



Smarter, High-Density HD Video Distribution over Coax

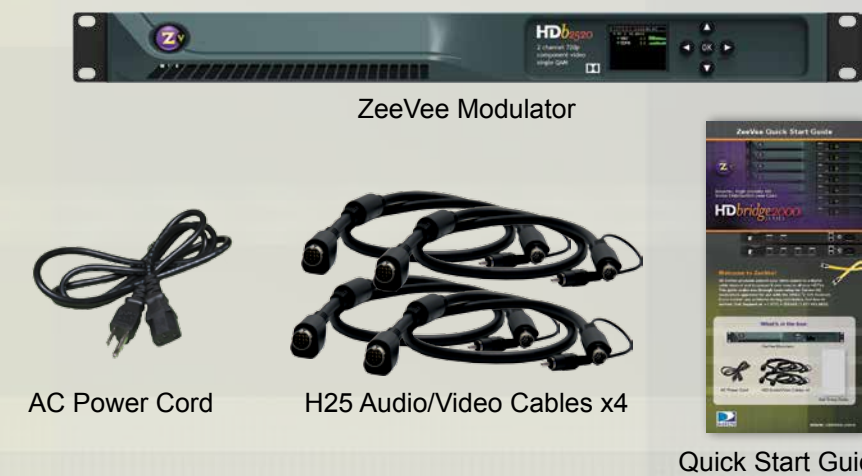
HDbridge2000 SERIES



Welcome to ZeeVee!

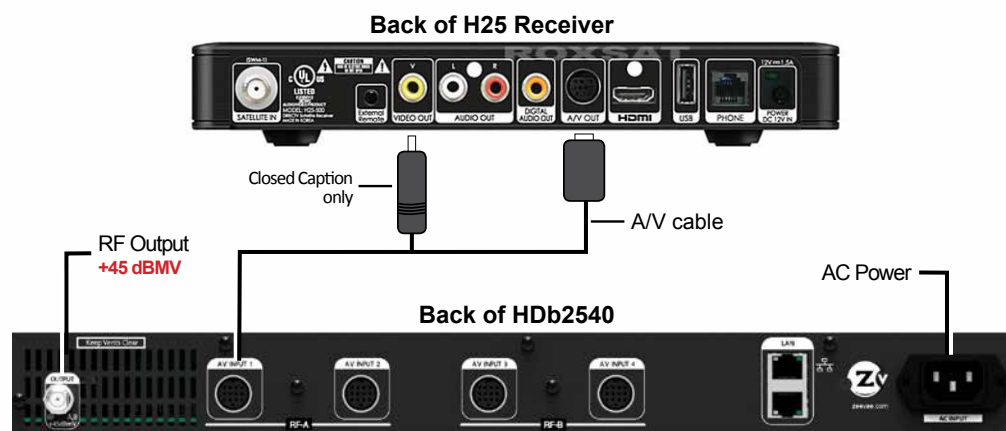
All ZeeVee products convert your video source to a digital cable channel and broadcast it over coax to all your HDTVs. This guide walks you through basic setup for ZeeVee HD modulators approved for use with the DIRECTV H25 Receiver. If you run into any problems during installation, feel free to contact Tech Support at +1 (877) 4-ZEEVEE (1.877.493.3833).

What's in the box:



HD_b2540 HD_b2520 + DIRECTV H25 RECEIVERS

RECEIVER-LESS HD



Factory default settings allow ZeeVee modulators to broadcast up to four HD sources on RF channels 2, 3, 5 and 6 for reception at connected HDTVs.

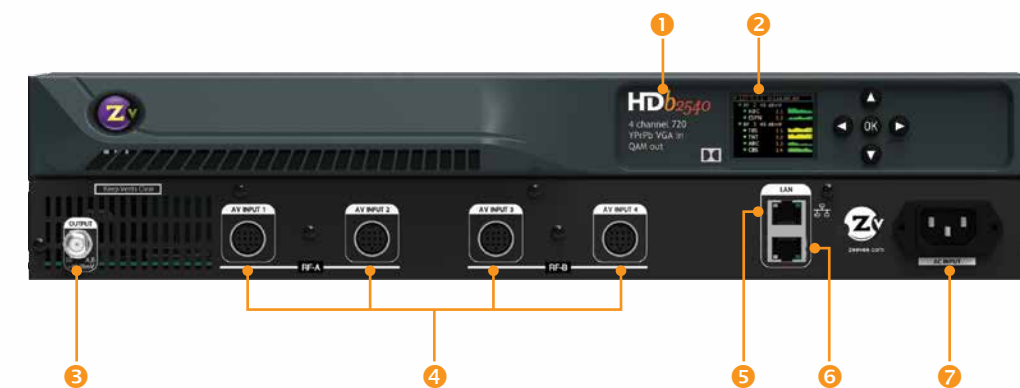
1. Connect the power supply and apply AC power.
 2. Using the A/V cable, connect the mini-DIN connector to the A/V Output on your H25 Receiver.
 3. Connect the Composite Video connector on the A/V cable to the Video Out port for closed captions only.
 4. Connect the RF Output to your **RF network**. Default output power can be changed using Maestro, the web-based configuration utility.
- NOTE: Default output power of HDbridge2000 is +45dBmV. Do not connect directly to TV or you may damage the TV.**
5. Set the RF input on the TV to Cable Mode (not Air or Antenna).
 6. Tune HDTVs to cable channels (see Table 1).

