RED CINE-BROADCAST
OPERATION GUIDE

RED CINE-BROADCAST | V1.0, REV. C

RED.COM

TABLE OF CONTENTS

DISCLAIMER

RED® has made every effort to provide clear and accurate information in this document, which is provided solely for the user's information. While thought to be accurate, the information in this document is provided strictly "as is" and RED will not be held responsible for issues arising from typographical errors or user's interpretation of the language used herein that is different from that intended by RED. All information is subject to change as a result of changes in local, federal or other applicable laws.

RED reserves the right to revise this document and make changes from time to time in the content hereof without obligation to notify any person of such revisions or changes. In no event shall RED, its employees or authorized agents be liable to you for any damages or losses, direct or indirect, arising from the use of any technical or operational information contained in this document.

This document was generated on 1/6/2026. To see earlier versions of this document, submit a Support ticket at https://support.red.com.

For comments or questions about content in this document, send a detailed email to OpsGuides@red.com.

COPYRIGHT NOTICE

TRADEMARK DISCLAIMER

All other company, brand, and product names are trademarks or registered trademarks of their respective holders. RED has no affiliation to, is not associated with or sponsored by, and has no express rights in third-party trademarks.

COMPLIANCE STATEMENTS

INNOVATION, SCIENCE AND ECONOMIC DEVELOPEMENT CANADA (ISED) EMISSION COMPLIANCE STATEMENTS

This Class A digital apparatus complies with Canadian ICES-003. CAN ICES-003 (A)/ NMB-003 (A)

FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENTS

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

To maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: If the device is changed or modified without permission from RED, the user may void his or her authority to operate the equipment.

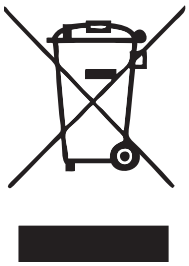
EUROPEAN UNION COMPLIANCE STATEMENTS

RED declares that the equipment described in this document complies with the EMC Directive (2014/30/EU) and the Low Voltage Directive (2014/35/EU) issued by the Commission of the European Community.

Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards).

- EN 62368-1 (IEC 62368-1) – Product Safety
- EN 55032 (CISPR 32) Electromagnetic Compatibility
- EN 55035 (CISPR 35) Immunity Requirements
- EN 61000-3-2 (IEC 61000-3-2) Harmonic Current Emissions
- EN 61000-3-3 (IEC 61000-3-3) Voltage changes, voltage fluctuations and flicker
- EU 2015/863 RoHS Directive

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)



The Waste Electrical and Electronic Equipment (WEEE) mark applies only to countries within the European Union (EU) and Norway. This symbol, on the product and accompanying documents, means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, take this product to designated collection points where it will be accepted free of charge. Alternatively, in some countries you may be able to return your products to your local retailer upon purchase of an equivalent new product.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For business users in the European Union, if you wish to discard electrical and electronic equipment, contact your dealer or supplier for further information.

China RoHS (list of chemicals)

产品中有害物质的名称及含有的信息表											
标志	部件名称	有害物质									
		Pb	Hg	Cd	Cr (VI)	PBBs	PBDEs	DBP	DIBP	BBP	DEHP
	外壳	○	○	○	○	○	○	○	○	○	○
	被覆	○	○	○	○	○	○	○	○	○	○
	机械元件	×	○	○	○	○	○	○	○	○	○
	电子元件	×	○	○	○	○	○	○	○	○	○

注1: ○: 表示该有害物质在该部件所有均质材料中的含量均不超出电器电子产品有害物质限制使用国家标准要求。
×: 表示该有害物质至少在该部件的某一均质材料中的含量超出电器电子产品有害物质限制使用国家标准要求。
注2: 以上未列出的部件、表明其有害物质含量均不超出电器电子产品有害物质限制使用国家标准要求。

RESPONSIBLE PARTY

RED Digital Cinema, Inc.
94 Icon
Foothill Ranch, CA 92610
USA

SAFETY INSTRUCTIONS

WARNING: Never connect power to the camera's DC-IN port when the Cine-Broadcast module is attached. Refer to Powering the Module.

WARNING: Class 1 Laser product

CLASS 1 LASER PRODUCT
IEC60825-1:2014
EN 60825-1:2014+A11:2021

PRODUIT LASER DE CLASSE 1
IEC60825-1:2014
EN 60825-1:2014+A11:2021

LASER WARNING: Do not look directly into a fiber-optic transceiver or into the ends of fiber-optic cables. Fiber-optic transceivers and fiber-optic cables connected to transceivers emit laser light that can damage your eyes.

LASER WARNING: Do not leave a fiber-optic transceiver uncovered except when inserting or removing a cable. The rubber safety cap keeps the port clean and prevents accidental exposure to laser light.

CAUTION: The performance of controls, adjustments, or procedures other than those specified in this manual may result in hazardous radiation exposure.

CAUTION: Do not bend fiber-optic cables beyond their minimum bend radius. An arc smaller than a few inches in diameter can damage the cable and cause problems that difficult to diagnose.

CAUTION: Suitable for installation in restricted access areas only. Mount on concrete or other non-combustible surfaces. For use by skilled personnel only.

- This equipment is intended to be used by instructed personnel and is not intended to be used by children.
- DO NOT use the camera or accessories near water. Avoid exposing the camera to moisture. The unit is not waterproof, so contact with water could cause permanent damage to the camera as well as electric shock and serious injury to the user. DO NOT use the camera in the rain or under other conditions with high moisture without appropriate protection, and immediately remove power source if the camera or accessories are exposed to moisture.

WARNING: To reduce the risk of fire or electric shock, do not expose the camera to rain or moisture.

- DO NOT point the camera directly into extreme light sources such as the sun or lasers. Permanent damage to optical path or sensor may occur, which is not covered by manufacturer's warranty.
- DO NOT expose the camera to excessive vibration or impact (shock). Be careful not to drop the camera. Internal mechanisms may be damaged by severe shock. Mechanical alignment of optical elements may be affected by excessive vibration.
- ELECTROMAGNETIC INTERFERENCE: The use of devices using radio or other communication waves may result in the malfunction or interference with the unit and/or with audio and video signals.
- Clean only using a dry cloth. When cleaning the camera, remember that it is not waterproof and moisture can damage electronic circuitry. DO NOT rinse or immerse any element of the camera, lens or other accessory, keep them dry at all times. DO NOT use soaps, detergents, ammonia, alkaline cleaners, and abrasive cleaning compounds or solvents. These substances may damage lens coatings and electronic circuitry.
- Maintain sufficient ventilation—DO NOT block any ventilation openings or obstruct cooling fan airflow.

CAUTION: Proper camera ventilation requires a minimum 0.5" (1.25 cm) clearance between the camera ventilation openings and external surfaces. Verify that objects that can block the fan intake and exhaust ports do not impede airflow. Failure to permit adequate airflow may result in overheating of the camera, degraded operation, and in extreme situations, damage to the camera.

WARNING: Media cards can become very hot during prolonged recording sessions. When ejecting the media card, let it cool before touching it with bare fingers.

- DO NOT operate or store near any heat sources such as radiators, heat registers, stoves, or any other apparatuses that produce heat. Store in a protected, level and ventilated place. Avoid exposure to temperature extremes, damp, severe vibration, strong magnetic fields, direct sunlight or local heat sources during storage. Remove any batteries from the camera before storage. Recommended storage and usage temperatures for your camera, lenses and other accessories are:
  - Operating range: 32° F to 104° F (0° C to 40° C)
  - Storage range: –4° F to 122° F (–20° C to 50° C)

- If there are any performance issues with the camera or accessories when operating within this temperature range, submit a support ticket to https://support.red.com.
- DO NOT bypass the third prong of the grounding-type plug on the power cord of the included power adaptor. A grounding-type plug has two blades and a third “grounding” prong. The third prong is provided for your safety. You must connect the plug to an outlet with a protective earth connection. If the grounding-type plug does not fit into the outlet, do not attempt to modify the plug or outlet, consult a qualified electrician.

CAUTION: Install the camera in a proper support system that can handle the entire weight of the camera and the accessories. Secure the camera by using the ¼-20 and/or the 3/8-16 mounting points located on the bottom of the camera. Always verify that the screws are tightened properly. When the camera is not properly attached, or is placed on an unstable surface, the camera can fall and cause injury or be damaged.

CAUTION: Products marked with this symbol are Class 2 devices. These double insulated devices are not provided with a grounding type plug.

CAUTION: The power cord plugs for the included power adaptor and the RED Cine-Broadcast Base Stations are used as the power disconnect. To disconnect all power, unplug the power cord plug from the wall outlet. During use, the power cord plug should remain easily accessible at all times.

CAUTION: For service and repair, return the camera to the RED factory only. To reduce the risk of electric shock, and damage to the camera or accessories, DO NOT attempt to perform any servicing other than any procedures that are recommended in the operating instructions.

INDOOR USE ONLY: This device is designed primarily for indoor use.

- El aparato no debe quedar expuesto a goteo o salpicadureas por líquidos.

POWER REQUIREMENTS

AC POWER SUPPLIES

The following devices feature auto-switching power supplies, compatible with input voltages ranging from 100 to 240 VAC.

- DSMC AC Power Adaptor: 150W
- KOMODO AC Power Adaptor: 45W
- RED AC Power Adaptor: 270W
- RED Compact Dual Charger (V-Lock and Gold Mount): 65W
- RED Cine-Broadcast Base Station (Half Rack and Full Rack): 360W

POWER CORD REQUIREMENTS FOR CAMERAS AND CHARGER

NOTE: For some countries, a power cord is not provided with this equipment. Please obtain a compatible, certified power cord separately. To ensure safe and proper operation, use a power cord that meets the following requirements:

CORD COMPONENTS

The power cord must include the following certified components:

- A plug (appropriate for the country of use)
- A cord
- An appliance coupler with one of the following types:
  - IEC 320 C13 (KOMODO-X, V-RAPTOR, V-RAPTOR XL & RED CINE-BROADCAST BASE STATION)
  - IEC 320 C5 (KOMODO 6K)
  - IEC 320 C7 (RED COMPACT DUAL CHARGER)

COUNTRY-SPECIFIC COMPLIANCE

Use a power cord that is approved and certified according to the national safety standards of the country where the equipment is used.

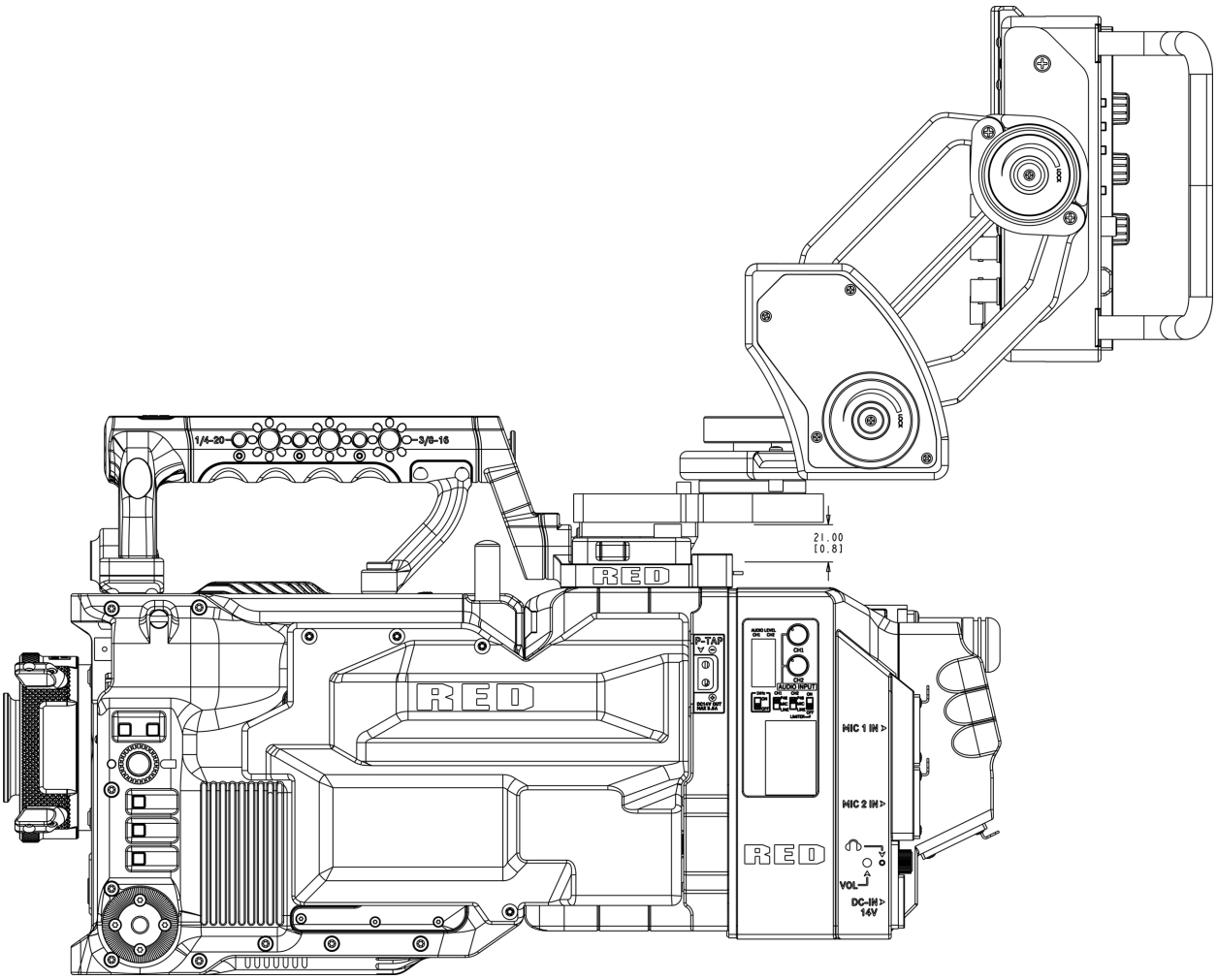
ELECTRICAL CONNECTION

RED Cameras and RED Cine-Broadcast Base Stations must be connected to a properly grounded electrical outlet (three-pin socket)
RED Compact Dual Chargers do not require a grounded electrical outlet (two-pin socket)
The power cord must be rated for the voltage and current required by the equipment.

RECOMMENDED CORD SPECIFICATIONS

- Certified to applicable national standards
- 18 AWG (0.824 mm^2) minimum conductor size
- Rated for a minimum operating temperature of 60°C
- Suitable voltage rating, recommended 500 VAC minimum

1. INTRODUCTION



RED CINE-BROADCAST

The RED Cine-Broadcast Module, compatible with the V-RAPTOR and V-RAPTOR XL line of camera systems, brings powerful live broadcast capabilities with RED's cinematic look.

RED CINE-BROADCAST MODULE

- Cinematic live broadcast with up to 2 channels of 4K 60P (HDR/SDR) over 12G-SDI
- Advanced workflows with slow-motion, AI/ML augmentation and live to headset using 8K 120 FPS R3Ds with RED Connect
- LEMO SMPTE 311M/304M hybrid fiber optic cable connects to a rack-mountable 2 RU or Half Rack 4RU Base Station

QUICK REFERENCE

Refer to the Quick Reference section to get familiar with this guide and the RED Cine-Broadcast components.

2. QUICK REFERENCE

Congratulations new RED Cine-Broadcast owner. This quick reference topic helps you get familiar with this guide and the RED Cine-Broadcast Components. It includes links to topics about configuring the Cine-Broadcast components to fit your recording requirements, and for learning the basic operation of the camera.

PREPARING THE CAMERA HARDWARE

Refer to the appropriate Operation Guide for your camera model at https://www.red.com/downloads.

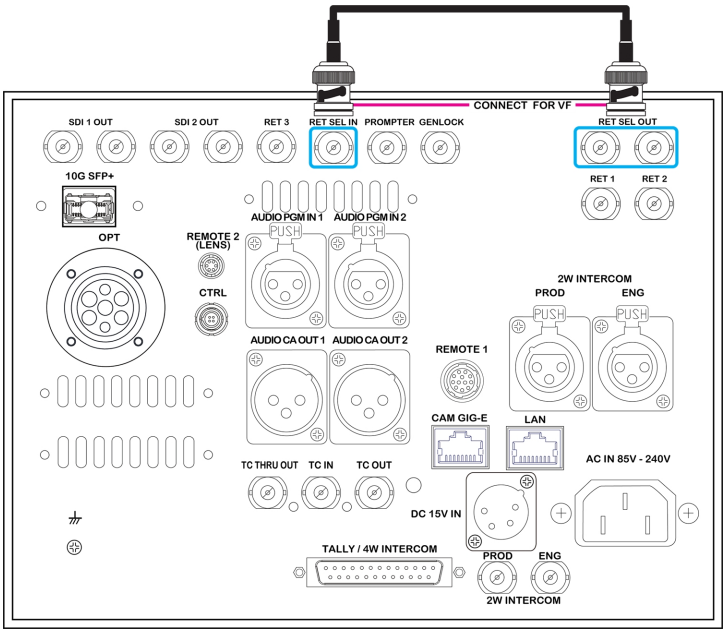
PREPARING THE RED CINE-BROADCAST SYSTEM

Configure the Cine-Broadcast settings to prepare for recording by configuring the Cine-Broadcast system EVF (refer to How-To).

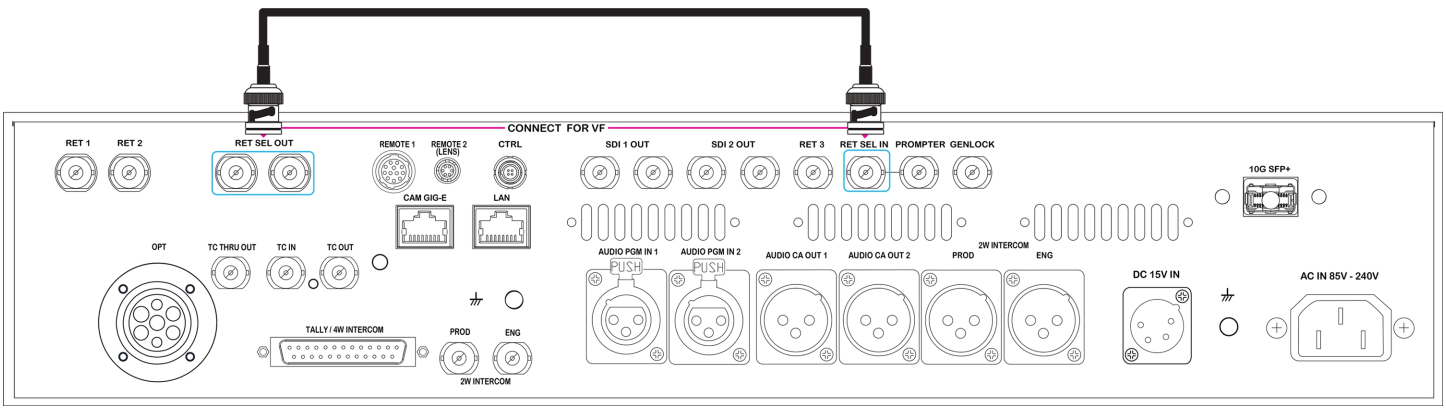
CONNECTING THE RETURNS ON THE BASE STATION

Connect RET SEL IN with one of the RET SEL OUTs by using the supplied BNC cable. This is required even when no return video is sent to the module.

