

RIP & RIB*

Remote Interface Panel & Remote Interface Box for your RED One®

User's manual

*Optional accessory, sold separately if the 'RIP & RIB' kit were not purchased

RED One® is a trademark of Red Digital Cinema Camera Company

IOP4R-1-9-003



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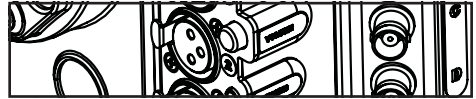
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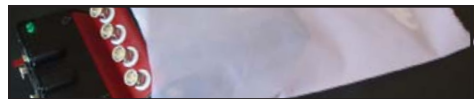
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Remote Interface Panel (RIP)

model # IOP4R-1

Thank you for buying the 'RIP' Remote Interface Panel by Air Sea Land Gear, Inc. This panel is a full size industry standard solution for your audio, video, timecode and genlock needs on your RED One® camera. It easily attaches to the connector side of the camera with no modifications and can be used in stand alone mode, or with the 'RIB' Remote Interface Box (optional) for even greater functionality. If you bought both units, note that they are packed separately.

Remote Interface Box (RIB)

model # BOB4R-1

Your Remote Interface Box is quickly connected by a single DVI-I cable to your Remote Interface Panel. By using the 'RIB', all of the audio, video, time-code, genlock and remote start/stop features can now be utilized remotely up to 50' away from the camera. This eliminates the nuisance of having multiple cables attached to the camera.

If you have not yet purchased the 'RIB' for your RED One® camera, you can do so by visiting www.aslgear.com.

Box Content

Your 'RIP' package includes:

- 1 Remote Interface Panel
- 1 2.5mm allen key
- 4 Nylon spacers (spare)
- 1 User's manual
- 1 FREE Jimmy-Cap kit (Protects your SD and CF slots)

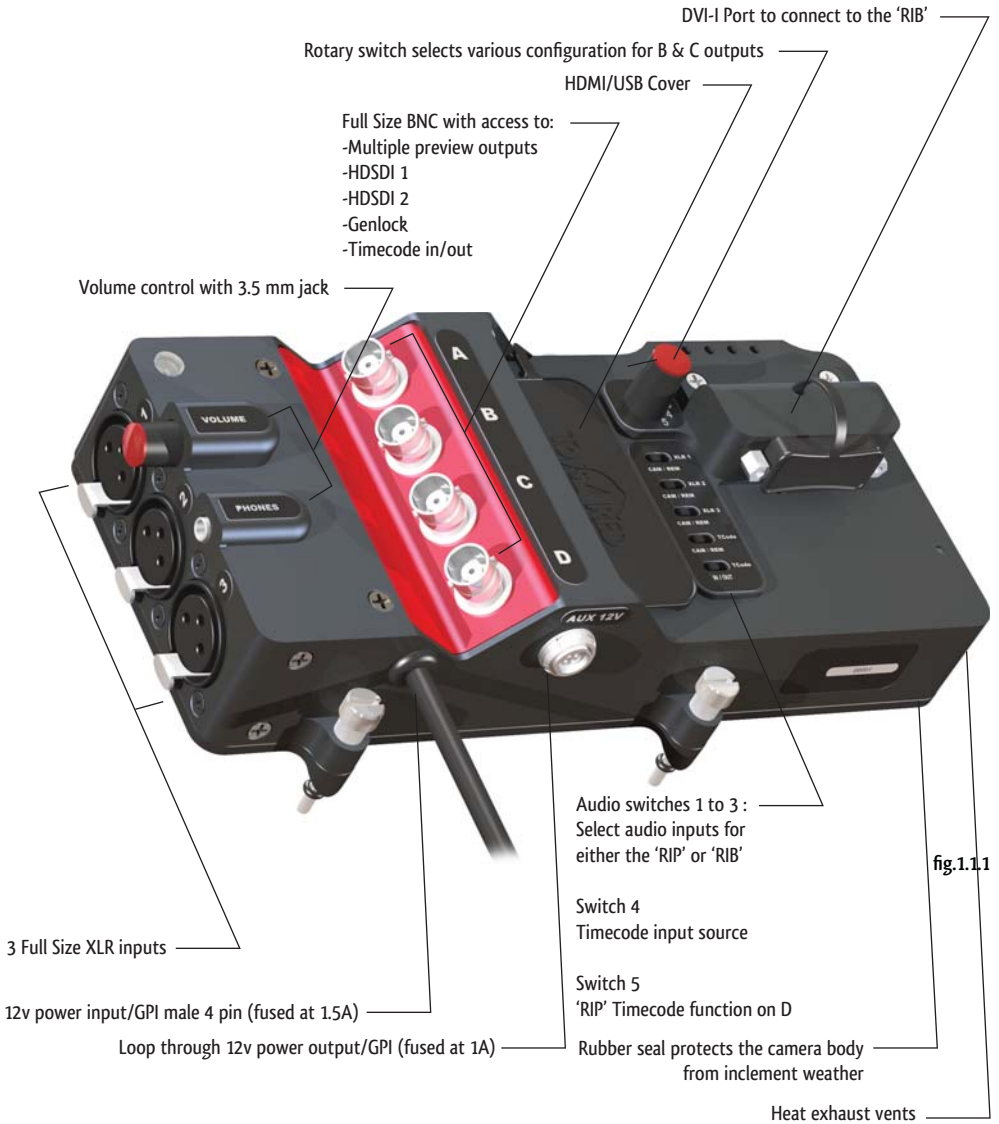
Your 'RIB' package includes (if purchased):

