



The C.A.R.E. Channel® HEART™ Broadcast Video Server

Installation Guide Model C100-HD



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Table of Contents

<u>System Overview</u>	Page 2
<u>Installation Considerations</u>	Page 3
<u>HEART™ Interface with CCTV System</u>	Page 4
<u>Uninterruptable Power Supply</u>	Page 5
<u>Quick Start Installation Guide</u>	Page 6
<u>Simplified CCTV System Flow Chart</u>	Page 7
<u>Post-Installation Checklist</u>	Page 8
<u>Troubleshooting</u>	Page 9
<u>Installation of Updates</u>	Page 10
<u>HEART™ Specifications</u>	Page 11
<u>Warranty</u>	Page 12

System Overview

- The C.A.R.E. Channel® programming for patient television is broadcast using the HEART™ Broadcast Video Server manufactured by TelVue Systems, Inc and the DekTec IP-QAM modulator.
- The HEART™ plays studio quality full D1MPEG2 at encoded rates to 30MB/s. Along with balanced stereo audio, it delivers crisp HD Digital QAM video signal via Transport Stream over IP (TSolP).
- The HEART™ Server can be rack mounted in a standard 19 inch rack.
- Outputs are compatible with headend cable TV systems that accept QAM signals.
- Server is bundled with DekTec IPTV to 4-Channel QAM output which converts the TSolP signal to an HD QAM signal for distribution.
- Content is provided on an internal hard drive; updates are provided annually via USB flash drive.

Installation Considerations

- Your C.A.R.E. Channel HD system is bundled with a HEART™ Server and DekTec Modulator which is set to a preconfigured channel for easy installation. Should any issues arise that require changing the channel or any other preconfigured settings, a computer will need to be connected to the HEART™ server to access the web based configuration interface. User ID and Password information to make these adjustments can be obtained by contacting HHS Technical Support at 800.348.0799.
- Verification of the new channel setup should be made in a patient room in order to verify the proper operation of the video distribution amplifier.
- Channel Elimination Filters are recommended even if you have an open television channel available as cable programming can change and free channels can be reassigned signal without notice.
- The HEART™ System should have at least one rack space left empty above it to prevent overheating problems.
- Temperature control, good ventilation and a clean environment are required for both the HEART™ System and UPS unit. Environments with temperatures exceeding the recommended range may affect warranty.

HEART™ Interface with CCTV System

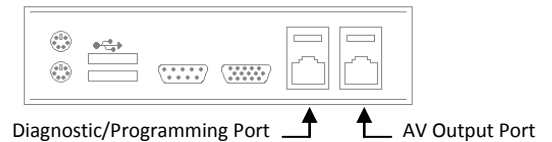
- The TSoIP video output of the HEART™ is fed into a modulator which converts the signal to HD QAM on the desired channel frequency for the patient-room television channel.
- A Channel Elimination Filter may be needed to block any incoming programming on the channel that has been designated by the hospital to broadcast C.A.R.E. programming. The filter is recommended to further isolate the channel and prevent potential interference from adjacent channels. It also protects against any future changes in the channel lineup that may interfere with currently open channels.
- Programming of individual televisions in each hospital room may be necessary to add the new channel into the line-up. This may be accomplished with a remote control, however check your television manuals for exact instructions.

Uninterruptable Power Supply (UPS)