Half Rack:



Full Rack:



3. RED CINE-BROADCAST COMPONENTS

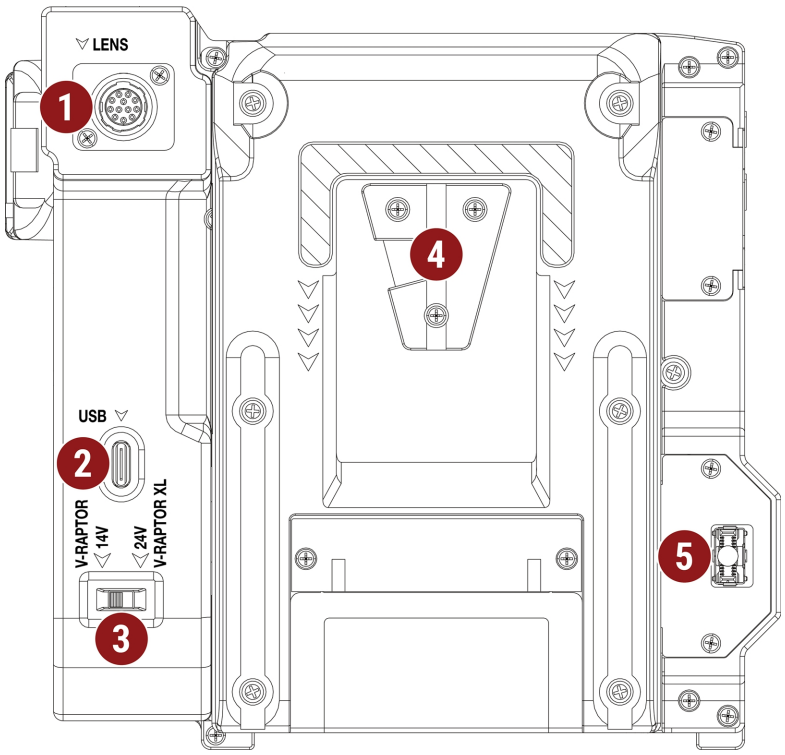
The RED Cine-Broadcast components include the RED Cine-Broadcast Module, RED Cine-Broadcast 7" Viewfinder, RED Cine-Broadcast Base Station (Half Rack), and RED Cine-Broadcast Base Station (Full Rack).

RED CINE-BROADCAST MODULE

This section describes the Front, Back, Left, Right, Top, and Bottom of the module, and identifies the controls, buttons, and, switches on the module.

FRONT

Figure: Module Front, Controls and Features

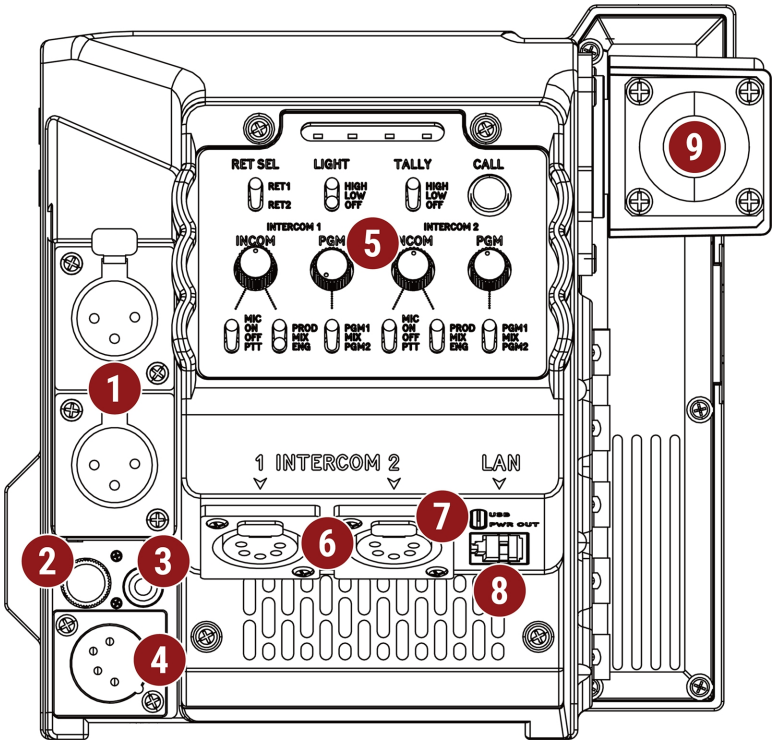


#	ITEM	DESCRIPTION
1	LENS	12-Pin Lens data port, Canon and Fujinon lens compatible
2	USB	1 Gbps USB-C port for camera control*
3	Voltage	Voltage selector for V-RAPTOR (14V) or V-RAPTOR XL (24V)
4	V-Mount	Camera mount
5	RED CONNECT	Proprietary RED CONNECT port

* Use only the supplied USB-C cable. Standard USB-C cables may not work properly.

BACK

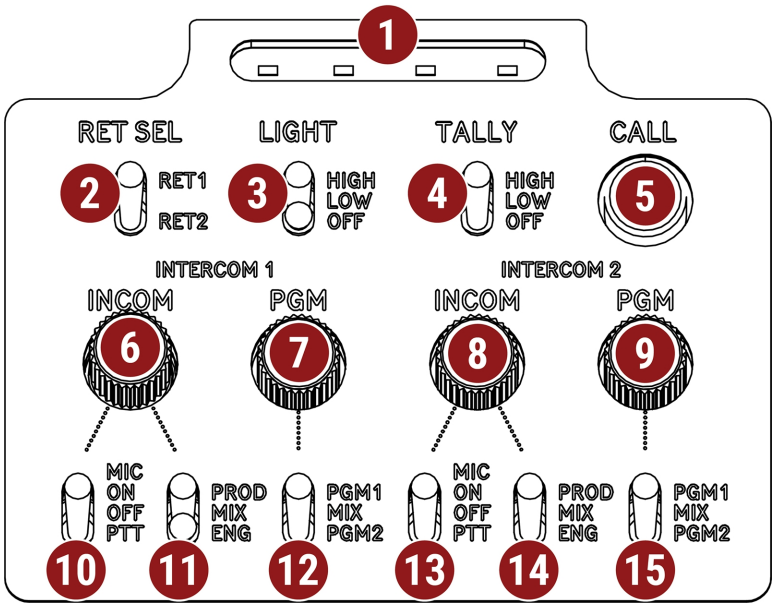
Figure: Module Rear, Controls and Features



#	ITEM	DESCRIPTION
1	MIC IN 1/2	XLR x2, MIC or LINE or Phantom +48V, Analog 2 channels, balance, 0 dBm
2	VOLUME	Adjust headphone volume
3	HEADPHONE	3.5 mm stereo headphone jack
4	DC IN	4-Pin male XLR, 14 V DC
5	CONTROLS	See next diagram
6	INTERCOM 1/2	XLR 5-Pin x2, Compatible with ClearCom, RTS, and Protech
7	USB	USB-C, 1 Gbps camera control, 1.5 A power
8	LAN	RJ45, 1 Gbps network trunk
9	OPT	LEMO, SMPTE 304M, Base Station connection

CONTROLS

Figure: Back Panel, Controls and Features



#	ITEM	DESCRIPTION
1	Tally light	Shines high, low, or off
2	RET SEL	Toggle the return to 1 or 2
3	LIGHT	Set the panel backlight to HIGH, LOW, or OFF
4	TALLY	Set the tally light to HIGH, LOW, or OFF
5	CALL	Call button
6	INCOM 1	Intercom 1 volume
7	PGM 1	Program 1 volume
8	INCOM 2	Intercom 2 volume
9	PGM 2	Program 2 volume
10	INCOM 1 MIC	Select Microphone ON, OFF, or push to talk (PTT)
11	INCOM 1 PROD	Select Production, Mix, or Engineer
12	PGM 1 Switch	Select Program 1, Mix, or Program 2
13	INCOM 2 MIC	Select Microphone ON, OFF, or push to talk (PTT)
14	INCOM 2 PROD	Select Production, Mix, or Engineer
15	PGM 2 Switch	Select Program 1, Mix, or Program 2

LEFT

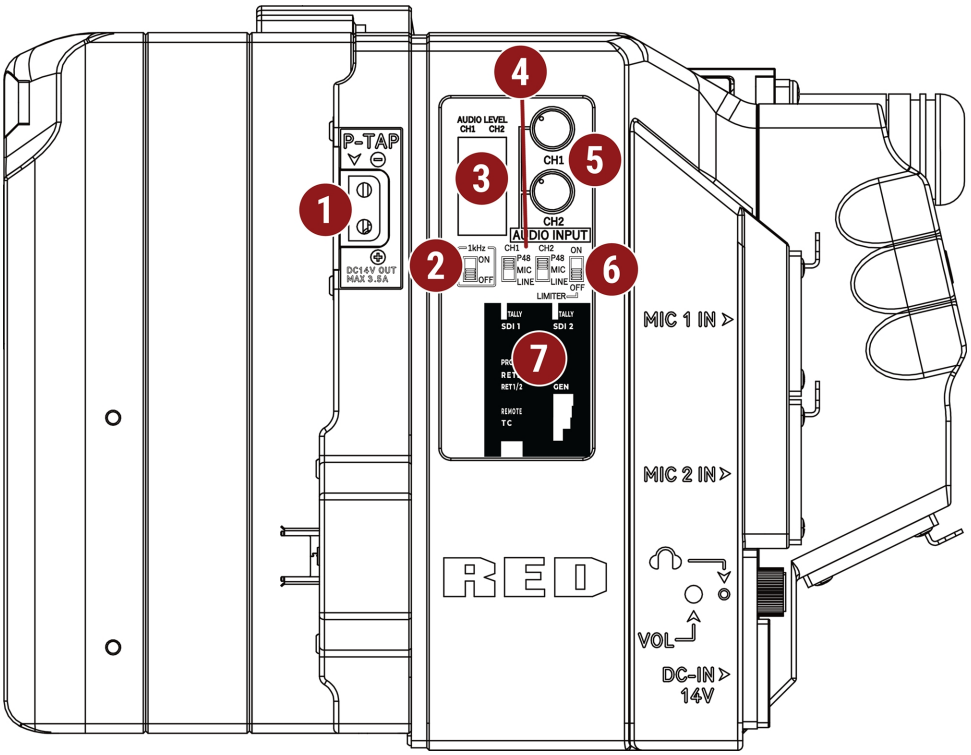


Figure: Module Left, Controls and Features

#	ITEM	DESCRIPTION
1	P-TAP	P-TAP power out, maximum 14 V / 3.5 A each
2	1kHz	Toggles 1 kHz tone on or off
3	AUDIO LEVEL	Audio level meter, Ch1 and Ch2
4	AUDIO SOURCE	Switches between Phantom +48V, microphone, and line for Ch1 and Ch2
5	AUDIO INPUT	Volume controls for Ch1 and Ch2 audio input
6	LIMITER	Toggles audio limiter on and off
7	STATUS	Module status Display Indicator

DISPLAY INDICATOR

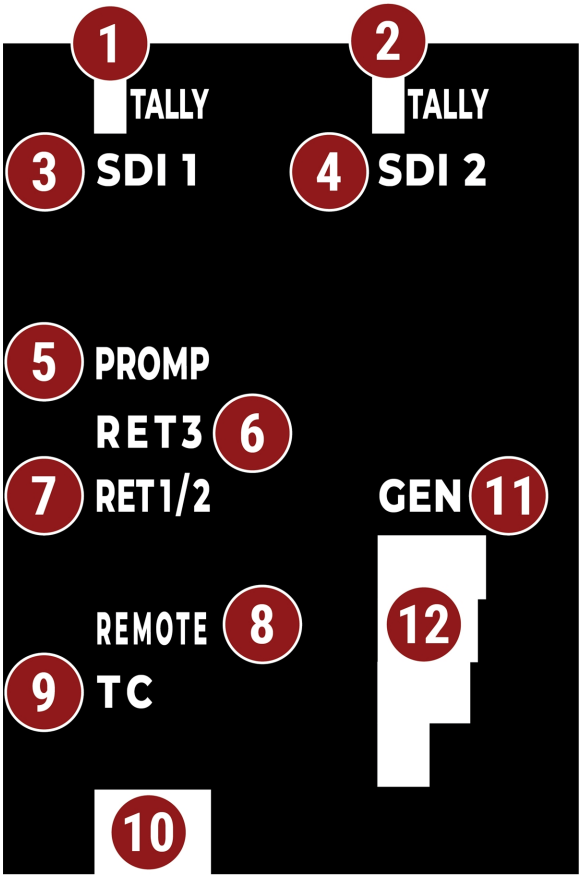
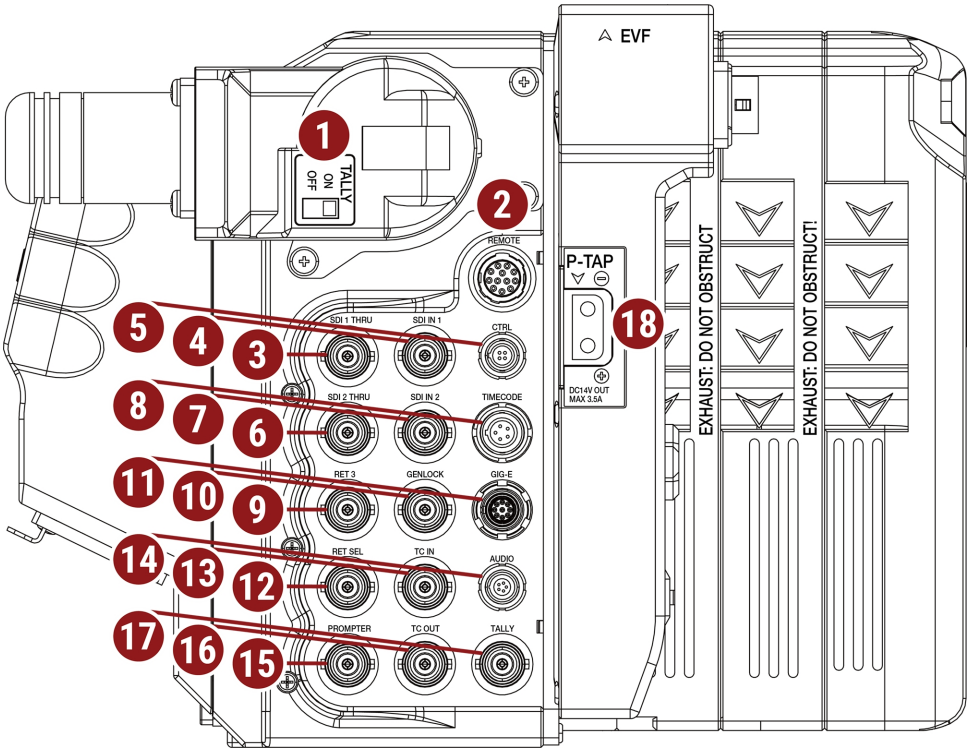


Figure: Module Left, Display Indicator

#	ITEM	DESCRIPTION
1	Tally red	Indicates when tally red is detected
2	Tally green	Indicates when tally green is detected
3	SDI 1	Indicates when SDI 1 is detected
4	SDI 2	Indicates when SDI 2 is detected
5	PROMP	Indicates when a prompter is detected
6	RET3	Indicates when Return 3 is detected
7	RET1/2	Indicates when Return 1 and/or Return 2 is detected
8	REMOTE	Indicates when a remote signal is connected
9	TC	Indicates when Timecode is detected
10	LED	Blue when Base Station is connected
11	GEN	Indicates when Genlock is detected
12	LED	Indicates when Optical Intensity is good (green), not fully plugged (red)

RIGHT



NOTE: It is recommended to terminate the RET SEL of the CINE-BROADCAST Module with a 75 ohm BNC terminator when the port is not in use to preserve optimal signal integrity.

Figure: Module Right, Controls and Features

#	ITEM	DESCRIPTION
1	TALLY	Tally on and off switch
2	REMOTE	12-Pin RS-232/RS-422 auto detect, for lens data
3	SDI 1 THRU	BNC, SDI passthrough out 12G, 6G, 3G, or 1.5G
4	SDI IN 1	BNC, SDI input 12G, 6G, 3G, or 1.5G
5	CTRL	4-Pin LEMO control input to camera
6	SDI 2 THRU	BNC, SDI passthrough out 12G, 6G, 3G, or 1.5G
7	SDI IN 2	BNC, SDI input 12G, 6G, 3G, or 1.5G
8	TIMECODE	5-Pin LEMO camera Timecode in
9	RET 3	BNC, SDI return output 12G, 6G, 3G, or 1.5G
10	GENLOCK	BNC, Tri-level Genlock output
11	GIG-E	9-Pin LEMO, 1 Gbps for camera control (V-RAPTOR XL)
12	RET SEL	BNC, SDI return output selected (RET 1 or RET 2) 12G, 6G, 3G, or 1.5G (viewfinder)
13	TC IN	BNC, SMPTE ST 12M Timecode input
14	AUDIO	5-Pin LEMO, audio input to camera channels 3 and 4
15	PROMPTER	BNC, teleprompter SDI output 12G, 6G, 3G, or 1.5G
16	TC OUT	BNC, SMPTE ST 12M Timecode output
17	TALLY	BNC, tally signal output, green tally 1.0 V - 3.0 V / red tally 3.1 V - 4.5 V
18	P-TAP	P-TAP power out, maximum 14 V / 3.5 A each

TOP

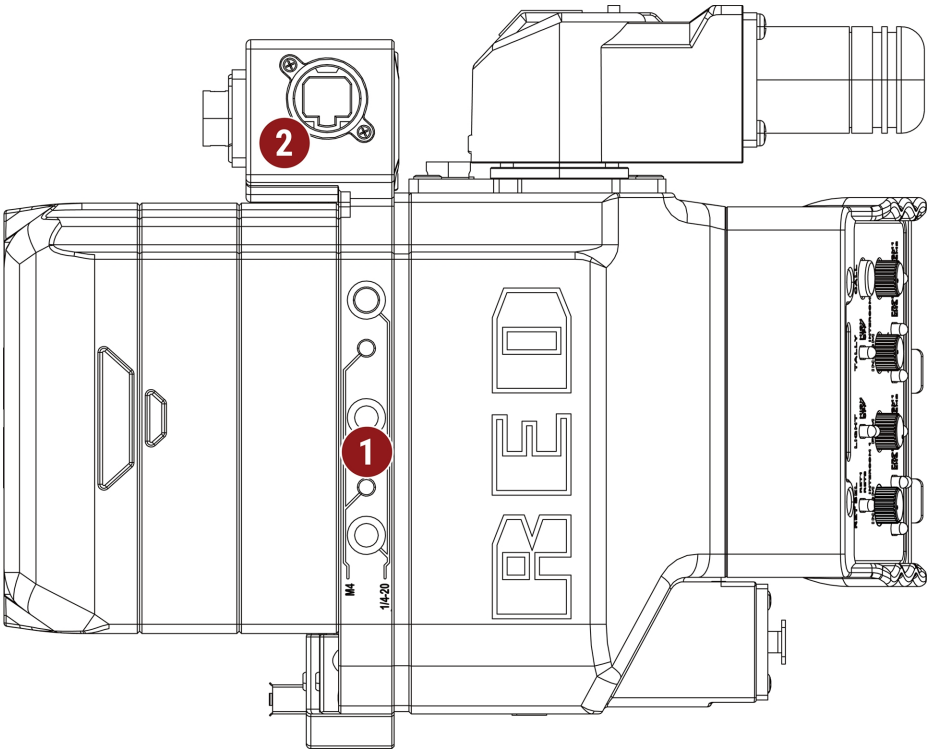


Figure: Module Top, Controls and Features

#	ITEM	DESCRIPTION
1	Mounting holes	3 top ¼-20 mounting holes and 2 top M4 mounting holes
2	EVF	20-Pin electronic viewfinder (EVF) port