- 1 Remote Interface Box
- 2 3" mounting arms
- 2 19mm to 15mm adaptor

If you purchased the 'RIP & RIB' kit, you would have also received a 3 foot DVI-I dual link cable.



Front view



Rear view



fig.1.1.2

Connecting & Attaching The 'RIP' To The Camera

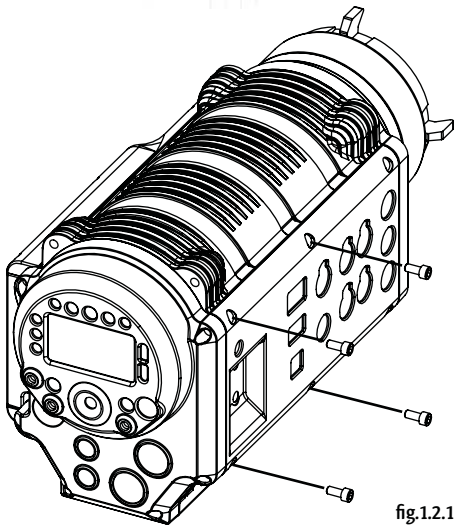


fig.1.2.1

Video

2- The video block contains four (4) 1.0/2.3 connectors. Carefully plug it into your camera's video connectors with cables facing up as shown on fig. 1.2.2. Press securely to insure proper mating of all four (4) connectors.

To remove it, gently pull back on the entire box. All four connectors will release simultaneously.

1- With the camera powered down, use the provided 2.5mm allen key to remove four (4) screws from your camera body (see fig.1.2.1). To avoid losing these screws, secure them to the upper right corner of the panel.

NOTE: Pay special attention to the position of the screws. If you detach the panel from the camera, make sure you re-install the screws in their initial holes.

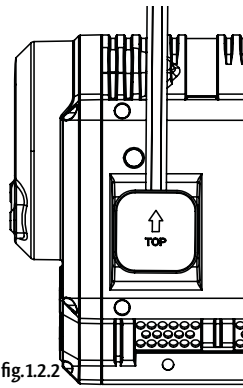


fig.1.2.2

Audio and Timecode

3- The underside of the Monitor/Audio/Timecode (M.A.T.) adaptor contains four rotary switches (see fig. 1.2.3). By default, all boards are shipped with the switches in the 'R1' position (audio upgrade).

If your RED One® does NOT have the new Audio Board Update from RED, then switch all four (4) switches to the 'R0' position, using a small flat-tip screwdriver. In this case, it is recommended to operate in 'Line' input mode for optimal audio performance.

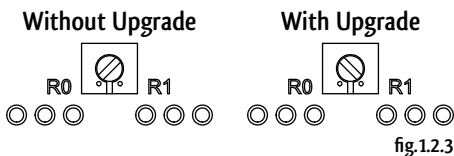


fig.1.2.3

NOTE: Green M.A.T. boards with no switches are already set up for the new audio board upgrade.

