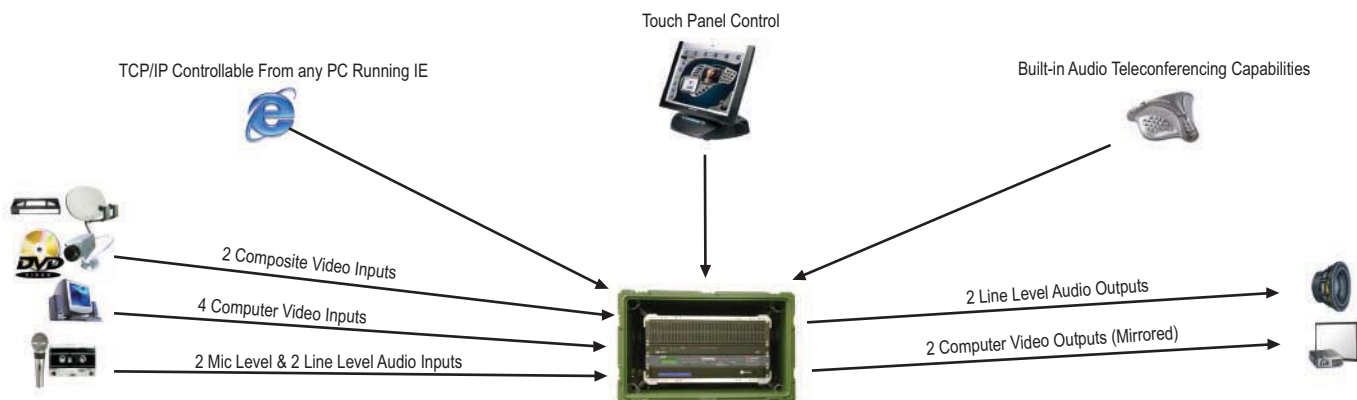
Packed Weight: 115 lbs. (52 kg)

Accessory Transport Case

Includes cables, touch panel and speaker.

Outer Dimensions: 24"L x 20.5"W x 15"H
(61 x 52 x 38 cm)

Packed Weight: 54 lbs. (25 kg)



SMALL AUDIO-VISUAL SYSTEM

1003084

- Interface via touch panel or secure Internet connection. Touch panels may also be used to view/cue video to be displayed on projection screens.
- Long Distance Video Distribution System: Uses RGBHV over CAT5 technology for long distance video distribution with minimal signal degradation.
- Video In: One HD15 and eight CAT5 Computer inputs that accept up to 1600 x 1200 resolution. Two BNC Composite Inputs for DVD/DSS or Camera/UAV.
- Audio In: Three Mic level XLR Inputs and four Line Level XLR Inputs for DVD/DSS audio.
- Video Out: Three HD15 and four CAT5 Computer outputs supporting 1024 x 768, 1280 x 1024 and 1400 x 1050 user selectable resolutions.
- Audio Out: Four Line Level XLR outputs; one dedicated to speaker.
- Includes two AC powered speakers with integrated 20 Watt amplifier that can be daisy chained together for audio distribution.

PACKAGING

Small AV Case

12RU OD green case contains the Control System, Two Four Window Display Processors, a Quad Video Scaler, an Audio Matrix/Mixer and 12 x 12 RGBHV Matrix Switcher.

Outer Dimensions: 40"L x 27"W x 27.9"H
(101 x 69 x 71 cm)

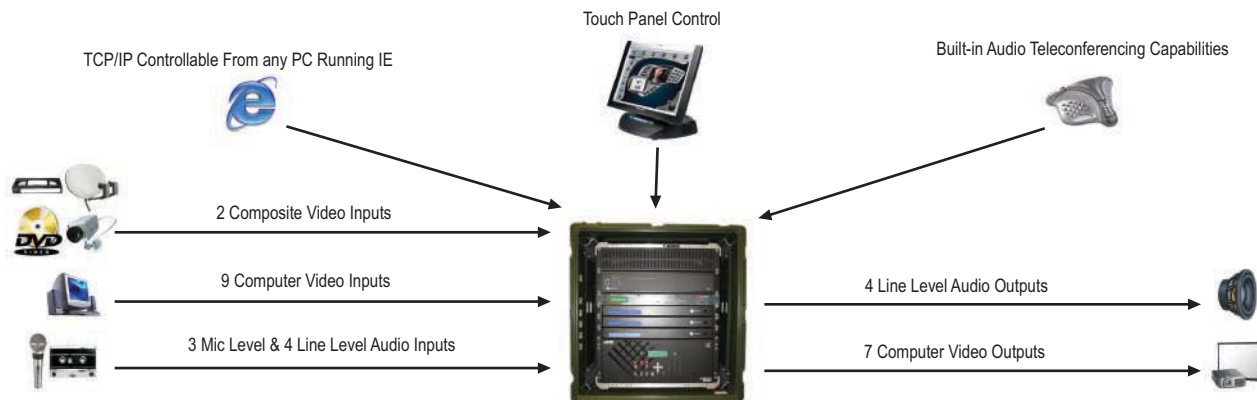
Packed Weight: 218 lbs. (99 kg)

Accessory Transport Case

Includes cables, touch panel, speakers and CAT5 TX/RX units.