BOTTOM

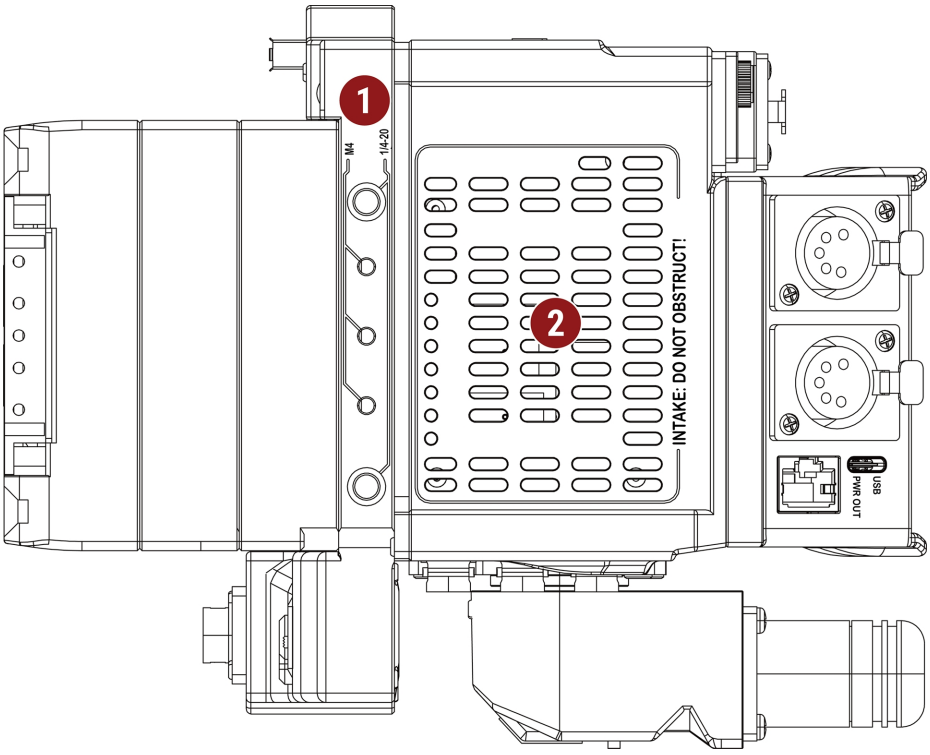
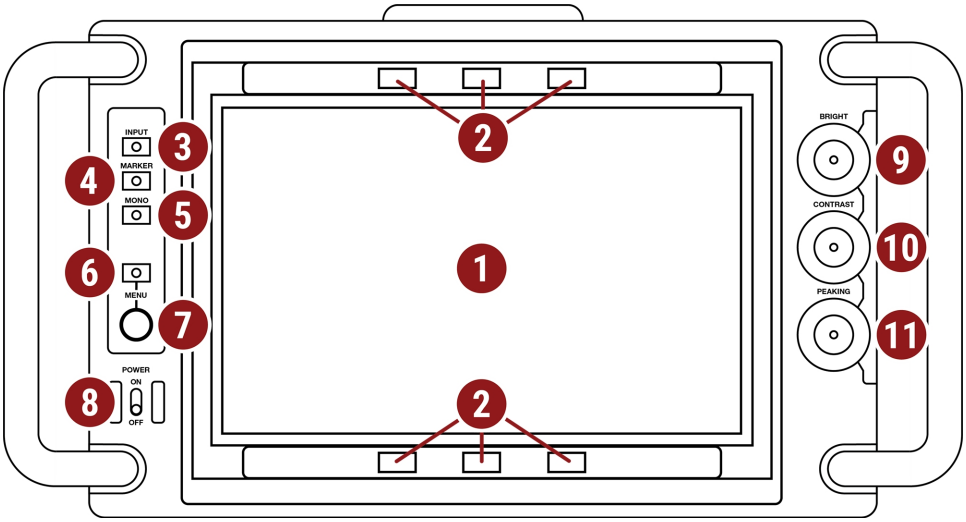


Figure: Module Bottom, Controls and Features

#	ITEM	DESCRIPTION
1	Mounting points	2 x 1/4"-20 mounting holes and 3 x M4 mounting holes
2	Air intakes	Cooling fan air intake

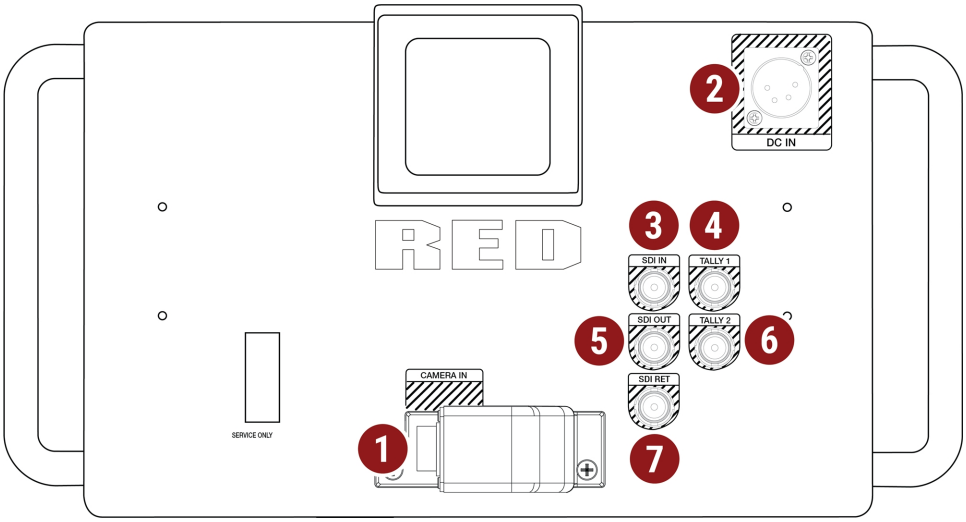
RED CINE-BROADCAST 7" VIEWFINDER

FRONT



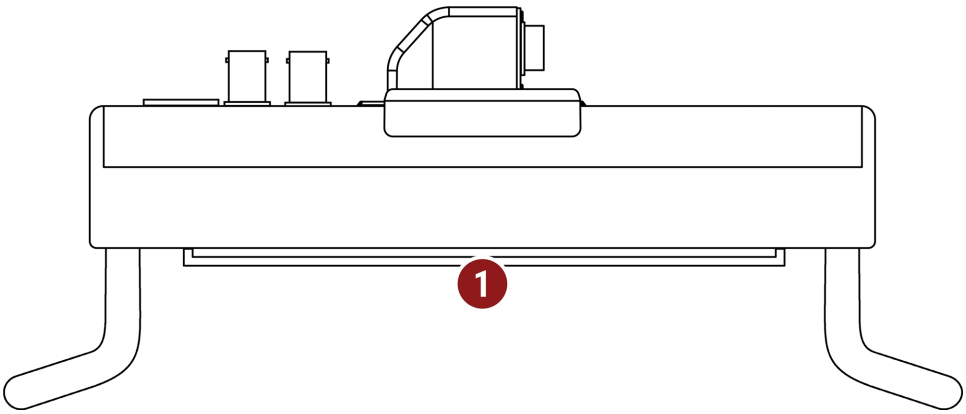
#	ITEM	DESCRIPTION
1	Display	7" TFT LCD 16:9, 1920 x 1080, 16.7 M colors, 170 degree viewing angle
2	Tally indicator	Green, Red, Tally indicators
3	Input	Input selection switch
4	Marker	Marker selection switch
5	Mono	Monochrome / Color toggle
6	Menu button	Enables the menu and the menu selection cursor
7	Menu knob	Navigates and selects the menu items
8	Power	Power On / Off toggle
9	Brightness	Brightness selection knob
10	Contrast	Contrast selection knob
11	Peaking	Peaking selection knob

BACK



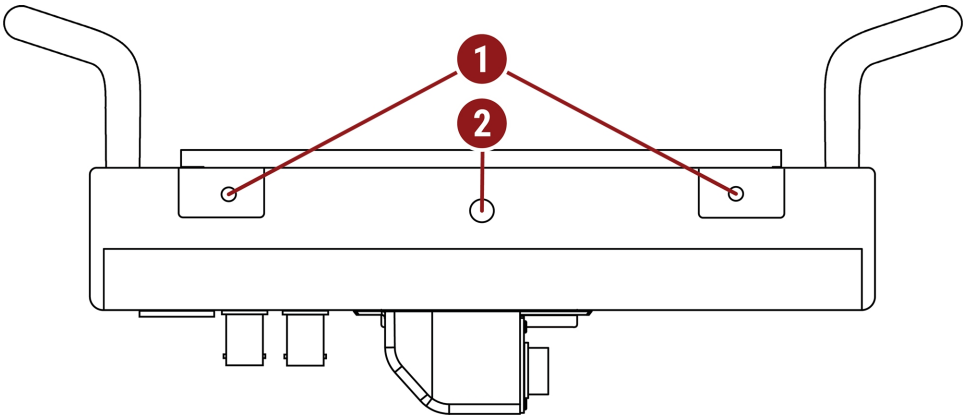
#	ITEM	DESCRIPTION
1	Camera In	Viewfinder 12-pin input (1080/60P)
2	DC-In	4-pin XLR DC-In (10 to 16 volts)
3	SDI In	BNC SDI input
4	Tally 1	BNC Tally 1 input, top - Green (2V- 4V), Red (4.1V- 5V), Off (0V- 2V)
5	SDI Out	BNC SDI output
6	Tally 2	BNC Tally 2 input, bottom - Red (On, short to ground), Off (Open)
7	SDI RET	BNC SDI Return input

TOP



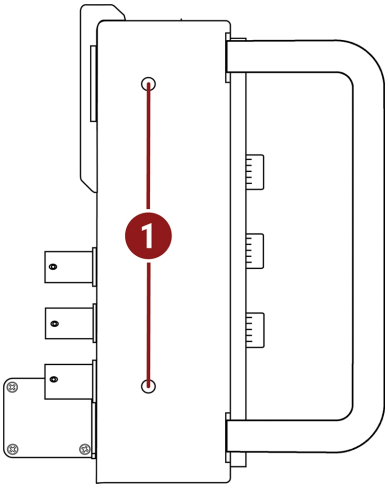
#	ITEM	DESCRIPTION
1	Hood slot	Slot for attaching top of viewfinder hood

BOTTOM



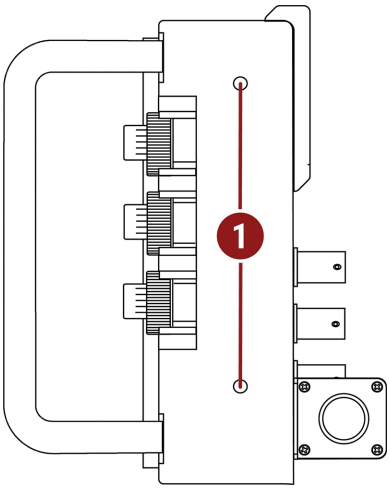
#	ITEM	DESCRIPTION
1	M4 holes	Two M4 mounting holes for securing the viewfinder hood
2	¼"-20 hole	One ¼"-20 mounting hole

LEFT SIDE



#	ITEM	DESCRIPTION
1	M4 holes	Two M4 mounting holes for securing the viewfinder basic bracket

RIGHT SIDE

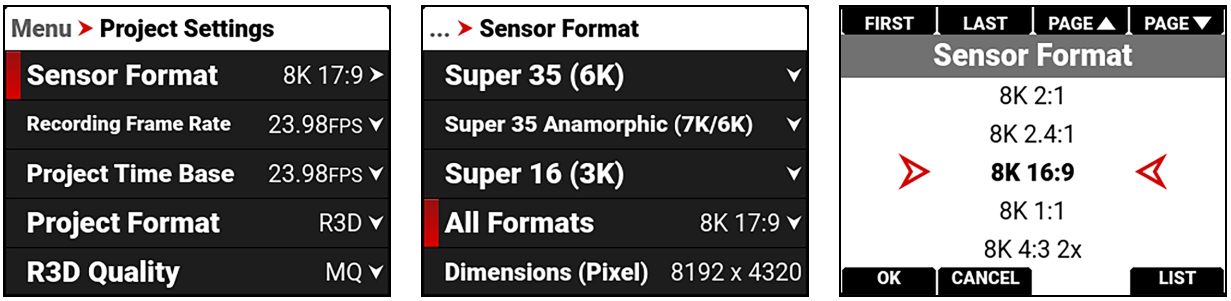


#	ITEM	DESCRIPTION
1	M4 holes	Two M4 mounting holes for securing the viewfinder basic bracket

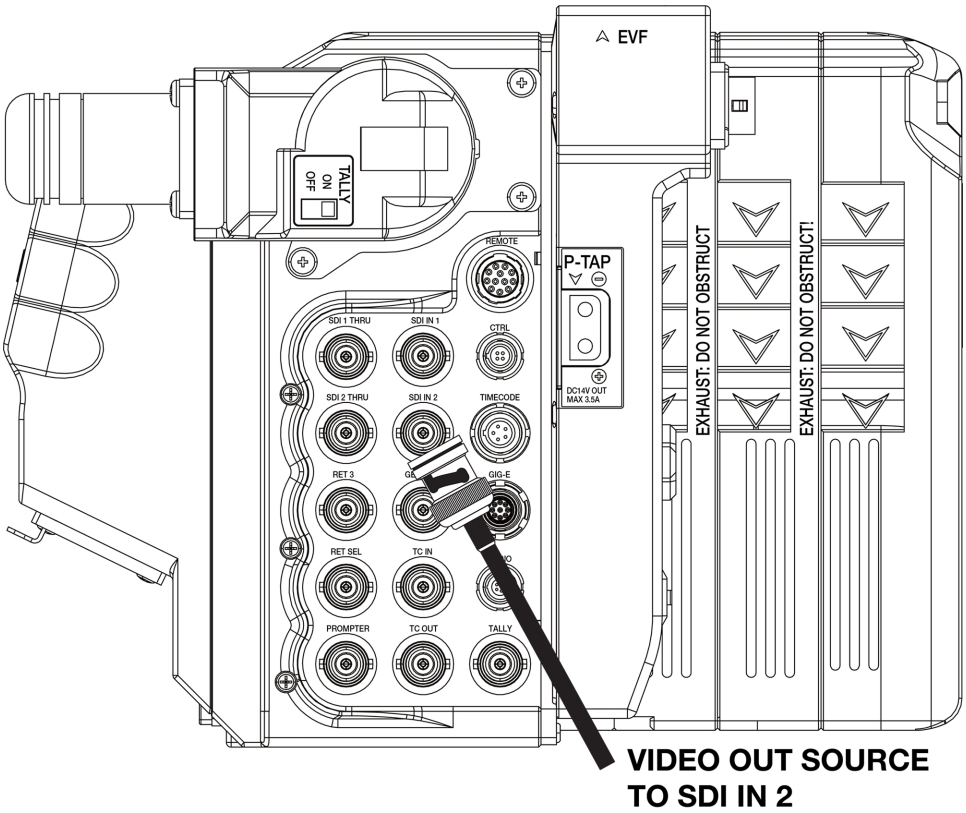
SETTING UP THE VIEWFINDER

When the RED Cine-Broadcast 7" viewfinder is connected by the proprietary viewfinder cable, the monitor can support up to 1.5G SDI video in a 16:9 aspect ratio. Make sure you perform the following:

1. Set the camera format to 16:9 (ex. 8K 16:9, 4K 16:9, 2K 16:9). Go to Menu -> Project Settings -> Sensor Format.

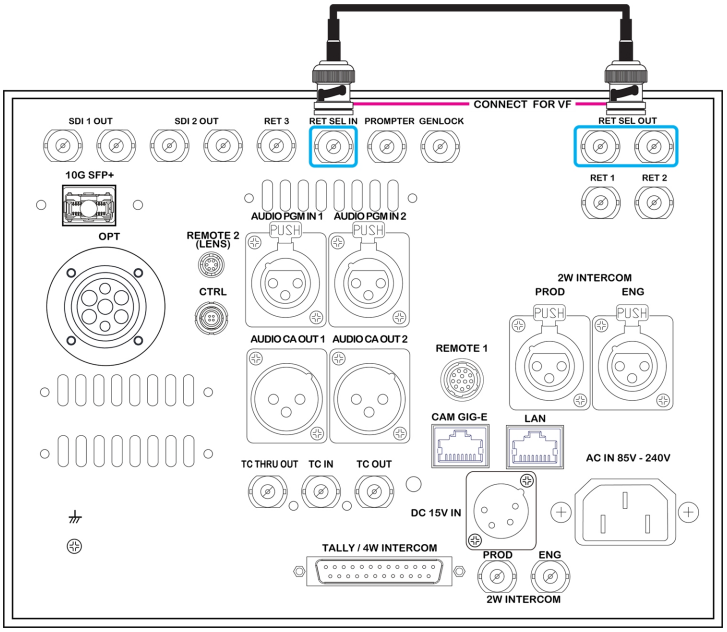


2. Connect the desired video output for the Viewfinder into SDI IN 2 on the Cine-Broadcast Module.

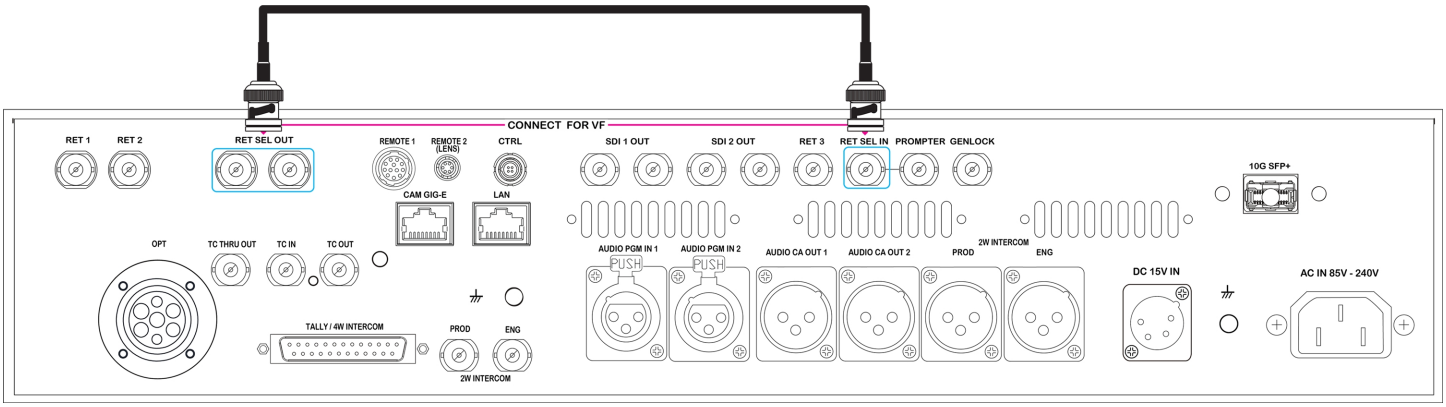


3. Connect RET SEL IN with one of the RET SEL OUTs by using the supplied BNC cable. This is required even when no return video is sent to the module.