Connecting & Attaching The 'RIP' To The Camera

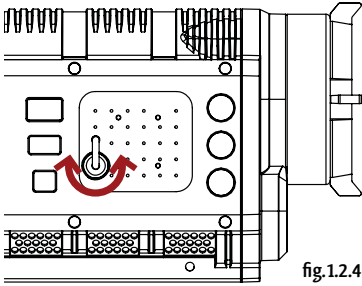


fig.1.2.4

5- Visually inspect to see that the 3 pin mini-Q connectors also line up with their respective connectors, and gently press downward to mate the panel to your camera. To remove it, start by pulling the board at the T.C. connector corner.

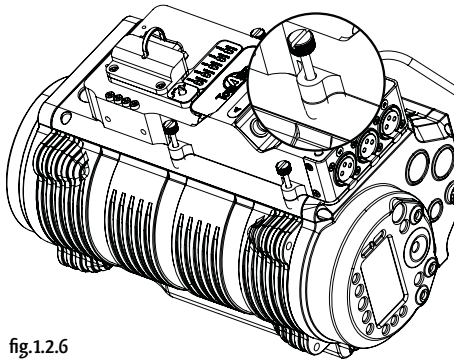


fig.1.2.6

7- Carefully inspect the cables from both the video block and the M.A.T. adaptor as you tighten down the thumbscrews. Be sure that they are not being pinched in the rubber seal between the camera and the panel.

4- Align the M.A.T. adaptor with your camera. You may need to slightly rotate your timecode connector so that it properly mates with the female connector on your camera.

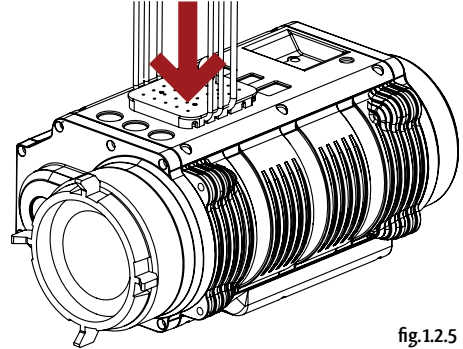


fig.1.2.5

6- Align the panel with the camera (*see fig.1.2.6*). Secure the panel to the camera with the four (4) thumbscrews, threading them into the same holes where the hex screws were previously removed. **DO NOT OVER TIGHTEN THEM.** It is recommended to lay the camera on its left side when performing this procedure. **NEVER INSTALL THUMBSCREWS WITHOUT THE PROVIDED SPACER.** Contact ASL Gear immediately for spare parts.

TIP: For easier assembly, use a small flat-tip screwdriver.

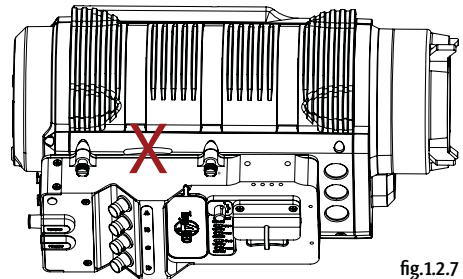


fig.1.2.7

Your system is now ready to be powered up. Follow the powering up instructions on the next page.



Powering Up

1- Connect the male 4 pin 12V power/GPI to your camera AUX 12v port 1 or 2 (see fig 1.3.1 & fig 1.3.2). The panel will power up when you turn the camera ON. The 'RIP' goes through a quick power up procedure upon startup. It may take 1 to 3 seconds for the system to complete this procedure.

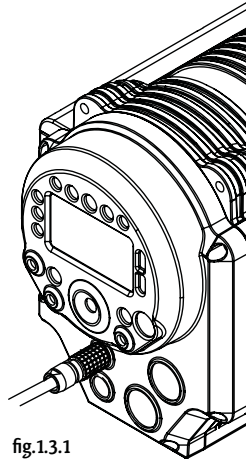


fig.1.3.1

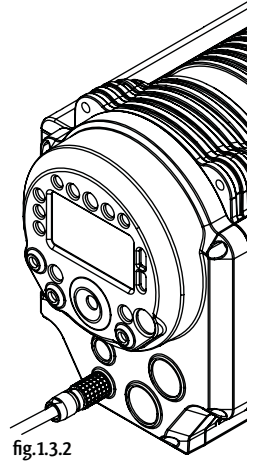


fig.1.3.2

If the power LED on your 'RIP' is flashing upon power up, your unit is warning you that your GPIO setting is incorrect in the camera menu. GPIO record tally should be set up to "Active low" in your camera menu system/setup/preferences/gpio/polarity/gpio out/(select your port 1 or 2).