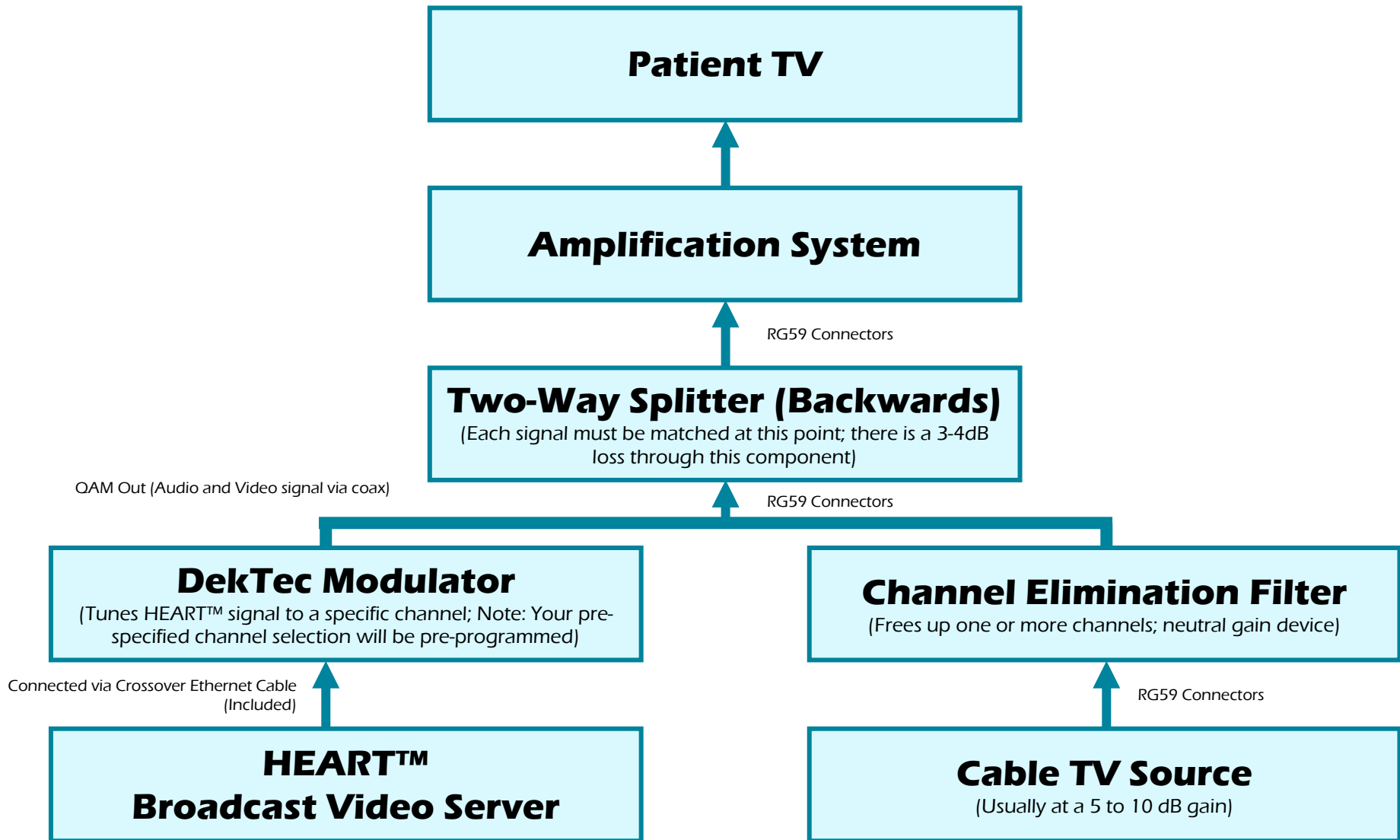
- The Uninterruptable Power Supply (UPS) provided with the HEART™ System is required to avoid interruption of programming due to brownouts, power outages and power fluctuations or surges.
- A UPS will prevent corruption of files, loss of schedule, damage to hardware, and other issues related to equipment loads on the same electrical circuit.
- Ensure the HEART™ is plugged into the side of the UPS unit labeled “Battery Backup” and **not** “Surge Only.”
- Temperature control, good ventilation and a clean environment are required for both the HEART™ System and UPS unit.
- **IMPORTANT:** Failure to install a UPS will void your warranty.