Half Rack:



Full Rack:



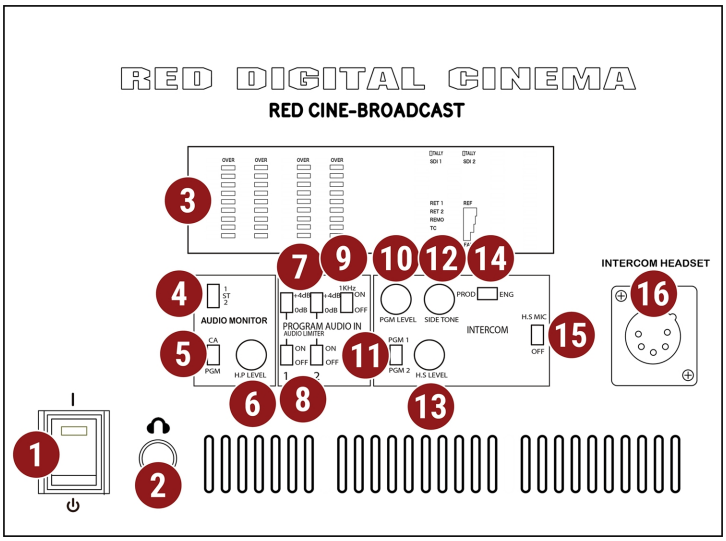
4. When RET 1 and RET 2 are both used, ensure that both return videos have the same format (ex. 2x FHD).

RED CINE-BROADCAST BASE STATION (HALF RACK)

This section describes the Front, and Back of the half rack space Base Station, and identifies the controls, buttons, and switches on the Base Station.

FRONT

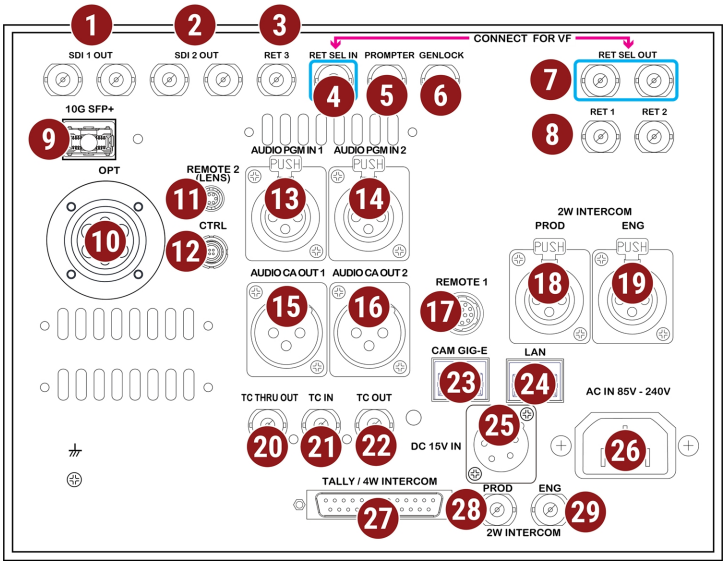
Figure: Half Rack Base Station Front, Controls and Features



#	ITEM	DESCRIPTION
1	POWER	Standby
2	HEADPHONE	6.35 mm stereo headphone port
3	DISPLAY	Signal status display screen
4	AUDIO MONITOR	Switch for selecting channel 1, stereo, or channel 2
5	CA / PGM	Switch for monitoring camera audio (CA) or program audio (PGM)
6	HP Level	Headphone volume adjusting knob
7	PGM AUDIO IN	Program Audio In 0 dB or +4 dB boost switch for each channel
8	PGM Limiter	Program Audio In limiter switch for each channel
9	PGM Test Signal	Program Audio In 1 kHz test tone on / off switch
10	PGM Level	Intercom Program audio volume adjusting knob
11	PGM Source	Intercom Program audio PGM 1 / PGM 2 selection switch
12	SIDE TONE	Intercom side tone volume adjusting knob
13	HS LEVEL	Intercom headset volume adjusting knob
14	PROD / ENG	Intercom source switch to select Producer or Engineer
15	HS MIC	Intercom headset microphone on / off switch
16	INTERCOM HS	Intercom headset port, male XLR 5-Pin

BACK

Figure: Half Rack Base Station Back, Controls and Features



#	ITEM	DESCRIPTION
1	SDI OUT 1	BNC x 2, SDI output 1, 12G/6G/3G/1.5G-SDI
2	SDI OUT 2	BNC x 2, SDI output 2, 12G/6G/3G/1.5G-SDI
3	RET 3	BNC, SDI Return 3 input 12G/6G/3G/1.5G-SDI
4	RET SEL IN	BNC, SDI Return select input 1.5G-SDI viewfinder source
5	PROMPTER	BNC, teleprompter input 12G/6G/3G/1.5G-SDI
6	GENLOCK	BNC, Tri-level Genlock input
7	RET SEL OUT	BNC x 2, SDI Return select output
8	RET 1 / 2	BNC x 2, SDI Return 1 and 2 input, 12G/6G/3G/1.5G-SDI[1] (Viewable on VF)
9	10G SFP+	SFP+ Cage (10Gbps) RED Connect input, Live 8K R3D or 4K JPEG-XS over SMPTE ST 2110[2]
10	OPT	LEMO, SMPTE 304M, camera connection
11	REMOTE 2	6-Pin, Canon and Fujinon Lens and Iris Control
12	CTRL	LEMO 4-Pin x 1, Control protocol to camera
13	AUDIO PGM 1	XLR 3-Pin, Program audio input 1, analog 2 channels, balanced, +4dBm
14	AUDIO PGM 2	XLR 3-Pin, Program audio input 2, analog 2 channels, balanced, +4dBm
15	AUDIO CA OUT 1	XLR 3-Pin, Camera audio output 1, analog 2 channels, balanced, +4dBm
16	AUDIO CA OUT 2	XLR 3-Pin, Camera audio output 2, analog 2 channels, balanced, +4dBm
17	REMOTE 1	12-Pin, RS-232/RS-422 auto detect
18	PROD	XLR 3-Pin, 2W Intercom input, Compatible with ClearCom and RTS
19	ENG	XLR 3-Pin, 2W Intercom input, Compatible with ClearCom and RTS
20	TC THRU OUT	BNC Timecode signal through output
21	TC IN	BNC, Timecode input SMPTE ST 12M
22	TC OUT	BNC, Timecode output SMPTE ST 12M
23	CAM GIG-E	RJ45, 1 Gbps for camera control[3]
24	LAN	RJ45, 1 Gbps network trunk
25	DC 15V IN	XLR 4-Pin, 15 V DC input
26	AC IN 85V - 240V	IEC 60320, 85 V to 240 V AC input
27	TALLY / 4W INTERCOM	DB-25, Tally signal input, 4W Intercom input
28	PROD	BNC, 2W Intercom input, compatible with Protech (FD-400A)
29	ENG	BNC, 2W Intercom input, compatible with Protech (FD-400A)

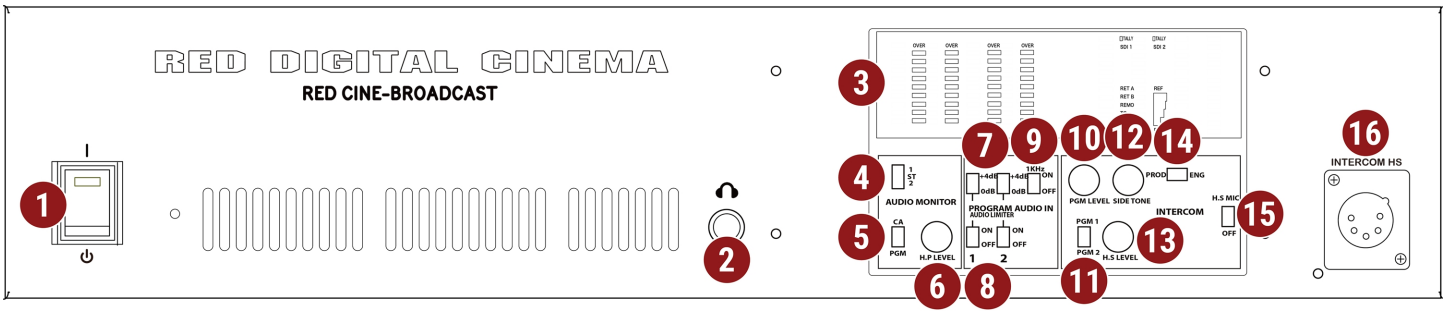
1. Switching between the live preview and the return signal on the RED® Cine-Broadcast 7.0” Viewfinder requires the return signal to be 1.5G
2. Requires a RED Connect license
3. GIG-E and USB cannot be used simultaneously

RED CINE-BROADCAST BASE STATION (FULL RACK)

This section describes the Front, and Back of the full rack space Base Station, and identifies the controls, buttons, and switches on the Base Station.

FRONT

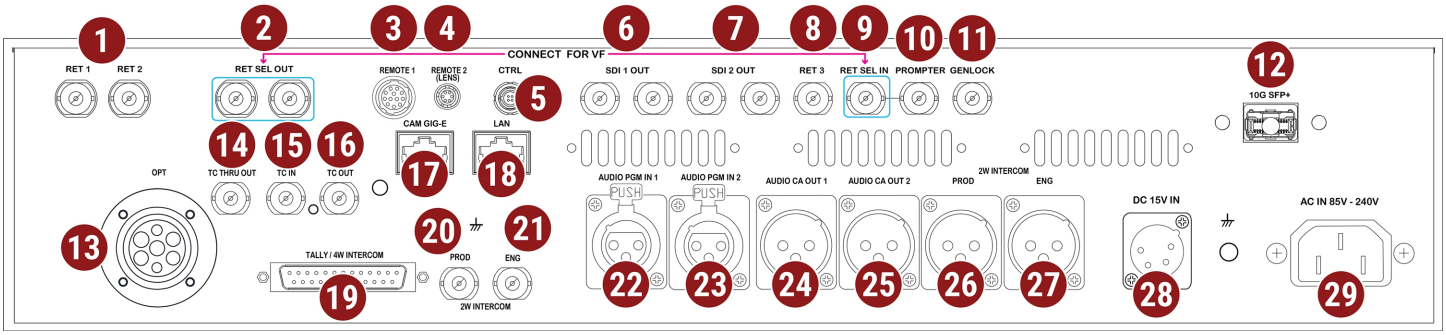
Figure: Base Station Front, Controls and Features



#	ITEM	DESCRIPTION
1	POWER	Standby
2	HEADPHONE	6.35 mm stereo headphone port
3	DISPLAY	Signal status display screen
4	AUDIO MONITOR	Switch for selecting channel 1, stereo, or channel 2
5	CA / PGM	Switch for monitoring camera audio (CA) or program audio (PGM)
6	HP Level	Headphone volume adjusting knob
7	PGM AUDIO IN	Program Audio In 0 dB or +4 dB boost switch for each channel
8	PGM Limiter	Program Audio In limiter switch for each channel
9	PGM Test Signal	Program Audio In 1 kHz test tone on / off switch
10	PGM Level	Intercom Program audio volume adjusting knob
11	PGM Source	Intercom Program audio PGM 1 / PGM 2 selection switch
12	SIDE TONE	Intercom side tone volume adjusting knob
13	HS LEVEL	Intercom headset volume adjusting knob
14	PROD / ENG	Intercom source switch to select Producer or Engineer
15	HS MIC	Intercom headset microphone on / off switch
16	INTERCOM HS	Intercom headset port, male XLR 5-Pin

BACK

Figure: Base Station, ports



#	ITEM	DESCRIPTION
1	RET 1 / 2	BNC x 2, SDI Return 1 and 2 input, 12G/6G/3G/1.5G-SDI[1] (Viewable on VF)
2	RET SEL OUT	BNC x 2, SDI Return select output
3	REMOTE 1	12-Pin, RS-232/RS-422 auto detect
4	REMOTE 2	6-Pin, Canon and Fujinon Lens and Iris Control
5	CTRL	LEMO 4-Pin x 1, Control protocol to camera
6	SDI OUT 1	BNC x 2, SDI output 1, 12G/6G/3G/1.5G-SDI
7	SDI OUT 2	BNC x 2, SDI output 2, 12G/6G/3G/1.5G-SDI
8	RET 3	BNC, SDI Return 3 input 12G/6G/3G/1.5G-SDI
9	RET SEL IN	BNC, SDI Return select input 1.5G-SDI viewfinder source
10	PROMPTER	BNC, teleprompter input 12G/6G/3G/1.5G-SDI
11	GENLOCK	BNC, Tri-level Genlock input
12	10G SFP+	SFP+ Cage (10Gbps) RED Connect input, Live 8K R3D or 4K JPEG-XS over SMPTE ST 2110[2]
13	OPT	LEMO, SMPTE 304M, camera connection
14	TC THRU OUT	BNC Timecode signal through output
15	TC IN	BNC, Timecode input SMPTE ST 12M
16	TC OUT	BNC, Timecode output SMPTE ST 12M
17	CAM GIG-E	RJ45, 1 Gbps for camera control[3]
18	LAN	RJ45, 1 Gbps network trunk
19	TALLY / 4W INTERCOM	DB-25, Tally signal input, 4W Intercom input
20	PROD	BNC, 2W Intercom input, compatible with Protech (FD-400A)
21	ENG	BNC, 2W Intercom input, compatible with Protech (FD-400A)
22	AUDIO PGM 1	XLR 3-Pin, Program audio input 1, analog 2 channels, balanced, +4dBm
23	AUDIO PGM 2	XLR 3-Pin, Program audio input 2, analog 2 channels, balanced, +4dBm
24	AUDIO CA OUT 1	XLR 3-Pin, Camera audio output 1, analog 2 channels, balanced, +4dBm
25	AUDIO CA OUT 2	XLR 3-Pin, Camera audio output 2, analog 2 channels, balanced, +4dBm
26	PROD	XLR 3-Pin, 2W Intercom input, Compatible with ClearCom and RTS
27	ENG	XLR 3-Pin, 2W Intercom input, Compatible with ClearCom and RTS
28	DC 15V IN	XLR 4-Pin, 15 V DC input
29	AC IN 85V - 240V	IEC 60320, 85 V to 240 V AC input

1. Switching between the live preview and the return signal on the RED® Cine-Broadcast 7.0” Viewfinder requires the return signal to be 1.5G
2. Requires a RED Connect license
3. GIG-E and USB cannot be used simultaneously

4. HOW-TO

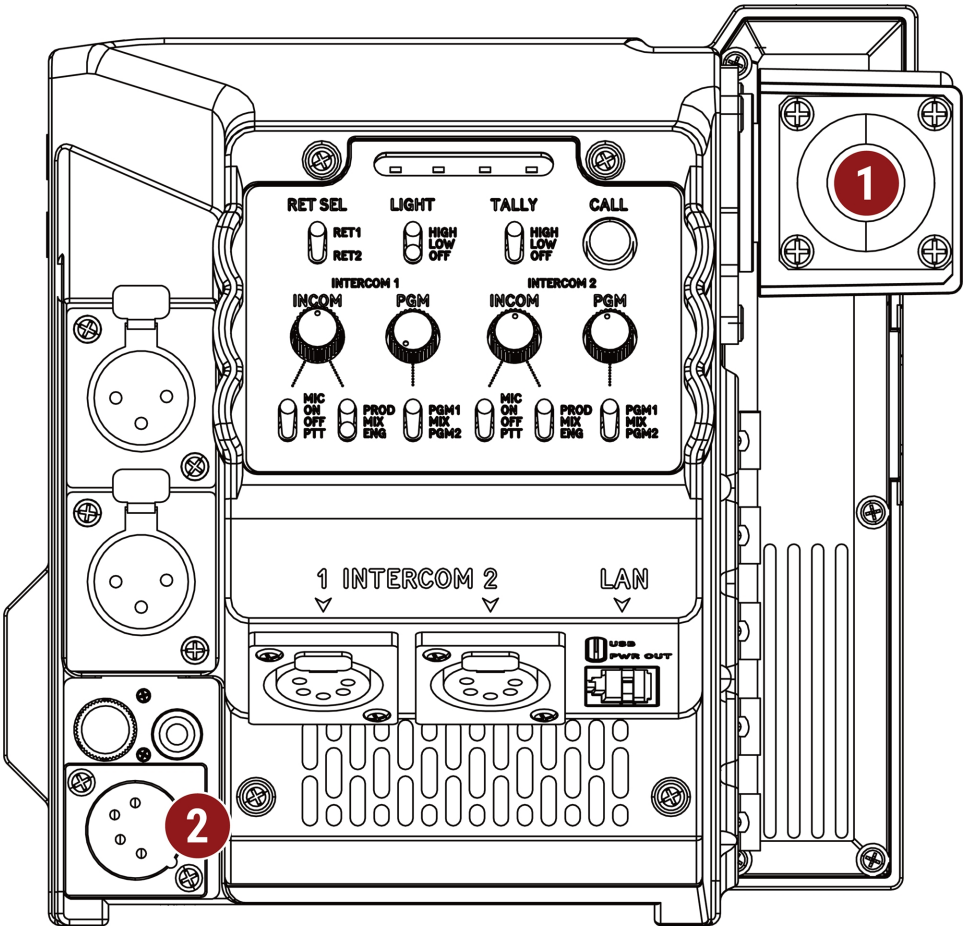
This section describes how you can properly use the RED Cine-Broadcast hardware.

POWERING THE MODULE

WARNING: Never connect power to the camera's DC-IN port when the module is attached. This will damage the 10G link in the module.

You must only power a Cine-Broadcast Module-equipped camera by using the module's OPT base station cable connection or the 4-Pin XLR DC-IN connection.

When the base station is powered by DC, you must use the module's 4-Pin XLR DC-IN connection.



#	ITEM	DESCRIPTION
1	OPT	LEMO, SMPTE 304M, Base Station connection
2	DC IN	4-Pin male XLR, 14 V DC

If you connect the RED Cine-Broadcast module to the camera with the RED Connect CFexpress bridge and the OPT base station cable is NOT connected, and the power is connected to the camera's DC-IN port, you will permanently damage the 10G link in the module.

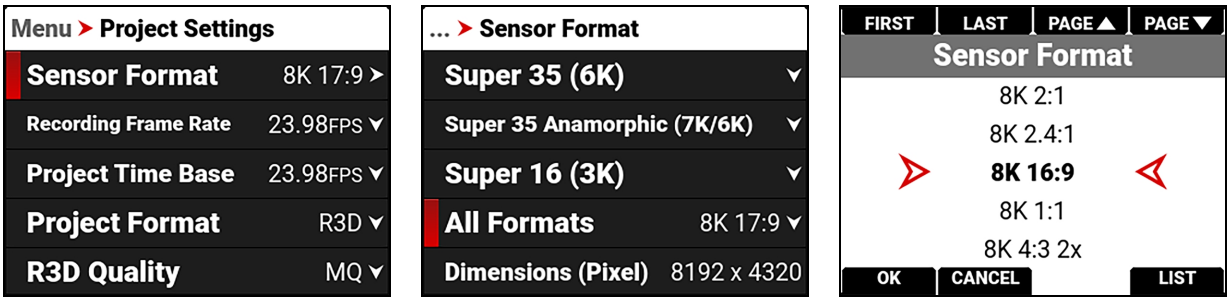
RED® CINE-BROADCAST 7" VIEWFINDER

The RED Cine-Broadcast 7" viewfinder allows the operator to see a 1.5G SDI feed from the camera and a return feed.