Tip: We recommend disconnecting the power cable from the camera before storing or packing the camera away.

Note:

Your panel is fused from the camera body at both the 12v power input & loop through 12v power output. This will greatly decrease the chance of a power demand overload from the camera body. If the power demand from the 12v loop through should surge past 1 amp, your unit will automatically kill power to the output then reset itself. It is advised to disconnect the device that overloaded the circuit and power it from an alternate source.

Your system is now ready to operate. Follow the operating instructions on the next pages.

Your 'RIP' is now ready for use in the field. Connecting cables to and from your camera will be faster, easier and your cable management will be simplified as well.

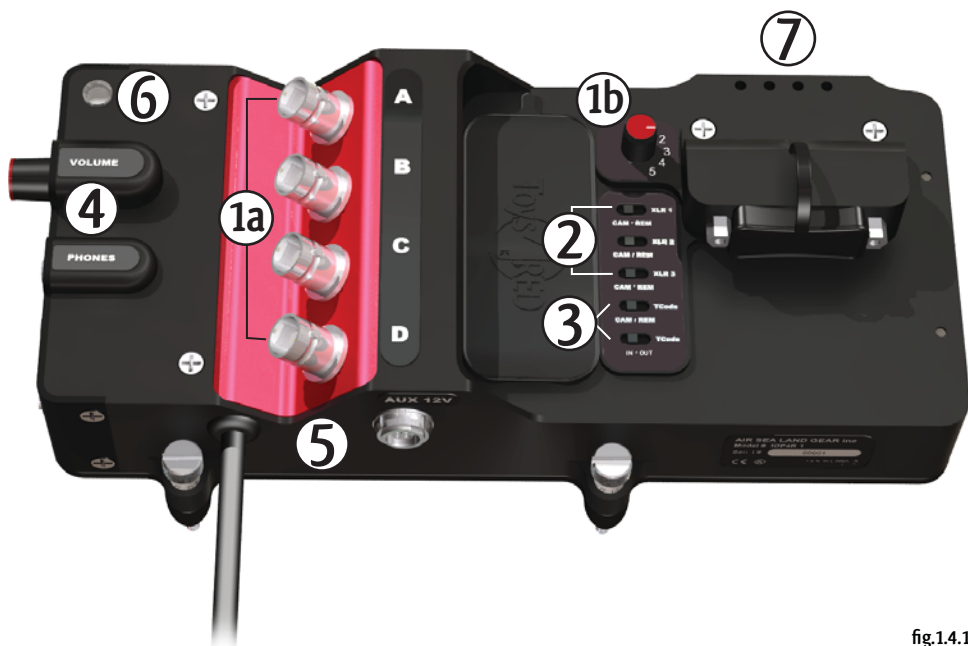


fig.1.4.1

1

BNC Assignment

The four (4) BNC connectors are labeled from A to D. (A) is always the camera's preview output. (B) & (C) are switchable via the rotary switch and are pre-assigned to several functional outputs. (See fig 1.4.2) (D) is always the camera's time code input or output.

Rotary switch position

	1	2	3	4	5
A	Preview	Preview	Preview	Preview	Preview
B	HDSDI 1	Preview	HDSDI 1	Preview	HDSDI 1
C	HDSDI 2	Preview	Preview	GenLock*	GenLock*
D	T.C. I/O	T.C. I/O	T.C. I/O	T.C. I/O	T.C. I/O

fig.1.4.2

*NOTE: Genlock at this source will supercede genlock from the 'RIB'.



'RIP' Operation

2 AUDIO

The XLR inputs at the rear of the camera are passive inputs to the camera and can operate even if the panel has no power. They are assigned as 1 to 3 from top to bottom. When connected to the 'RIB', the inputs can be toggled between both input sources. (i.e. input #1 comes from the 'RIP', while #2 comes from the 'RIB', etc.). The top 3 switches allow the user to select from which input source the camera will obtain its audio feed. If you do not have the 'RIB' connected to the camera, then leave all 3 switches in the "CAM" position.