NOTE: Many TVs require a full channel scan to find the channels.

H25 A/V cables are included with this product for use with DirecTV H25 receivers. Standard Hydra A/V cables and VGA-DIN cables for use with other video sources can be purchased separately from your distributor.

Table 1

AV Input	RF #	HDTV Channel
AV Input 1	2	2.1
AV Input 2	3	3.1
AV Input 3	5	5.1
AV Input 4	6	6.1



HD_b2540

1	Model Number	Name and description of the unit.
2	Color Display	Displays configuration and system status.
3	Coax Output HDbridge 2000 Default +45dBmV Power - do not connect directly to HDTVs.	Up to 2 paired, frequency-agile QAM RF CATV output channels for up to 4 video sources. Output power can be set between +25 to +45 dBmV using the front panel or the Maestro web interface.
4	Audio/Video Inputs for up to 4 sources	Video: Component Closed Captioning: Composite Audio: Digital, Analog
5	10/100 LAN Port	Configuration and remote management
6	10/100 LAN Port	For simplified wiring and deployment
7	A/C Power Input	100-240VAC / 50-60Hz

H25 A/V Cable

8	DIN Connector to ZeeVee
9	Mini-DIN Connector to DirecTV
10	Composite Video Connector for Closed Captions only



H25 A/V cables are included with this product for use with DirecTV H25 receivers. Standard Hydra A/V cables and VGA-DIN cables for use with other video sources can be purchased separately from your distributor.





Front Panel Configuration

In most cases, ZeeVee modulators will only require setting the RF and HDTV broadcast channels. This can be done using the Front Panel controls.



- Unlock the panel by pressing / holding together the ◀▶ arrow buttons until "Setup" lights up. Press "OK" to enter the Configuration screen.
- Use the the arrow buttons (▲▼◀▶) to go to each item you want to configure (such as RF Number or RF Power), then press "OK" to edit the highlighted field.



Setup Screen



Configuration Screen



Active Configuration Screen

Use the ▲▼ arrow buttons to scroll through the options for that field.

- Once you've made changes, press "OK" to accept them. You can then select the next item for configuration.
- When finished making changes, use the arrow buttons (▲▼◀▶) to scroll down to select "Apply," then click "OK" to save your changes.

Note: The front panel locks automatically after a few seconds. To make more changes, press/hold the ◀▶ buttons again to re-enter the setup screen.

Table 2: Cable TV Channels vs RF Frequency (MHz)

RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)	RF Ch.	Band (MHz)
2	54-60	27	240-246	57	420-426	87	600-606	122	780-786
3	60-66	28	246-252	58	426-432	88	606-612	123	786-792
4	66-72	29	252-258	59	432-438	89	612-618	124	792-798
5	76-82	30	258-264	60	438-444	90	618-624	125	798-804
6	82-88	31	264-270	61	444-450	91	624-630	126	804-810
95	90-96	32	270-276	62	450-456	92	630-636	127	810-816
96	96-102	33	276-282	63	456-462	93	636-642	128	816-822
97	102-108	34	282-288	64	462-468	94	642-648	129	822-828
98	108-114	35	288-294	65	468-474	100	648-654	130	828-834
99	114-120	36	294-300	66	474-480	101	654-660	131	834-840
14	120-126	37	300-306	67	480-486	102	660-666	132	840-846
15	126-132	38	306-312	68	486-492	103	666-672	133	846-852
16	132-138	39	312-318	69	492-498	104	672-678	134	852-858
17	138-144	40	318-324	70	498-504	105	678-684	135	858-864
18	144-150	41	324-330	71	504-510	106	684-690		
19	150-156	42	330-336	72	510-516	107	690-696		
20	156-162	43	336-342	73	516-522	108	696-702		
21	162-168	44	342-348	74	522-528	109	702-708		
22	168-174	45	348-354	75	528-534	110	708-714		
7	174-180	46	354-360	76	534-540	111	714-720		
8	180-186	47	360-366	77	540-546	112	720-726		
9	186-192	48	366-372	78	546-552	113	726-732		
10	192-198	49	372-378	79	552-558	114	732-738		
11	198-204	50	378-384	80	558-564	115	738-744		
12	204-210	51	384-390	81	564-570	116	744-750		
13	210-216	52	390-396	82	570-576	117	750-756		
23	216-222	53	396-402	83	576-582	118	756-762		
24	222-228	54	402-408	84	582-588	119	762-768		
25	228-234	55	408-414	85	588-594	120	768-774		
26	234-240	56	414-420	86	594-600	121	774-780		