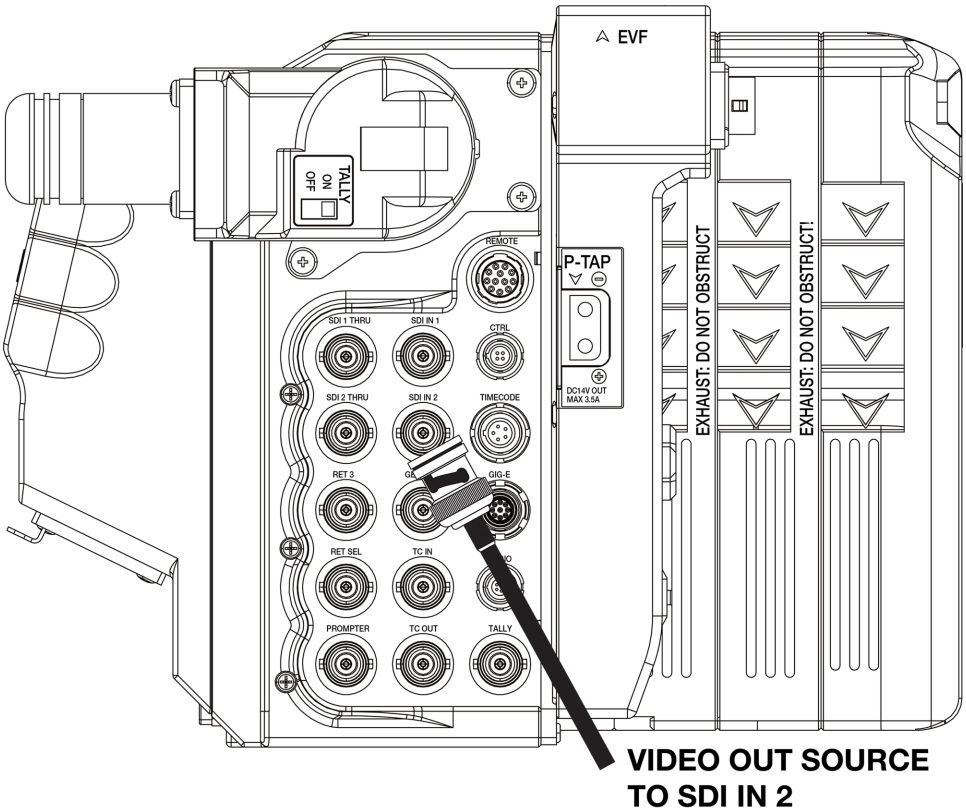
SETTING UP THE VIEWFINDER

When the viewfinder is connected by the proprietary viewfinder cable, the monitor can support up to 1.5G SDI video in a 16:9 aspect ratio. Make sure you perform the following:

1. Set the camera format to 16:9 (ex. 8K 16:9, 4K 16:9, 2K 16:9). Go to Menu -> Project Settings -> Sensor Format.

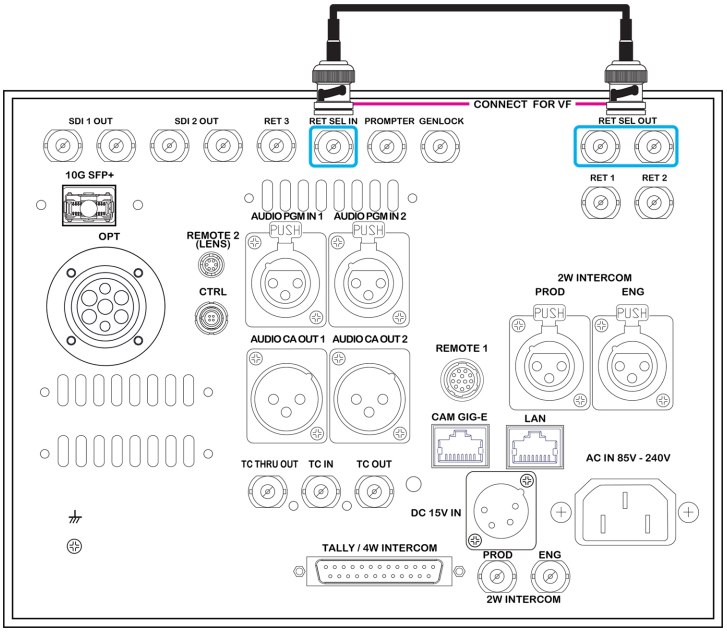


2. Connect the desired video output for the Viewfinder into SDI IN 2 on the Cine-Broadcast Module.

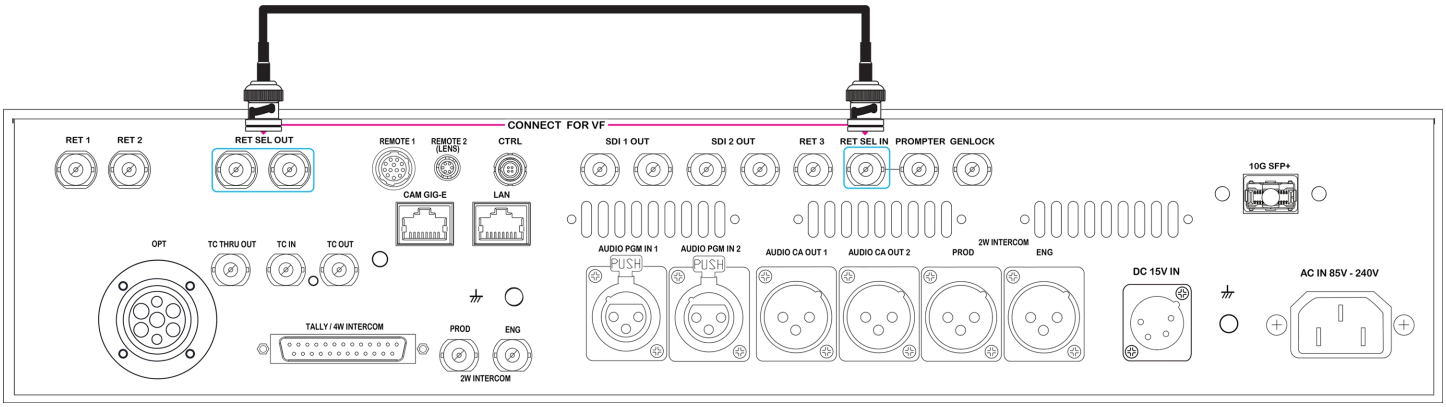


3. Connect RET SEL IN with one of the RET SEL OUTs by using the supplied BNC cable. This is required even when no return video is sent to the module.

Half Rack:



Full Rack:



4. When RET 1 and RET 2 are both used, ensure that both return videos have the same format (ex. 2x FHD).

RED® CINE-BROADCAST LENS AND IRIS CONTROL CABLES

This section describes how to setup lens and iris control with compatible lenses and a compatible RCP (Remote Control Panel).

Compatible RCP's with both example configurations:

BRAND	SKU
Cyanview	CY-RCP
Skarrhoj	RCP-PRO-V2B-BK

SETTING UP THE CABLES

CONFIGURATION EXAMPLE 1:

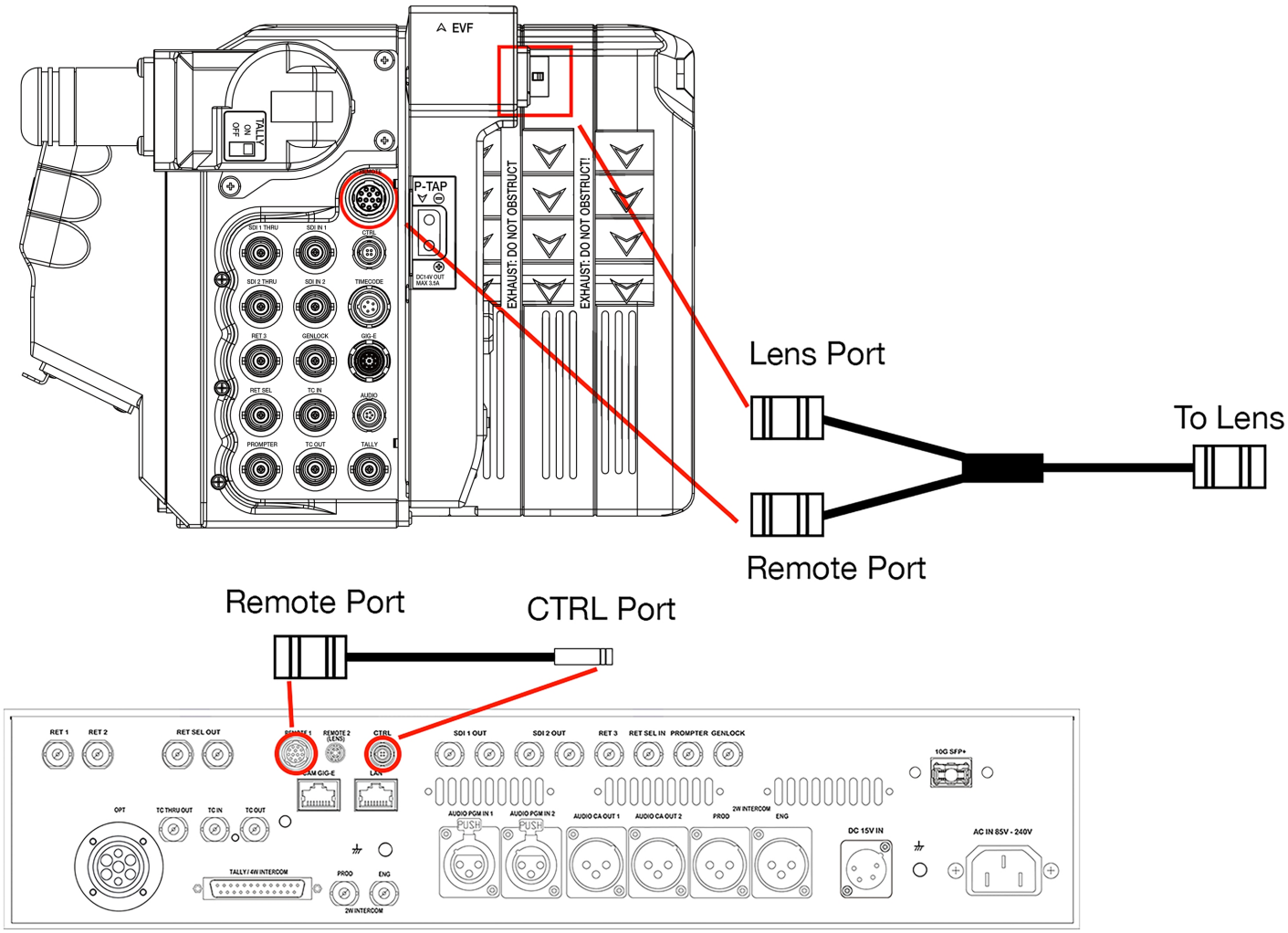
This configuration assumes that you are using the RED Cine-Broadcast Module and a compatible lens with a 12-pin Hirose connector.

This configuration enables iris control and the return command from focus or zoom demands attached to the lens. The return command from the demand triggers the Broadcast Module's Viewfinder to display the selected return feed.

REQUIRED ACCESSORIES

ITEM	DESCRIPTION
790-0804	RED® 12-Pin-to-Dual-12-Pin Lens Adapter Cable for RED® Cine-Broadcast Module
790-0806	RED® 12-Pin-to-4-Pin Lens Communication Loopback Cable for RED® Cine-Broadcast Base Station
790-0774	9.5" RED® 4-Pin-to-4-Pin CTRL (included in V-RAPTOR XL Cine-Broadcast Pack)
790-0778	11" RED® 9-Pin-to-5-Pin Timecode, BNC, Genlock, and 4-Pin CTRL (included in V-RAPTOR Cine-Broadcast Pack)

1. Make sure that you fully configure the camera system and rig it while the RED Cine-Broadcast Module and lens are attached.
2. For V-RAPTOR XL, connect the 4-Pin-to-4-Pin CTRL cable between the CTRL port on the RED Cine-Broadcast Module and the CTRL port on the V-RAPTOR XL. For V-RAPTOR, connect the 9-Pin-to-5-Pin Timecode, BNC, Genlock, and 4-Pin CTRL cable to the EXT port on the camera and the CTRL port on the RED Cine-Broadcast Module.
3. Using the 12-Pin-to-Dual-12-Pin Lens adapter cable, connect the singled ended 12-Pin Hirose connector to the 12-Pin port on the lens.
4. Connect the Dual 12-Pin connectors to the Lens and Remote ports on the RED Cine-Broadcast Module.
5. Connect the RED® 12-Pin-to-4-Pin Lens Communication Loopback Cable's 12-Pin Hirose connector to the port marked Remote 1 on the RED Cine-Broadcast Base Station.
6. Connect the 4-Pin CTRL Lemo connector to the CTRL port on the RED Cine-Broadcast Base Station.



CONFIGURATION EXAMPLE 2:

This configuration assumes you want to control a compatible lens with a 12-Pin Hirose connector over IP with no RED Cine-Broadcast Module.

NOTE: This configuration will not trigger the return command from a lens demand if a RED Cine-Broadcast Module is attached.

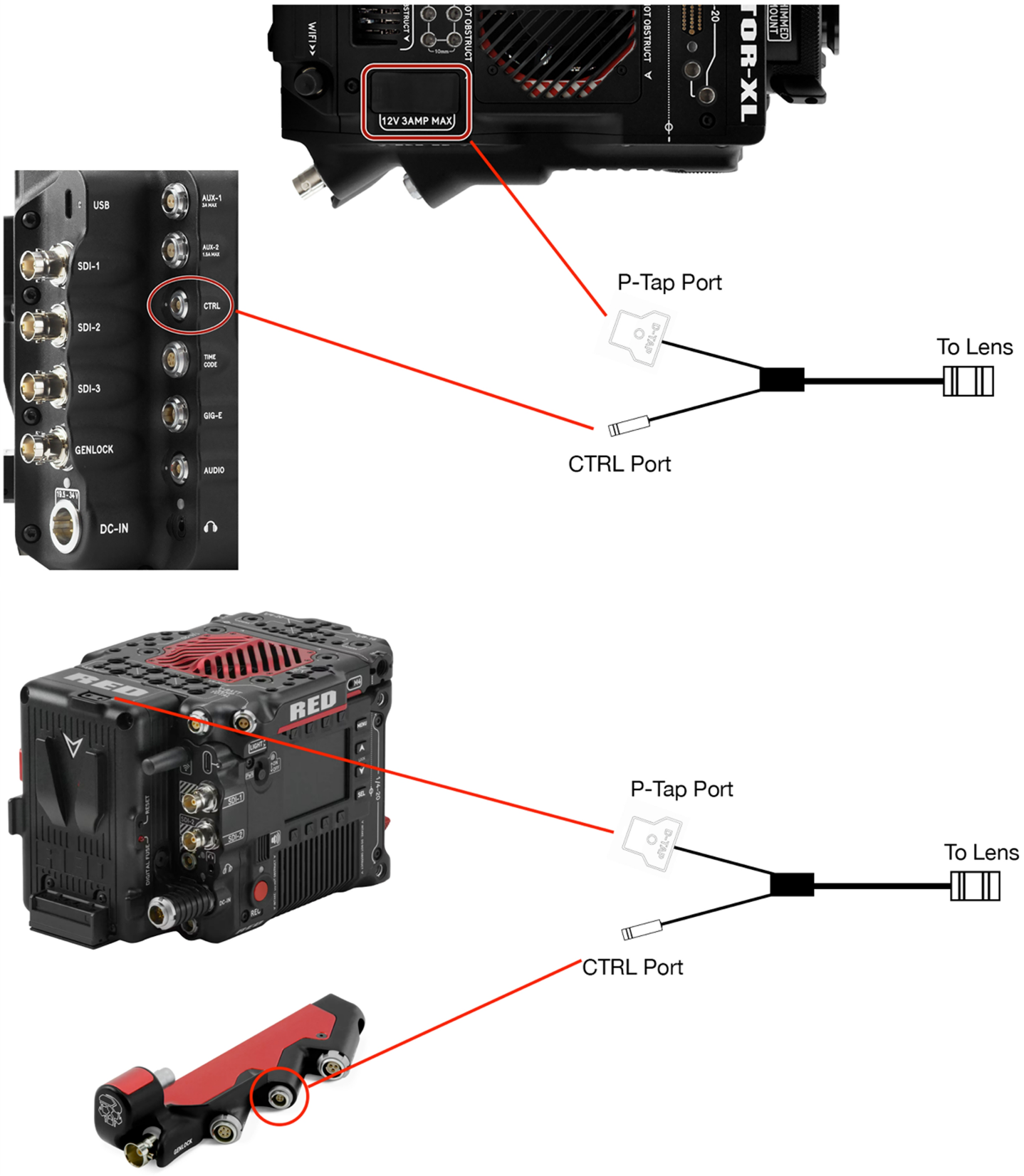
REQUIRED ACCESSORIES

ITEM	DESCRIPTION
790-0814	RED® 12-Pin-to-4-Pin and PTap Broadcast Lens Control Cable
Third-Party	USB-C to Ethernet Adapter
790-0655	9' RED GIG-E Right-to-CAT5E Ethernet Cable*
720-0060	V-RAPTOR Expander Blade (not required for XL, XL has a dedicated CTRL port)**
790-0759	V-RAPTOR Tactical Top Plate w/ Battery Adapter Plus

* Optional for use with an XL configuration, where USB-C is not being used.

** V-RAPTOR Expander Blade not compatible with RED Cine-Broadcast Shoulder Mount.

1. Make sure you fully configure the camera system, rig it with a USB-C to Ethernet Adapter or GIG-E to CAT5E cable and attach a lens.
2. Connect the 12-Pin Hirose connector into the 12-Pin port on the lens.
3. Using the RED® 12-Pin-to-4-Pin and PTap Broadcast Lens Control Cable, connect the CTRL connector to the CTRL port on the V-RAPTOR XL, the V-RAPTOR Expander Blade, or a V-RAPTOR third-party 9-Pin breakout adapter. Connect the and D-TAP connector to the D-TAP port on the top of the V-RAPTOR XL or the V-RAPTOR Tactical Top Plate w/ Battery Adapter Plus.
4. Connect an Ethernet cable to the USB-C to Ethernet adapter (V-RAPTOR) or a GIG-E to CAT5E cable (XL) to a network switch or directly to an RCP.