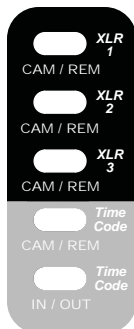
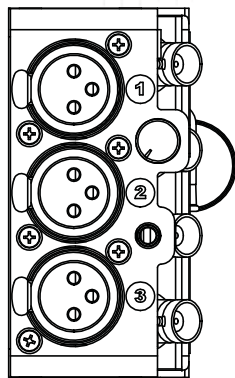


fig.1.4.3



CAM refers to the source on the 'RIP' while REM refers to the source on the 'RIB'.

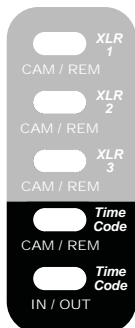
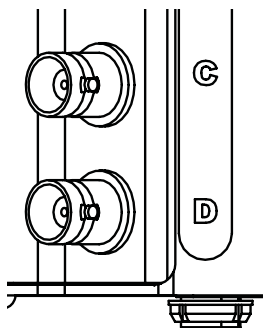


fig.1.4.4

4 MONITOR

The 3.5mm stereo headphone jack at the rear of the panel gets its signal from the 5 pin monitor output on the RED One®. Its level can be controlled via the volume potentiometer. The 2nd 3.5 mm output is an extension of the camera's headphone output. Channel monitor assignment and level of both these outputs is selected via the camera menu (refer to your RED One® Operations Guide under "Headphone" sub menu).

3 TIMECODE (T.C.)

If you are not connected to the 'RIB', leave the 4th switch in the 'CAM' position.

To send a T.C. source into your camera select 'IN' on the T.C. switch.

If you are taking T.C. out of the camera, then switch to the 'OUT' position. You will now be able to receive the T.C. Output of the RED One® (for T.C. operations, refer to your RED One® Operations Guide).

If you are connected to the 'RIB' and your T.C. source is connected to it as well, select 'REM' on the 4th switch and 'OUT' on the 5th. T.C. IN can only come from one source at a time while T.C. out can be sent out of both.



5 AUXILLARY POWER / GPI

The 'RIP' provides a 12volt power/GPI connector on the under side of the unit. It is wired in the same configuration as the aux ports on your RED One®. This connector provides a fused 12v/1a output for powering accessories and running GPI triggers. If the demand on the 12v output is greater than 1amp, an internal fuse will trip. This fused output will reset automatically after a few seconds. Be sure to disconnect the accessory that overloaded the circuit.

DO NOT exceed a 1A draw on the 12v source. If your accessory requires more power than 1A, it is recommended that it be powered from an alternate source.

The GPI pins on the 'RIP' follow the same GPI configuration that is assigned to it in the camera menu at the port assignment that the panel is plugged into. Third party start/stop accessories will trigger record through this GPI port.

GPIO record tally should be set to "Active low" in your camera menu system/setup/preferences/gpio/polarity/gpio out/(select your port 1 or 2)

6 POWER INDICATOR LED

The 'RIP' will power itself on as soon as the camera receives power and is powered on. After receiving power, the 'RIP' runs through its own power up sequence, and within a few short seconds, the LED will illuminate red.

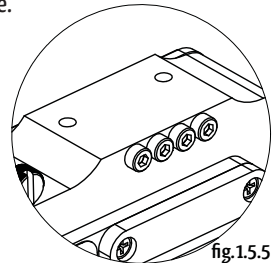
The following LED indicators represent the status of the unit while in operation:

SOLID	Unit is powered up and operating correctly.
FLASHING (Slowly)	Camera is in RECORD operation or GPIO setting for tally is incorrect in the camera menu.
OFF	Unit is powered down or malfunctioning. Verify connection before contacting customer service.