Quick Start Installation Instructions

1. Unpack your new HEART™ Video Broadcast Server and DekTec IP-QAM Modulator.
2. Install the units in desired location. If you are installing the HEART™ System in an equipment rack, it should have at least one rack space left empty above it to aid in proper ventilation. If you are not racking the server, place it on a sturdy surface with proper ventilation.
3. Plug the units into the provided UPS, ensuring they are plugged into the side of the unit labeled “Battery Backup” and **not** “Surge Only.”
4. Attach the provided crossover Ethernet cable to the **RIGHT** Ethernet port on the HEART™. See diagram at right.
5. Connect the crossover Ethernet cable to the DekTec modulator. **NOTE:** The top output of the DekTec will be used to connect to your CATV system.
6. Power on the DekTec modulator by connecting its power supply.
7. Press the power switch on the front of the HEART™ server. Programming will begin broadcasting after startup (about 3 mins.).
8. Should programming not begin broadcasting within 5 minutes, contact HHS Technical Support at 800.348.0799.
9. Adjustments to the DekTec and the HEART™ should not be needed as the systems are pre-configured for standard broadcast applications on your preselected channel. If you experience any issues that require adjustments to the equipment, please contact HHS for assistance. A computer with a direct connection to the HEART™ will be needed to make these adjustments.
10. Read through this entire Technical Information Guide for requirements and hints. The HEART™ system should not need any additional changes or adjustments, however if adjustments are needed, contact HHS Technical Support for assistance at 800.348.0799.



Simplified Typical CCTV System Flow Chart



Post-Installation Checklist

- All cabling is securely connected
 - Ethernet Crossover
 - Power
 - USB Extension Cable (if needed)

- HEART™ is connected to Uninterruptable Power Supply which is securely connected to a power source

- Power has been turned on to all components

- Filter has been installed (if needed)

- DekTec Modulator has been installed and is operational

- On a patient room television, confirm quality of C.A.R.E. programming on its designated channel; view the channel above and the channel below to verify there is no audio or video bleed-over or interference with existing programs.

Troubleshooting

If you have any problems with the installation or with the HEART™ not playing properly, take the following steps to evaluate which device has the problem.

No Picture/Picture Quality:

1. Is all equipment turned on and connected properly? Be sure to check all cable connections, reseal all cables, and power cycle all devices. If picture is still absent or fuzzy, move to step 2.
2. Is the problem apparent on all hospital televisions? If yes, move to step 3. If no, and the problem exists on only the TV you are viewing, there may be an issue with the individual television set. If no, and the picture is missing or distorted in certain areas of the building, an issue with the cabling infrastructure is likely.

No Sound/Sound Level Inappropriate:

1. Is all equipment turned on and connected properly? Be sure to check all cable connections, reseal all cables, and power cycle all devices. If there are still sound issues, move to step 2.
2. To ensure that the issue is with only The C.A.R.E. Channel, compare sound on another channel to confirm it is different. If all channels are experiencing the same issue, the problem is likely with the TV or amplification system. If only The C.A.R.E. Channel experiences sound problems, move to step 3.
3. If there is a problem with only The C.A.R.E. Channel, an issue with the modulator or server is likely. To diagnose these units, a computer with a direct connection to the HEART™ server will be needed. Once this has been established, please contact HHS Technical Support at 800.348.0799.

If you have confirmed a problem with your HEART™ Server or are experiencing an interruption in broadcast of The C.A.R.E. Channel, please contact HHS Technical Support immediately at 800.348.0799.

Installation of Updates

Updates for the HEART™ server are sent on an annual basis (on or near the anniversary of the date of first broadcast). Updates for the server are delivered via USB Flash Drive and include a pre-paid return label for your convenience. To install updates, follow the instructions below.

1. At initial installation, you received a USB extension cable to connect to the rear USB port of your server. If installed, you can easily connect the USB Flash Drive to this cable. If it is not installed, insert the drive into one of the USB ports on the rear of the server. If the extension cable was not initially installed and you desire one for easier access in the future, contact HHS Technical Support at 800.348.0799.
2. Once the drive has been inserted, content will automatically begin to update without interruption of broadcast. If broadcast is interrupted, please contact HHS Technical Support immediately at 800.348.0799. As content updates are generally over 10GB, this may take many hours. It is recommended to leave the drive unattended overnight while updating and return the following day to remove it.
3. The server will emit a brief audible beep once updating is complete and will write a completion file to the USB drive. To ensure the update completed successfully, insert the USB drive into any PC and look for the file "usb_media_import_YYYYMMDD_HHMMSS.log" where the title usb_media_import is followed by the completion date in YEAR, MONTH, DAY_HOUR, MINUTE, SECOND format.
4. Once you have confirmed the completion file is on the drive, please return the drive to HHS immediately using the included return label. If the file does not exist, try the update once more, this time allowing 48 hours for the update process. If no file exists after the second try, contact HHS Technical Support at 800.348.0799.