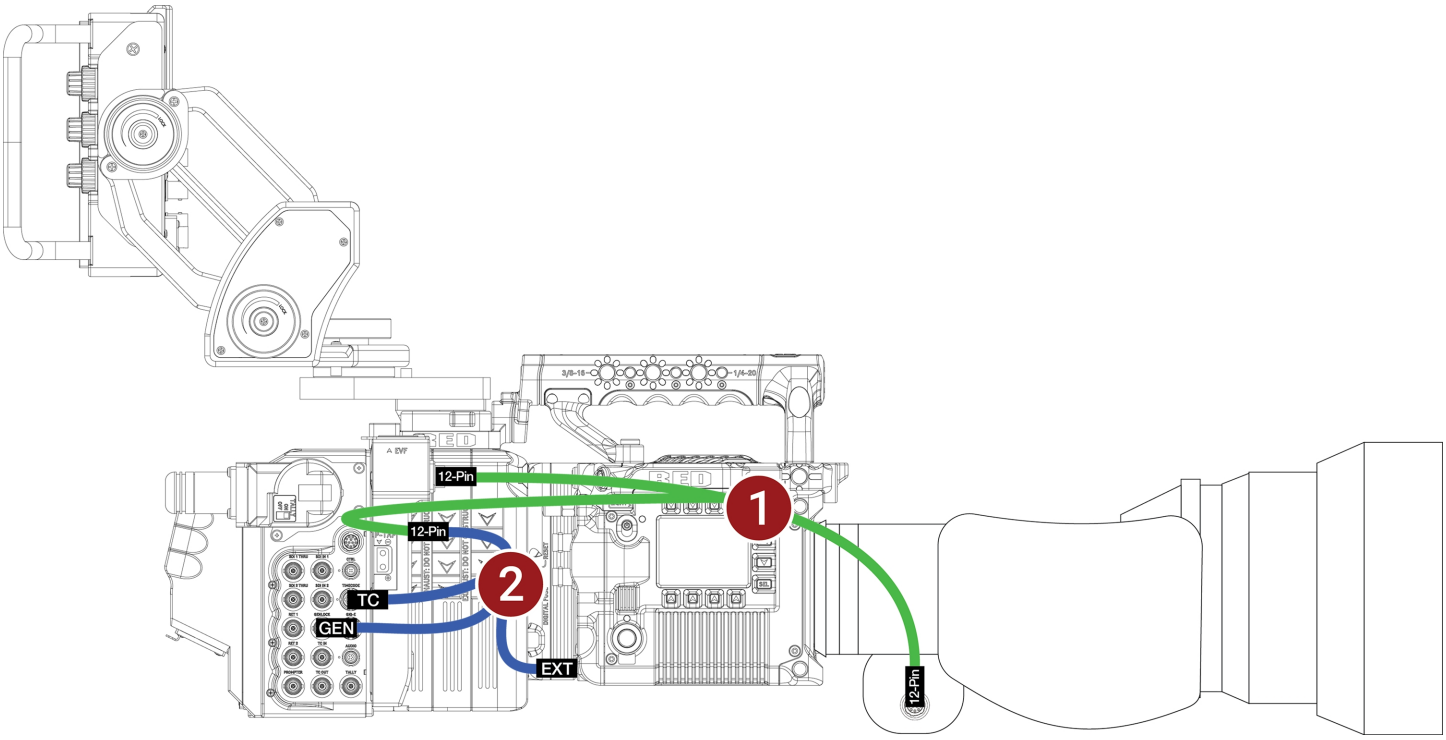


CONFIGURATION EXAMPLE 3:

This configuration assumes that you are using the RED Cine-Broadcast Module and a compatible lens with a 12-pin Hirose connector.

This section contains the diagrams for connecting the iris control cable to the broadcast module, camera, and lens for V-RAPTOR and V-RAPTOR XL.

V-RAPTOR



V-RAPTOR CONFIGURATION EXAMPLE

This configuration assumes that you are using the RED Cine-Broadcast Module and a compatible lens with a 12-pin Hirose connector.

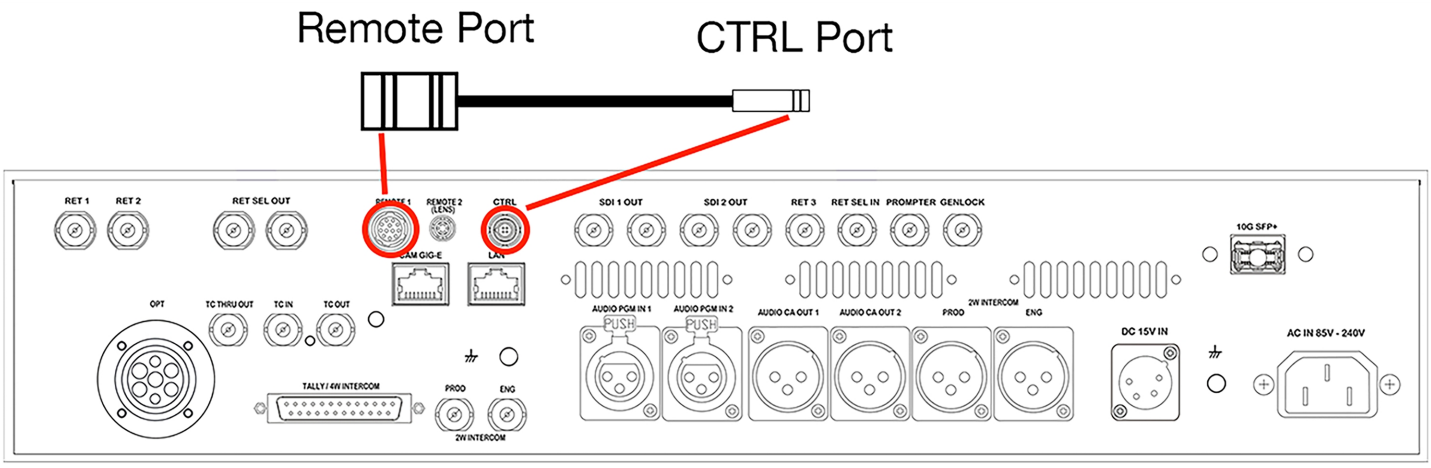
This configuration enables iris control of the broadcast lens on V-RAPTOR.

REQUIRED ACCESSORIES

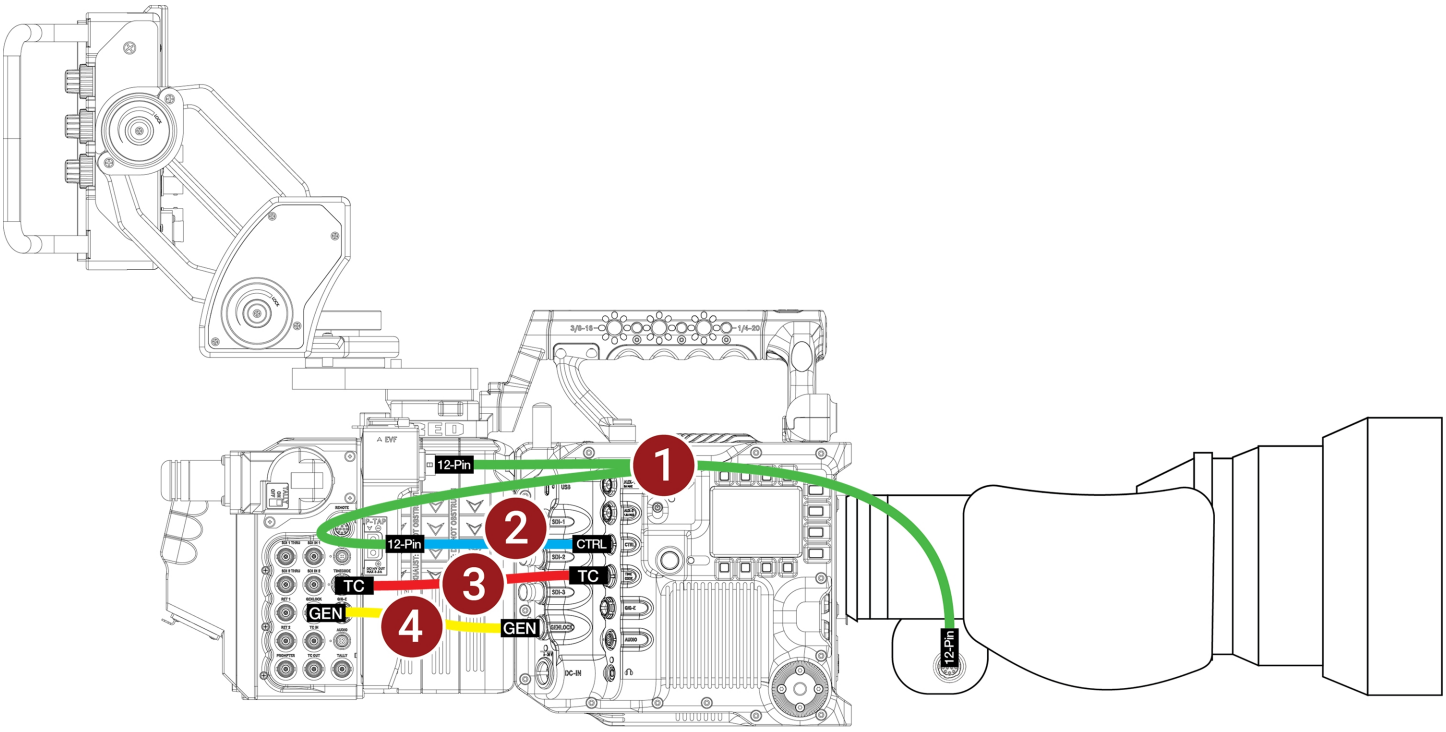
#	ITEM	DESCRIPTION
1	790-0804	RED 12-Pin to dual 12-Pin lens adapter cable for RED Cine-Broadcast module ("lens y-cable")
2	790-0821	RED 9-Pin to 5-Pin Timecode, BNC, Genlock, and 12-Pin lens communication for V-RAPTOR ("3-way cable")

1. Make sure that you fully configure the camera system and rig it while the RED Cine-Broadcast Module and lens are attached.
2. Connect the RED 9-Pin to 5-Pin Timecode, BNC, Genlock, and 12-Pin lens communication for V-RAPTOR ("3-way cable") to the EXT port on the camera and to the RED 12-Pin to dual 12-Pin lens adapter cable for RED Cine-Broadcast module ("lens y-cable").
3. Using the RED 12-Pin to dual 12-Pin lens adapter cable for RED Cine-Broadcast module ("lens y-cable"), connect the two remaining 12-Pin Hirose connectors to the lens port on the RED Cine-Broadcast Module, and attach the other 12-Pin connector to the port on the broadcast lens.

NOTE: Remove the Remote Port to CTRL Port cable from the back of the RED Cine-Broadcast Base Station.



V-RAPTOR XL



V-RAPTOR XL CONFIGURATION EXAMPLE

This configuration assumes that you are using the RED Cine-Broadcast Module and a compatible lens with a 12-pin Hirose connector.

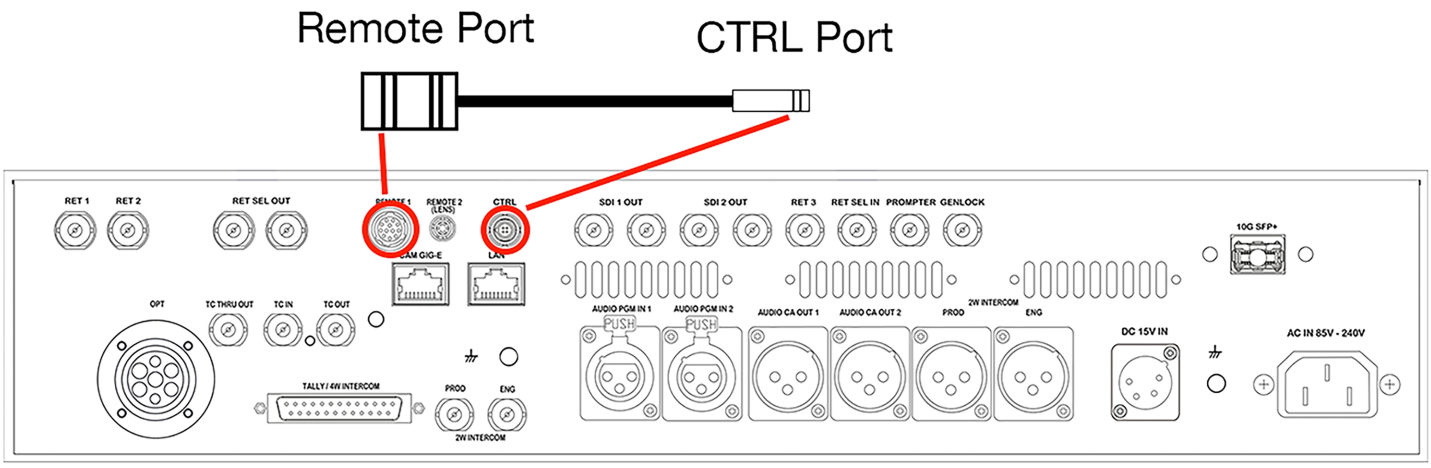
This configuration enables iris control of the broadcast lens on V-RAPTOR.

REQUIRED ACCESSORIES

#	ITEM	DESCRIPTION
1	790-0804	RED 12-Pin to dual 12-Pin lens adapter cable for RED Cine-Broadcast module ("lens y-cable")
2	790-0820	12-Pin to 4-Pin 00B CTRL (RCP2 communication)
3	790-0776	Timecode 5-Pin 0B to 5-Pin 0B
4	790-0785	Genlock BNC to BNC

1. Make sure that you fully configure the camera system and rig it while the RED Cine-Broadcast Module and lens are attached.
2. Connect the Genlock BNC cable to the RED Cine-Broadcast Module Genlock port and to the V-RAPTOR XL Genlock port.
3. Connect the Timecode 5-Pin cable to the RED Cine-Broadcast Module Timecode port and to the V-RAPTOR XL Timecode port.
4. Connect the 12-Pin to 4-Pin 00B CTRL (RCP2 communication) cable to the V-RAPTOR XL 4-Pin CTRL port.
5. Using the RED 12-Pin to dual 12-Pin lens adapter cable for RED Cine-Broadcast module ("lens y-cable"), connect the 12-Pin Hirose connectors to the lens port on the RED Cine-Broadcast Module, to the 12-Pin lens port on the broadcast lens, and to the 12-Pin end of the 12-Pin to 4-Pin 00B CTRL (RCP2 communication) cable.

NOTE: Remove the Remote Port to CTRL Port cable from the back of the RED Cine-Broadcast Base Station.



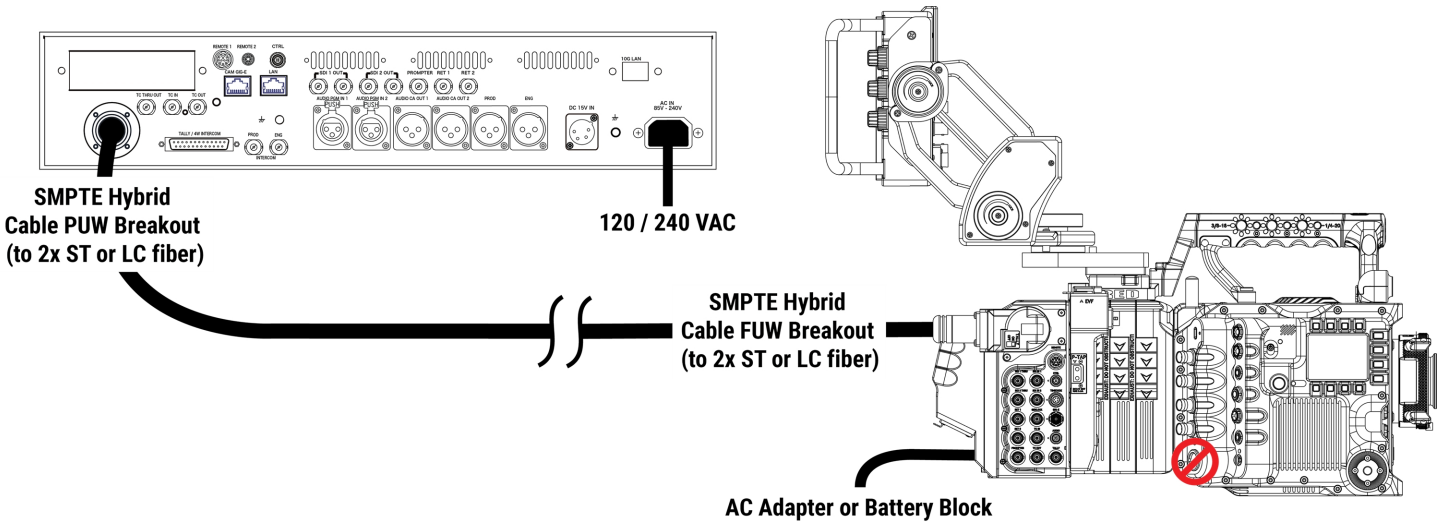
LONG-RANGE TRANSMISSION

Broadcast setups can vary significantly depending on rigging configurations and cable manufacturers. These variables influence signal integrity, transmission length, and overall reliability.

For typical transmission, SMPTE 311M/304M hybrid fiber cables are recommended. These cables are engineered for high-bandwidth, low-latency video and audio signals, making them ideal for both studio and field environments.

For extremely long runs, we recommend using breakout cables (see diagram below) for signal transmission, and applying power to the Base Station and Module locally and independently.

Long-Range Signal Extension Solution



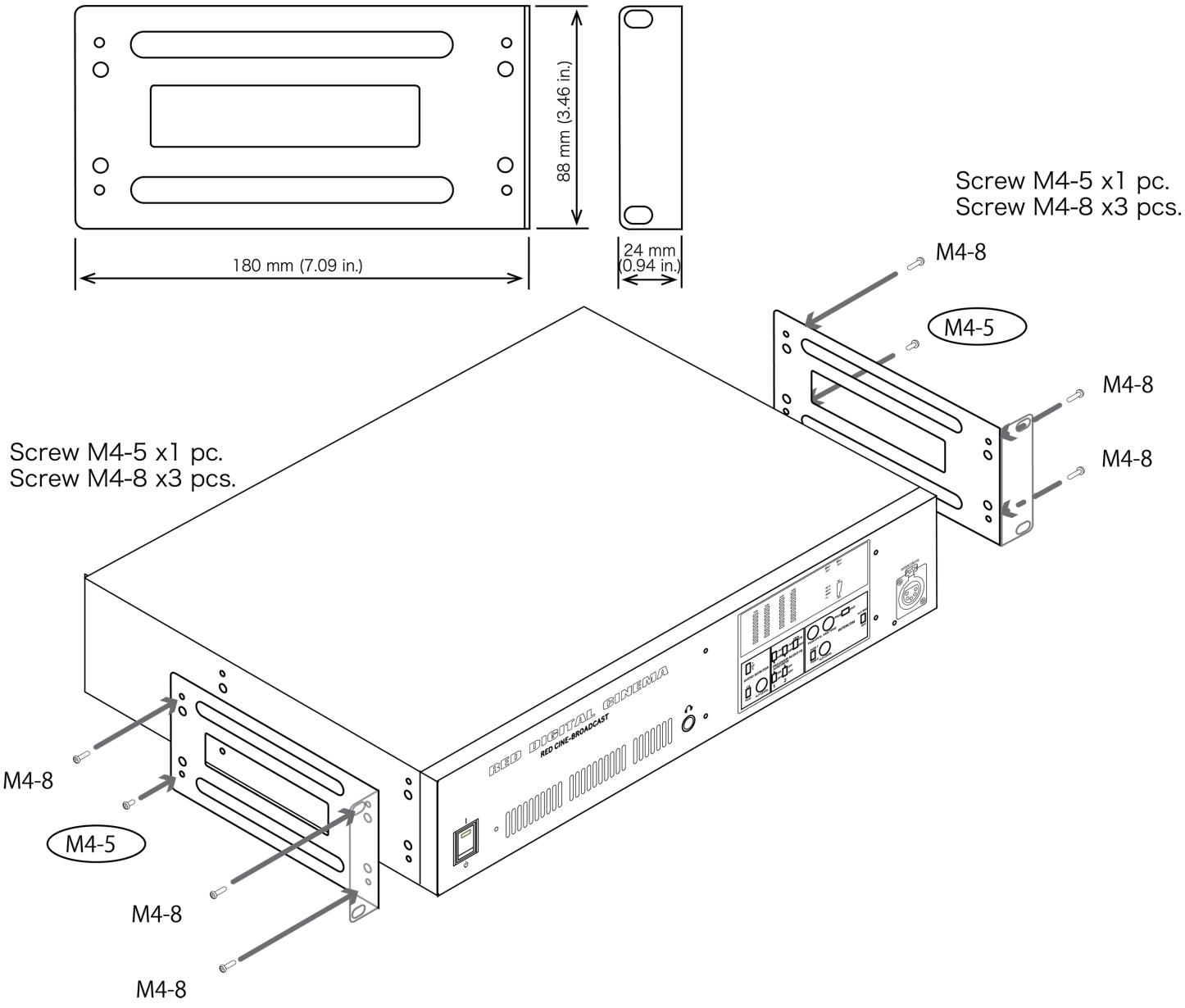
BASE STATION (FULL) MOUNTS

The RED Cine-Broadcast Base Station (Full) includes rack mounting brackets.