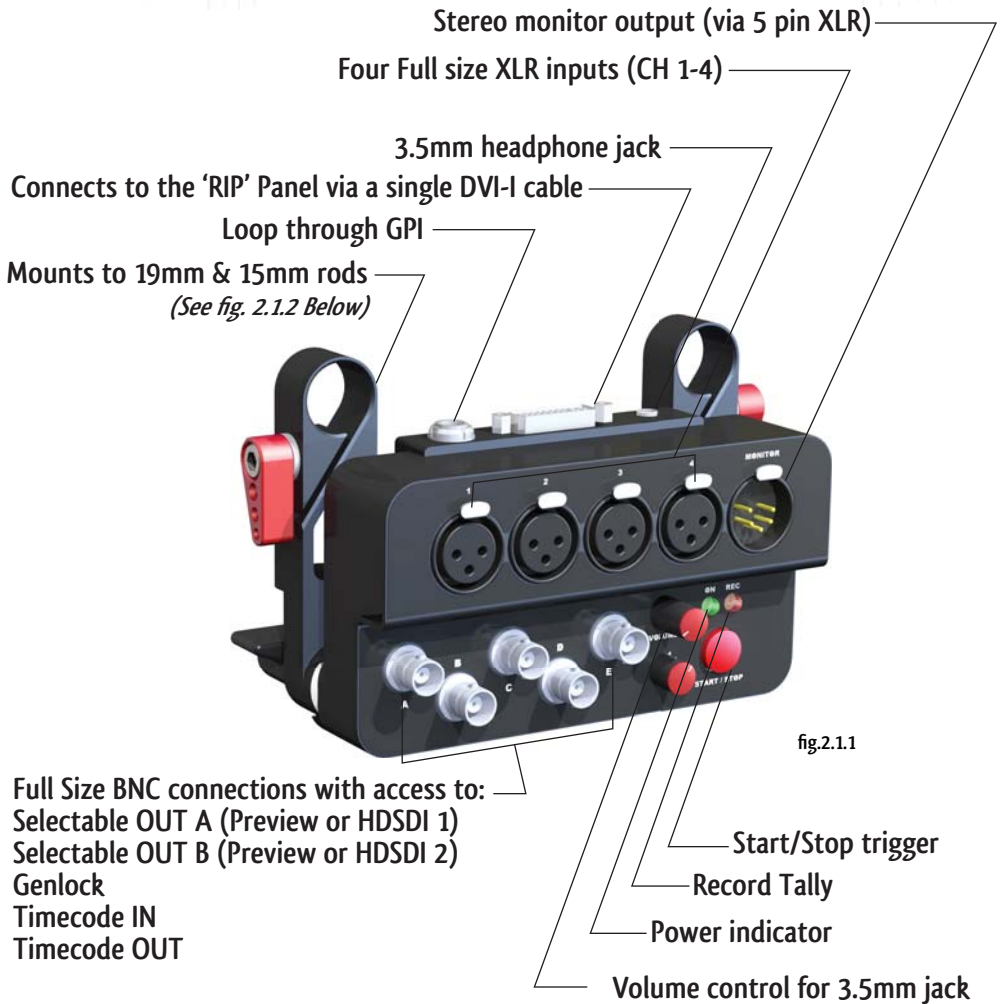
7 MICROPHONE MOUNT

Two 10-24 threaded holes which are 1.100" (28mm) apart allow you to mount a microphone on the panel.

This configuration is ideal for Sony external microphone mounts.



'RIB' Features



Full Size BNC connections with access to:
 Selectable OUT A (Preview or HDSDI 1)
 Selectable OUT B (Preview or HDSDI 2)
 Genlock
 Timecode IN
 Timecode OUT

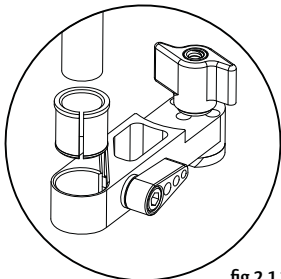


fig.2.1.2

Note:
 The 'RIB' can only be used in conjunction with the 'RIP'

1- Use the supplied 3" mounting arms to mount and adjust the 'RIB' on any rod configuration (see fig 2.2.1).

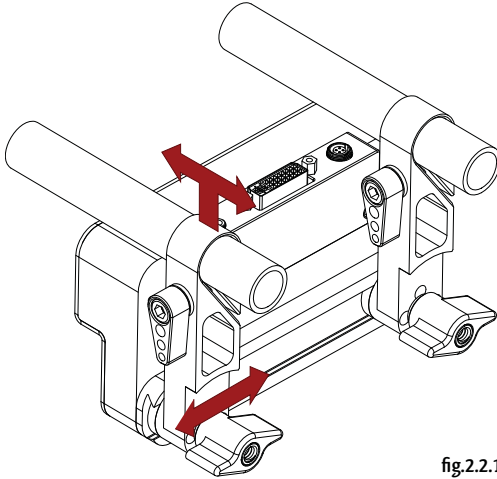


fig.2.2.1

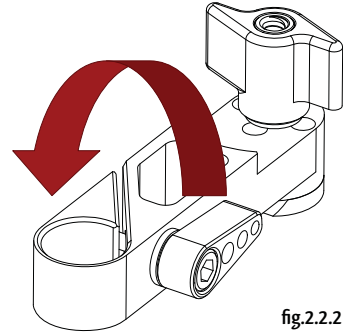


fig.2.2.2

2- Levers can be mounted on the opposite side of the mounting arms to allow clearance (see fig 2.2.2).