Outer Dimensions: 30"L x 21.5"W x 30"H
(76 x 55 x 76 cm)

Packed Weight: 146 lbs. (66 kg)



MEDIUM AUDIO-VISUAL SYSTEM

BP300A007 / BP300A016

- Interface via touch panel or secure Internet connection. Touch panels may also be used to view/cue video to be displayed on projection screens.
- Long Distance Video Distribution: Uses RGBHV over CAT5 technology for long distance video distribution with minimal signal degradation.
- Video In: Two HD15 and 12 CAT5 Computer Inputs that accept up to 1600 x 1200 resolution. Four BNC Composite Inputs for DVD/DSS or Camera/UAV.
- Audio In: Four Mic level XLR Inputs and four Line Level XLR Inputs for DVD/DSS audio.
- Video Out: Four HD15 and four CAT5 computer outputs supporting 1024 x 768, 1280 x 1024 and 1400 x 1050 user selectable resolutions.
- Audio Out: Four Line Level XLR outputs, one dedicated to speaker.
- Includes two AC powered speakers with integrated 20 Watt amplifier that can be daisy chained together for audio distribution.

PACKAGING

Medium AV Case

14RU OD green case contains Control System, a Four Window Display Processor, a Six Window Display Processor, a Quad Video Scaler, an Audio Matrix/Mixer and a 20 x 20 RGBHV Matrix Switcher.

Outer Dimensions: 40.4"L x 27"W x 33"H
(103 x 69 x 84 cm)

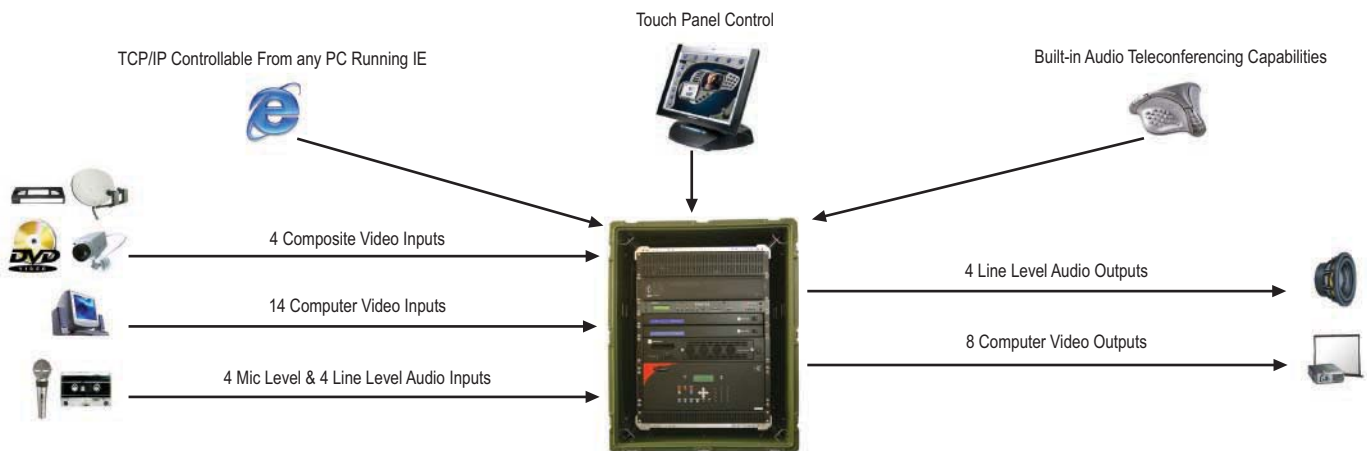
Packed Weight: 220 lbs. (99.8 kg)

Accessory Transport Case

Includes cables, touch panel, speakers and CAT5 TX/RX units.

Outer Dimensions: 30"L x 21.5"W x 30"H
(76 x 55 x 76 cm)

Packed Weight: 151 lbs. (68 kg)



LARGE AUDIO-VISUAL SYSTEM

BP300A008

- Interface via touch panel or secure Internet connection. Touch panels may also be used to view/cue video to be displayed on projection screens.
- Long Distance Video Distribution: System uses RGBHV over CAT5 technology for long distance video distribution with minimal signal degradation.
- Video In: One HD15 and 20 CAT5 Computer Inputs that accept up to 1600 x 1200 resolution. Eight BNC Composite Inputs for DVD/DSS or Camera/UAV.
- Audio In: Four Mic level XLR Inputs and four Line Level XLR Inputs for DVD/DSS audio.
- Video Out: Five HD15 and eight CAT5 computer outputs supporting 1024 x 768, 1280 x 1024 and 1400 x 1050 user selectable resolutions.
- Audio Out: Four Line Level XLR outputs, one dedicated to speaker.
- Includes two AC powered speakers with integrated 20 Watt amplifier that can be daisy chained together for audio distribution.

PACKAGING

Large AV Case

15RU OD green case containing the Control System, two Four Window Display Processors, a Six Window Display Processor, two Quad Video Scalers, an Audio Matrix/Mixer and a 32 x 28 RGBHV Matrix Switcher.

Outer Dimensions: 40.4"L x 27"W x 33"H
(103 x 69 x 84 cm)

Packed Weight: 268 lbs. (122 kg)

Accessory Transport Case 1

Includes CAT5 TX/RX units, touch panel and speakers.

Outer Dimensions: 30"L x 21.5"W x 30"H
(76 x 55 x 76 cm)

Packed Weight: 150 lbs. (68 kg)

Accessory Transport Case 2

Includes cables.

Outer Dimensions: 25.5"L x 24"W x 24"H
(65 x 61 x 61 cm)

Packed Weight: 100 lbs. (45 kg)

