



## Phantom Breakout Box

Expands the capabilities of the Phantom HD/65

Designed for the high-end production environment

### Functions

- Up-converts 12v to 24v for camera power
- Provides 12v accessory power
- Provides 24v accessory power with self-resetting fuses
- Provides BNC Trigger Port
- Hot swappable 12v power inputs (allows swapping batteries without shutting off camera)
- Supports 12v Handheld Rig

### Features

Lightweight: 1.6 lbs (0.7kg)

Compact: 6.3" L x 4.9" W x 1.3" H  
(159mm L x 125mm W x 34mm H)

Display: Input power LEDs

Operating temperature:  
0°C to +40°C (+32°F to +104°F)

Operating humidity:  
80% non-condensing at +5°C

The Phantom Breakout Box was designed to provide additional accessory power ports and camera control capabilities for the Phantom HD and Phantom 65 cameras. Integrating seamlessly with the camera body, the device allows for easier camera operation in all production settings, as well as when the camera is mounted on a Phantom Handheld Rig or a Steadicam.

The Phantom Breakout Box provides two each of 12-volt and 24-volt accessory ports. This allows 12-volt power supplies and batteries to be used with the Phantom (up-converted to the camera's 24-volt spec), as well as zoom/focus motors, on-board monitors and other accessories.

The Breakout Box also simplifies the run/stop interface of the camera by splitting off the trigger signal from the capture signals (timecode, sync, strobe, etc.) This allows the use of a simple BNC trigger switch.

Two hot swappable 12-volt inputs (one XLR4 and one Fischer 2-pin 103 series connector) enable you to switch out a battery without the need to shut down and restart the camera, thus saving the time required to "boot up" the camera system. This feature is particularly useful when shooting with the camera mounted to Abel's Handheld Rig or a Steadicam.

The Breakout Box is supplied with Capture and Power cables, and Abel offers custom cable building for your accessories.





## Phantom Breakout Box

### List of Connectors

2x 24v accessory power (3pin Fischer) – 1 amp each

2x 12v accessory power (4pin Fischer)

2x 12v input (1x XLR4 and 1x 2pin Fischer)

1x camera capture pass through (8pin Fischer)

1x trigger signal (BNC)

*The Phantom Breakout Box requires the revised bottom panel which has a 1/4-20 threaded hole that is used to mount the Breakout Box.*

### Function and Pin-Outs of Connectors

Use: **24v Accessories**  
 Type: 3 Pin Fischer Series 102  
 Quantity: 2

**Pin-out:**  
 Pin 1: Ground  
 (Panavision Version: Voltage Out)  
 Pin 2: Voltage Out  
 (Panavision Version: Ground)  
 Pin 3: Unused

Use: **12v Accessories**  
 Type: 4 Pin Fischer Series 103  
 Quantity: 2

**Pin-out:**  
 Pin 1: Ground  
 Pin 2: Unused  
 Pin 3: Unused  
 Pin 4: Voltage Out

Use: **Input Voltage to Breakout Box**  
 Type: XLR4  
 Quantity: 1

**Pin-out:**  
 Pin 1: Ground  
 Pin 2: Unused  
 Pin 3: Unused  
 Pin 4: Voltage In

Use: **Input Voltage to Breakout Box (for handheld use)**

Type: 2 Pin Fischer 103 Series  
 Quantity: 1

**Pin-out:**  
 Pin 1: Ground  
 Pin 2: Voltage In

Use: **Camera Capture Pass Through**  
 Type: 8 Pin Fischer 103 Series  
 Quantity: 1

**Pin-out:**  
 Pin 1: Ground  
 Pin 2: SMPT  
 Pin 3: Ground  
 Pin 4: IRIG/AUX  
 Pin 5: F-SYNC  
 Pin 6: Unused  
 Pin 7: Strobe  
 Pin 8: Trigger

Use: **Camera Trigger**  
 Type: BNC  
 Quantity: 1

**Pin-out:**  
 Pin 1: Trigger