3- Remove the cap from the 'RIP' DVI-I female connector. Connect the DVI-I cable to both DVI-I female connectors on the 'RIP' and 'RIB'. The 'RIB' can be connected to the 'RIP' when the camera and 'RIP' are either powered on or off.

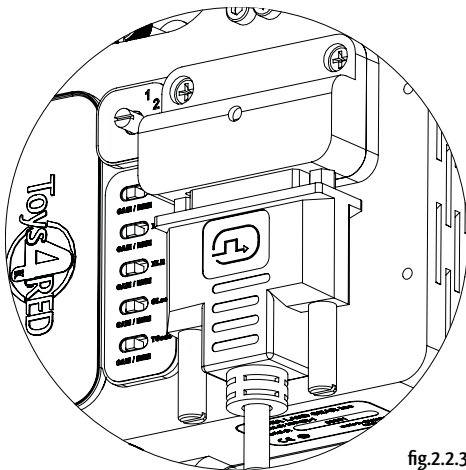


fig.2.2.3

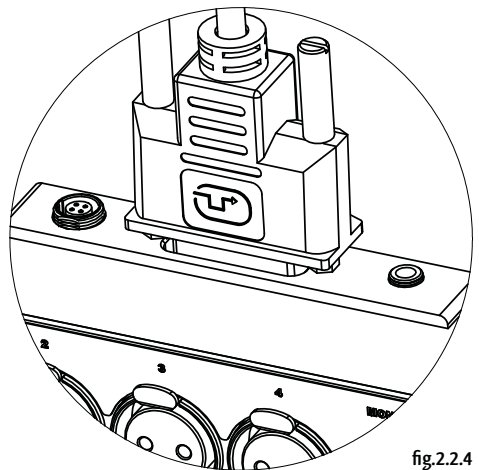


fig.2.2.4

Your system is now ready to operate. Follow the operating instructions on the next page.

The 'RIB' allows greater functionality of your RED One® camera by eliminating excess cables that may interfere with operation, or to simplify operation by combining all I/O's down a single source cable. It is ideal for cranes, dollies, 3D rigs, handheld, multi-camera, and many other operations.



fig.2.3.1

① AUDIO

All four (4) channels of audio are accessible via the 'RIB'. Inputs 1-3 can be toggled between the 'RIP' & the 'RIB'. If the input source of channel 1, 2 or 3 is from the 'RIB', then place the respective switch on the 'RIP' to the 'REM' position (*see page 10*).

② STEREO MONITOR AND HEADPHONE JACK

This output is a standard 5 pin XLR audio monitor. In addition to the output, a volume control pot and 3.5mm jack provide monitoring at this unit. Setting the desired channels to monitor is done in the camera headphone menu. (refer to your RED One® Operations Guide)



③ BNC ASSIGNMENT

The BNC Panel provides access to the following functions:

- A- Selectable Output (Preview or HDSDI 1)
- B- Selectable Output (Preview or HDSDI 2)
- C- GENLOCK
- D- Timecode IN *
- E- Timecode OUT

A&B are assigned via the rotary switch on the 'RIB'.

Rotary switch position

	1	2	3	4	5
A	HDSDI 1	Preview	HDSDI 1	Preview	Preview
B	HDSDI 2	Preview	Preview	HDSDI 2	Preview
C	GenLock	GenLock	GenLock	GenLock	GenLock
D	T.C. IN	T.C. IN	T.C. IN	T.C. IN	T.C. IN
E	T.C. OUT	T.C. OUT	T.C. OUT	T.C. OUT	T.C. OUT

BNCs on 'RIB'

fig.2.3.2

*Timecode IN can only source from one unit at a time ('RIP' or 'RIB'), while Timecode OUT can be provided to both units at the same time. The desired unit from which T.C. IN will be received from can be selected via switch #4 on the 'RIP' (see page 10).