ATTACHING THE MOUNTING BRACKETS

Use the included rack mounting brackets when you are installing the RED Cine-Broadcast Base Station Full in a rack.

Use three M4-8 screws and one M4-5 short screw to attach each of the two brackets to the base station as shown in the diagram:



A. MECHANICAL DRAWINGS

NOTE: Dimensions are shown in millimeters.

RED CINE-BROADCAST MODULE

FRONT VIEW

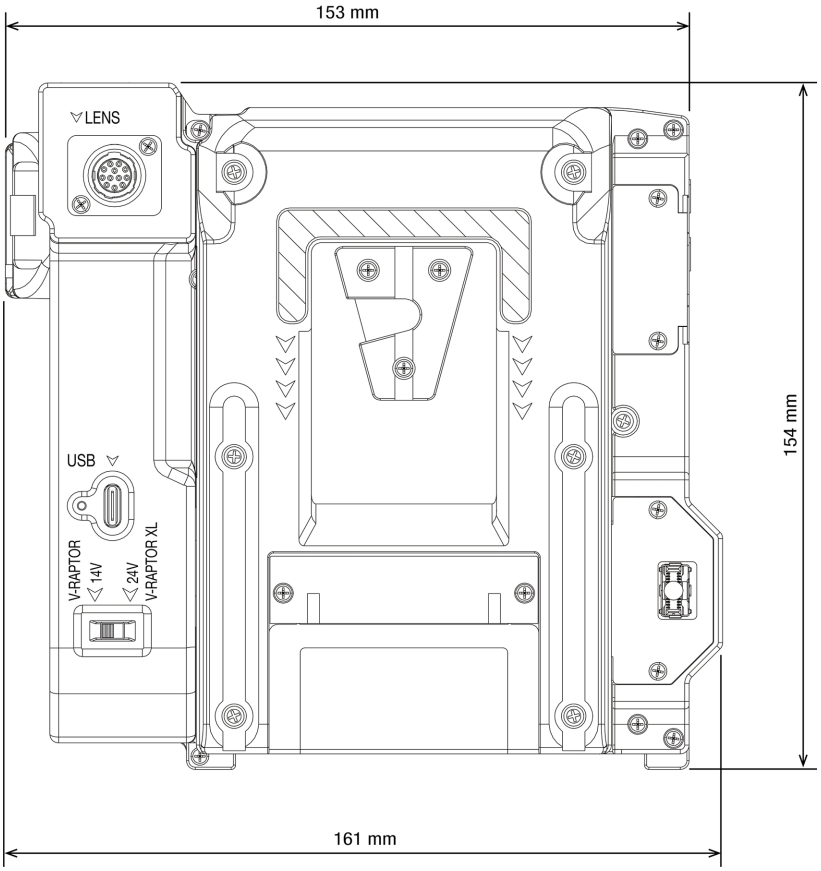


Figure: Module Front View

BACK VIEW

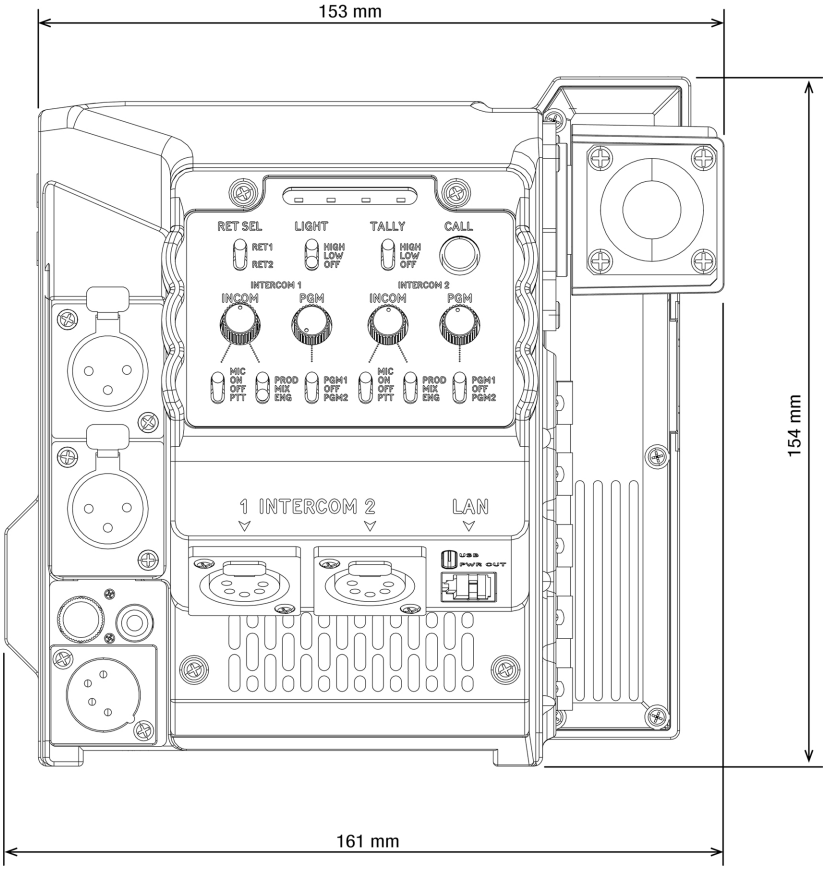


Figure: Module Rear View

RIGHT SIDE VIEW

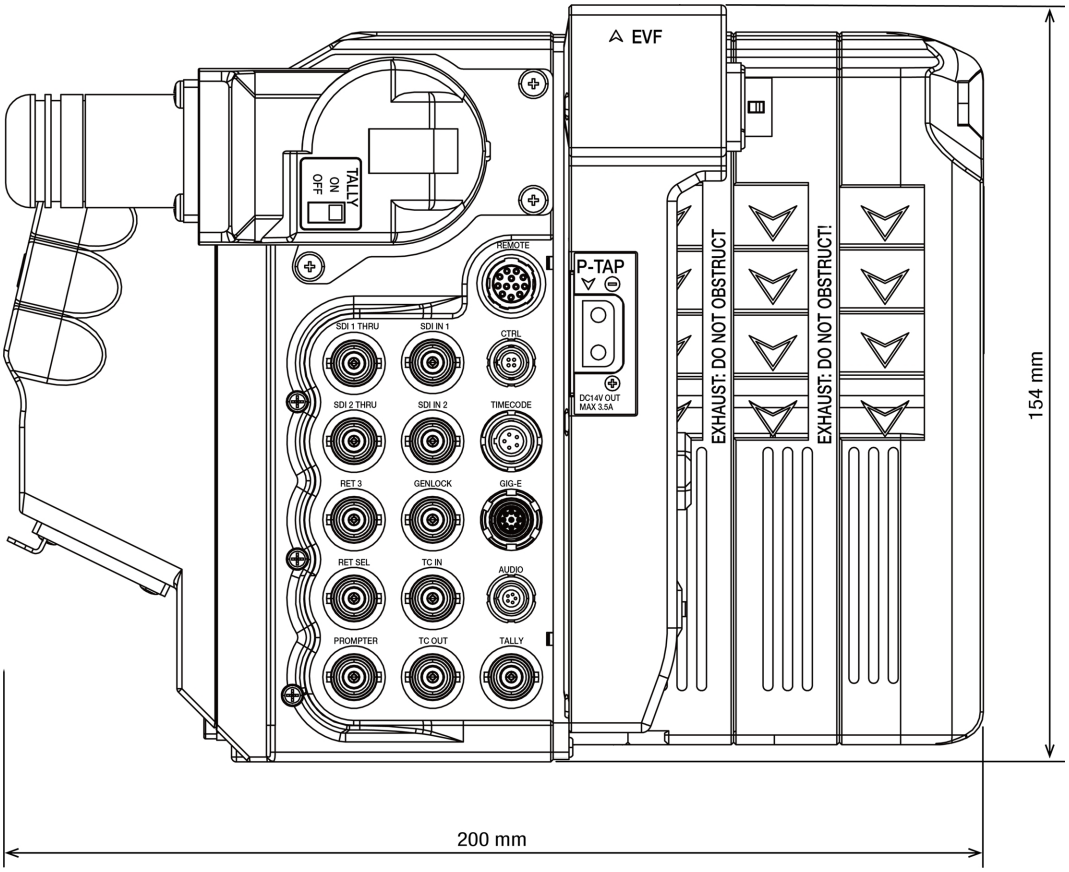


Figure: Module Side View (Right)

LEFT SIDE VIEW

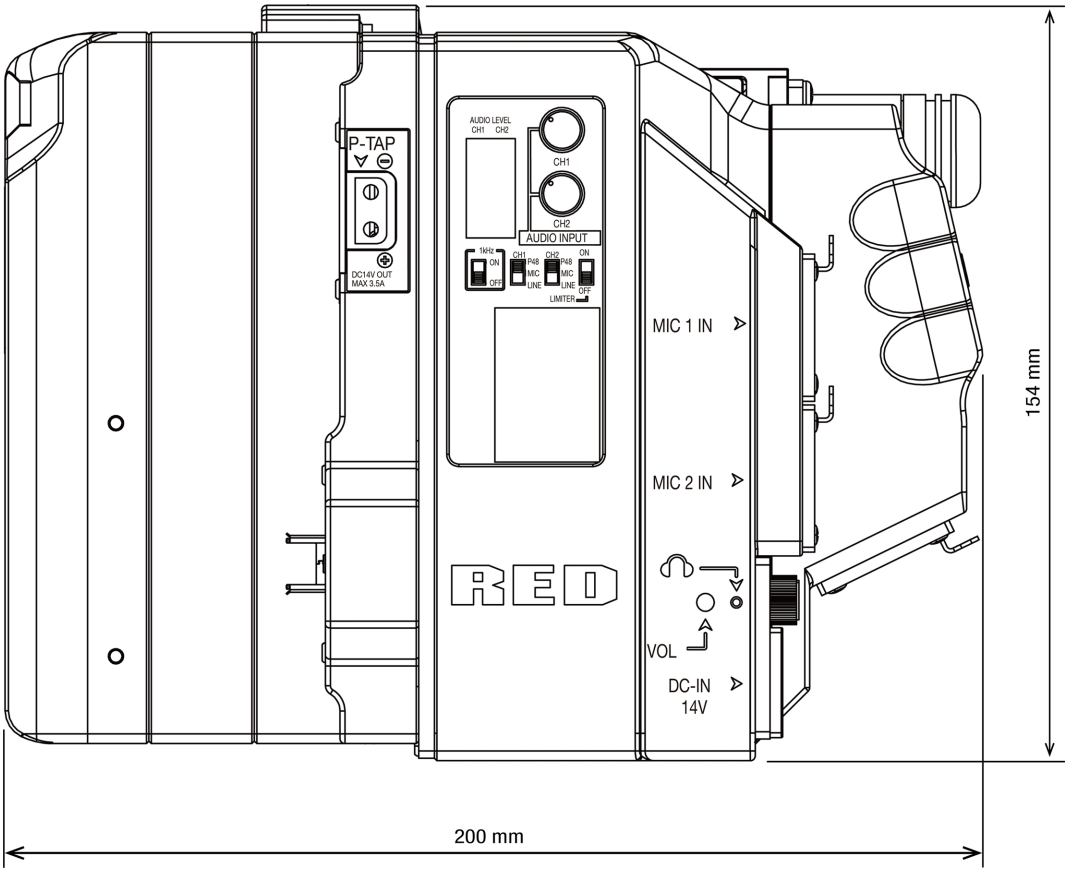


Figure: Module Side View (Left)

TOP VIEW

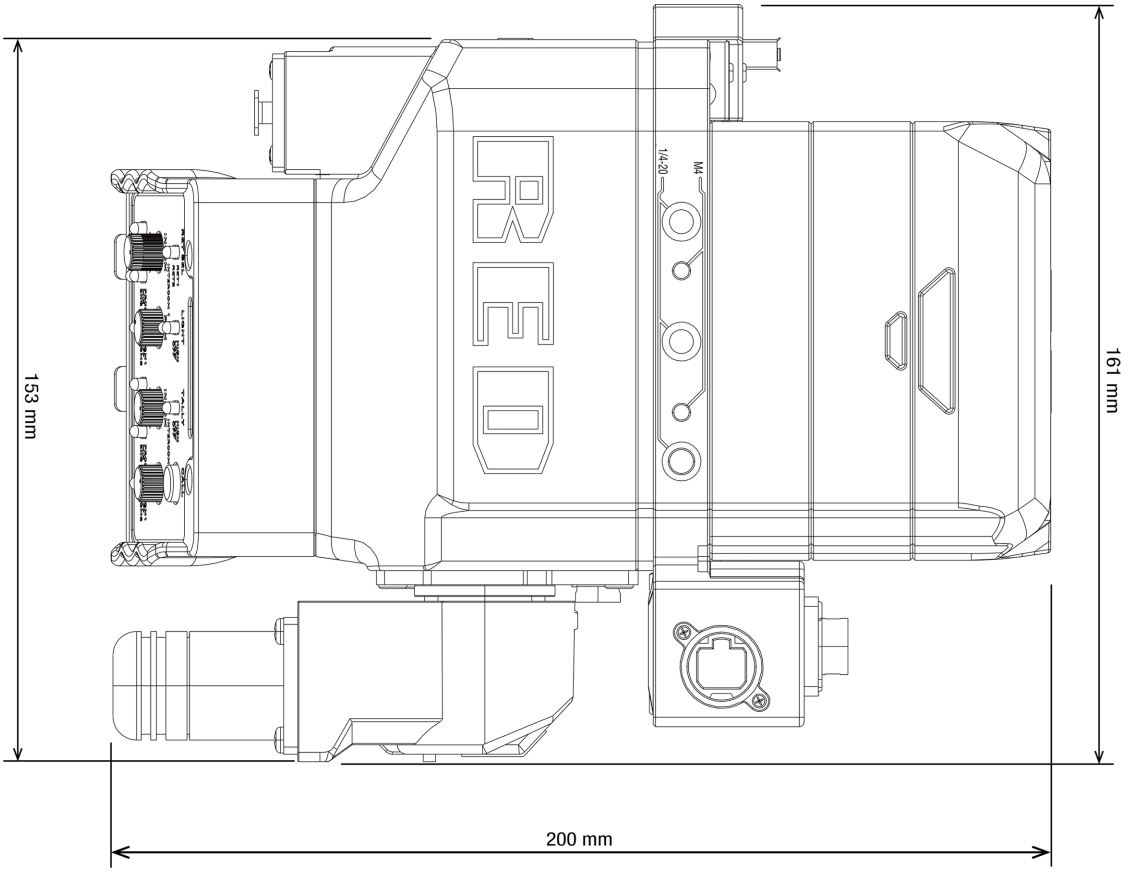


Figure: Module Top View

BOTTOM VIEW

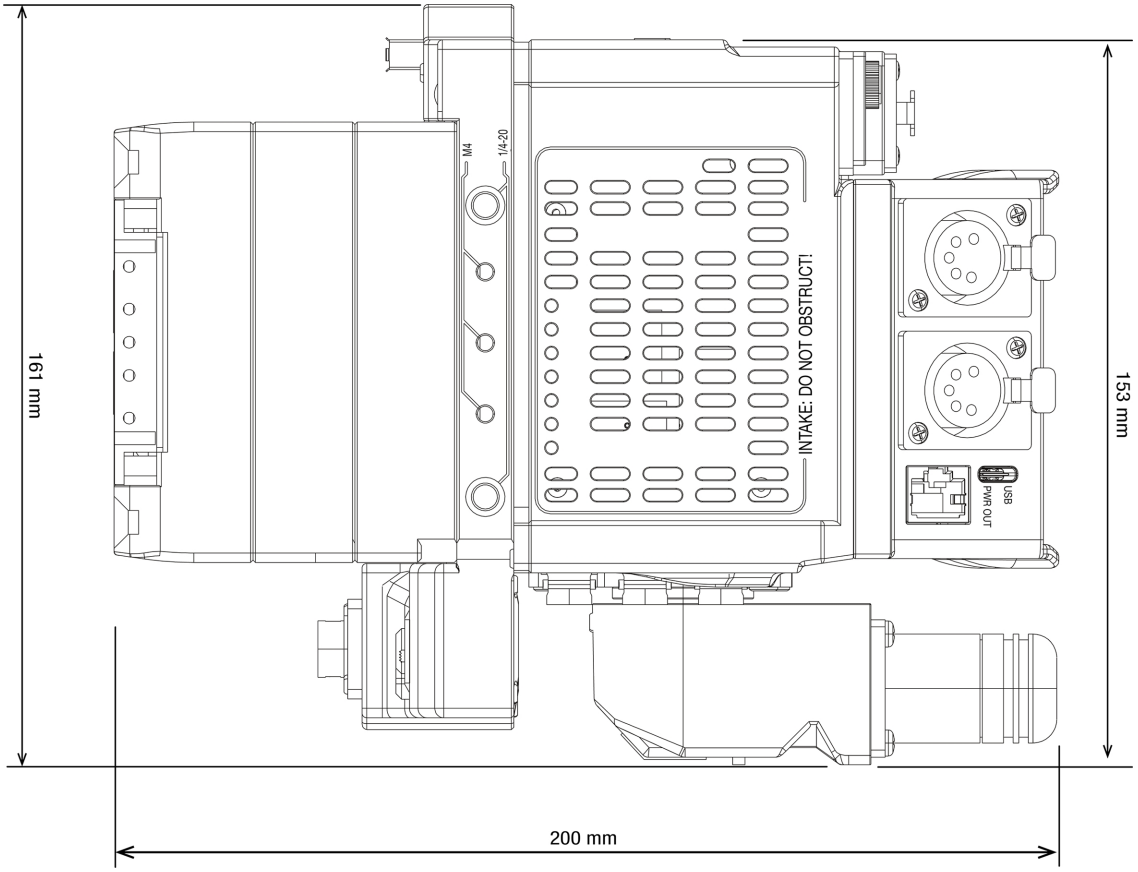


Figure: Module Bottom View

RED CINE-BROADCAST VIEWFINDER

FRONT VIEW

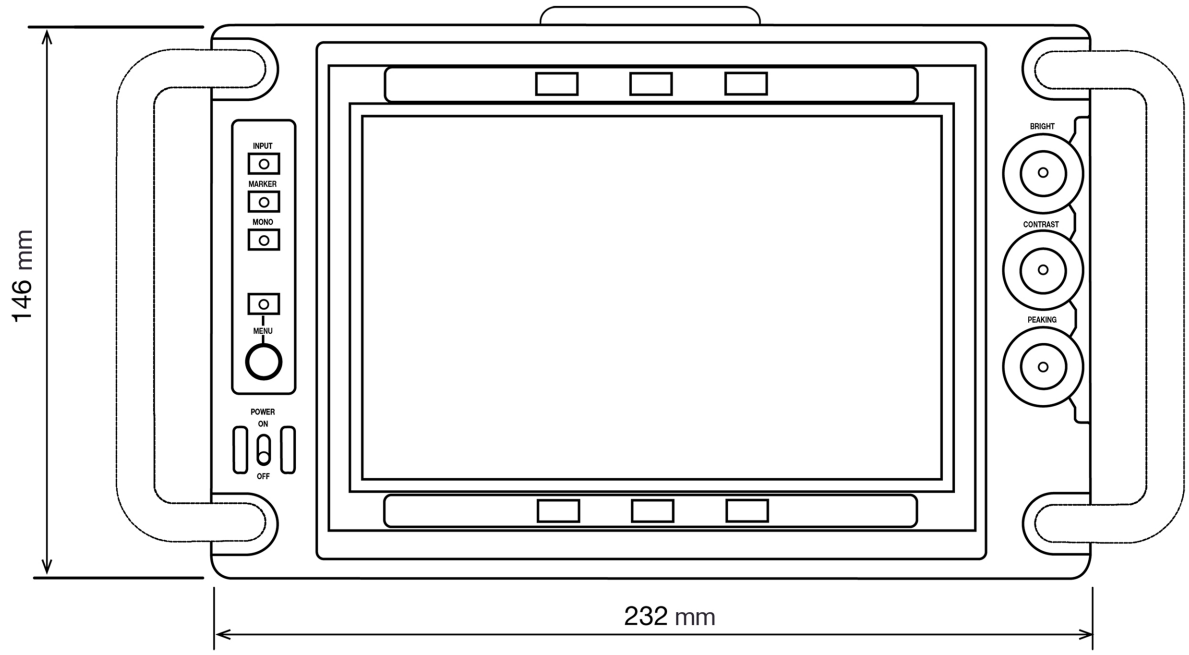


Figure: Viewfinder Front View

RED CINE-BROADCAST BASE STATION (HALF RACK)