HRC Frequencies = Standard Frequencies minus 1.25 MHz

Except for:
Channel 5, Video = 78.0 MHz
Channel 6, Video = 84.0 MHz

IRC Frequencies = Same as Standard Frequencies

Except for:
Channel 5, Video = 79.25 MHz
Channel 6, Video = 85.25 MHz

Advanced Configuration with Maestro

When other changes are required, the web-based interface (Maestro) should be used.

- Connect your computer directly to the ZeeVee modulator using a standard Ethernet cable (cross-over cable not required), or connect the unit to any LAN that has a DHCP server.
- After a few moments, an IP address will appear at the top of the front panel display.



- Using any web browser (Firefox or Chrome preferred), go to the IP address to launch Maestro, the configuration tool.
- You will be directed to a login page:

User Name: admin
Default Password: admin

The User Name will always be "admin." The default password is "admin" but it can be changed in the configuration tool.

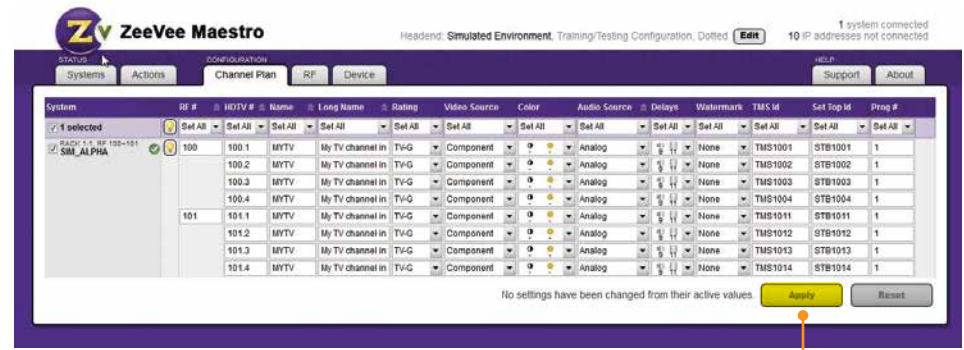
NOTE: Login is case-sensitive.



- Click on "Channel Plan" to set the RF number, channel names, video source, etc.

Refer to Table 2 for help selecting channel settings.

- Click "Apply" to save your changes. Settings are stored in the unit and not lost on power-down.



Click Apply to save your changes.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

Important Safety Instructions. Save These Instructions.

WARNING: When using electronic products, basic precautions should always be followed, including:

- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Power cord must be accessible to allow for the removal of power from the unit.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Unplug the apparatus during lightning storms or when unused for long periods of time.
- Only use attachments/accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- WARNING: To reduce the risk of fire or electric shock do not place this apparatus in a position where it is exposed to dripping or splashing liquids, rain, moisture, or excessively high humidity. Objects containing liquid shall not be placed in proximity to the unit such that they present a risk of spillage onto the apparatus.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

FCC Statement

FCC Compliance and Advisory Statement: This hardware 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. 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 in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed or used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: 1) reorient or relocate the receiving antenna; 2) increase the separation between the equipment and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the dealer or an experienced radio/TV technician for help. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulations.

Contact ZeeVee

For support, repairs and warranty service: +1-877-4ZEEVEE (1-877-493-3833)

Warranty

Limited Two Year Warranty

ZeeVee warrants your ZeeVee Modulator (HDbridge2000 MODEL NUMBERS HDB2540-NA, HDB2520-NA) against defects in materials and workmanship for a period of two years from the date of purchase. Visit www.zeevee.com for complete warranty details.

To Get Warranty Service

Warranty service will be provided by ZeeVee. If you believe you need service for your ZeeVee Modulator (HDbridge2000 MODEL NUMBERS HDB2540-NA, HDB2520-NA), please contact ZeeVee directly by calling ZeeVee Support at +1 (877) 493-3833. If it is determined that the product needs to be returned for service or exchange, you will receive a Return Material Authorization ("RMA") number. Our agents will help you through the process through which you can return the product. ZeeVee is not responsible for Customer products received without an RMA number and may reject such products.

To Get Out-Of-Warranty Service

To obtain out-of-warranty service for your ZeeVee Modulator (HDbridge2000 MODEL NUMBER HDB2540-NA, HDB2520-NA), please contact ZeeVee by calling ZeeVee Support at +1 (877) 493-3833 for information on the possibility of and any costs for repair or replacement of out-of-warranty products. No agent, company, dealer, distributor, or person is authorized to change, modify, or extend the terms of these warranties in any manner.