HEART™ Specifications

SPECIFICATIONS – Model C100-HD

Power	100-240VAC / 760Watts
Frequency Limits	50-60Hz
Power requirement (Maximum)	4A
Operating Temperatures	50° - 90° F (10° - 32° C)
Operating Humidity	Maximum 70% (Non-condensing)
Dimensions (WxHxD)	17.2"x1.7"x10"
Rack Space Requirements	1 RU
Weight	10 lbs.
Outputs	MPEG2 –TS over IP (Gigabit Ethernet)
Inputs	USB – For Content Updates via USB Flash Drive
Warranty	1 st Year – Full Warranty; 2 nd & 3 rd Years – Parts & Labor not to exceed \$600 Extended warranties are available.



Warranty

1. PROVISIONS:

1.1. Year One:

Within 12 months of the date of original purchase, Healing HealthCare Systems, Inc. (HHS) agrees to replace or repair, free of charge, any C.A.R.E. CHANNEL HEART™ that, upon inspection by HHS or its duly authorized representative, is found to have been defective in workmanship or materials. This Warranty expires 12 months from the date of original purchase.

1.2. Years Two and Three:

For 24 months following the initial 12 month warranty period, HHS will provide repair or replacement services at a flat maximum rate of \$600 USD, plus all shipping, handling, and insurance. Purchaser must obtain a return authorization number (RA#) from HHS, and either pay the repair fee or provide a Purchase Order in the amount of the repair fee prior to HHS returning the server back to hospital.

1.3. Beyond Year Three:

For repairs that may be required following these three years, parts and labor (plus shipping, handling, and insurance) will be charged. This Warranty gives the purchaser specific legal rights, and the purchaser may also have other rights, which vary from state to state.

1.4. Extended Warranties:

At the time of purchase, client may chose to purchase an extended warranty for up to FIVE years from date of original purchase. If client has purchased an extended warranty, provisions under section 1.1 will apply for the term of the warranty period purchased. Section 1.2 shall only apply to YEARS TWO and THREE after initial purchase, not the extended warranty period expiration.

2. CONDITIONS:

- 2.1. The unit, along with purchaser's written claim of a defect shall have been shipped pre-paid to HHS offices in Reno, Nevada (or at such address as HHS shall specify) for inspection, within one year of the date of original purchase. The product will be either replaced or repaired at the sole discretion of HHS.
- 2.2. Any damage incurred during shipping must be reported to HHS within three (3) business days of receipt of the unit. Failure to do so will void warranty provisions. Any costs incurred to repair damages sustained during shipping will fall under the sole responsibility of the purchaser should HHS not be notified of the damage within the aforementioned time frame.
- 2.3. This warranty requires that the HEART™ be attached to an Uninterrupted Power Supply (UPS) at all times. This warranty is void if a UPS is not used.

3. EXCLUSIONS:

- 3.1. HHS will not pay for or warrant repairs made by anyone other than personnel authorized by HHS to make repairs, unless prior written agreement has been obtained by the claimant from HHS.
- 3.2. HHS assumes no further responsibility or liability, whether for delays, damages to persons or property, special, indirect or consequential damages, or from any damages arising from the use of the C.A.R.E. CHANNEL HEART™, or component parts. Some states do not allow limitation or exclusion of incidental or consequential damages, so the above limitation may not apply to you.
- 3.3. No HHS representative, employee, or dealer has the authority to make or imply any representation, promise, or agreement which in any way varies from the terms of this Warranty.
- 3.4. The remedies provided in this warranty shall be the exclusive sole remedies of the purchaser. There is no implied warranty that the C.A.R.E. CHANNEL HEART™ or parts thereof sold under this Warranty are of merchantable quality or that they are fit for any particular purpose other than broadcast distribution of The C.A.R.E. Channel®.

To make inquiries regarding this Warranty, or to obtain a valid Return Authorization Number, please call +1.800.348.0799. All shipping costs to and from HHS shall be borne by Purchaser. Any tampering or unauthorized use of system voids warranty.

The C.A.R.E. Channel is a registered trademark of Healing HealthCare Systems, Inc. ©2010.