FRONT VIEW

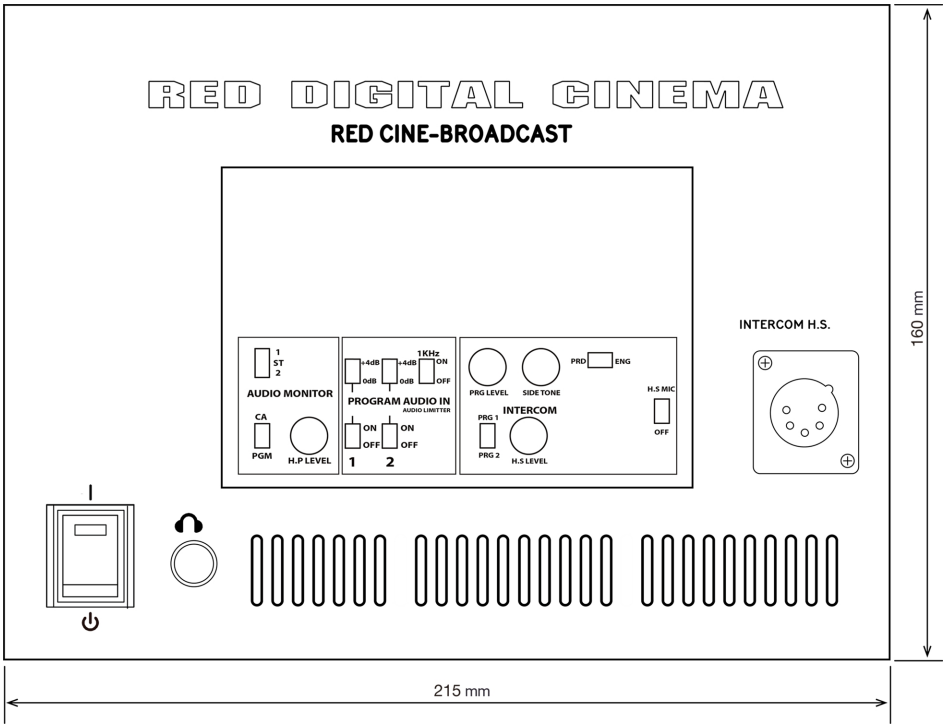


Figure: Base Station (Half Rack) Front View

RED CINE-BROADCAST BASE STATION (FULL RACK)

FRONT VIEW

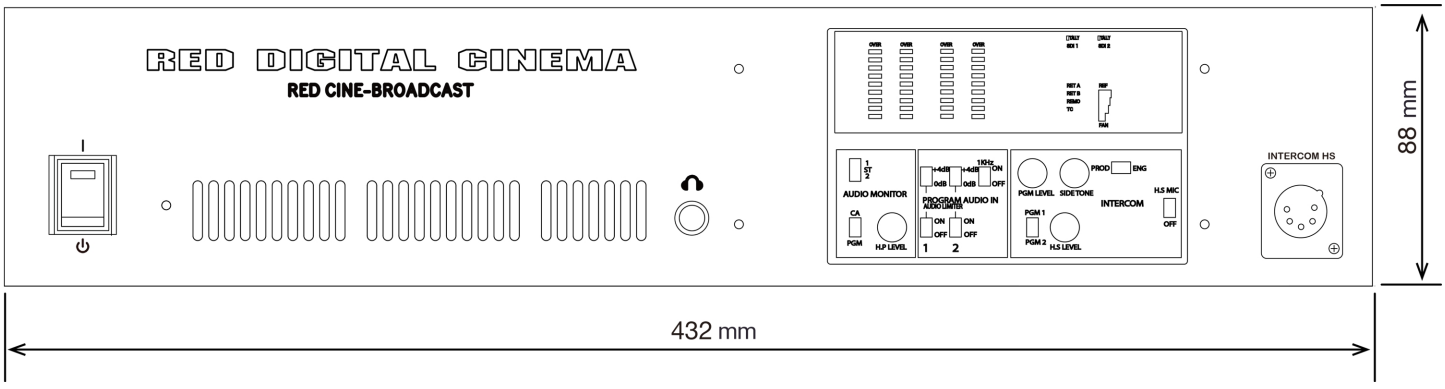


Figure: Base Station (Full Rack) Front View

B. TECHNICAL SPECIFICATIONS

Technical specifications reflect both current and projected information. Everything is subject to change.

RED CINE-BROADCAST MODULE

INPUT / OUTPUT

ITEM	TYPE	DETAILS
SDI 1 / 2	BNC x 2	SDI input: 12G, 6G, 3G, and 1.5G SDI
SDI 1 / 2 THRU	BNC x 2	SDI passthrough output: 12G, 6G, 3G, and 1.5G SDI
RET SEL	BNC	SDI return 1 or 2 output: 12G, 6G, 3G, and 1.5G SDI[1] (viewfinder)
RET 3	BNC	SDI return output: 12G, 6G, 3G, and 1.5G SDI
PROMPTER	BNC	Teleprompter output: 12G, 6G, 3G, and 1.5G SDI
GENLOCK	BNC	Genlock output: Tri-level
TC IN	BNC	Timecode input: SMPTE ST 12M
TC OUT	BNC	Timecode output: SMPTE ST 12M
TIMECODE	5-Pin LEMO	Timecode into camera

1. Switching between the live preview and the return signal on the RED® Cine-Broadcast 7.0" Viewfinder requires the return signal to be 1.5G.

NOTE: It is recommended to terminate the RET SEL of the CINE-BROADCAST Module with a 75 ohm BNC terminator when the port is not in use to preserve optimal signal integrity.

POWER

ITEM	TYPE	DETAILS
OPT	SMPTE	DC Power Input: Provided by the OPT cable from the Base Station. **Note**: When the Base Station is driven by DC power, the DC power is not supplied from the BS.
DC IN 14V	Male XLR 4-Pin	DC Power Input
12V / 24V	Switch	DC Output to the camera: Switch for V-RAPTOR (14V) or V-RAPTOR XL (24V) Output
P-TAP	P-TAP x 2	P-TAP power out, maximum 14 V / 3.5 A each
USB	USB-C	USB-C, 1 Gbps camera control, 1.5 A power

AUDIO

ITEM	TYPE	DETAILS
MIC IN 1 / 2	XLR 3-Pin x 2	Audio input: compatible with ClearCom, RTS, and Protech
AUDIO	5-Pin LEMO	Audio input to camera Ch 3 and Ch 4

INTERCOM

ITEM	TYPE	DETAILS
INTERCOM 1 / 2	5-Pin XLR x 2	Intercom headset, audio input compatible with ClearCom, RTS, and Protech

TALLY

ITEM	TYPE	DETAILS
TALLY	BNC	Green TALLY 1.0V - 3.0V / Red TALLY 3.1V - 4.5V
Tally (rear control panel)	Switch	Set the Tally brightness to High, Low, or Off

REMOTE

ITEM	TYPE	DETAILS
LENS	12-Pin	Canon and Fujinon lens compatible
REMOTE	12-Pin	RS-232/RS-422 auto detect, lens data
CTRL	4-Pin LEMO	CTRL protocol into camera
GIG-E	9-Pin LEMO	1 Gbps for camera control (for V-RAPTOR XL only)
USB	USB-C	USB-C, 1 Gbps camera control, 1.5 A power
LAN	RJ45	1 Gbps network trunk

RED CONNECT

ITEM	TYPE	DETAILS
RED CONNECT Flyover Cable	Proprietary Connector (10 Gbps)	Connects RED Cine-Broadcast module to the camera's media port. Live 8K R3D or 4K JPEG-XS output through SMPTE ST 2110[1]

1. Requires a RED Connect license

FIBER OPTICS

ITEM	TYPE	DETAILS
FIBER	LEMO	SMPTE 304M, Connects the Broasdcast Module to the Base Station Fiber type: Single-mode optical fiber (ITU-T G.652.D, 9/125 µm) Numerical aperture (NA): ≈ 0.12 (nominal) Beam Divergence Angle (from NA): Half-angle (θ): arcsin (NA) ≈ 7°, Full-angle (2θ): ≈ 14°
Transmission	Laser Diodes	Wavelengths: 1270, 1290, 1310, 1330, 1350, 1370, 1390, 1410, 1470, 1490, 1530, 1550 nm Maximum output power: 5 dBm Beam divergence (half-angle): 7°

GENERAL

ITEM	DETAILS
Operating temperature	32°F to 104°F (0°C to 40°C)
Storage temperature	-4°F to 122°F (-20°C to 50°C)
Operating humidity	0% to 85% Non-condensing
Laser Safety	Class 1 Laser
Compliance	USB-C, 1 Gbps camera control, 1.5 A power
Weight	6.35 lb (2.88 kg)
Dimensions	W: 6.02" (153 mm) x H: 6.06" (154 mm) x D: 7.83" (199 mm)

RED CINE-BROADCAST 7" VIEWFINDER

LCD PANEL

ITEM	DETAILS
Panel type	Thin Film Transister LCD
Panel size	Seven inches diagonal
Display area	5.94 inches (151 mm) horizontal by 3.35 inches (85 mm) vertical
Aspect ratio	16:9
Picture resolution	1920 pixels horizontal by 1080 pixels vertical
Viewing angle	170° horizontal by 170° vertical
Color reproduction	16.7 million colors

INPUT / OUTPUT

ITEM	DETAILS
SDI IN	BNC SDI input
SDI OUT	BNC SDI output
RET IN	BNC SDI return input
TALLY 1	BNC Green (2.1 V- 4 V) / Red (4.1 V- 5 V) / OFF (0 V- 2 V)
TALLY 2	BNC Red - ON (short to ground) / OFF (open)

INDICATORS

ITEM	DETAILS
Front Tally	Two Tally indicators (Green or Red). You can adjust the brightness from the viewfinder menu
Top Tally	Red - you can adjust the brightness from the viewfinder menu

POWER

ITEM	TYPE	DETAILS
DC IN 12 V	Male XLR 4-Pin	DC Power Input 12 V (10 V to 16 V)

AUDIO

ITEM	TYPE	DETAILS
MIC IN 1 / 2	XLR 3-Pin x 2	Audio input: compatible with ClearCom, RTS, and Protech
AUDIO	5-Pin LEMO	Audio input to camera Ch 3 and Ch 4

GENERAL

ITEM	DETAILS
Operating temperature	32° F to 104° F (0° C to 40° C)

GENERAL

ITEM	DETAILS
Storage temperature	14° F to 113° F (-10° C to 45° C)
Operating humidity	30% to 85% Non-condensing
Storage humidity	0% to 90% Non-condensing
Power consumption	DC 12 V and approximately 12 W
Weight	2.65 lb (1.2 kg) without accessories
Dimensions	W: 9.13" (232 mm) x H: 5.75" (146 mm) x D: 1.85" (47 mm) excluding protrusions

VIDEO INPUT SIGNAL

ITEM	DETAILS
Signal**	1080/59.94p, 1080/50p, 1080/29.97p, 1080/25p, 1080/24p, 1080/23.98p, 1080/59.94i, 1080/50i, 1080/29.97PsF, 1080/25PsF, 1080/24PsF, 1080/23.98PsF, 720/59.94p, 720/50p

**Some input signals may not be supported

RED CINE-BROADCAST BASE STATIONS

INPUT / OUTPUT

ITEM	TYPE	DETAILS
SDI OUT 1 / 2	BNC x 2 x 2	SDI output: 12G, 6G, 3G, and 1.5G SDI
RET 1 / 2	BNC x 2	SDI return input: 12G, 6G, 3G, and 1.5G SDI
RET SEL OUT	BNC x 2	SDI return 1 or 2 output: 1.5G SDI[1] (connect to RET SEL IN for viewfinder)
RET SEL IN	BNC	SDI return 1 or 2 input: 12G, 6G, 3G, and *1.5G SDI (viewfinder)*[1]
RET 3	BNC	SDI return input 3: 12G, 6G, 3G, and 1.5G SDI
PROMPTER	BNC	Teleprompter input: 12G, 6G, 3G, and 1.5G SDI
GENLOCK	BNC	Genlock input: Tri-level
TC IN	BNC	Timecode input: SMPTE ST 12M
TC OUT	BNC	Timecode output: SMPTE ST 12M
TC THRU OUT	BNC	Timecode through output: SMPTE ST 12M
TIMECODE	5-Pin LEMO	Timecode into camera

1. Switching between the live preview and the return signal on the RED® Cine-Broadcast 7.0” Viewfinder requires the return signal to be 1.5G

POWER

ITEM	TYPE	DETAILS
OPT	SMPTE x 1	DC Power Input: Provided by the OPT cable from the Base Station. **Note**: When the Base Station is driven by DC power, the DC power is not supplied from the Base Station.
DC IN 14V	Male XLR 4-Pin x 1	DC Power Input
12V / 24V	Switch	DC Output to the camera: Switch for V-RAPTOR (14V) or V-RAPTOR XL (24V) Output

POWER

ITEM	TYPE	DETAILS
P-TAP	P-TAP x 2	P-TAP power out, maximum 14 V / 3.5 A each
USB	USB-C x 1	USB-C, 1 Gbps camera control, 1.5 A power

AUDIO

ITEM	TYPE	DETAILS
MIC IN 1 / 2	XLR 3-Pin x 2	Audio input: compatible with ClearCom, RTS, and Protech
AUDIO	5-Pin LEMO	Audio input to camera Ch 3 and Ch 4

INTERCOM

ITEM	TYPE	DETAILS
INTERCOM 1 / 2	5-Pin XLR x 2	Intercom headset, audio input compatible with ClearCom, RTS, and Protech

TALLY

ITEM	TYPE	DETAILS
TALLY	BNC x 1	Green TALLY 1.0V - 3.0V / Red TALLY 3.1V - 4.5V
Tally (rear control panel)	Switch	Set the Tally brightness to High, Low, or Off

REMOTE

ITEM	TYPE	DETAILS
LENS	12-Pin x 1	Canon and Fujinon lens compatible
REMOTE	12-Pin x 1	RS-232/RS-422 auto detect, lens data
CTRL	4-Pin LEMO x 1	CTRL protocol into camera
GIG-E	9-Pin LEMO x 1	1 Gbps for camera control (for V-RAPTOR XL only)
USB	USB-C x 1	USB-C, 1 Gbps camera control, 1.5 A power
LAN	RJ45 x 1	1 Gbps network trunk

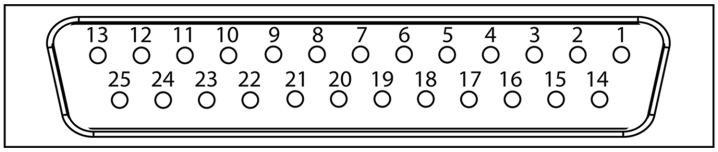
RED CONNECT

ITEM	TYPE	DETAILS
RED CONNECT Flyover Cable	Proprietary Connector (10 Gbps)	Connects RED Cine-Broadcast module to the camera's media port. Live 8K R3D or 4K JPEG-XS output through SMPTE ST 2110[1]

1. Requires a RED Connect license

FIBER OPTICS

ITEM	TYPE	DETAILS
FIBER	LEMO	SMPTE 304M for connecting the camera to the Base Station



TALLY / 4W INTERCOM DB-25 PINOUT

PIN	DETAILS
3, 16	Ground, CCOM / RTS 2W Intercom
1	Channel 1, CCOM / RTS 2W Intercom
14	Channel 2, CCOM / RTS 2W Intercom
11	Bare End, Red Tally
12	Bare End, Red Tally
24	Bare End, Green Tally
25	Bare End, Green Tally
8	Ground, Program 1, Female XLR 3-Pin
7	Signal+, Program 1, Female XLR 3-Pin
6	Signal-, Program 1, Female XLR 3-Pin
21	Ground, Program 2, Female XLR 3-Pin
19	Signal+, Program 2, Female XLR 3-Pin
20	Signal-, Program 2, Female XLR 3-Pin
None	Ground, 4W Intercom, Engineering, Male XLR 3-Pin
1	Out+, 4W Intercom, Engineering, Male XLR 3-Pin
2	Out-, 4W Intercom, Engineering, Male XLR 3-Pin
None	Ground, 4W Intercom, Engineering, Female XLR 3-Pin
4	In+, 4W Intercom, Engineering, Female XLR 3-Pin
5	In-, 4W Intercom, Engineering, Female XLR 3-Pin
3, 16	Ground, 4W Intercom, Production, Male XLR 3-Pin
14	Out+, 4W Intercom, Production, Male XLR 3-Pin
15	Out-, 4W Intercom, Production, Male XLR 3-Pin
3, 16	Ground, 4W Intercom, Production, Female XLR 3-Pin
17	In+, 4W Intercom, Production, Female XLR 3-Pin
18	In-, 4W Intercom, Production, Female XLR 3-Pin

GENERAL

ITEM	DETAILS
Operating temperature	32°F to 104°F (0°C to 40°C)
Storage temperature	-4°F to 122°F (-20°C to 50°C)
Operating humidity	0% to 85% Non-condensing
Laser Safety	Class 1 Laser
Compliance	RoHS, CE, FCC
Weight	Half rack (4U) 12.55 lb (5.69 kg) Full rack (2U) 14.75 lb (6.67 kg)
Dimensions	Half Rack: W: 8.46" (215 mm) x H: 5.91" (150 mm) x D: 11.89" (302 mm) Full Rack: W: 17.0" (432 mm) x H: 3.46" (88 mm) x D: 11.89" (302 mm)

SOFTWARE

RED Control and RED Control Pro	Access full camera controls and live preview from iOS or Android devices Pro App: Operate one or multiple cameras over an IP connection to synchronize settings, manage media files locally or upload directly to FrameIO, develop custom looks with advanced CDL and LUT controls, and more. Ideal for control of multi-camera arrays, multi-camera shoots, and live events, all from one central location Standard app available from the Apple App Store and Google Play Store RED Control Pro available from Apple App store only and requires additional purchase RED Control works wirelessly or wired using USB-C