④ START/STOP

The record trigger is activated from the 'RIB' via this button. Triggering of start/stop/burst/ramp is selected in the camera menu at the port assignment in which the 'RIP' is plugged into. (Refer to your RED One® Operations Guide)

⑤ GPI

An extended GPI trigger can be plugged into this port for triggering the camera further away from the 'RIB'. DO NOT plug accessories into this connector as the voltage provided at this port is minimal and will not power any devices.

⑥ SETTING DVI-I CABLE LENGTH EQUALIZATION (EQ)

To set your DVI-I Cable length EQ, please follow these steps.

(1) Unmount all recording media from your RED One®. (2) Press and hold the record button on the 'RIB' so the green LED will begin to flash. (3) Continue to hold the record button and move the rotary switch to your desired cable length according to the chart below. (4) Once your desired length is selected, release the record button.

The green LED will now be solid. Your 'RIB' will retain cable EQ if it has been either disconnected or powered down. Reset the cable EQ each time you change your cable length. When you first connect your 'RIP' to you 'RIB', if your red LED flashes rapidly, it is required to set the cable EQ.

Rotary switch position for desired cable length:

- 1- 0 to 10 feet
- 2- 10 to 15 feet
- 3- 15 to 35 feet
- 4- 35 to 50 feet

DVI-D Single Link (Digital only)

Two sets of nine pins, and a solitary flat blade.



DVI-I Single Link (Digital and analog)

Two sets of nine pins and four contacts around the blade.



DVI-D Dual Link (Digital only)

Three rows of eight pins and a solitary flat blade.



DVI-I Dual Link (Digital and analog)

Three rows of eight pins and four contacts around the blade.



WHICH DVI?

		DVI-D (SINGLE-LINK)	DVI-I (SINGLE-LINK)	DVI-D (DUAL-LINK)	DVI-I (DUAL-LINK)
AUDIO	Channel 1				
	Channel 2				
	Channel 3				
	Channel 4				
	Monitor				
VIDEO	HD-SDI (1)				
	HD-SDI (2)				
GENLOCK	Genlock				
TIME CODE	IN				
	OUT				



Warranty

All manufactured parts of our 'RIP' and 'RIB' are fully covered for defects in manufacture up to 90 days under normal use. The warranty will automatically become void if the equipment has been mishandled, abused or modified in any way. Air Sea Land Gear, Inc. is not responsible for any damages to the camera during installation or use.

The warranty is only to the original purchaser through Air Sea Land Gear, Inc. or an authorized dealer. The warranty is void on all Air Sea Land Gear, Inc. products that are no longer owned by or in the possession of the original purchaser.

The expressed warranty set forth herein is in lieu of all other warranties expressed or implied, including without limitation any warranties of merchantability or fitness for a particular purpose, and all such warranties are hereby disclaimed and excluded by the manufacturer. Repair or replacement of any defective part is the sole and exclusive remedy provided hereunder. Air Sea Land Gear, Inc. will not be liable for any further loss, damages or expenses, including incidental or consequential damages directly or indirectly arising from the sale or use of this product.

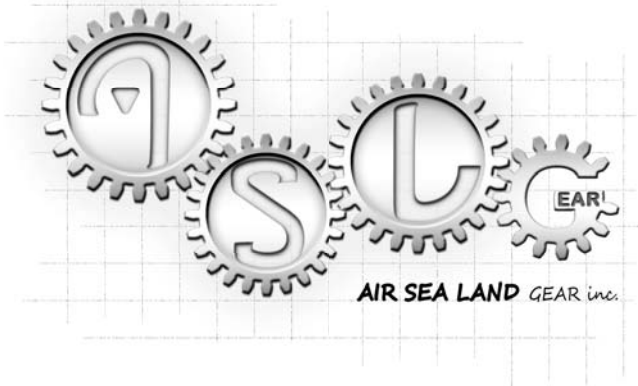
Before returning your product for care, please call or e-mail our service department for an RMA# (Return Merchandise Authorization). Ship your product prepaid freight with the return number printed on the outside of the box. It is recommended that you keep the shipper's tracking number until the product is returned to you.

Return Policy

Returns will be accepted within 30 days of purchase date as long as the item has not been used. There will be a 15% restocking fee for returned items. Please call or email for instructions before shipping back your item.

Latest modification: 30-12-2008
Updates for this User's Manual can be found at
http://www.aslgear.com/RIPKIT_manual.pdf

For troubleshooting visit
www.aslgear.com/RIP_troubleshoot.aspx



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